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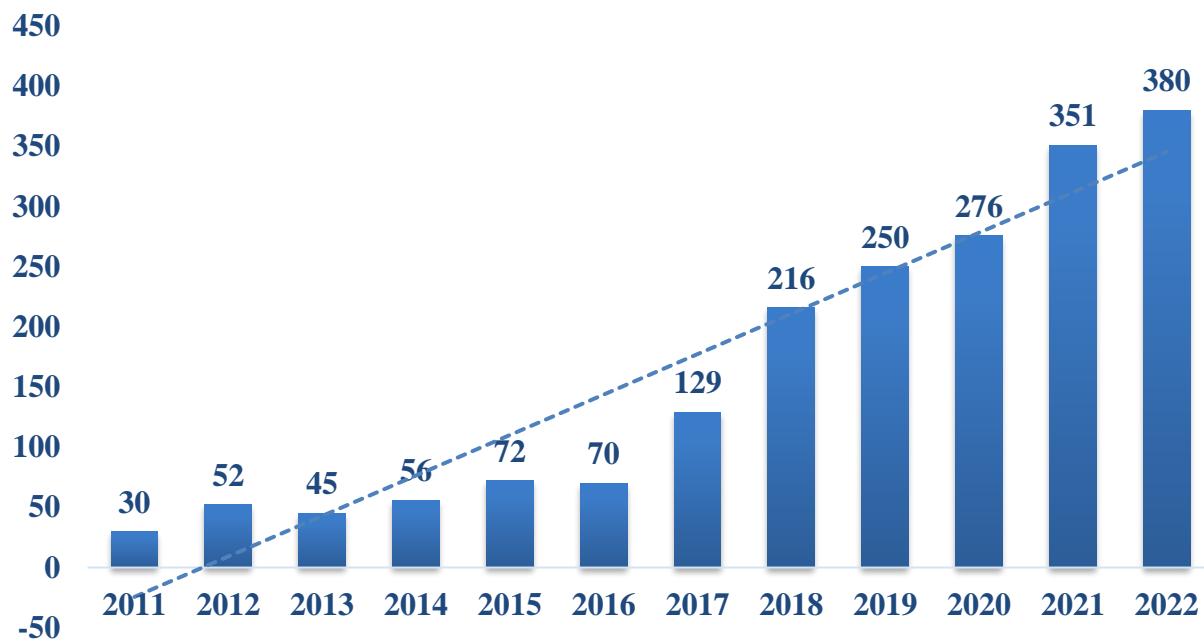


RESEARCH PUBLICATIONS

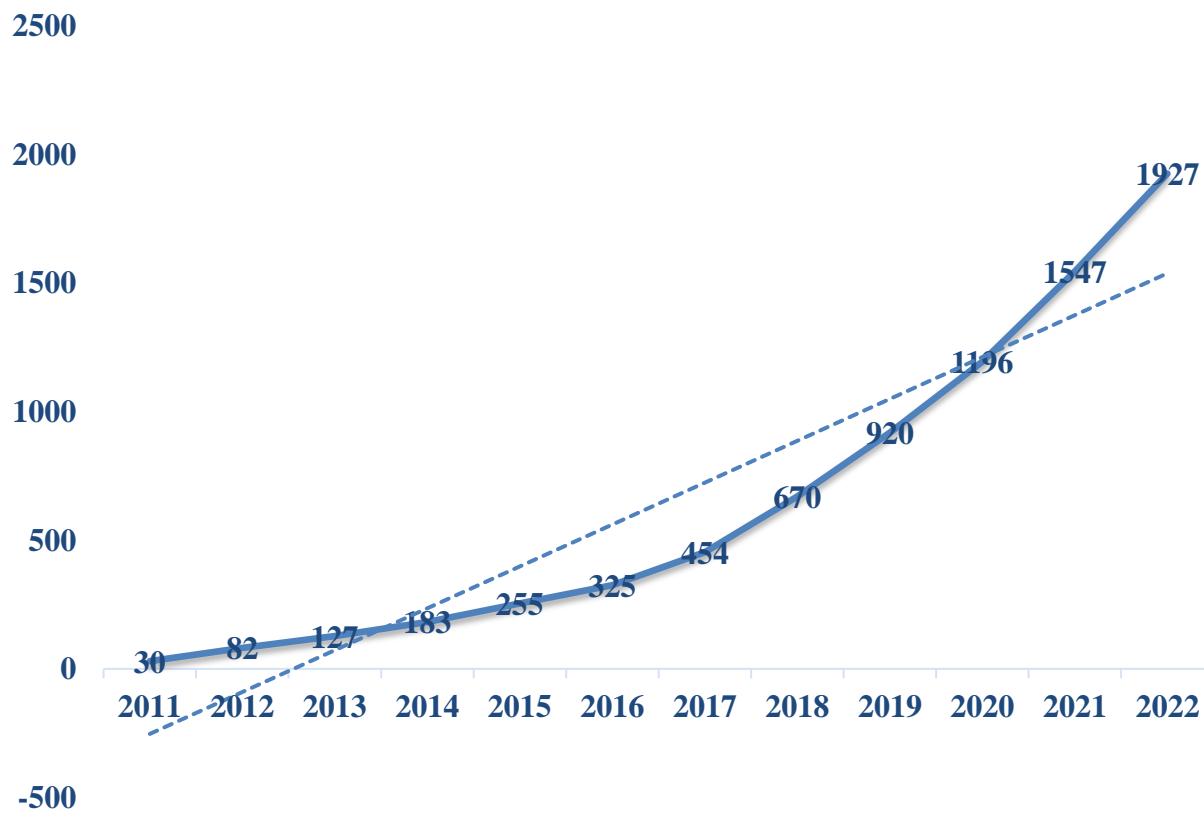
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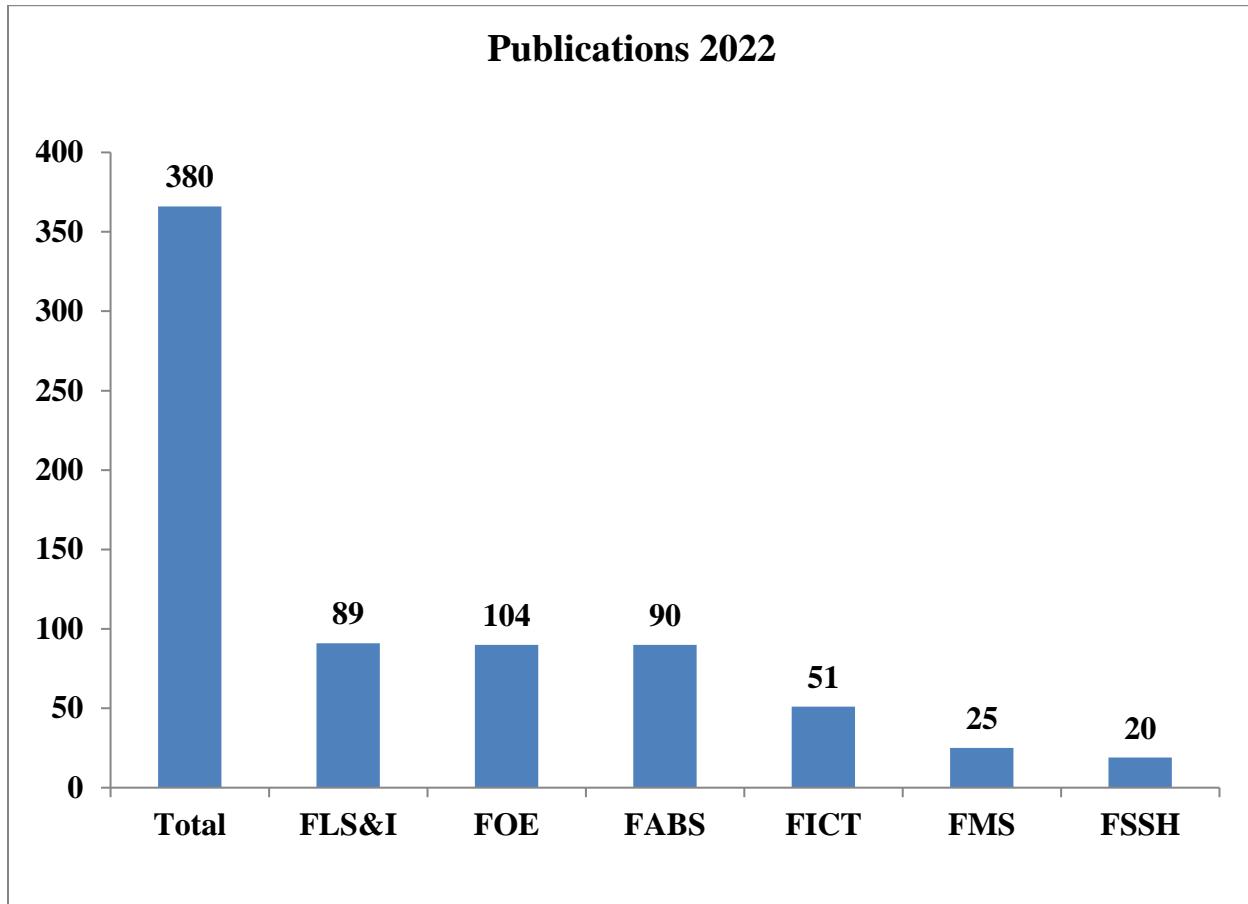


Year wise Publications 2011-2022

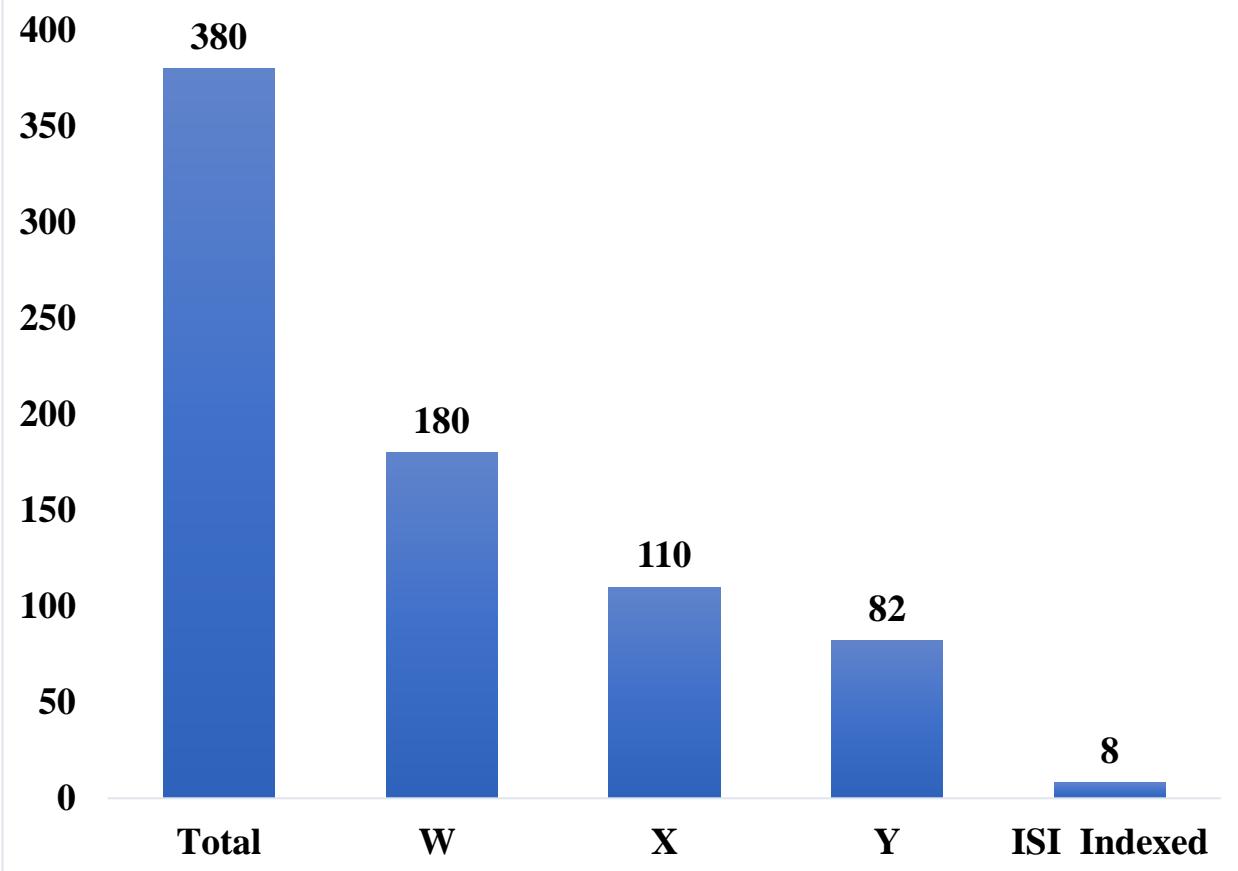


RESEARCH PUBLICATIONS 2022

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Publications 2022



FACULTY OF LIFE SCIENCES & INFORMATICS

- 1.Ahmed S, Gul S, Siraj S, **Abrar Hussain**, Sheikh FS, Shah SU, Janjua K, Khan H, Hamdard MH. (2022). Antiplatelet response to clopidogrel is associated with a haplotype in CYP2C19 gene in Pakistani patients. *Scientific Reports.* 12:1-10. **(IF:4.37) (HEC W Category)**
- 2.Rasool M, Malik A, Waqar S, Arooj M, Sara Zahid, **Muhammad Asif**, Shaheen S, **Abrar Hussain, Hamid Ullah**, Gan SH. (2022). New Challenges in the Use of Nanomedicine in Cancer Therapy. *Bioengineered.* 13(1)- 759-773. **(IF: 6.82) (HEC X Category).**
- 3.**Muhammad Asif**, Amir M, **Abrar Hussain**, Pushparaj PN, Rasool M. (2022). Management and effective role of tyrosine kinase inhibitor treatment in chronic myeloid leukemia with SARS-CoV-2 infection. *Medicine.* 101:26: e29660. **(IF: 1.89) (HEC W Category).**
- 4.Nasrullah, **Abrar Hussain**, Ahmed S, Rasool M, Shah AJ. (2022). DNA methylation across the tree of life, from micro to macro-organism. *Bioengineered.* 13(1):1666-1685. **(IF: 6.82) (HEC X Category).**
- 5.**Muhammad Asif**, **Abrar Hussain**, Ali I, Baloch Z, Rasool M, Achakzai NM. (2022). Cytogenetical and hematological analysis of chronic myelogenous leukemia patients with a novel case 52XX, t (1; 9; 22)(q23. 3; q34; q11. 2),+ 6,+ 8, i (9)(q10; q10),+ 18,+ 19,+ 21+ der22 t (9; 22)(q34; q11). *Medicine.* 2022 Nov 11;101(45):e31670. **(IF: 1.89) (HEC W Category).**
- 6.Bashir A, Ali K, Bux K, Farid N, Khaireabadi M, Hassan KA **Abrar Hussain**, Fatima K, Mehmood S, Haider SA, Herwig R. (2022). Molecular Characterization, Purification, and Mode of Action of Enterocin KAE01 from Lactic Acid Bacteria and Its In Silico Analysis

against MDR/ESBL *Pseudomonas aeruginosa*. Genes. 13(12):2333. **(IF: 4.12) (HEC W Category).**

7. Ashfaq M, Khan AM, Rasool A, Akhtar S, Nazir N, **Nazeer Ahmed**, Manzoor F, Sones J, Perez K, Sarwar G, Khan AA. (2022) A DNA barcode survey of insect biodiversity in Pakistan. PeerJ. 10:e13267. **(IF: 3.06) (HEC W Category).**
8. Pushparaj PN, Damiati LA, Denetiu L, Bakhshab S, **Muhammad Asif, Abrar Hussain, Rasool M.** (2022). Deciphering SARS CoV-2-associated pathways from RNA sequencing data of COVID-19-infected A549 cells and potential therapeutics using in silico methods. Medicine. 101(35): e29554. **(IF: 1.89) (HEC W Category).**
9. Tabasum A, **Shajjahan Shabir Ahmed Rana, Nazeer Ahmed, Imran Ali Sani, D Shahid, S Irfan** (2022). DNA Bar Coding: A Tool for the Identification of Wild Grasses of Quetta Ecosystem. Bangladesh Journal of Plant Taxonomy. 5(12):556-565. **(HEC Y Category).**
10. Muhammad Awais, **Abdul Wajid**, Iryna V. Goraichuk, Andleeb Batool, Asif Rahim, Atif Anif, **Nazeer Ahmed**, and Renfu Yin. (2022). Surveillance and Assessment of Risk Factors for Newcastle Disease Virus from Live Bird Retail Stalls in Lahore District of Pakistan. Avian Diseases: 66(3):1-8. **(IF: 1.77) (HEC W Category).**
11. Mushtaq A, Sabir N, Kousar T, Rizwan S, Jabeen U, Bashir F, Sabir S, **Muhammad Naeem Shahwani.** (2022). Effect of Sodium Silicate and Salicylic Acid on Sodium and Potassium Ratio in Wheat (*Triticum aestivum L.*) Grown Under Salt Stress. Silicon. 14(10): 5595-5600 **(IF: 2.67) (HEC X Category).**
12. Bharadwaj T, Schrauwen I, Rehman S, Liaqat K, Acharya A, Giese AP, Nouel-Saied LM, Nasir A, Everard JL, Pollock LM, Zhu S, **Abdul Wali et al.,** (2022). ADAMTS1, MPDZ, MVD, and SEZ6: candidate genes for autosomal recessive nonsyndromic hearing

impairment. European Journal of Human Genetics. 30(1):22-33. **(IF: 4.26.) (HEC W Category).**

13. Ijaz A, Alfadhli F, Alharbi A, Khan YN, Alhawas YK, Hashmi JA, **Abdul Wali**, Basit S. (2022). NPHP3 splice acceptor site variant is associated with infantile nephronophthisis and asphyxiating thoracic dystrophy; A rare combination. European Journal of Medical Genetics. 65(10):104578. **(IF: 2.4) (HEC X Category)**.
14. Iqbal MJ, Javed Z, Herrera-Bravo J, **Haleema Sadia**, Anum F, Raza S, Tahir A, **Muhammad Naeem Shahwani.**, Sharifi-Rad J, Calina D, Cho WC. (2022). Biosensing chips for cancer diagnosis and treatment: a new wave towards clinical innovation. Cancer Cell International. 22(1):1-6. **(IF: 6.42)(HEC W Category)**.
15. Sainero-Alcolado L, **Muhammad Mushtaq**, Liano-Pons J, Rodriguez-Garcia A, Yuan Y, Liu T, Ruiz-Pérez MV, Schlisio S, Bedoya-Reina O, Arsenian-Henriksson M. Expression and activation of nuclear hormone receptors result in neuronal differentiation and favorable prognosis in neuroblastoma. Journal of Experimental & Clinical Cancer Research. 41(1):1-25. **(IF: 12.68)(HEC W Category)**.
16. **Rafiullah R**, Albalawi AM, Alaradi SR, Alluqmani M, **Mushtaq M, Abdul Wali**, Basit S. (2022) .An expansion of phenotype: novel homozygous variant in the MED17 identified in patients with progressive microcephaly and global developmental delay. Journal of Neurogenetics. 10:1-7. **(IF: 1.6) (HEC Y Category)**.
17. Danbamrongtrakool N, **Imrana Niaz Sultan**, Laemsak N, **Afrasiab Khan Tareen**, Sirisansaneeyakul S, Parakulsuksatid P. (2022)- Comprehensive approach to utilize hydrogen peroxide sterilization and urea as nitrogen source for ethanol production from oil palm trunk. Agriculture and Natural Resources. 56(2):387-98. **(ISI Indexed)**.

18. Raza SA, Rashid Ch A, Mumtaz MW, Bashir S, **Maqsood Ahmad**, Touqeer T, Mukhtar H, Akhtar MT, Ali S, William J. (2022). Metabolites in *Conocarpus erectus* leaves attenuate α -amylase activity by modulating amino acid residues of α -amylase: an in vitro and docking study. *Boletín Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas*. 21(3). (**HEC Y Category**).
19. **Muhammad Waseem Khan**, Juutilainen J, Naarala J, Roivainen P. (2022). Residential extremely low-frequency magnetic fields and skin cancer. *Occupational and Environmental Medicine*. 79(1):49-54. (**IF:4.4**) (**HEC W Category**).
20. Awan F, Nawaz S, Ali MM, Iqbal A, Akhtar R, Firyal S, Nawaz S, Akhtar R, Iqbal A, Saeed S, Naseer R, **Haleema Sadia et al.**, (2022). Drinking water quality of various sources in Peshawar, Mardan, Kohat and Swat districts of Khyber Pakhtunkhwa province, Pakistan. *Brazilian Journal of Biology*. 84: e255755. (**IF: 1.65**) (**HEC Category**).
21. Tanvir Ahmad Abbas Khichi, Tausif Ahmad, Muhammad Aun Naqvi, Sajjad Hussain, Syedah Andleeb, Zinnia Mansoor, Aasma Noureen, Tanveer Hussain, **Haleema Sadia**, Shahzad Aamir, Sohail. (2022). A comparative study for evaluation of uric acid among age-wise and gender-wise in district Toba Tek Singh. *International Journal of Biosciences*. 18(5): 1-6. (**ISI Indexed**)
22. Hidayatullah, **Shakeela Daud**, Saba Manzoor, Adeel Ahmad, Palwasha Khan, **Asma Yousafzai**, Nabeela Tariq, Muhammad Luqman and Gohram Khan. (2022). Mutational Analysis of Gene BRD2 in Patients of Juvenile Myoclonic Epilepsy. *International Journal of Pathology*. 20(1): 7-13. (**HEC Y Category**).
23. Abdul Latif, Sadia Sabir, Saima Iram, Pari Gul, **Asma Yousafzai**. (2022). Hematological and Clinical Analysis of Hepatitis B Patients from Quetta, Pakistan. *Pak-Euro Journal of Medical and Life Sciences*. 5(2):275-282. (**HEC Y Category**).

24. **Jamila Tabassum**, Muhammad Luqman, Fariha Hasan, Fariha Arooj, Saif Ur Rehman Kashif, and **Asma Yousafzai**. (2022). Efficacy of Cavern Isolates for Biodegradation of Synthetic Plastic. Letters in Organic Chemistry. 19(3):198-207. (**HEC Y Category**).
25. Javeed R, Tariq N, **Shakeela Daud**, **Asma Yousafzai**, Manzoor S, Ahmad A. (2022). Nested-PCR based Detection of Hepatitis C Virus: Low-cost Strategy in Pakistan: Nested-PCR based detection of Hepatitis C virus. Proceedings of the Pakistan Academy of Sciences: B. 59(3):81-87. (**HEC X Category**).
26. Changming S, Kongsaree P, **Imrana Niaz Sultan**, Afrasiab Khan Tareen, Vanichsriratana W, Sirisansaneeyakul S, Parakulsuksatid P. (2022). β -glucosidase production by recombinant Pichia pastoris strain Y1433 under optimal feed profiles of fed-batch cultivation. Folia Microbiologica:1-12. (**IF:2.69 (HEC X Category)**).
27. **Imrana Niaz Sultan**, Tareen M, Tareen A, Khan M. (2022). Phytochemical effectiveness of some ethanomedicinal plants of Balochistan, Pakistan against urogenital infections. International Journal of Agricultural Technology. 18(5):2271-2282 (**IF:0.46 (HEC Y Category)**).
28. Asma Basharat, **Abdul Wajid**, Andleeb Batool, Tayyeba Batool, Aziz Ullah, Mahmood Shaukat. (2022). Identification of two novel missense TBX22 mutations are a frequent cause of non-syndromic cleft palate in the Pakistani population. Pakistan Journal of Zoology. 1-4, DOI: <https://dx.doi.org/10.17582/journal.pjz/20181104181110> (**IF: 0.68 (HEC X Category)**).
29. Shadab Nasir, **Abdul Wajid**, Aasma Naureen, Amina Mustafa, Gohar Ayub, Quratul Ain, Ayesha Mohiud Din, Andleeb Batool, Tanveer Hussain (2022). Isolation of Avian Orthoavulaviruses-1 from Caged Birds in Lahore District, Punjab. Acta Veterinaria Hungarica. 70(1):73-6. **IF: 0.9 (HEC X Category)**.

- 30.** Jarungkeerativimol P, Chonsongkram J, Sappamongkolchai W, **Imrana Niaz Sultan, Afrasiab Khan Tareen**, Parakulsuksatid P. (2022). Screening of high lipid content and productivity of microalgae under photoautotrophic cultivation for biodiesel production. Environmental Progress & Sustainable Energy:e13950. (**IF: 2.824**) (**HEC X Category**).
- 31.** Liangwattanachai F, **Afrasiab Khan Tareen**, Sirisansaneeyakul S, **Imrana Niaz Sultan**, Leamsak N, Parakulsuksatid P. (2022). Development of low-cost medium for ethanol production by using glutamic acid mother liquor. Bioresource Technology Reports. 19:101184. (**IF: 4.81**) (**HEC X Category**).
- 32.** Wilaitup A, **Imrana Niaz Sultan, Afrasiab Khan Tareen**, Laemsak N, Sirisansaneeyakul S, Vanichsriratana W, Parakulsuksatid P. (2022). Bioethanol Production from Oil Palm Trunk Fibers Using Activated Immobilized *Saccharomyces cerevisiae* SC90 Under Simultaneous Saccharification and Fermentation. BioEnergy Research:1-10. (**IF: 2.81**) (**HEC W Category**).
- 33.** Agha SI, **Nusrat Jahan, Azeem S, Samia Parveen**, Tabassum B, **Asif Raheem, Hamid Ullah, Anwar Khan**. (2022). Characterization of broad-spectrum biocontrol efficacy of *Bacillus velezensis* against *Fusarium oxysporum* in *Triticum aestivum* L. Notulae Botanicae Horti Agrobotanici Cluj-Napoca. 50:e12590. (**IF:1.40**). (**HEC X Category**).
- 34.** **Akram Ali Baloch**, Adeel Ahmad , **Kaleem U. Kakar, Sara Naudhani, Samiullah Khan, Agha Muhammad Raza, Imrana Niaz Sultan** , Humaira Zahid, Saadullah and **Shakeela Daud**. (2022). Detection of Two Missense Substitutions in Gene EPM2B in Patients of Myoclonic Epilepsy from Balochistan. Pakistan Journal of Zoology. 1-6. (**IF: 0.687**) (**HEC X Category**).
- 35.** Luqman M, Awan MUF, Muhammad S, **Shakeela Daud, Asma Yousafzai**, Arooj F. (2022). Microbial pollution in inland recreational freshwaters of Quetta, Pakistan: an initial

report. J Water Health. 2022; 20(3):575-588. DOI: 10.2166/wh.2022.291. (**IF: 1.744**).

(HEC X Category).

36. Jan Z, Aqeel M, Munir A, Saeed A, **Haleema Sadia**, Kalsoom S, Nadeem T, Bashir Z, Awan L, Ali GM . (2022). In silico-prediction of chloroquine as a multi-targeted drug against CDKN2A signaling network associated with cutaneous malignant melanoma. Pakistan Journal of Pharmaceutical Sciences. 35(3). 731-739. (**IF: 0.86**)(HEC Y Category).
37. Javed Z, Khan K, Herrera-Bravo J, Naeem S, Iqbal MJ, Raza Q, **Haleema Sadia**, Raza S, Bhinder M, Calina D, Sharifi-Rad J. (2022). Myricetin: targeting signaling networks in cancer and its implication in chemotherapy. Cancer Cell International. 22(1):1-13. (**IF: 6.42**)(HEC W Category).
38. **Haleema Sadia**, Bugti N, Ashiq S, Kalsoom S, Baloch H, Nawaz A, Akbar A. (2022). Demographic Distribution of Viral Hepatitis in the Patients of District Quetta, Pakistan. RADS Journal of Biological Research & Applied Sciences. 13:23-32. (**HEC Y Category**).
39. **Haleema Sadia**., Ullah M, Irshad A, Malik K, Ahmad W, Ahmed R, Khan MU, Ashiq S, Akbar A, ur Rehman A, Raza S. (2022). Mutational analysis of exons 5-9 of TP53 gene in breast cancer patients of Punjabi ethnicity. Advancements in Life Sciences. 9(1):18-23. (**HEC X Category**).
40. Wajid C, Baloch AH, Khosa AN, Kaleri HA, Bangulzai N, Fazlani SA, **Haleema Sadia**, Kalsoom S, Arain MB, Vistro WA (2022). Prop-1 gene is a selective marker of wool production in sheep breeds of Balochistan Pakistan. Journal of Animal Health and Production. 10(2): 238-244. (**HEC Y Category**).
41. Ali S, Mehmood F, Ayaz Y, Sajid M, **Haleema Sadia**, Nawaz R (2022). An experimental trial: Multi-robot therapy for categorization of autism level using hidden Markov model.

Journal of Educational Computing Research. 60(3):722-741. (IF: 4.34)(HEC W Category).

42. Ahmad J, Ahmad MM, Su Z, Rana IA, Rehman A, **Haleema Sadia**. (2022). A systematic analysis of worldwide disasters, epidemics, and pandemics associated mortality of 210 countries for 15 years (2001-2015). International Journal of Disaster Risk Reduction. 76:103001. (IF: 4.84) (HEC W Category).
43. Waqas MK, **Haleema Sadia**, Khan MI, Omer MO, Siddique MI, Qamar S, Zaman M, Butt MH, Mustafa MW, Rasool N. Development and characterization of niosomal gel of fusidic acid: in-vitro and ex-vivo approaches. Designed Monomers and Polymers. 25(1): 165-174. (IF: 3.71) (HEC X Category).
44. Ullah S, **Haleema Sadia**, Ullah F and Jadoon T. 2022. Inclusive DFT insight into sensing mechanism of cyclotetrapyrrole towards lung irritants. Journal of Molecular Modeling. 28(5): 1-13. (IF: 2.17) (HEC X Category).
45. Haq A, **Haleema Sadia** Khoo MB. (2022). A parameter-free adaptive EWMA chart with variable sample sizes and variable sampling intervals for the process mean. Journal of Statistical Computation and Simulation. 1-27. (IF: 1.22) (HEC W Category).
46. **Haleema Sadia**, Prevett P, Whitworth D, Gaus N. (2022). Transition of Female Pakistani Students to both the UK and Postgraduate Lecture Notes of the Institute for Computer Identities through a modicum of control. Research in Post-Compulsory Education. 27(1): 24-47. (HEC X Category).
47. **Naveed Iqbal, Muhammad Rafiq**, Shah M, Tareen S, **Maqsood Ahmad**, Nawaz F, Khan S, Riaz R, Yang T, Fatima A, Jamal M, Mansoor S, Liu X, **Nazeer Ahmed**. (2022) The SARS-CoV-2 differential genomic adaptation in response to varying UVindex reveals

potential genomic resources for better COVID-19 diagnosis and prevention. *Frontiers in Microbiol.* 13:922393. **(IF: 6.06) (HEC W Category).**

- 48. Nusrat Jahan**, Javed MA, **Anwar Khan**, Tabassum B, **Samia Parveen**, Muzaffar N. (2022) Multiple interval mapping of QTLs and epistasis for iron toxicity tolerance in segregating population of Indica rice. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca.* 50(4):12773-. **(IF:1.24). (HEC X Category).**
- 49. Uddin N**, Muhammad N, Nisar M, Ali N, Ullah R, Ali EA, Khan AA, Rahman IU, **Anwar Khan**, Zeb A. (2022). Distribution of polyphenolic compounds, antioxidant potential, and free amino acids in *Ziziphus* fruits extract; a study for determining the influence of wider geography. *Food Science & Nutrition.* 10:1414–1430. **(IF: 2.86)(HEC W Category).**
50. Azeem S, Agha SI, Jamil N, Tabassum B, Ahmed S, **Asif Raheem**, **Nusrat Jahan**, Ali N, **Anwar Khan**. (2022). Characterization and survival of broad-spectrum biocontrol agents against phytopathogenic fungi. *Revista Argentina de Microbiologia.* 479: 1-10.**(IF: 1.85)** **(HEC X Category).**
51. **Asif Raheem**, Ali B. (2022). The Microphenotron: a novel method for screening plant growth-promoting rhizobacteria. *PeerJ.* 10:e13438. **(IF: 3.06) (HEC W Category).**
52. **Asif Raheem**, Sultan R, Yasmeen H. Epidemiology of Obesity in Asia: Challenges and Prevention. *Advancements in Life Sciences.* 2022 Aug 27;9(2):125-30. **(HEC X Category).**
53. **Jeneen Pansezai**, Thomas E. Van Dyke. (2022). Resolution of inflammation: Intervention strategies and future applications. *Toxicology and Applied Pharmacology.* 116089. **(IF: 4.45) (HEC W Category).**

54. Murtaza S, Tabassum B, Tariq M, Riaz S, Yousaf I, Jabbar B, **Anwar Khan**, Samuel AO, Zameer M, Nasir IA. (2022). Silencing a *Myzus persicae* Macrophage Inhibitory Factor by Plant-Mediated RNAi Induces Enhanced Aphid Mortality Coupled with Boosted RNAi Efficacy in Transgenic Potato Lines. *Molecular Biotechnology*:1-12. (**IF:2.86**) (**HEC Y Category**).
55. Peng Z, Wang Y, Geng G, Yang R, Yang Z, Yang C, Xu R, Zhang Q, **Kaleem Ullah Kakar**, Li Z, Zhang S. (2022). Comparative Analysis of Physiological, Enzymatic, and Transcriptomic Responses Revealed Mechanisms of Salt Tolerance and Recovery in *Tritipyrum*. *Frontiers in Plant Science*.12: e 800081. (**IF: 5.57**) (**HEC W Category**).
56. Ali E, Hussain S, Hussain N, **Kaleem Ullah Kakar**, Shah JM, Zaidi SH, Jan M, Zhang K, Khan MA, Imtiaz M. (2022). Tocopherol as plant protector: an overview of Tocopherol biosynthesis enzymes and their role as antioxidant and signaling molecules. *Acta Physiologiae Plantarum*. 44(2):1-11. (**IF: 2.35**) (**HEC W Category**).
57. Areesha Ahmad, Syed Faraz Moin, Iram Liaqat, Sadia Saleem, **Faiz Muhammad**, Talat Mujahid & Urooj Zafar(2022) Isolation, Solubilization of Inorganic Phosphate, and Production of Organic Acids by Individual and Co-inoculated Microorganisms. *Geomicrobiology Journal*. DOI: 10.1080/01490451.2022.2124329. (**IF:2.41**) (**HEC W Category**).
58. Hassan N, **Muhammad Rafiq**, Haleem A, Iqba N, Khan M, Shah AA, Hasan F. (2022). Glaciochemistry and Pigment Producing Ability of Bacteria from the Roof of the World, the Glaciers of Karakoram, Pakistan. *Geomicrobiology Journal*,1-9. (**IF:2.41**) (**HEC W Category**).
59. Muhammad Maqsood Ur Rehman, Ying Zhu, Muhammad Abrar, Wasim Khan, Wei Wang, Awais Iqbal, Anum Khan, Yuan Chen, **Muhammad Rafiq**, Muhammad Aammar

- Tufail, Jian-Sheng Ye. (2022). Moisture- and period-dependent interactive effects of plant growth-promoting rhizobacteria and AM fungus on water use and yield formation in dryland wheat. *Plant and Soil.* **(IF: 4.99) (HEC W Category).**
60. Khan I, Zada S, **Muhammad Rafiq**, Sajjad W, Zaman S and Hasan F. (2022). Phosphate solubilizing epilithic and endolithic bacteria isolated from clastic sedimentary rocks, Murree lower Himalaya, Pakistan. *Archives of Microbiology.* 204(6):1-11. **(IF 0.7) (HEC X Category).**
61. Rabbani I, Ahmad T, Maqsood-Ur-Rehman M, **Muhammad Rafiq**, et al, (2022). Effect Of Various Culture Conditions On The Antimicrobial Activity By Bacteria From Passu Glacier, Pakistan. *Applied Ecology And Environmental Research.* 20(3): 2059-2076. **(IF 0.7) (HEC X Category).**
62. Jan SU, Zada S, **Muhammad Rafiq**, Khan I, Sajjad W, Khan MA, Hasan F. (2022). Calcium carbonate precipitation by cave bacteria isolated from Kashmir Cave, Khyber Pakhtunkhwa, Pakistan. *Microscopy Research and Technique.* Volume 2022. 2514-2525. **(IF 2.089) (HEC W Category).**
63. Yu, Jing, Bo Lei, Huina Zhao, Bing Wang, **Kaleem U Kakar**, Yushuang Guo, Xiaolian Zhang, Mengao Jia, Hui Yang and Degang Zhao. (2022). Cloning, Characterization and Functional Analysis of Ntmyb306a Gene Reveals Its Role in Wax Alkane Biosynthesis of Tobacco Trichomes and Stress Tolerance. *Frontiers in Plant Science.* 1-13. **(IF: 6.627) (HEC W Category).**
64. Ullah, Raqeeb, Bo Zhu, **Kaleem U Kakar**, Zarqa Nawaz, **Muhammad Mushtaq**, **Taimoor Shah Durrani**, Zia Ul Islam, and **Faheem Nawaz.** (2022). Micro-Synteny Conservation Analysis Revealed the Evolutionary History of Bacterial Biphenyl

Degradation Pathway. Environmental Microbiology Reports. (IF: 4.933) (HEC W Category).

65. Cui, Zhouqi, Yang Zhang, **Kaleem U Kakar**, Xiangdong Kong, Ruihui Li, Belinda Loh, Sebastian Leptihn and Bin Li. (2022). Involvement of Non-Coding RNAs During Infection of Rice by Acidovorax Oryzae (Vol 13, Pg 540, 2021). Environmental Microbiology Reports. 14:320-320. (IF: 4.933)(HEC W Category).
66. Yang, Zhi-Xiao, Ying-Chao Lin, Yi Cao, Ren-Gang Wang, De-Jun Kong, Qian Hou, Jian-Yu Gou, **Kaleem U Kakar**, Ji-Shun Zhang and Zhi-Hong Wang. (2022). Potassium Accumulation Characteristics and Expression of Related Genes Involved in Potassium Metabolism in a High-Potassium Variety: Tobacco (*Nicotiana Tabacum*) as a Model. Functional Plant Biology. 49, no. 10 (2022): 887-897. (IF: 3.10) (HEC W Category).
67. **Akram Ali Baloch, Kaleem U Kakar, Zarqa Nawaz, Muhammad Mushtaq, Asma Abro, Samiullah Khan and Abdul Latif.** (2022). Comparative Genomics and Evolutionary Analysis of Plant Cncs. Biology Methods and Protocols. 7: bpac018. (HEC Y Category).
68. Hussain J, **Faiz Muhammad**, Rehmani SF, Ahmad A, Lone NA, Bughio M, Freed SK, Khan SA. (2022). An Improved Haemagglutination Inhibition Test for Rapid Diagnosis and Stereotyping of Avian Infectious Bronchitis Virus. Pakistan Journal of Zoology. 54(2): 503-1000. (IF:0.83). (HEC X Category).
69. Saif-Ud-Din AS, Hussain S, **Javid Hussain**, Luqman M, Hussain J, Ali S. Evaluation of heavy metal contamination in indigenous fruits and associated human health risk: evidence from Fuzzy-TOPSIS approach. Global Nest Journal. 24(3):435-444. (HEC X Category).
70. **Akram Ali Baloch, Kaleem ullah Kakar, Abro A, Mushtaq M, Nawaz ZA, Abrar Hussain.** (2022). Genome-wide identification and evolutionary analysis of CNGC gene

families in sixteen Brassicaceae plant genomes. Turkish Journal of Botany. 46(6):583-589.

(IF:1.42). (HEC X Category).

71. Nisar MS, Ali S, Hussain T, Ramzan H, Niaz Y, Haq IU, **Faiza Akhtar**, Alwahibi MS, Elshikh MS, Kalaji HM, Telesinski A. (2022). Toxic and repellent impacts of botanical oils against *Callosobruchus maculatus* (Bruchidae: Coleoptera) in stored cowpea [*Vigna unguiculata* (L.) Walp.]. Plos one. 17(5):e0267987. **(IF:3.24). (HEC W Category)**.
72. **Faiza Akhtar**, Shahkhan S, Mehmood R. Poverty: (2022). An Indicator of Poor-Performing Socioeconomic System In A Region. Journal of Education & Humanities Research. University of Balochistan, Quetta-Pakistan. 13(1):106-114. **(HEC Y Category)**.
73. **Faiza Akhtar** Mushtaq A. (2022). Mycotoxic effects of medicinal plants on the asexual reproduction of *Aspergillus nigar* ATCC 1015. Pak-Euro Journal of Medical and Life Sciences. 5(2):195-202. **(HEC Y Category)** .
74. **Faiza Akhtar**, Khan SS, Shaukat T, Khan QS. (2022). WEEE Resource Recovery and Role of Informal Sector: Prospects of Circular Economy in Pakistan: Prospects of Circular Economy in Pakistan. JEHR Journal of Education And Humanities Research, 14(2):95-106. **(HEC Y Catagory)**
75. Saeed S, Bhatti SH, Tanveer Z, **Faiza Akhtar**, Ahmad T, Raza MA, Khan A, Parveen M, Bukhari N. (2022). Obesity, Smoking, and Stress: Exploring Correlates of Stress. Pak-Euro Journal of Medical and Life Sciences. 5(1):177-182. **(HEC Y Category)**.
76. Hussain SJ, Ali S, **Javid Hussain**, Ali S, Hussain J, Hussain M, Hussain I. Contamination and Human Health Risk Assessment of Toxic Trace Elements in Drinking Water of Gilgit-Baltistan, Pakistan. *Pertanika Journal of Science & Technology* DOI <https://doi.org/10.47836/pjst.31.1.12>. **(HEC Y Catagory)**

77. **Akhtar Malik Muhammad**, Tang Zhonghua; Xiao Tainang. (2022). Evaluation of the factors affecting arsenic distribution using geospatial analysis techniques in Dongting Plain, China. *Frontiers in Environmental Science*.1942 (**Impact Factor: 5.4**) (**HEC W Category**).
78. Tianyun Xiao, **Akhtar Malik Muhammad**, Xiao Pan, Yu Wang, Hu Guangming and Tang Zhonghua (2022). Spatial distribution and risk identification of arsenic contamination in water and soil through GIS-based interpolation techniques in Jianghan Plain, Central China. *Frontiers in Environmental Science* DOI 10.3389/fenvs. 2022.1001862 (**Impact Factor: 5.4**) (**HEC W Category**).
79. **Faiza Akhtar**, Safder Shah Khan, Moghira Badar. (2022) Smart Growth Strategies for Juniper Forest. *European Online Journal of Natural and Social Sciences.* 11(3):597-609. (**ISI indexed**)
80. Rizwan Akhtar, **Faiza Akhtar**, Rahat Mehmood (2022). Measles: Global Indicators and Progress on the road for Achieving and Sustaining Virus Eradication: A Review. (2022). *Pak-Euro Journal of Medical and Life Sciences*.5(2):325-332. (**HEC Y Catagory**).
81. **Javid Hussain**, Ittehad Hussain, Raana Fahim, Jawad Ali, Zhang yunyun, Sadia Hassan Sherani. 92022). Distribution and eco-toxicological risk characteristics of polycyclic aromatic hydrocarbons in water from Changdang Lake, China. *Journal of Biodiversity and Environmental Science*. 20:32-43. (**ISI indexed**)
82. Naeemullah Nadia Khan, Khan MJ, Wazir AK, Iqbal A, Ishtiaq M, Khan SA, **Jawad Ali**. (2022). Requency of Over Weight and Obesity and its Determinants Among Adult Population of District Swat Khyber Pakhtunkhwa Pakistan. *Pakistan Journal of Medical & Health Sciences*. 16(07):855-857. (**HEC Y Catagory**)

83. Khan MJ, Naeemullah NK, Wazir AK, Iqbal A, Ishtiaq M, Khan SA, **Jawad Ali**. (2022). Knowledge Attitude and Practice of Food Handlers Regarding Food Safety Practices District Kohat Khyber Pakhtunkhwa Pakistan. *Pakistan Journal of Medical & Health Sciences*. 16(07):831-834. (**HEC Y Catagory**)
84. Israr M, Nazneen S, Raza A, Ali N, Khan SA, Khan H, Khan S, **Jawad Ali**. (2022). Assessment of municipal solid waste landfilling practices on the groundwater quality and associated health risks: a case study of Mardan-Pakistan. *Arabian Journal of Geosciences*. 15(17):1-11. (**HEC X Catagory**)
85. Khan MJ, Waheed MS, Nadia Khan, Ishtiaq M, Wazir AK, **Jawad Ali**. (2022). Dental Caries Frequency & its Determinants among Adults of District Kohat & Nowshera Khyber Pakhtunkhwa Pakistan. *Pakistan Journal of Medical & Health Sciences*. 16(05):1155-1157. (**HEC Y Category**).
86. **Anila Ali**, Hussain RM, Asghar A, Shah SZ, **Malghani GK**. (2022). Physiological Impacts of Motorcycling on its Young Riders in relation to their Body Mass Index. *Journal of Applied and Emerging Sciences*. 2022 Dec 29;12(2):70-76. (**HEC Y Category**).
87. Sohail MT, Hussan A, Ehsan M, Al-Ansari N, **Malik Muhammad Akhter**, Manzoor Z, Elbeltagi A. (2022). Groundwater budgeting of Nari and Gaj formations and groundwater mapping of Karachi, Pakistan. *Applied Water Science*. 12(12):267. (**IF: 5.41**) (**HEC W Category**).
88. **Malik Muhammad Akhter**, Sheikh A, Ghaffar M. Assessment of land use/land cover dynamics in Zhob river basin, Pakistan. *Songklanakarin Journal of Science & Technology*. 44(6). (**IF: 0.6**) (**HEC Y Category**).
89. Manzoor Z, Ehsan M, Khan MB, Manzoor A, Akhter MM, Sohail MT, Hussain A, Shafi A, Abu-Alam T, Abioui M. (2022). Floods and flood management and its socio-economic

impact on Pakistan: A review of the empirical literature. *Frontiers in Environmental Science*. 10:2480. (**IF: 5.4**) (**HEC W Category**).

FACULTY OF BASIC SCIENCES

90. **Hamid Ullah, Abrar Hussain, Muhammad Asif.** (2022). Faheem N, Rasool M. Natural products as bioactive agents in the prevention of dementia. CNS & Neurological Disorders Drug Targets. DOI: 10.2174/1871527321666220422085835 (IF: 3.81) (HEC W Category)
91. **Mohib Ullah,** Shah LA, Haleem A, Khan D, Ullah I, **Hameeda Panezai.** (2022). Aminated-diamond integrated poly (methyl methacrylate) fibers reinforced epoxy composites with enhanced structural, thermal, and mechanical properties. Polymer Bulletin.2: 1-9. (IF: 2.843)(HEC X Category)
92. Shah LA., Gul K, Ali I, Khan A, Sayyar Muhammad S, **Ullah, Mohib**, et al,. (2022). Synthesis of Poly (N-vinyl formamide-acrylamide) hydrogels: Composition effect and Rheological investigation. Iranian Polymer Journal. <http://doi.org/10.1007/s13726-022-01043-x>. (IF: 2.48)(HEC X Category).
93. **Mujtaba Ellahi**, Muhammad J, Furqan Ali M, Mangi KH, Bhayo AM, Iqbal M. (2022). Preparation of silver nanoparticles (AgNPs)-doped epoxy-based thin PDLC films (smart glass), Polymer Bulletin 79:3135–3153. (IF: 2.84) (HEC X Category).
94. **Sarwar Aziza.**, Bahron H, Nabi N, **Ellahi Mujtaba**, Naureen B, **Hamida Panezai**, Alias Y. (2022). Recent Trends in Luminescent Zn (II) and Ir(III) Complexes Bearing a Variety of Schiff Base Ligands. Malaysian Journal of Chemistry. 24(3): 88–112. (IF: 0.47) (HEC Y Category).
95. Hafsa A, **Shazia Iqbal**, Ashif S, **Hamid Ullah**, Abida F, Benish A. (2022). Health risk assessment of heavy metals in raw and packed milk from the areas of rawalpindi and Islamabad: a comparative study. Pak-Euro Journal of Medical and Life Sciences. 5(2): 383-390. (HEC Y Category)

96. Manzoor A, Khan MA, Afzal AM, Arshad MI, Shahzad A, Akbar S, Kashif M, Ashraf GA, Khan MY, Rasul MN, Shifa MS, **Gulfam Nasar**, Hussain A. (2022). Dielectric, XPS, and ferromagnetic relaxation studies of Ho-substituted polycrystalline magnetic oxide materials. *Ceramics International*. 48(21): 32266-32272. **(IF: 4.54) (HEC W Category)**.
97. Ahmad M, Qureshi MT, Rehman W, Alotaibi NH, Gul A, Hameed RS, Al Elaimi M, Abd El-kader MF, **Muhammad Nawaz**, Ullah R. (2022). Enhanced photocatalytic degradation of RhB dye from aqueous solution by biogenic catalyst Ag@ ZnO. *Journal of Alloys and Compounds*. 895:e162636. **(IF: 5.31) (HEC W Category)**.
98. Shazia Ishfaq, **Hamid Ullah**, Taj Ur Rahman, Sadia Majid, Nisar Ahmad, Mujtaba Ellahi, Syed Badshah, Muhammad Akram, **Noornama Panezai**, (2022), Morita Baylis Hillman Adduct Serves as Ligand in the Synthesis of Transition Metal Complexes Exhibiting Antibacterial Activity, *Pharmaceutical Chemistry Journal*, **56 (7)**. **(IF: 1.063) (HEC Y Category)**.
99. Haleem A, **Hamid Ullah**, Akbar A, **Ahmad N**, **Ellahi M**, **Nawaz M**. (2022). Synthesis and Biological Activity of Morita Baylis Hillman Adducts and their Oximes. *Pharmaceutical Chemistry Journal*. 56(2):185-190. **(IF: 0.83)(HEC Y Category)**.
100. Ullah, Zain, Saqib Ali, Atarad Hussain, Mehmet Ozturk, Abdulselam ERTAS, Muhammad Alamzeb, **Mamoon Ur Rashid**, **Hamid Ullah**, Rubia Zaman, and Muhammad Imtiaz. (2022). In vitro antioxidant, anticholinesterase, tyrosinase activity studies, and LC-MS/MS simultaneous determination of 37 bioactive compounds in Indigofera heterantha. *South African Journal of Botany*. 148 (2022): 537-545. **(IF: 3.11) (HEC W Category)**.
101. Mafia Rani, Javed Iqbal, Rana Farhat Mehmood, Ehsan Ullah Rashid, Saima Rani, **Muhammad Raheel**, Rasheed Ahmad Khera. (2022). Strategies toward the end-group

modifications of indacenodithiophene based non-fullerene small molecule acceptor to improve the efficiency of Organic solar Cells; a DFT study. Computational and Theoretical Chemistry. 1213: 113747. (**IF :1.926**) (**HEC X Category**).

102. Muhammad Waqas, Javed Iqbal, Rana Farhat Mehmood, Sahar Javaid Akram, Ahmed M Shawky, **Muhammad Raheel**, Ehsan Ullah Rashid, Rasheed Ahmad Khera. (2022).

Impact of end-capped modification of MO-IDT based non-fullerene small molecule acceptors to improve the photovoltaic properties of organic solar cells. Journal of Molecular Graphics and Modelling. 116: 108255. (**IF:2.51**) (**HEC X Category**).

103. Wajid Ullah, Tariq Aziz, Amjad Ali, Zaheen Ullah Khan, Sandeep Kumar Das, Mudassir Iqbal, Roh Ullah, Nasrullah Wazir, Farman Ullah Khan, **Muhammad Raheel**. (2022).

Significant enhancement of surface area and structural distortion of carbon nitride by recrystallization method. Journal of Materials Science. 57: 12886-12893. (**IF: 4.68**) (**HEC W Category**).

104. Sahar Javaid Akram, N. M. A. Hadia, Javed Iqbal, Rana Farhat Mehmood, Saleem Iqbal, Ahmed M. Shawky, Areeba Asif, H. H. Somaily, **Muhammad Raheel**, and Rasheed Ahmad Khera. (2022). Impact of various heterocyclic π -linkers and their substitution position on the opto-electronic attributes of the A- π -D- π -A type IECIO-4F molecule: a comparative analysis. RSC Advances. 12: 20792–20806. (**IF:4.036**) (**HEC W Category**).

105. Muhammad Umar Saeed, Javed Iqbal, Rana Farhat Mehmood, Muhammad Riaz, Sahar Javaid Akram, H. H. Somaily, **Muhammad Raheel**, Muhammad Imran Khan, Ehsan Ullah Rashid, and Rasheed Ahmad Khera. (2022). Structural modification on Dimethoxythienothiophene based non-fullerene acceptor molecule for construction of

high-performance organic chromophores by employing DFT approach. *Journal of Physics and Chemistry of Solids.* 170: 110906. (**IF :3.99**) (**HEC W Category**).

106. Haya A. Abubshait, Muhammad Saad, Shahid Iqbal, Samar A. Abubshait, Ali Bahadur, **Muhammad Raheel**, Fwzah H. Alshammari, Norah Alwadai, Hamad Alrbyawi, Mohammed A.S. Abourehab, Eslam B. Elkaeed, Muhammad Abdul Qayyum, H.H. Somaily. (2023). Co-doped zinc oxide nanoparticles embedded in Polyvinylalcohol Hydrogel as solar light derived photocatalyst disinfection and removal of coloured pollutants. *Journal of Molecular Structure.* 1271: 134100. (**IF:3.19**) (**HEC X Category**).

107. Saliha Sabir, N.M.A. Hadia, Javed Iqbal, Rana Farhat Mehmood, Sahar Javaid Akram, Muhammad Imran Khan, Ahmed M. Shawky, **Muhammad Raheel**, H. H Somaily, Rasheed Ahmad Khera. (2022). DFT molecular modeling of A₂-D-A₁-D-A₂ type DF-PCIC based small molecules acceptors for organic photovoltaic cells. *Chemical Physics Letters.* 806: 140026. (**IF :2.32**) (**HEC X Category**).

Gulfam Nasar, Khalil U, Khan MS, Nadeem Q. (2022). Synthesis and Characterization of CNT/PVA Nanocomposites for Electrical, Thermal and Morphological Properties. *Journal of Materials and Physical Sciences.* 3(1): 14–21. (**HEC Y Category**).

108. Syed Awais Ali, WaqadUlMulk, **ZahoorUllah**, Haris Khan, Afrah Zahid, Mansoorul Hassan Shah and Syed Nasir Shah. Recent Advances in the Synthesis, Application and Economic Feasibility of Ionic Liquids and Deep Eutectic Solvents for CO₂ Capture: A Review. *Energies*, 15 (23), 9098,(2022).(**IF: 3.25**) (**HEC W Category**).

109. Kooprasertying P, Vanichsriratana W, Sirisansaneeyakul S, Laemsak N, Tareen AK, **ZahoorUllah**, Parakulsuksatid P, Sultan IN. (2022). Ethanol production through optimized alkaline pretreated *Elaeisguineensis* Frond waste from Krabi province, Thailand. *Fermentation.* 8: 648. .(**IF: 5.12**) (**HEC X category**)

110. Ahmad P, Khandaker MU, Khan A, Rehman F, Din SU, Ali H, Khan MI, Muhammad N, Ahmed N, **Zahoor Ullah**, Khan G. (2022) Enhanced Thermal Stability and Synergistic Effects of Magnesium and Iron Borate Composites against Pathogenic Bacteria. BioMed Research International. Vol. 2022. Article ID 3605054 **(IF:3.24) (HEC W Category)**.
111. Gul A, Nisar U, **Zahoor Ullah**, Furqan M, Haq M. (2022). Pattern Of Anemia In Diabetic Patients Presenting To Private Sectors Tertiary Care Hospitals In Peshawar. Journal of Medical Sciences. 30(04):246-9. **(HEC Y Category)**.
112. Ali SA, Mulk WU, **Zahoor Ullah**, Khan H, Zahid A, Shah MU, Shah SN. (2022) Recent Advances in the Synthesis, Application and Economic Feasibility of Ionic Liquids and Deep Eutectic Solvents for CO₂ Capture: A Review. Energies. 15(23):9098. **(IF:3.25) (HEC W Category)**.
113. Ghanem OB, Shahrom MS, Shah SN, Mutalib MI, Leveque JM, **Zahoor Ullah**, El-Harbawi M, Alnarabiji MS. (2022) Greener approach for the separation of naphthenic acid from model oil using Pyrrolidinium-based amino acid ionic liquids. Fuel. 2337:127141. **(IF:8.03) (HEC W Category)**.
114. Ali I, Malghani YA, **Sardar Muhammd Hussain**, Khan N, Ro JS. (2022). Generalization of k-Uniformly Starlike and Convex Functions Using q-Difference Operator. Fractal and Fractional. 6(4):216. **(IF:3.31) (HEC X Category)**.
115. **Sardar Muhammd Hussain**, Shah HH, Ro JS. (2022). Comparison between computational cost of fractals using line-doublets. Mathematics and Computers in Simulation. 202:374-387. **(IF:2.46). (HEC W Category)**.
116. Channa N, Abbas N, Khan JK, Khalid M, Muhammad M, **Hafeez Ullah**, MK, Inam S, Arshad M. (2022). Fabrication of Cobalt Ferrite Nanoparticles with a Facile Approach:

Variations in Structural, Dielectric and Morphological Properties by Influence of Annealing Temperature. International Journal of Nanoelectronics & Materials.15: 1-16. **(ISI Indexed). (HEC Y Category).**

117. Nazeer M, **Farooq Hussain**, Khan MI, El-Zahar ER, Chu YM, Malik MY. (2022). Theoretical study of MHD electro-osmotically flow of third-grade fluid in micro channel. Applied Mathematics and Computation. 420: e126868. **(IF: 4.09). (HEC W Category)**.

118. **Hassan Shah**, Suhail Khan, Dianchen Lu, Zahid Ahmad, **Sardar Muhammad Hussain** and **Hasrat Hussain Shah**. (2022). Gravitational collapse of dissipative fluid in $f(R,G)$ gravity. International Journal of Modern Physics A. <https://doi.org/10.1142/S0217751X22501433>. **(IF:1.475)(HEC X Category)**.

119. Maryam Atta, **Sardar Muhammad Hussain**, **Farooq Hussain**, **Hasrat Hussain Shah**, Jong Suk Ro. (2022). Fractals Flow Simulation for Ground Flow with Varying Apertures by Using Analytic Element Method. Journal of Fractals and Fractional. 6(10) 573. **(IF:3.31) (HEC X Category)**.

120. Umar Habib, Salman Zeb, Kamal Shah and **Sardar Muhammad Hussain**. (2022). KdV Equation Solution by Double Laplace Adomian Decomposition Method and Its Convergence Analysis. Mathematical Problems in Engineering. Article ID 1132557. **(IF:1.430) (HEC X Category)**.

121. Ullah N, Ali I, **Sardar Muhammad Hussain**, Ro JS, Khan N, Khan, B. (2022). Third Hankel Determinant for a Subclass of Univalent Functions Associated with Lemniscate of Bernoulli. Fractal and Fractional. 6: 48. **(IF:3.31) (HEC X Category)**.

122. Laiba Sultan Dar , Muhammad Aamir, Zardad Khan, **Muhammad Bilal**, Nattakan Boonsatit and Anuwat Jirawattanapanit. (2022). Forecasting Crude Oil Prices Volatility by

Reconstructing EEMD Components using ARIMA and FFNN Models. *Frontiers in Energy Research*. 1501. (**IF 4.008**) (**HEC X Category**).

123. **Qaisar Khan, Farooq Hussain,,** Shakeel Ahmad, Hammad Alotaibi, and Taseer Muhammad. (2022). Analysis of squeezing flow of Powell–Eyring fluid with generalized transport phenomena and double stratification past inclined parallel sheets. *Waves in Random and Complex Media*. 1-20. (**IF: 4.5**) (**HEC W Category**).
124. Khan RU, Almakdi S, Alshehri M, Kumar R, Ali I, **Sardar Muhammad Hussain, Haq AU, Khan I, Ullah A, Uddin MI.** (2022) Probabilistic Approach to COVID-19 Data Analysis and Forecasting Future Outbreaks Using a Multi-Layer Perceptron Neural Network. *Diagnostics*. 12(10):2539. (**IF:3.99**). (**HEC X Category**).
125. Sadaf H, Asghar Z, **Naheeda Iftikhar.** (2022). Cilia-driven flow analysis of the cross fluid model in a horizontal channel. *Computational Particle Mechanics*. pp:1-8. (**IF:3.11**). (**HEC W Category**).
126. **Muhammad Bilal,** Shakoor Muhammad, Fazal Hanan Nekmat Ullah, Subhan Ullah. (2022). Optimum solutions of partial differential equation with initial condition using optimization techniques. *VFAST Transactions on Mathematics*. 10(2): 118-136. (**HEC Y Category**).
127. **Muhammad Bilal,** Aamir M, Abdullah S, Mahmood N, Khalil U, Khalid N, Ahmed M, Naeem M, Muhammad S, Dar LS. Assessment of the COVID-19 Pandemic's Impact on Gasoline Prices in Pakistan. *VFAST Transactions on Mathematics*. 10(2):51-66. (**HEC Y Category**).

128. **Khan M**, Salahuddin T, Awais M, Al Alwan B. (2022) An entropy analysis in a slip condition flow over a linear stretching sheet. Chinese Journal of Physics.. **(IF: 3.95) (HEC W Category)**.
129. **Khan M**, Salahuddin T, Awais M, Al Alwan B. (2022) Thermo-physical properties of liquids and gases over a heated rotating disk. International Communications in Heat and Mass Transfer. 139:106468. **(IF: 6.78) (HEC W Category)**.
130. Salahuddin T, Bashir AM, **Khan M**. (2022) Numerical study on thermal performance of TiO₂, Fe₃O₄ and NiCr/engine oil in an inclined wavy pip. Journal of the Indian Chemical Society.99(11):100719. **(IF: 0.243) (HEC Y Category)**.
131. Salahuddin T, Javed A, **Khan M**, Awais M, Bangali H. (2022) The impact of Soret and Dufour on permeable flow analysis of Carreau fluid near thermally radiated cylinder. International Communications in Heat and Mass Transfer. 138:106378. **(IF: 6.78) (HEC W Category)**.
132. **Khan M**, Salahuddin T, Al Alwan B, Khan Q. (2022) A Blasius boundary layer analysis for variable viscosity function near a flat plate. International Communications in Heat and Mass Transfer. 138:106320. **(IF: 6.78) (HEC W Category)**.
133. Salahuddin T, Kousar I, **Khan M**. (2022) Electrokinetically driven peristaltic flow of nanofluid in a curved microchannel. Materials Science and Engineering: B. 284:115886. **(HEC W Category)**.
134. Salahuddin T, Javed A, **Khan M**, Awais M, Al Alwan B. (2022) A significant impact of Carreau Yasuda material near a zero velocity region. Arabian Journal of Chemistry. 15(10):104166. **(IF: 6.21) (HEC W Category)**.

135. Salahuddin T, Mahmood Z, **Khan M**, Awais M. (2022) A permeable squeezed flow analysis of Maxwell fluid near a sensor surface with radiation and chemical reaction. *Chemical Physics*. 562:111627. **(IF: 2.55) (HEC X Category)**.
136. Salahuddin T, Ali R, **Khan M**, Awais M. (2022) An axisymmetric flow analysis by means of tangent hyperbolic fluid with Cattaneo-Christov heat and mass flux model. *Journal of the Indian Chemical Society*. 99(10):100592. **(IF: 0.243) (HEC Y Category)**.
137. Salahuddin T, Bashir AM, **Khan M**. (2022) A theoretical study on rheological effect of multiple nanoparticles on thermal performance near an inclined wavy pipe. *Materials Science and Engineering: B*. 284:115862. **(HEC W Category)**.
138. Salahuddin T, Akram A, **Khan M**, Altanji M. (2022) A curvilinear approach for solving the hybrid nanofluid model. *International Communications in Heat and Mass Transfer*. 137:106179. **(IF: 6.78) (HEC W Category)**.
139. **Khan M**, Salahuddin T, Bangali H. (2022) An entropy flow analysis by means of new scaling transformations. *International Journal of Hydrogen Energy..* **(IF: 7.13) (HEC W Category)**.
140. Tanveer A, **Khan M**, Salahuddin T, Al Alwan B, Amari A. (2022) Dynamics of Walters' B fluid due to periodic wave in a convectively heated channel with internal heat generation. *Mathematics and Computers in Simulation*. 199:374-93. **(IF: 3.60) (HEC W Category)**.
141. Salahuddin T, Akram A, Awais M, **Khan M**. (2022) A hybrid nanofluid analysis near a parabolic stretched surface. *Journal of the Indian Chemical Society*. 99(8):100558. **(IF: 0.243) (HEC Y Category)**.
142. Salahuddin T, **Khan M**, Tanveer A, Awais M, Ali R. (2022) Centrifugal and coriolis forces in three dimensional thermo-physical system with enthalpy and activation energy. *Case Studies in Thermal Engineering*. 35:101999. **(IF: 6.26) (HEC W Category)**.

143. **Khan M**, Salahuddin T, Al Alwan B. (2022) Significance of binary chemical reaction, enthalpy and variable thermophysical properties over a radioactive heated rotated disk. Chinese Journal of Physics. 77:511-20. **(IF: 3.95) (HEC W Category)**.
144. Salahuddin T, Bashir AM, **Khan M**, Al Alwan B, Almesfer M. (2022) Hybrid nanofluid analysis for a class of alumina particles. Chinese Journal of Physics. 77:2550-60. **(IF: 3.95) (HEC W Category)**.
145. **Khan M**, Salahuddin T, Awais M, Al Alwan B. (2022) Thermo-physical properties of fluid and gases near a solar rough rotating disk. Waves in Random and Complex Media 12:1-6. **(IF: 4.05) (HEC W Category)**.
146. **Khan M**, Salahuddin T, Altanji M, Khan Q. (2022) Calculating the isotropic and anisotropic roughness by using MW model: a variable thermal conductivity study. Radiation Physics and Chemistry. 194:110010. **(IF: 2.77) (HEC W Category)**.
147. **Khan M**, Salahuddin T, Ali R, Khan Q. (2022) A Blasius boundary layer study for liquids and gasses with variable thermo-physical characteristics and radiative heat flux. Ain Shams Engineering Journal. 13(3):101584. **(IF: 4.79) (HEC W Category)**.
148. Salahuddin T, **Khan M**, Sakinder S, Al Alwan B. (2022) A flow analysis of hybrid nanoparticles near a solid sphere. International Journal of Hydrogen Energy. 47(37):16640-8. **(IF: 7.13) (HEC W Category)**.
149. **Khan M**, Salahuddin T, Taj M, Al Alwan B. (2022) Numerical solution of Arrhenius activation energy for rotational flow. Waves in Random and Complex Media.:1-8. . **(IF: 4.05) (HEC W Category)**.
150. Salahuddin T, Siddique N, **Khan M**, Altanji M. (2022) A significant study on flow analysis of viscoelastic fluid with variable thermo-physical properties. Mathematics and Computers in Simulation. 194:416-29. **(IF: 3.60) (HEC W Category)**.

151. Sakinder S, Salahuddin T, Taj M, **Khan M**, Al Alwan B. (2022) A flow analysis of gamma-alumina nanoparticles near a solid sphere. Waves in Random and Complex Media.:1-6. **(IF: 4.05) (HEC W Category).**
152. Salahuddin T, Siddique N, **Khan M**, Al Alwan B, Almesfer M. (2022) The role of enthalpy and activation energy on thermophysical properties of third grade fluid near a magnetized radioactive irregular wavy surface. Results in Physics. 34:105063. **(IF: 4.56) (HEC W Category).**
153. Salahuddin T, **Khan M**, Awais M. (2022) A noteworthy impact of heat and mass transpiration near the unsteady rare stagnation region. Pramana. 96(1):48. **(IF: 2.69).**
154. Salahuddin T, **Khan MH**, **Khan M**, Al Alwan B, Amari A. (2022) An analysis on the flow behavior of MHD nanofluid with heat generation. Fuel. 311:122548. **(IF: 8.03) (HEC W Category).**
155. Salahuddin T, Ali Z, Awais M, **Khan M**, Altanji M. (2022) A flow behavior of Sutterby nanofluid near the catalytic parabolic surface. International Communications in Heat and Mass Transfer. 131:105821. **(IF: 6.78) (HEC W Category).**
156. **Khan M**, Salahuddin T, Altanji M. (2022) A viscously dissipated Blasius boundary layer flow with variable thermo-physical properties: An entropy generation study. International Communications in Heat and Mass Transfer. 131:105873. **(IF: 6.78) (HEC W Category).**
157. **Khan M**, Salahuddin T, Khan Q, Al Alwan B, Almesfer M. (2022) Numerical study of binary mixture and thermal analysis near a solar radiative heated surface. Solar Energy. 231:262-9. **(IF: 7.10) (HEC W Category)**
158. **Javed Rehman**, Eid K, Ali R, Fan X, Murtaza G, Faizan M, Laref A, Zheng W, Varma RS. (2022). Engineering of Transition Metal Sulfide Nanostructures as Efficient Electrodes

for High-Performance Supercapacitors. ACS Applied Energy Materials. 5(6): 6481–6498

DOI: 10.1021/acsaem.1c0393 (IF:6.02). (HEC W Category)

159. **Zahoor Ullah, Javed Rehman**, Rehman FU, Gulbadan S, Mahmood MA, Khan MA. (2022). Structural and dielectric properties of Sr substituted BaTi0. 8Zr0. 2O3 perovskite synthesized via solid state reaction route. Applied Physics A: Materials Science and Processing. 128(6):1-13. **(IF:2.5) (HEC X Category).**
160. **Sohaib M**, Iqbal T, Afsheen S, Almohammedi A, **Hamdullah Khan**, Masood A, Yousaf M, Mansha MS, Farooq M, Naseer H, Riaz KN. Simple synthesis of lanthanum and molybdenum doped ZnO for their application to enhance the shelf life of apple. Optical Materials.134:113195. **(IF:3.7) (HEC W Category).**
161. M. K. Butt, **Javed Rehman**, Ayman S. Alofi, Zhao Yang, H. M. Zeeshan, Shuanhu Wang, Amel Laref, Munirah Albaqami, Reham Ghazi Alotabi, Jin Kexin, M. F Shibl. (2022). Investigating the electrochemical properties of SnO monolayer in sodium-ion batteries. Journal of Physics and Chemistry of Solids. 110975. **(IF: 4.3) (HEC X Category).**
162. Peng Qiong, **Javed Rehman**, Kamel EIId, Ayman S. Alofi, Amel Laref, Munirah Albaqami, Reham Ghazi Alotabi, M. F Shibl. (2022). Vanadium Carbide (V4C3) MXene as an Efficient Anode for Li-Ion and Na-Ion Batteries. Nanomaterials. 12(16): 2825. **(IF: 5.7) (HEC W Category).**
163. Muhammad Junaid, Ijaz Ahmad Qazafi, Muhammad Azhar Khan, Shagufta Gulbadan , Syed Zafar Ilyas,H.H. Somaily , Mohamed S. Attia ,Mohammed A. Amin , **H.M. Noor ul Huda Khan Asghar**. The influence of Zr and Ni co-substitution on structural, dielectric and magnetic traits of lithium spinel ferrites. Ceramics International. 48(10):14307-14314 **(IF: 4.52) (HEC W Category).**

164. Muhammad Azhar Khan, Shaheen Aslam, M. Asif Iqbal, Muhammad Junaid, Shagufta

Gulbadan, Syeda Rabia Ejaz, Alina Manzoor, Ghulam Abbas Ashraf, **H.M. Noor ul Huda**

Khan Asghar, H.H. Somaily, Manal Morsi, Thamraa Alshahrani. Structural spectral,

dielectric, and magnetic properties of Mg substituted Ba₃CoFe₂₄O₄₁ Z-type hexaferrites.

Journal of Magnetism and Magnetic Materials. 560: 169589 (**IF: 2.99**) (**HEC W**

Category).

165. Kiran Naz, Junaid Kareem Khan, Muhammad Khalid, Muhammad Saeed Akhtar, **Zaheer**

Abbas Gilani, H.M. Noor ul Huda Khan Asghar, Gaber A.M. Mersal, Mohamed

M. Ibrahim, A. Muhammad, M.G.B. Ashiqh. Structural, dielectric, impedance and electric

modulus analysis of Ni substituted copper spinel ferrites nanoparticles for microwave

device applications. Materials Chemistry and Physics. 285: 126091 (**IF: 4.094**) (**HEC W**

Category).

166. Samiullah, **H. M. Noor ul Huda Khan Asghar, Zaheer Abbas Gilani, Muhammad**

Khalid, Awais Ahmed, Abdul Kareem Khan, Mohammad Rizwan Khan, Furhaj Ahmed

Sheikh, Naushad Ahmad & Rosa Busquets. (2022). Structural, dielectric, impedance and

electric modulus properties of praseodymium-substituted BaPr_xFe_{12-X}O₁₉ nanoparticles

synthesized via sol-gel method. Applied Physics A Materials Science & Processing. 762

Applied Physics A. 128: 762 (**IF: 2.58**) (**HEC W Category**).

167. **Sameen Aslam, Ahmad Salam Farooqi, Mohd Yusri Abd Rahman, Siti Azrah Mohamad**

Samsuri (2022). Titanium-Based Vacancy-Ordered Double Halide Family in Perovskite

Solar Cells. Physica Status Solidi (A) Applications and Materials. 219(8) (**IF: 2.06**) (**HEC**

W Category).

168. Malik M, Iqbal MA, Iqbal Y, Malik M, **Sunila Bakhsh**, Irfan S, Ahmad R, Pham

PV. Biosynthesis of silver nanoparticles for biomedical applications: A mini review.

Inorganic Chemistry Communications. 2022 Sep 13:109980. (IF: 3.17) (HEC X Category).

169. Fang J, Qaisrani MA, Tu N, We J, Wan Z, Jin Y, **Muhammad Khalid**, Ahmed N. (2022). Experiment and numerical analysis of thermal performance of a billboard external receiver. Energies. 15(6): 2188. (IF: 3.0) (HEC W Category).
170. **Muhammad Asim Shahzad**, Hafiz Tariq Masood, Muhammad Farooq Warsi, **Zaheer Abbas Gilani**, Abdullah Saad Alsubaie, Khaled H. Mahmoud, Salah M. El-Bahy, Zeinhom M. El-Bahy, Muhammad Azhar Khan & Muhammad Asghar , Impact of Nd³⁺ and Ni²⁺ dopants on the structural, electrical and dielectric behaviour of PbZrO₃ nanocrystalline material. Journal of Taibah University for Science. 16:362-. (IF:1.8) (HEC X Category).
171. **Bakhsh M.**, Yasuda H, **Nisar Ahmad**, Ding J. H., Wong, Shahrim Mustafa I S., (2022). Zinc-Doped Magnesium Borate Glass: A Potential Thermoluminescence Dosimeter for Extended Range of Dosimetric Applications. Applied sciences. 12 (15): 7491 (IF: 2.67). (HEC X Category).
172. Rahim A, Haider A, **Hamdullah Khan**. Din HU, Shafiq M, Amin B, Idrees M. (2022). Electronic and thermoelectric properties of group IV–VI van der Waals heterostructures. Journal of Computational Electronics. 21:725–732. (IF: 1.98) (HEC X Category).
173. Hussain I, Khan SN, **Muhammad Naeem Khan**, Fournier P, Koo BH. (2022). Probing the effect of Pr doping on the magnetic and magnetocaloric properties of Ba_{2-x}Pr_xFeMoO₆ double perovskites. Solid State Communications. 353: e114875. (IF:1.8)(HEC X Category).
174. Ali A, Salam A, Khesro A, **Muhammad Naeem Khan**. (2022). Dielectric properties of Bi (M₂/3Nb₁/3) O₃ (M= Ni, Mg, Zn) ceramics. Journal of Materials Science:. 33: 15067–15073. (IF: 4.68) (HEC W Category).

175. Ghaffar AA, Khan MA, Niaz S, **Farooq Khan**, Jamil MA, Ramay SM.(2022). Controllable fast light in quantum dot molecules assisted hybrid optomechanical system. International Journal of Quantum Chemistry. 122(12):e26955. **(IF:2.44) (HEC X Category).**
176. Wang D, Li C, Li Q, Li H, **Javed Rehman**, Zhi C, Zhu L. (2022) Unraveling the high Energy efficiency for Zn|| metal hexacyanoferrate batteries in a zinc-potassium hybrid configuration. Nano Energy. 104:107990. **(IF:19.06) (HEC W Category).**
177. Butt MK, **Javed Rehman**, Yang Z, Wang S, El-Zatahry A, Alofi AS, Albaqami MD, Alotabi RG, Laref A, Jin K, Shibl MF. (2022) Storage of Na in 2D SnS for Na ion batteries: a DFT prediction. Physical Chemistry Chemical Physics. 24(48):29609-2915. **(IF:3.94) (HEC W Category).**
178. **Farooq Khan**, Rehman HU, Asif SM, Khan MA, Khan MA. (2022) Interference in photo-detachment of triatomic negative ion near a hard reflecting surface. International Journal of Quantum Chemistry. e27054. **(IF:2.43) (HEC X Category).**
179. **Nisar Ahmad**, Niamatullah, Hussain J, Ahmad I, Asif M.(2022). Estimation of health risk to humans from heavy metals in soil of coal mines in Harnai, Balochistan. International Journal of Environmental Analytical Chemistry. 102(16):3894-905. **(IF:2.4) (HEC X Category).**

FACULTY OF INFORMATION COMMUNICATION TECHNOLOGY

180. Hasnain A, Sheng Y, Hashmi MZ, Bhatti UA, Hussain A, Hameed M, Marjan S, Bazai SU, Aamir Hussain, Mazhar Hameed, **Shah Marjan, Sibghat ullah Bazai**, Mohammad

Amzad Hossain, **Raja Asif Wagan**. (2022) Time Series Analysis and Forecasting of Air Pollutants Based on Prophet Forecasting Model in Jiangsu Province, China. *Frontiers in Environmental Science*:1044. **(IF: 5.41) (HEC W Category)**.

181. Muhammad **Annas Hafeez**, Ahmer Naeem, **Muhammad Akram**, Muhammad Yaqoob Javed, **Aamer Bilal Asghar**, and Yong Wang. (2022). A Novel Hybrid MPPT Technique Based on Harris Hawk Optimization (HHO) and Perturb and Observer (P&O) under Partial and Complex Partial Shading Conditions. *Energies*. 15(15):5550. **(IF:3.25) (HEC W Category)**.

182. Usman Habib Khan, Muhammad Naeem Ahmed Khan, **Aamir Mehmood Mirza**, **Muhammad Akram**, Shariqa Fakhar, Shumaila Hussain, Irfan Ahmed Magsi, and **Raja Asif Waga**. (2022) Automating Test Case Generation for Android Applications using Model-based Testing. *EMITTER International Journal of Engineering Technology*:26:63-68. **(HEC Y Category)**.

183. Khan Z, Naseer F, **Yousuf Khan**, **Muhammad Bilal**, Butt MA. (2022). Study of Joint Symmetry in Gait Evolution for Quadrupedal Robots Using a Neural Network. *Technologies*.10(3):64. **HEC Y Category**

184. Naqeeb Ullah, Lingling Huang, Muhammad Rizwan Amirzada, Anayat Ullah, **Muhammad Luqman Haider**, Muhammad Khurram Ehsan, **Yousuf Khan**. (2022). Investigation of Leakage Current in Micro M-I-M Structure Using Multilayer High-K Dielectric Materials with COMSOL Multiphysics. *Elektronika IR Elektrotehnika*. 28(2):72-77. **(IF:1.09)(HEC X Category)**.

185. Muhammad Sheharyar, Alamgir Naushad, Imran Khan, Muhammad Abid Hussain, **Faizullah Khan Kakar**. (2022). Study on Fixed and Dynamic Spectrum Access Models

for Cellular Networks. Journal of Telecommunications and the Digital Economy.

10(2):267-287. (**HEC X Category**).

186. Munir ME, Al Harbi AG, Kiani SH, Marey M, Parchin NO, Khan J, Mostafa H, Iqbal J, **Muhammad Abbas Khan**, See CH, Abd-Alhameed RA.(2022). A New mm-Wave Antenna Array with Wideband Characteristics for Next Generation Communication Systems. Electronics. 11(10): e1560. (**IF: 2.39**) (**HEC X Category**).
187. Wan C, Liu B, Nazir MS, Abdalla AN, Mohamed MA, Ding Z, Bhutta MS, **Mehar Gul**. (2022). An Energy Storage Assessment: Using Frequency Modulation Approach to Capture Optimal Coordination. Sustainability.14(14):8510. (**IF:3.25**) (**HEC W Category**).
188. Bakht MP, Salam Z, **Mehar Gul**, Anjum W, Kamaruddin MA, Khan N, Bukar AL. The Potential Role of Hybrid Renewable Energy System for Grid Intermittency Problem: A Techno-Economic Optimisation and Comparative Analysis. Sustainability. 14(21):14045. (**IF:3.25**) (**HEC W Category**).
189. Iqbal S, Jan MU, **Atiq Ur Rehman**, Shafiq A, Rehman HU, Aurangzeb M. (2022). Feasibility Study and Deployment of Solar Photovoltaic System to Enhance Energy Economics of King Abdullah Campus, University of Azad Jammu and Kashmir Muzaffarabad, AJK Pakistan. IEEE Access. 10:5440-55. (**IF: 3.47**) (**HEC W Category**).
190. Shafiq A, Iqbal S, Habib S, **Atiq Ur Rehman**, ur Rehman A, Selim A, Ahmed EM, Kamel S. (2022). Solar PV-Based Electric Vehicle Charging Station for Security Bikes: A Techno-Economic and Environmental Analysis. Sustainability. 14(21):13767. **IF:3.25** (**HEC W Category**).

191. Iqbal J, Illahi U, **Muhammad Abbas Khan**, Rauf A, Ali EM, Bari I, Ali H, Khan MA, Alibakhshikenari M, Dalarsson M. (2022). A Novel Single-Fed Dual-Band Dual-Circularly Polarized Dielectric Resonator Antenna for 5G Sub-6GHz Applications. *Applied Sciences*. 12(10): e5222. **(IF:2.83) (HEC X Category)**.
192. Sehito N, Yang S, Al Harbi AG, Abbasi MI, **Muhammad Abbas Khan**, Khan MA, Kamal MM. (2022). Secrecy Performance by Power Splitting in Cooperative Dual-Hop Relay Wireless Energy Harvesting. *Wireless Communications and Mobile Computing*. Volume 2022: e8367107. **(IF:2.33) (HEC W Category)**.
193. **Muhammad Abbas Khan**, Al Harbi AG, Kiani SH, Nordin AN, Munir ME, Saeed SI, Iqbal J, Ali EM, Alibakhshikenari M, Dalarsson M. (2022). mmWave Four-Element MIMO Antenna for Future 5G Systems. *Applied Sciences*. 12(9): 4280. **(IF:2.67) (HEC X Category)**.
194. Ilyas M, Khan A, **Muhammad Abbas Khan**, Xie W, Riaz RA, Khan Y. (2022). Observer design estimating the propofol concentration in PKPD model with feedback control of anesthesia administration. *Archives of Control Sciences*. 32: 85-103. **(IF:1.08) (HEC W Category)**.
195. Inam M, Dahri MH, Kamarudin MR, Ashyap AY, Jamaluddin MH, Sulaiman NH, **Muhammad Abbas Khan**, Shamsan ZA, Almuhanna K, Alorifi F. (2022). Linearly Polarized Millimeter Wave Reflectarray with Mutual Coupling Optimization. *CMC-Computers Materials & Continua*. 72(2):2397-2410. **(IF:3.77) (HEC W Category)**.
196. **Muhammad Paend Bakht**, Salam Z, Bhatti AR, Ullah Sheikh U, Khan N, Anjum W. (2022). Techno-economic modelling of hybrid energy system to overcome the load shedding problem: A case study of Pakistan. *PloS one*. 17(4): e0266660 **(IF:3.24) (HEC W Category)**.

197. Anjum W, Husain AR, Abdul Aziz J, Fasih ur Rehman SM, **Muhammad Paend Bakht**, Alqaraghuli H. (2022). A Robust Dynamic Control Strategy for Standalone PV System under Variable Load and Environmental Conditions. *Sustainability*. 14(8): 4601. (**IF:3.25**) (**HEC W Category**).
198. Khan S, Pasund A, Ahmad N, **Shoaib Ahmed**, Khan HA, Cheema KM, Milyani AH. (2022). Performance Investigation and Cogging Torque Reduction in a Novel Modular Stator PM Flux Reversal Machine. *Energies*. 15(6):2261. (**IF: 3.25**) (**HEC W Category**).
199. **Muhammad Abbas Khan**, Rafique U, Savci HS, Nordin AN, Kiani SH, Abbas SM. (2022). Ultra-wideband pentagonal fractal antenna with stable radiation characteristics for microwave imaging applications. *Electronics*. 11(13): 2061. (**IF:2.69**) (**HEC X Category**).
200. Bhatti UA, Wu G, **Sibghat Ullah Bazai**, Nawaz SA, Mehmood Baryalai, Bhatti MA, Hasnain A, Nizamani MM. (2022). A Pre-to Post-COVID-19 Change of Air Quality Patterns in Anhui Province Using Path Analysis and Regression. *Polish Journal of Environmental Studies*. 31(5): 1-14. (**IF:1.69**) (**HEC X Category**).
201. Hameed M, Yang F, **Sibghat Ullah Bazai**, Ghafoor MI, Alshehri A, Khan I, **Mehmood Baryalai**, Andualem M, Jaskani FH. (2022). Urbanization Detection Using LiDAR-Based Remote Sensing Images of Azad Kashmir Using Novel 3D CNNs. *Journal of Sensors*. e6430120 (**IF:2.33**) (**HEC W Category**).
202. Muhammad Aamir,, Mughair Aslam Bhatti, **Sibghat Ullah Bazai**, **Shah Marjan**, Aamir **Mehmood Mirza**, **Abdul Wahid**, Ahmad Hasnain, and Uzair Aslam Bhatti.. Predicting the Environmental Change of Carbon Emission Patterns in South Asia: A Deep Learning Approach Using BiLSTM. *Atmosphere*. 13(12):2011. (**IF: 2.68**) (**HEC W Category**).

203. Fakhar S, Baber J, **Sibghat Ullah Bazai, Shah Marjan**, Jasinski M, Jasinska E, Chaudhry MU, Leonowicz Z, Hussain S. Smart Classroom Monitoring Using Novel Real-Time Facial Expression Recognition System. *Applied Sciences*. 12(23):12134. . **(IF:2.83) (HEC X Category)**.
204. Ali I, **Syed Mobasher Aftab**. (2022). Climate Change and Human-Induced Factor Impacts on Quetta Valley Aquifer, Baluchistan, Pakistan. *Journal of Himalayan Earth Science*. 55(2). **(HEC Y Category)**.
205. **Muhammad Waqas**, Tahir MA, Qureshi R. (2022). Deep Gaussian mixture model based instance relevance estimation for multiple instance learning applications. *Applied Intelligence*. 17:1-16. **(IF: 5.01) (HEC W Category)**.
206. Qureshi R, **Muhammad Waqas** . (2022). Block Based Enhancement using Deep Learning for Conversion of Low Resolution AVS Video to High Resolution HEVC Video. *IEEE transactions on human-machine systems*. Volume 2022. 1-13. **(IF: 4.12) (HEC W Category)**.
207. Hameed M, Yang F, **Sibghat Ullah Bazai**, Ghafoor MI, Alshehri A, Khan I, Ullah S, **Mehmood Barylalai**, Jaskani FH, Andualem M. (2022). Convolutional Autoencoder-Based Deep Learning Approach for Aerosol Emission Detection Using LiDAR Dataset. *Journal of Sensors*. Volume. 2022: e3690312. **(IF:2.33) (HEC W Category)**.
208. Kiani SH, **Muhammad Abbas Khan**, Rafique U, Marey M, Alharbi AG, Mostafa H, Khan MA, Abbas SM. (2022). High Performance Eight-Port Dual-Band MIMO Antenna System for 5G Devices. *Micromachines*. 13(6): 959. **(IF:2.89) (HEC W Category)**.

209. **Muhammad Abbas Khan**, at all. (2022). A Novel Design and Development of a Strip-Fed Circularly Polarized Rectangular Dielectric Resonator Antenna for 5G NR Sub-6 GHz Band Applications. *Sensor*. 22:1-6. (**IF:3.57**) (**HEC W Category**).
210. Adeel H, Ali SS, Riaz MM, Kirmani SA, **Muhammad Imran Qureshi**, Imtiaz J. (2022). Learning Deep Pyramid-based Representations for Pansharpening. *Arabian Journal for Science and Engineering*. 17:1-12. (**IF:23**) (**HEC W Category**).
211. **Muhammad Imran Qureshi**, Ullah A, Arif M, Noor R. (2022). A unified technique for entropy enhancement based diabetic retinopathy detection using hybrid neural network. *Computers in Biology and Medicine*. 145:e105424. (**IF:3.57**) (**HEC W Category**).
212. **Hamayoun Shahwani, Syed Attique Shah, Muhammad Ashraf, Muhammad Akram, Jaehoon Paul Jeong, and Jitae Shin**. (2022). A comprehensive survey on data dissemination in Vehicular Ad Hoc Networks. *Vehicular Communications*. 34:100420. (**IF:8.37**) (**HEC W Category**).
213. Tufail AB, Ullah K, Khan RA, Shakir M, **Muhammad Abbas Khan**, Ullah I, Ma YK, Ali M. (2022). On Improved 3D-CNN-Based Binary and Multiclass Classification of Alzheimer's Disease Using Neuroimaging Modalities and Data Augmentation Methods. *Journal of Healthcare Engineering*. Volume 2022: e1302170 (**IF: 2.6**) (**HEC W Category**).
214. Aman MA, Ren XC, Tareen WU, **Muhammad Abbas Khan**, Anjum MR, Hashmi AM, Ali H, Bari I, Khan J, Ahmad S. (2022). Optimal Siting of Distributed Generation Unit in Power Distribution System considering Voltage Profile and Power Losses. *Mathematical Problems in Engineering*. Volume 2022 : e5638407. (**IF: 1.3**) (**HEC X Category**).

215. **Adil Israr**, Yang Q, Israr A. (2022). Power consumption analysis of access network in 5G mobile communication infrastructures—An analytical quantification model. *Pervasive and Mobile Computing*. 80: e101544. (**IF: 3.45**) (**HEC W Category**).
216. **Muhammad Bilal**, **Sara Shahid**, **Yousuf Khan**, **Zahid Rauf**, **Raja A. Wagan**, Butt MA, Khonina SN, Kazanskiy NL. (2022). A Miniaturized FSS-Based Eight-Element MIMO Antenna Array for Off/On-Body WBAN Telemetry Applications. *Electronics*. 11(4) :522. (**IF: 2.39**) (**HEC X Category**).
217. Ashfaq M, Bashir S, Shah SI, Abbasi NA, Rmili H, **Muhammad Abbas Khan**. (2022). 5G Antenna Gain Enhancement Using a Novel Metasurface. *Computers Materials & Continua*. 72(2):3601-3611. (**IF:3.77**) (**HEC W Category**).
218. **Muhammad Abbas Khan**, Ahmad I, Nordin AN, Ahmed AE, Mewada H, Daradkeh YI, Rasheed S, Eldin ET, Shafiq M. (2022) Smart Android Based Home Automation System Using Internet of Things (IoT). *Sustainability*. 14(17):10717. (**IF:3.25**) (**HEC W Category**).
219. **Tufail AB**, Ullah I, Rehman AU, Khan RA, **Muhammad Abbas Khan**, Ma YK, Hussain Khokhar N, Sadiq MT, Khan R, Shafiq M, Eldin ET. (2022) On Disharmony in Batch Normalization and Dropout Methods for Early Categorization of Alzheimer's Disease. *Sustainability*. 14(22):14695. (**IF:3.25**) (**HEC W Category**).
220. **Mayet** AM, Muqeet MA, Alqahtani AA, **Muhammad Abbas Khan**, Dawbi AO, Alhashim HH, Qaisi RM, Ghamry NA, Tag-Eldin EM. (2022) Application of Nondestructive Techniques to Investigate Dissolvable Amorphous Metal Tungsten Nitride for Transient Electronics and Devices. *Electronics*. 11(20):3284. (**IF: 2.39**) (**HEC X Category**).

221. Afzal MZ, Aurangzeb M, Iqbal S, Kotb H, AboRas KM, Elgamli E, Shouran M. (2022) A resilience-oriented bidirectional anfis framework for networked microgrid management. Processes. 10(12):2724. **(IF: 3.352) (HEC X Category).**
222. Farrukh ud din, **Syed Mudassir Hussain, Atiq Ur Rehman, Shah Marjan**, and Bilawal Rehman. (2022). MMSE-DFE Equalizer for Discrete Wavelet Packet Transform Based Wireless Communication System for Channel Equalization. Journal of Applied and Emerging Sciences. 12:2 (2023): 108-112. **(HEC Y Category).**
223. Zahoor MI, Zheng D, **Raja Asif Wagan**, Ayub S. (2022). A LOW-COMPLEXITY CHANNEL ESTIMATION METHOD FOR MASSIVE MIMO SYSTEMS. Technical Journals, National Taiwan University of Science and Technology 37:43-52. **(HEC Y Category).**
224. Raza MA, **Sibghatullah Bazai**, Li Z, **Raja Asif Wagan**, Nizamani MM, Khokhar AA. (2022). Analysis of Change in Diversity Pattern Due to Environmental Change to Improve the Conservation of Species. Polish Journal of Environmental Studies. 31(2). **(IF: 1.87) (HEC X Category).**
225. Bhatti UA, Zeeshan Z, Nizamani MM, **Sibghatullah Bazai**, Yu Z, Yuan L. (2022). Assessing the change of ambient air quality patterns in Jiangsu Province of China pre-to post-COVID-19. Chemosphere. 288(2):132569. **(IF:8.94)(HEC W Category).**
226. **Akbar khan** A Deep Learning Approach for Crowd Counting in HighlyCongested Scene. Journal Computers, Materials & Continua. 73(3): 5826-5844. **(IF: 3.86) (HEC W Category).**
227. Memon A, Wazir Bin Mustafa M, Anjum W, Ahmed A, **Saif Ullah**, Altbawi SM, Jumani TA, Khan I, Hamadneh NN. (2022). Dynamic response and low voltage ride-through

- enhancement of brushless double-fed induction generator using Salp swarm optimization algorithm. Plos one. 17(5):e0265611. **(IF: 3.75) (HEC W Category).**
228. Saif **Ullah**, Radzi RZ, Yazdani TM, Alshehri A, Khan I. (2022). Types of Lightweight Cryptographies in Current Developments for Resource Constrained Machine Type Communication Devices: Challenges and Opportunities. IEEE Access. 10: 35589–35604. **(IF: 3.47) (HEC W Category).**
229. **Abdul Rehman** , Hassan MF, Hooi YK, Qureshi MA, Shukla S, Susanto E, Rubab S, Abdel-Aty AH. (2022). CTMF: Context-Aware Trust Management Framework for Internet of Vehicles. IEEE Access. 10:73685-73701. **(IF: 3.47) (HEC W Category).**
230. **Muhammad Imran**, Ismail MA, Hamid S, Nasir MH. (2022). Complex process modeling in Process mining: A systematic review. IEEE Access.10:101515 – 101536. **(IF: 3.47) (HEC W Category).**

FACULTY OF ENGINEERING & ARCHITECTURE

231. **Ahmed T, Zaheer Ahmed, Ullah S, Hussain A, Hussain Z, Abbas A, Fahim Ahmed Ibupoto.** (2022) Determination of optimum blending ratios of Sor-range with Indonesian coal for utilization in Pakistani Cement Industries. Journal of Applied and Emerging Sciences 12: 16-20. **(HEC Y Category).**
232. Ahmed, Tufail, Syed Hafeez Ur Rehman, **Fahim Ahmed Ibupoto**, Asif Abbas, Sami Ullah, Abbas Hussain, and Shehzad Usman. (2022). Determination of durability and strength of sandstone and shale of United Mineral Coal Company Sor-Range. Journal of Mountain Area Research. 7: 56-62. **(HEC Y Category).**

233. Khan, Naseer Muhammad, Maqsood Ahmad, Kewang Cao, Imtiaz Ali, Wei Liu, **Hafeezur Rehman**, Sajjad Hussain, Faheem Ur Rehman, and Tufail Ahmed. Developing a new bursting liability index based on energy evolution for coal under different loading rates.

Sustainability. 14 (3): 1572. (**IF:3.25 HEC W Category**).

234. Ma, Liqiang, Naseer Muhammad Khan, Kewang Cao, **Hafeezur Rehman**, Saad Salman,

and Faheem Ur Rehman. (2022). Prediction of sandstone dilatancy point in different water contents using infrared radiation characteristic: Experimental and machine learning approaches. Lithosphere. 3243070. (**HEC Y Category**).

235. Hong C, Huang J, Abro ZA, Zafar Abro. (2022). Monitoring inner temperature change of

carbon fiber in additive manufacturing process using fiber optic sensors. Sensors and Actuators A: Physical. 348:113996. (**IF:4.29 (HEC W Category)**)

236. Kim, Han-eol, Kyoung-min Nam, Tae-su Kyeon, **Hafeezur Rehman**, and Han-kyu Yoo.

"Analysis of the Effect of the Tool Shape on the Performance of Pre-Cutting Machines during Tunneling Using Linear Cutting Tests. Applied Sciences. 12: 4489. (**IF:2.83 (HEC X Category)**).

237. **Hafeezur Rehman**, Shah A, Mohd Hashim MH, Khan NM, Ali W, Shah KS, Junaid M,

Ullah R, Adeel MB. Investigating Effect of Tunnel Size, Rock Mass Conditions, and In-Situ Stresses on Stability of Tunnels. Journal of Mining and Environment.13(4):973-87. (**HEC Y Category**).

238. Ali, Wahid, **Hafeezur Rehman**, Rini Abdullah, Qiang Xie, and Yuxin Ban. (2022).

Topography Induced Stress And Its Influence On Tunnel Excavation In Hard Rocks–A Numerical Approach. GEOMATE Journal. 22: 93-101. (**HEC X Category**).

239. Shah, Kausar Sultan, Mohd Hazizan Bin Mohd Hashim, **Hafeezur Rehman**, and Kamar Shah Bin Ariffin. (2022). Weathering induced Brazilian Tensile Strength and fracture characteristics of sandstone and their prevailing mutual association. International Journal of Mining and Geo-Engineering. 56:191-197. (**HEC Y Category**).
240. Junaid, Muhammad, Rini Asnida Abdullah, Radzuan Sa'ari, **Hafeezur Rehman**, Kausar Sultan Shah, Rafi Ullah,. (2022). Mohd Nur Asmawisham Alel, Ir Zainal, and Nurul Eilmy Zainuddin. (2022). Quantification of Rock Mass Condition Based on Fracture Frequency Using Unmanned Aerial Vehicle Survey for Slope Stability Assessment. Journal of the Indian Society of Remote Sensing. 1-14. (**IF:1.89 (HEC X Category)**).
241. Junaid M, Abdullah RA, Sa'ari R, Ali W, **Hafeez ur Rehman** , Sari M. (2022). Water-saturated zone recognition using integrated 2D electrical resistivity tomography, borehole, and aerial photogrammetry in granite deposit, Malaysia. Arabian Journal of Geosciences. 15(14):1-13. (**IF: 1.82 (HEC X Category)**).
242. Kim, Han-eol, Kyoung-min Nam, **Hafeezur Rehman**, Tae-su Kyeon, and Han-kyu Yoo. (2022). Comparison Study on Coarseness Index and Maximum Diameter of Rock Fragments by Linear Cutting Tests. Applied Sciences. 12: 8793. (**IF:2.83 (HEC X Category)**).
243. **Hafeezur Rehman**, Wahid Ali, Kausar Sultan Shah, Mohd Hazizan Bin Mohd Hashim, Naseer Muhammad Khan, **Muhammad Ali**, Muhammad Kamran, and Muhammad Junaid. (2022). The Finite Difference Analysis of Empirical Tunnel Support Design in High Stress fractured rock mass Environment at the Bunji Hydropower Project, Pakistan. Journal of Mining and Environment. 13:781-793. (**HEC Y Category**).
244. **Muhammad Bilal**, Park I, Hornn V, Ito M, Hassan FU, Jeon S, Hiroyoshi N. (2022). The Challenges and Prospects of Recovering Fine Copper Sulfides from Tailings Using

Different Flotation Techniques: A Review. Minerals. 12(5):e586. (**IF:2.64**) (HEC W Category).

245. **Muhammad Bilal**, Ito M, Akishino R, Bu X, Hassan FU, Park I, Jeon S, Aikawa K, Hiroyoshi N. (2022). Heterogenous carrier flotation technique for recovering finely ground chalcopyrite particles using coarse pyrite particles as a carrier. Minerals Engineering. 180:e107518. (**IF:4.7**). (HEC W Category).

246. Zhou S, Bu X, Wang X, Ni C, Ma G, Sun Y, Xie G, **Muhammad Bilal**, Alheshibri M, Hassanzadeh A, Chelgani SC. (2022). Effects of surface roughness on the hydrophilic particles-air bubble attachment. Journal of Materials Research and Technology. 18:3884-3893. (**IF:5.03**). (HEC W Category).

247. Ni C, Zhou S, Bu X, **Muhammad Bilal**, Ul Hassan F, Chen Y, Xu G, Xie G. (2022). Characterization and Removal Potential of Fluorine in Lignite from a Mine in Shaanxi Province, China: A Case Study. Minerals. 12(3): 280. (**IF: 2.64**). (HEC W Category).

248. Ullah B, Cheng Y, Wang L, Hu B, Jiskani IM, **Fawad Ul Hassan**, Shahani NM, Ali M. (2022). Experimental and theoretical analyses to predict coal and gas outburst using desorption indices of drill cuttings. Arabian Journal of Geosciences. 15(7):1-16. (**IF: 1.82**).

249. Gao J, Bu X, Zhou S, Wang X, **Muhammad Bilal**, Hassan FU, Hassanzadeh A, Xie G, Chelgani SC. (2022). Pickering emulsion prepared by nano-silica particles—A comparative study for exploring the effect of various mechanical methods. Ultrasonics sonochemistry. 83: e105928. (**IF:7.49**) (HEC W Category).

250. Bu X, Zhou S, Danstan JK, **Muhammad Bilal**, Ul Hassan F, Chao N. (2022). Prediction of coal flotation performance using a modified deep neural network model including three

input parameters from feed. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. 14:1-13. **(IF: 3.44) (HEC X Category).**

251. Shahani NM, Zheng X, Liu C, Li P, **Fawad Ul Hassan.** (2022). Application of soft computing methods to estimate uniaxial compressive strength and elastic modulus of soft sedimentary rocks. Arabian Journal of Geosciences. 15(5):1-19. **(IF: 1.82) (HEC X Category).**

252. Shah KS, Hashim MH, **Hafeez ur Rehman**, Ariffin KS. (2022) Evaluating microscale failure response of various weathering grade sandstones based on micro-scale observation and micro-structural modelling subjected to wet and dry cycles. J. Min. Environ. 13:341-355. **(HEC Y Category).**

253. Khan NM, Cao K, Emad MZ, Hussain S, **Hafeez ur Rehman**, Shah KS, Rehman FU, Muhammad A. (2022) Development of Predictive Models for Determination of the Extent of Damage in Granite Caused by Thermal Treatment and Cooling Conditions Using Artificial Intelligence. Mathematics. 10(16):2883. **(IF:3.92) (HEC W Category).**

254. Khan NM, Cao K, Yuan Q, Bin Mohd Hashim MH, **Hafeez ur Rehman**, Hussain S, Emad MZ, Ullah B, Shah KS, Khan S. (2022) Application of Machine Learning and Multivariate Statistics to Predict Uniaxial Compressive Strength and Static Young's Modulus Using Physical Properties under Different Thermal Conditions. Sustainability. 14(16):9901 **(IF: 3.25) (HEC W Category).**

255. Mazhar T, Malik MA, Haq I, Rozeela I, Ullah I, **Muhammad Abbas Khan**, Adhikari D, Ben Othman MT, Hamam H. (2022) The Role of ML, AI and 5G Technology in Smart Energy and Smart Building Management. Electronics. 11(23):3960. **(IF: 2.39) (HEC X Category).**

256. Soomro MI, **Asadullah**, Khan MA. (2022). An investigation on simultaneous freshwater production and CO₂ capture using flue gas of a power plant. *Greenhouse Gases: Science and Technology*. 12(13): 349-361. **(IF:2.01) (HEC X Category)**.
257. Al Hassan M, **Abdul Qadeer Dayo**, Zegaoui A, Derradji M, Moussa Hassane A, Liu WB, Wang J, Liu YG. (2022). Polymer composites based Epoxy-WB and WB2: Gamma-rays impact on structure, thermal degradation, and mechanical behavior. *High Performance Polymers*. 34(9):09540083221105259. **(IF:1.73) (HECX Category)**.
258. Alshahrani H, **Abdul Qadeer Dayo**, Liu WB. (2022). Development of chopped glass fiber composites with difunctional benzoxazine and bio-based phthalonitrile copolymer: A study of mechanical and thermomechanical properties. *Journal of Applied Polymer Science*. 139(34):e52804. **(IF:3.05) (HEC W Category)**.
259. Gorar AA, Wang T, Al Hassan M, **Abdul Qadeer Dayo**, Liu WB, Wang J. (2022). Polybenzoxazine-hazelnut shell composites: Curing behavior, thermal stability, mechanical properties, and material stress analysis. *Polymer Composites*. 43:4351–4357. **(IF:3.53) (HEC W Category)**.
260. Tahir M, **Azmat Ali Khan**, Tasleem S, Mansoor R, Sherryna A, Tahir B. (2022). Recent advances in titanium carbide MXene-based nanotextures with influential effect of synthesis parameters for solar CO₂ reduction and H₂ production: A critical review. *Journal of Energy Chemistry*. 76: 295-331. **(IF:13.59) (HEC W Category)**.
261. Azmat **Ali Khan**, Tahir M, Khan N. (2022). Recent Developments in Titanium Carbide (Ti₃C₂)-Based Layered Double Hydroxide (LDH) Nanocomposites for Energy Storage and Conversion Applications: A Minireview and Perspectives. *Energy & Fuels*, 36: 9821-9843. **(IF:4.65) (HEC W Category)**.

262. Tahir M, Sherryna A, **Azmat Ali Khan**, Madi M, Zerga AY, Tahir B. (2022). Defect Engineering in Graphitic Carbon Nitride Nanotextures for Energy Efficient Solar Fuels Production: A Review. *Energy & Fuels.* 36(16):8948-77. (**IF:4.65**) (**HEC W Category**).
263. Kaewsichan L, Techato K, **Zahid Naeem Qaisrani**, Chowdhury MS, Yilmaz M. (2022). Elimination of selected heavy metals from aqueous solutions using biochar and bentonite composite monolith in a fixed-bed operation. *Journal of Environmental Chemical Engineering.* 10(1):106993. (**IF:7.96**). (**HEC W Category**).
264. **Zahid Naeem Qaisrani**, Nuthammachot N, Techato K, Jatoi GH, Mahmood B, Ahmed R. (2022) Avaliacao da variabilidade da seca usando o indice de precipitacao padronizado, índice de seca de reconhecimento e decis de precipitação no Baluchistao, Paquistao. *Brazilian Journal of Biology.* 84. (**IF:1.32**) (**HEC X Category**).
265. **Faisal Mushtaq**, Alam N, Ullah A. (2022). Performance analysis of natural gas sweetening unit with amine solution and blends. *Mehran University Research Journal Of Engineering & Technology.* 41(2):100-108. (**HEC X Category**).
266. Ruiz KH, **Tufail Mustafa**, Yan P, Ding Q, Qiu P, Luo W, Fan Y, Jiang W. (2022). Highly ordered mesoporous 1T'MoTe₂/m-SiO₂ composite as efficient microwave absorber. *Microporous and Mesoporous Materials.* 336:111894. (**IF:5.87**). (**HEC W Category**).
267. **Muhammad Siddique**, Soomro SA, Aziz S, Suri SU, Akhter F, **Zahid Naeem Qaisrani**. (2022). Potential Techniques for Conversion of Lignocellulosic Biomass into Biofuels. *E& Environmental Chemistry.* 23(1):21-31. (**HEC Y Category**).
268. **Muhammad Siddique**, Soomro SA, Aziz S. (2022). Characterization and optimization of lignin extraction from lignocellulosic biomass via green nanocatalyst. *Biomass Conversion and Biorefinery.* 30:1-9. (**IF:4.05**). (**HEC X Category**).

269. Ahmed SM, Kazi SN, **Ghulamullah Khan**, Ahmed W, Zubir MN. (2022). Heat transfer and friction loss of flowing kenaf core non-wood pulp fibre suspensions to curb reject papers. *Heat and Mass Transfer*. 20:1-6. (**IF:2.32**). (**HECX Category**).
270. Azhar U, Bashir MS, Babar M, Arif M, Hassan A, Riaz A, Mujahid R, Sagir M, **Saadat Ullah Khan Suri**, Show PL, Chang JS. (2022) Template-based textural modifications of polymeric graphitic carbon nitrides towards wastewater treatment. *Chemosphere*. 302:134792. (**IF:8.94**). (**HEC W Category**).
271. Mohammad Siddique Nasar, Suhail Ahmed Soomro, Shaheen Aziz, **Ehsanullah Khan Kakar, Ali Nawaz Mengal, Ghulamullah Khan, Syed Haseeb Sultan, Zafarullah Abro, and Luqman Khan**. (2022). Blending of biomass fuel as a renewable and coal in co-combustion for environmentally friendly power generation." *Journal of Applied and Emerging Sciences*. 12(2):138-145. (**HEC Y Category**).
272. **Saadat Ullah Khan Suri**, Mohammad Siddique, Suhail Ahmed Soomro, Shaheen Aziz. (2022) Efficacy of Intensified Parameters in the Trickle Bed Reactors Towards an Optimum Performance. *Sindh University Research Journal* 54(1). (**HEC Y Category**).
273. **Zahid Naeem Qaisrani**, Nuthammachot N, Techato K, Jatoi GH, Mahmood B, Ahmed R. (2022). Drought variability assessment using standardized precipitation index, reconnaissance drought index and precipitation deciles across Balochistan, Pakistan. *Brazilian Journal of Biology*. 84: e261001. (**IF:1.65**) **HEC X Category**).
274. Tahir M, Sherryna A, Mansoor R, **Azmat Ali Khan**, Tasleem S, Tahir B. (2022). Titanium Carbide MXene Nanostructures as Catalysts and Cocatalysts for Photocatalytic Fuel Production: A Review. *ACS Applied Nano Materials*. 5(1):18-54. (**IF:5.09**) (**HEC W Category**).

275. **Azmat Ali Khan**, Tahir M, Mohamed AR. (2022). Constructing S-scheme heterojunction of carbon nitride nanorods (g-CNR) assisted trimetallic CoAlLa LDH nanosheets with electron and holes moderation for boosting photocatalytic CO₂ reduction under solar energy. *Chemical Engineering Journal*. 433:e133693. **(IF:13.27) (HEC W Category)**.
276. Jabeen U, Iqbal A, Aamir M, Wali Q, Ahmad I, **Muhammad Najam Malghani**, Akhtar J. (2022). Synthesis of Cu-doped ZnO for bulk heterojunction hybrid solar cells. *Chemical Papers*. 18:1-6. **(IF:2.14) (HEC X Category)**.
277. Ali L, Palamanit A, Techato K, **Asadullah**, Chowdhury MS, Phoungthong K. (2022). Characteristics of Biochars Derived from the Pyrolysis and Co-Pyrolysis of Rubberwood Sawdust and Sewage Sludge for Further Applications. *Sustainability*. 14(7):3829. **(IF: 3.25) (HEC W Category)**.
278. Wang T, **Abdul Qadeer Dayo**, Wang ZL, Lu HM, Shi CY, Pan ZC, Wang J, Zhou H, Liu WB. (2022). Novel self-promoted phthalonitrile monomer with siloxane segments: synthesis, curing kinetics, and thermal properties. *New Journal of Chemistry*. 46(9):4072-4081. **(IF: 3.59) (HEC W Category)**.
279. Naseer S, Aamir M, Mirza MA, Jabeen U, Tahir R, **Muhammad Najam Malghani**, Wali Q. (2022). Synthesis of Ni–Ag–ZnO solid solution nanoparticles for photoreduction and antimicrobial applications. *RSC advances*. 12(13):7661-7670. **(IF: 4.03) (HEC W Category)**.
280. Wang Z, Li R, Qin Q, Al Hassan M, **Abdul Qadeer Dayo**, Liu W, Wang J. (2022). Curing kinetics and mechanical properties of cyanate ester/hyperbranched benzoxazine copolymers. *Polymers for Advanced Technologies*. 33(5):1606-1616. **(IF: 3.66) (HEC W Category)**.

281. Wang T, Wang ZL, **Abdul Qadeer Dayo**, Shi CY, Liu HB, Pan ZC, Gorar AA, Wang J,

Zhou H, Liu WB. (2022). Synthesis and properties of a novel autocatalytic phthalonitrile monomer and its copolymerization with multi-functional fluorene-based benzoxazine monomers. *Journal of Applied Polymer Science*. 139(21):e52193. (**IF: 3.12**) (**HEC W Category**).

282. Kiran S, Gorar AA, Wang T, **Abdul Qadeer Dayo**, Zhang LL, Wang J, Shah AH, **Syed Kamran Sami**. (2022). Effects of hollow glass microspheres on the polybenzoxazine thermosets: mechanical, thermal, heat insulation, and morphological properties. *Journal of Applied Polymer Science*. 139(7):51643. (**IF: 3.12**) (**HEC W Category**).

283. Arain A. H, Ridha, S, **Imtiaz Ali**. (2022). Development and performance evaluation of castor oil based biodiesel as an eco-friendly ester-based drilling fluid. *Petroleum Science and Technology*. 1-21. (**IF: 1.695**) (**HEC X Category**).

284. Hussain T, **Zahid Naeem Qaisrani**, Ullah A, Sagir M, Tahir MB. (2022) Synthesis of Bio-Metal Organic Framework-11 Based Mixed Matrix Membrane for Efficient Carbon Dioxide Separation. *Pakistan Journal of Analytical & Environmental Chemistry*. 23(2):237-246. (**ISI Indexed**).

285. Baghban S, Mo KH, Ibrahim Z, Radwan MK, **Syed Nasir Shah**. (2022). Effect of basalt and polypropylene fibers on crumb rubber mortar with Portland cement and calcium aluminate cement binders: Strength and artificial neural network prediction model. *Progress in Rubber. Plastics and Recycling Technology*. 38(1): 99-124. (**IF:1.15**) (**HEC X Category**).

286. **Syed Nasir Shah**, Tan TH, Tey OW, Leong GW, Chin YS, Yuen CW, Mo KH. (2022). Aerogel and expanded perlite incorporated lightweight cementitious composites containing

crushed glass: Evaluation of the drying shrinkage and alkali-silica expansion. *Science Progress.* 105(2): 1–16. (**IF:2.74**) (**HEC W Category**).

287. **Azizullah Shaikh**, Dai C, Sun Y, You Q, Qureshi AS, Zhao G, Foutou V, Bakhsh A, Khan N, **Zafarullah Abro**, Zhao M. (2022). Performance evaluation of a novel CO₂-induced clean fracturing fluid in low permeability formations. *Journal of Petroleum Science and Engineering.* 208:e109674 (**IF: 5.168**) (**HEC W Category**).

288. **Azizullah Shaikh**, Caili Dai, Yongpeng Sun, VarelFoutou, Qing You, Guang Zhao, Allah Bakhsh, Mingwei Zhao. (2022). Performance Evaluation of a Novel CO₂-induced VES Fluid in Low Permeability Formations. *Journal of Petroleum Science and Engineering.* 208, Part D: 109674. (**IF: 5.168**) (**HEC W Category**).

289. Yang Yong, Danish Khan, Longwei Qiu, Du Yushan, Jiang Long, Li Weizhong, Tehseen Zafar, Fahad Ali, and **Azizullah Shaikh**. (2022). Microscopic Reservoir Characteristics of the Lacustrine Calcareous Shale: An Example from the Es₄^s Shale of the Paleogene Shahejie Formation in Boxing Sag, Dongying Depression. *ACS Omega.* <https://doi.org/10.1021/acsomega.2c05055>. (**IF: 4.132**) (**HEC W Category**).

290. Iferobia, C. C., Ahmad, M., **Imtiaz Ali**. (2022). Experimental Investigation of Shale Tensile Failure under Thermally Conditioned Linear Fracturing Fluid (LFF) System and Reservoir Temperature Controlled Conditions. *Polymers.* 14(12), 2417. (**IF: 4.967**) (**HEC W Category**).

291. **Allah Bakhsh**, Liang Zhang, Huchao Wei, **Azizullah Shaikh**, Nasir Khan, Saeed Khan, Shaoran Ren. (2022). The Approach of Dimethyl Ether-enhanced Waterflooding (DEW) for Oil Recovery: A Review. *Arabian Journal of Geosciences.* 15 (6): 1-22. (**IF: 1.827**) (**HEC X Category**).

292. **Allah Bakhsh**, Zhang Liang, Huchao Wei, **Azizullah Shaikh**, Nasir Khan, Zeeshan Khan, Shaoran Ren. (2022). Development of CO₂-sensitive Viscoelastic Fracturing Fluid for Low Permeability Reservoirs: A Review. *Processes*. 10 (5): 885. (**IF: 3.352**) (**HEC X Category**).
293. Hussain S, Muhammad Khan N, Emad MZ, **Abdul Muntaqim Naji**, Cao K, Gao Q, Ur Rehman Z, Raza S, Cui R, Salman M, Alarifi SS. An Appropriate Model for the Prediction of Rock Mass Deformation Modulus among Various Artificial Intelligence Models. *Sustainability*. 14(22):15225. (**IF: 3.88**) (**HEC W Category**).
294. Saif Ullah Khan, Muhammad Wasim, Muhammad Qamar Khan, Abdul Salam, Syed **Zameer Ul Hassan**, **Abdul Malik Rehan Abbasi**, and Tufail Mustafa..(2022). Valorization of recycled PET for yarn manufacturing and knitwear fabrics used for apparel applications. *Polymer Bulletin*. 23:1-21. (**IF:2.87**) (**HEC X Category**).
295. **Syed Zameer Ul Hassan**, **Ali Raza Shafqat**, **Mohammad Kashif**, **Ali Asghar**, **Anila Ali**, **Zamir Abro**, Nadar Baz, Muhammad Ikramullah, Zafar Javed, and Salman Naeem. (2022). Fiber Reinforced Polymer Composite for Bullet Proof Application. *Journal of Applied and Emerging Sciences*. 12(2):86-89. (**HEC Y Category**).
296. Bar M, Grégoire M, **Saif Ullah Khan**, De Luycker E, Ouagne P. (2022). Studies on Classically Harvested Linseed Flax Fibers for Bio-composite Reinforcement and Textile Applications. *Journal of Natural Fibers*. 5:1-15. (**IF:3.57**) (**HEC X Category**).
297. Salam A, Phan DN, **Saif Ullah Khan**, **Syed Zameer Ul Hassan**, **Tufail Hassan**, Muhammad R, Ullah Khan W, Pasha K, Khan MQ, Kim IS. (2022). Development of a Multifunctional Intelligent Elbow Brace (MIEB) Using a Knitted Textile Strain Sensor. *Fibres & Textiles in Eastern Europe*. 151: 22-30. (**IF:1.04**) (**HEC X Category**).

298. Khan FM, **Ahmer Hussain Shah**, Wang S, Mehmood S, Wang J, Liu W, Xu X (2022) A Comprehensive Review on Epoxy Biocomposites Based on Natural Fibers and Bio-fillers: Challenges, Recent Developments and Applications. *Advanced Fiber Materials*. 683-670. **(IF: 12.93) (HEC Y Category)**.
299. Alshahrani H, Alshammari BA, **Ahmer Hussain Shah**, Dayo AQ. Development of Hybrid Composite Utilizing Micro-Cellulose Fibers Extracted from Date Palm Rachis in the Najran Region. *Polymers*. 14(21):4687. **(IF: 4.967) (HEC W Category)**.
300. Ullah A, Usman M, **Ahmer Hussain Shah**, Ahmad I, Maqbool M. Fabrication and Ions Irradiation Study of AlN: Gd Thin Films. *ECS Journal of Solid State Science and Technology*. 11(4):043002. **(IF: 2.9) (HEC X Category)**.
301. Syed **Qutaba Tariq**, Asmelash M, Saptaji K, Azhari A (2022) A review on peening processes and its effect on surfaces. *The International Journal of Advanced Manufacturing Technology*:1-38. **(IF: 3.52) (HEC X Category)**.
302. Syed **Qutaba Tariq**, Ali MQ, Shoaib M, Khushairi A, Abdullah Y, Haider M (2022) Eco-friendly antimicrobial finishing of cotton fabrics using bioactive agents from novel *Melia azedarachyan* berries extract and their performance after subsequent washings. *Egyptian Journal of Chemistry*. **(HEC Y Category)**.
303. Islam MZ, Deb H, Hasan MK, **Nazakat Ali Khoso**, Hossain MK, Wentong Y, Qi X, Dong Y, Zhu Y, Fu Y (2022) A facile one-pot scalable production of super electromagnetic shielding conductive cotton fabric by hierarchical graphene-composites. *Journal of Materials Science*. 57 (32):15451-15463. **(IF:4.68) (HEC W Category)**.
304. Naeem MA, **Muhammad, Qasim Siddiqui**, Khan MR, Mushtaq M, Wasim M, Farooq A, Naveed T, Wei Q. Bacterial cellulose-natural fiber composites produced by fibers

extracted from banana peel waste. Journal of Industrial Textiles. 51(1_suppl):990S-1006S.

. (IF:2.92) (HEC X Category).

305. S, **Muhammad, Qasim Siddiqui**, Ndlovu L. A preliminary study on the effect of short fiber content on drafting force and its variability. Journal of Natural Fibers. 19(1):78-87. (IF:3.50) (HEC X Category).

306. Lakho RA, **Zamir Ahmed Abro**, Chen J, Min R. (2022) Smart Insole Based on Flexi Force and Flex Sensor for Monitoring Different Body Postures. Sensors. 22(15):5469. (IF:2.33) (HEC W Category).

307. **Saif Ullah Khan**, Bar M, Evon P, Labonne L, Ouagne P. (2022) Development of 100% Linseed Flax Yarns with Improved Mechanical Properties and Durability for Geotextiles Applications. Fibers. 10(12):102. (HEC X Category).

308. Ayaz M, Salam A, **Saif Ullah Khan**, Khan MQ, Hussain T, Kim IS. (2022) Bioactive Silvadur loaded polyacrylonitrile nanofibrous membranes for wound dressing applications. Materials Research Express. 9(11):115305. (IF:2.02) (HEC X Category).

309. Matallah ME, Arrar HF, Faci M, **Waqas Ahmed Mahar**, Ben Ratmia FZ, Attia S. (2022). Assessment of Human Outdoor Thermal Comfort in a Palm Grove during the Date Palm Phenological Cycle. Atmosphere. 13(3):379. (IF: 3.11) (HEC W Category).

310. Labdaoui K, **Waqas Ahmed Mehar**, Qureshi S, Marri SA. (2022). How Tmrt Affects PET Assessment in Outdoor Environments: A Comparative Study. Journal of Art, Architecture and Built Environment. 5:121-138. (HEC Y Category).

311. **Sohrab Ahmed Marri, Waqas Ahmed Mahar,,** Qureshi S, Memon RM. (2022). Architecture For" Other"? Building A Critical Account On Architecture" Othering" From

Colonial To Post-Colonial Time (19 th Century-Present Time). Webology. 19(2): 7923-7935. (**HEC Y Category**).

312. **Soomro R**, Memon IA, Pathan AFH, **Waqas Ahmed Mahar**, Sahito N, Lashari ZA (2022). Factors That Influence Travelers' Willingness to Adopt Bus Rapid Transit (Green Line) Service in Karachi. Sustainability, 14(16), 10184. (**IF: 3.88**) (**HEC W Category**).

313. **Sohrab Ahmed Marri**, Mahar, WA, Anwar, NUR, Labdaoui, K, Shah, S (2022). LA MAISON DE VERRE (Myth of Transparency/Translucency and Light). Journal of Xi'an University of Architecture & Technology, XIV (8), p. 416-423. (**HEC Y Category**).

314. Memon RM, Talpur BD, Nazir H, Kaka ZG, **Waqas Ahmed Mahar** (2022). Easy Movement Facilities for Users' Comfort in Shopping Malls in Clifton, Karachi, Pakistan. Journal of Xi'an Shiyou University, Natural Sciences Edition, 18(9):37-51. (**HEC X Category**).

315. Bughio M, Bahale S, **Waqas Ahmed Mahar**, Schuetze T (2022). Parametric Performance Analysis of Cooling Potential of Earth-to-Air Heat Exchangers in the Hot and Humid Climates. Energies. 15(19), 7054. (**IF: 3.25**) (**HEC W Category**).

316. Khan I, Iftikhar A, Raza A, **Sohrab Ahmed Marri** (2022). Anti-Terrorism Law and Policy in Pakistan. Competitive Education Research Journal. 3(2): 48-63. (**HEC Y Category**).

317. Ali Z, Asif M, **Sohrab Ahmed Marri**, Maria B (2022). China-Pakistan Economic Corridor (CPEC) From A China-Pakistan Point of View. Competitive Education Research Journal. 3(2): 120-129. (**HEC Y Category**).

318. Raza A, **Sohrab Ahmed Marri**, Khan I, Atif M (2022). Continuity or Change? US Policy Towards Afghanistan Through Presidential Terms (2001-2021). Competitive Education Research Journal (CERJ), 3(1): 300-309. (**HEC Y Category**).

319. Khan MA, Iftikhar A, Shakir M, **Sohrab Ahmed Marri**. (2022). Impact of China-Pakistan Economic Corridor (CPEC) On GDP, GNP, Industrial Production, Unemployment, and Inflation. Competitive Education Research Journal. 3(1): 362-372. (**HEC Y Category**).
320. Soomro MI, Kumar S, **Asad Ullah**, Shar MA, Alhazaa A. (2022) Solar-Powered Direct Contact Membrane Distillation System: Performance and Water Cost Evaluation. Sustainability. 14(24):16616. (**IF:3.25 (HEC W Category)**).
- 321.** Baghban S, Mo KH, Ibrahim Z, Radwan MK, **Syed Nasir Shah**. (2022). Effect of basalt and polypropylene fibers on crumb rubber mortar with Portland cement and calcium aluminate cement binders: Strength and artificial neural network prediction model. Progress in Rubber. Plastics and Recycling Technology. 38(1): 99-124. (**IF:1.15 (HEC X Category)**).
- 322.** Syed Nasir Shah, Tan TH, Tey OW, Leong GW, Chin YS, Yuen CW, Mo KH. (2022). Aerogel and expanded perlite incorporated lightweight cementitious composites containing crushed glass: Evaluation of the drying shrinkage and alkali-silica expansion. Science Progress. 105(2): 1–16. (**IF:2.74 (HEC W Category)**).
323. Tan, T. H., **Shah, S. N.**, Ng, C. C., Putra, A., Othman, M. N., & Mo, K. H. (2022). Insulating foamed lightweight cementitious composite with co-addition of micro-sized aerogel and hydrogen peroxide. Construction and Building Materials, 360(August), 129485. <https://doi.org/10.1016/j.conbuildmat.2022.129485> (**IF:7.69 (HEC W Category)**).
324. **Ghafar, S. A.**, Warid, M. N. M., & Hassan, N. A. (2022). Laboratory investigation of cup lump modified bitumen emulsion. Construction and Building Materials, 359, 129471. <https://doi.org/10.1016/J.CONBUILDMAT.2022.129471> (**IF:7.69 (HEC W Category)**).

325. **Ayoub, M.**, Sheikh, M. N., & Hadi, M. N. (2022). Investigation of the Effectiveness of CFRP Strip Ties as Transverse Reinforcement for GFRP Bar–Reinforced Concrete Columns. *Journal of Composites for Construction*, 26(5), 04022061. **(IF:2.606) (HEC W Category)**.
326. **Ayoub, M.**, Hasan, H. A., Neaz Sheikh, M., & Hadi, M. N. (2023). Experimental Behavior of GFRP Bar–Reinforced CFRP Strip Tie–Confined Normal-Strength Concrete Columns under Different Loading Conditions. *Journal of Composites for Construction*, 27(2), 04023018. **(IF:2.606) (HEC W Category)**.
327. Liu, S., Cao, H., Chen, Z., **Habib, M.**, & Zhu, H. (2022, November). Study on Dimensionless Mid-tower Stiffness of Three-Tower Self-Anchored Suspension Bridges Based on an Analytical Approach. In *Structures* (Vol. 45, pp. 1573-1586). **(IF:4.01) (HEC W Category)**.
328. **Ansari, A. H.**, Jakarni, F. M., Muniandy, R., Hassim, S., Elahi, Z., & Zair, M. M. B. (2022). Effect of cup lump rubber as a sustainable bio-modifier on the properties of bitumen incorporating polyphosphoric acid. *Construction and Building Materials*, 323, 126505. <https://doi.org/10.1016/j.conbuildmat.2022.126505> **(IF=7.69) (HEC W category)**.
329. **Ansari, A. H.**, Jakarni, F. M., Muniandy, R., Hassim, S., Elahi, Z., & Ben Zair, M. M. (2022, January). Physical and Rheological Properties of Cup Lump Rubber Modified Bitumen. In *Road and Airfield Pavement Technology: Proceedings of 12th International Conference on Road and Airfield Pavement Technology, 2021* (pp. 713-723). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-87379-0_54
330. Xinnan Hu, Zheng Tong, Jie Sha, **Muhammad Bilal**, Yujin Sun, Rui Gu, Chao Ni, Chaoqun Li, Yumeng Deng (2022). Effects of Flotation Reagents on Flotation Kinetics of

Aphanitic (Microcrystalline) Graphite. Separations 9 (12), 416. (**IF: 3.34**) (**HEC X Category**).

331. Xuexia Wang, Xiangning Bu, Muidh Alheshibri, **Muhammad Bilal**, Shaoqi Zhou, Chao Ni, Yaoli Peng, Guangyuan Xie. Effect of scrubbing medium's particle size distribution and scrubbing time on scrubbing flotation performance and entrainment of microcrystalline graphite. International Journal of Coal Preparation and Utilization 42 (10), 3032-3053. (**IF: 2.79**) (**HEC X Category**).

332. Shufang Ding, Hongshunda Zou, Shaoqi Zhou, Xiangning Bu, **Muhammad Bilal**, Xuexia Wang. The preparation of hydroxypropyl starch grafted acrylamide and its enhancement on flocculation of coal slime water. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 44 (3), 7934-7948. (**IF: 3.44**) (**HEC X Category**).

333. Yemin Wang, Xuexia Wang, **Muhammad Bilal**. Recovery of carbon and cryolite from spent carbon anode slag of electrolytic aluminum by flotation based on the evaluation of selectivity index 10. (**IF: 5.54**) (**HEC W Category**).

334. Xu Y, Khan NM, Rehman H, Hussain S, Khan RM, Emad MZ, Cao K, Bin Mohd Hashim MH, Alarifi SS, Cui R, Li X. Research on Leakage Detection at the Joints of Diaphragm Walls of Foundation Pits Based on Ground Penetrating Radar. Sustainability. 2022 Dec 28;15(1):506.

335. Naveed ur Rehman Anwar, Waqas Ahmed Mahar, Qureshi S, Sohrab Ahmed Marri, Gohram Khan Malghani, Khan MA. (2022). Urban Sprawl, Its Impact, and Challenges: A Case Study of Quetta, Pakistan. Journal of Applied and Emerging Sciences 12(2).99-107. (**HEC Y Category**).

FACULTY OF SOCIAL SCIENCES & HUMANITIES

336. **Fouzia Ahmed Baloch**, Mohamed Ismail S.A.M, Jomezai NA. (2022). Predictability of School Principals' Leadership Orientation for Their Intentions of Implementing Nutrition Education. International Journal of Educational Reform. Article 10567879221121658. **(HEC X Category)**.
337. Khilji G, Jomezai NA, Bibi N, **Fouzia Ahmed Baloch**. (2022). Understanding the effects of educational decentralization through the perspectives of education managers and teachers. International Journal of Educational Management. 36(7): **(IF: 1.63) (HEC X Category)**
338. Khadija Karim, **Khadija Jaffar, Seema Azeem**. (2022). Impact Of Social Media on Adolescents Learning In District Quetta. Pakistan Journal of Educational Research, 5(2):1-6 **(HEC Y Category)**.
339. Sharif S, **Liaquat Ali Channa**. Lived narratives: Female investment and identity negotiation in learning English in rural Pakistan. Linguistics and Education.72:101119. **(IF: 1.65) (HEC W Category)**.
340. Pansezai A, **Liaquat Ali Channa**, Bibi B. Translanguaging in higher education: exploring interactional spaces for meaning-making in the multilingual universities of Pakistan. International Journal of Bilingual Education and Bilingualism. 22:1-4. **(IF: 3.16) (HEC W Category)**.
341. Gul S, **Liaquat Ali Channa**, Dialectal preferences: a mixed methods study of ESL students' attitudes towards Englishes in Pakistan. Asian Englishes.:1-6. **(HEC W Category)**.

342. Manan SA, **Liaquat Ali Channa**, Haidar S. Celebratory or guilty multilingualism? English

medium instruction challenges, pedagogical choices, and teacher agency in Pakistan.

Teaching in Higher Education. 27(4):530-45. **IF: 2.75 (HEC W Category)**.

343. Zaidi S, **Mehwish Sahibzada** , Farooq SA, Bibi B.(2022). A Representation Of Boundless

Horizon In Post-Cyberpunk Through The Deconstruction Of Race In Accelerando.

Webology. 19(2): 7488-7497. **(HECY Category)**.

344. **Mehwish Sahibzada**, Zaidi S, at all. (2022). Biographical Comparative Analysis of

Rolling Thunder and Mad Bear : An Ecocritical Examplar. International Journal of Special

Education. 37(3): 14203-14211. **(HEC X Category)**.

345. **Shahab Naimat Khan**, Ahmad S (2022). اشتہار میں موجود آوازوں کا اسلامی نقطہ نظر سے جائزہ.

Islamic Review of Voices Used in The Advertisement. Pakistan Journal of Islamic

Philosophy. 4:71-80. **(HEC Y Category)**.

346. **Shahab Naimat Khan**, Ali HN, Durrani MA.(2022). اشتہاری عبارت: تعریف، اجزا اور اسالیب

سے متعلق اسلامی نقطہ نظر: Advertisement Text: An Islamic Perspective on its Definition,

Parts and Styles. Al-Qamar. 5:33-44. **(HEC Y Category)**.

347. Malik NA, Gulraiz H, Anjum R, Khan A. A Comparative Study of the Relationship

between Marital Adjustment and Life Satisfaction among Childless Couples with or

without an Adopted Child. Journal of Applied Research and Multidisciplinary Studies.

15;3(2). 37-56. **(HEC Y Category)**.

348. **Shahab Naimat Khan**, wadood A, (2022). مختلف معاملات میں امانت اور اس پر قبضہ Trust

and Its Possession in Different Transactions. Rahat ul Quloob. 6: 210-221. **(HEC Y**

Category).

349. **Shahab Naimat Khan**, (2022). Critical Review of Two Pakistani TV Ads in the light of Islamic Shariah. University of Chitral Journal of Religious Studies. 5(2):1-11. (**HEC Y Category**)
350. **Khatoon N, Sadia Bano**. (2022). The Level of Instrumental Motivation in Learning English as a Second Language at University Level. SHAJAR. 4:44-54. (**HEC Y Category**).
351. Shabir Ahmad , M.Rashid (2022) قضاء اور مصالحت : تقابلی جائزہ. Comparative review of the peace Al-Azhar. 1:59-72. (**HEC Y Category**).
352. Khan T, **Malik Muhammad Akhtar**, Malghani G, **Rabia Akhtar** (2022). Comparative analysis of bacterial contamination in tap and groundwater: A case study on water quality of Quetta City, an arid zone in Pakistan. Journal of Groundwater Science and Engineering. 10(2):153-165. (**HEC Y Category**).
353. Mughal T, **Aurangzaib Alamgir**. (2022). The Post 2014 Indo-Afghan Nexus: Implications for Pakistan. Pakistan Perspective. 27(2). (**HEC Y Category**).
354. **Makhtoom Ahmed**, Sabir I, Zaman M.2022. Children's Perceptions of their Safety and Agency in Pakistan. Child Indicators Research.15(3):959-87. (**IF: 2.32**) (**HEC W Category**).
355. Manan SA, **Khadija Tul-Kubra**. (2022). Reclaiming the indigenous knowledge (s): English curriculum through Decoloniality'lens. Journal of Multicultural Discourses. 17(1):78-100. (**HEC X Category**).

356. Hussain R, **Tayyaba Akram**, Hassali MA, Muneswarao J, Rehman AU, Hashmi F, Babar ZU. Barriers and facilitators to pharmacovigilance activities in Pakistan: A healthcare professionals-based survey. PloS one. 17(7):e0271587. **IF: 3.5 (HEC W Category)**.
357. **Muhammad Asad** , Dastgeer G, Uz Zaman N, Khalid Z, Brohi MA, Bibi A. (2022). The Role of Authentic Leadership in Shaping Performance Feedback Reactions: The Mediating Role of Trust in Leader. South Asian Journal of Human Resource Management. 9(1):33-52. **(HEC Y Category)**.
358. Krifa-Schneider H, Matei I, **Abdul Sattar**. (2022). FDI, corruption and financial development around the world: A panel non-linear approach. Economic Modelling. 110:105809. **(IF: 3.87) (HEC W Category)**.
359. **Khan A, Reham Anjum**, Khan M. (2022). Investor Perception of Cryptocurrency: A Moderating Role of Social Media on Decision-Making. Global Economics Review.VI(IV):136-49. **(HEC Y Category)**.
360. **Muhammad Adeel Anjum**, Liang D, Ahmed A, Parvez A. (2022). Understanding how and when workplace ostracism jeopardizes work effort. Management Decision. 60(7): 1793-1812. **(IF :5.58) (HEC W Category)**.
361. Ahmed A, Liang D, **Muhammad Adeel Anjum**, Durrani DK. (2022). Stronger together: Examining the interaction effects of workplace dignity and workplace inclusion on employees' job performance. Frontiers in Psychology. 13:891189 **(IF:4.23) (HEC W Category)**.
362. **Muhammad Adeel Anjum**, Liang D, Durrani DK, Parvez A. (2022). Workplace mistreatment and emotional exhaustion: The interaction effects of self-compassion. Current Psychology.41:1460-1471. **(IF:2.38) (HEC X Category)**.

363. Zhang L, Wang Y, **Muhammad Adeel Anjum**, Mu J. (2022). The impacts of point rewarding and exchanging on users' loyalty toward mobile payment applications: a dual channeling perspective. *Internet Research*. 32(6):1832-1861. (**IF: 6.35**) (**HEC W Category**).
364. **Nadeem-Uz-Zaman** TA, Ramayahb T, Khalida Z, Asada M. (2022). Career stages at the bottom line: Revisiting the relationship between organizational justice and turnover intentions. *Human Systems Management*. 41:155-172. (**HEC X Category**).
365. Atta A, **Hadi Hassan Khan**, **Nadeem-Uz-Zaman**, Kousar S, Ulhaq SN, Ahmed W. (2022) Employee Motivations In Protecting Workplace Harassment: Longitudinal Analysis Of Protection Motivation Theory From Fear Appeal Perspective. *Multicultural Education*. 8(3): 227-241. (**HEC X Category**).
366. Nagi AH, **Muhammad Asad**, Khalid Z, Bibi A. (2022). The effect of performance appraisal politics on deviant work behavior: The mediating role of job satisfaction. *Human Systems Management*. 1-14. (**HEC X Category**).
367. **Nagina Gul**, **Hadi Hassan Khan**, Haq SN, **Nadeem Uz Zaman**, Baloch MF. (2022). Impact of E-Service Delivery on Client Satisfaction: A Case of NADRA Pakistan. *Journal of Applied and Emerging Sciences*. 12.6-9. (**HEC Y Category**).
368. Iqbal S, Parvez A, **Muhammad Adeel Anjum**, SAFDAR T, **Ammarah Ahmed**. (2022). Links Between Macro Facilitators of Organizational Empowerment and Ambidextrous Behaviors: An Empirical Study from Pakistan. *Journal of Asian Finance, Economics and Business*. 9(2):113-120. (**HEC X Category**).

369. **Sidra Nazir, Hadi Hassan Khan.** (2022) Technological Change and Decision of Make-

or-Buy in Developing Economy. Journal of Managerial Sciences. 16:130-146. (**HEC Y**

Category).

370. Khan N, **Muhammad Zohair Durrani**, Mushtaq N, ul Haq SN, Ijaz B. (2022). The

Relationships among Cryptocurrencies: A Granger Causality Analysis. iRASD Journal of

Economics. 4(2):264-274. (**HEC Y Category).**

371. Sohu JA, Lashari AR, Memon IA, **Manzoor Ali Brohi**, Kehar A. (2022). Analysis of the

Psychological Characteristics and Entrepreneurial Intentions among University Students.

Journal of Entrepreneurship, Management, and Innovation. 4:210-230. (**HEC Y**

Category).

372. Metlo MY, Janweri SA, **Manzoor Ali Brohi**, Memon IA, Kehar A. (2022). An Empirical

Study to Evaluate the Influence of Organizational Support and Job Commitment on Job

Performance: An Evidence from Pakistan. Journal of Entrepreneurship, Management, and

Innovation. 4:58-70. (**HEC Y Category).**

373. Malhia Kasi, **Noor Muhammad, Bilal Sarwar.** (2022). Analyzing the Demographic

Differences in Context of Financial Literacy: Evidence from Quetta City. Journal of

Accounting and Finance in Emerging Economies. 8(1): 201-212. (**HEC Y Category).**

374. Sheza Riaz, Hadi Hassan Khan, Bilal Sarwar, Wahab Ahmed, Noor Muhammad, Sajjida Reza, and Sheikh Muhammad Nabeel Ul Haq. (2022). Influence of Financial Social

Agents and Attitude Toward Money on Financial Literacy: The Mediating Role of

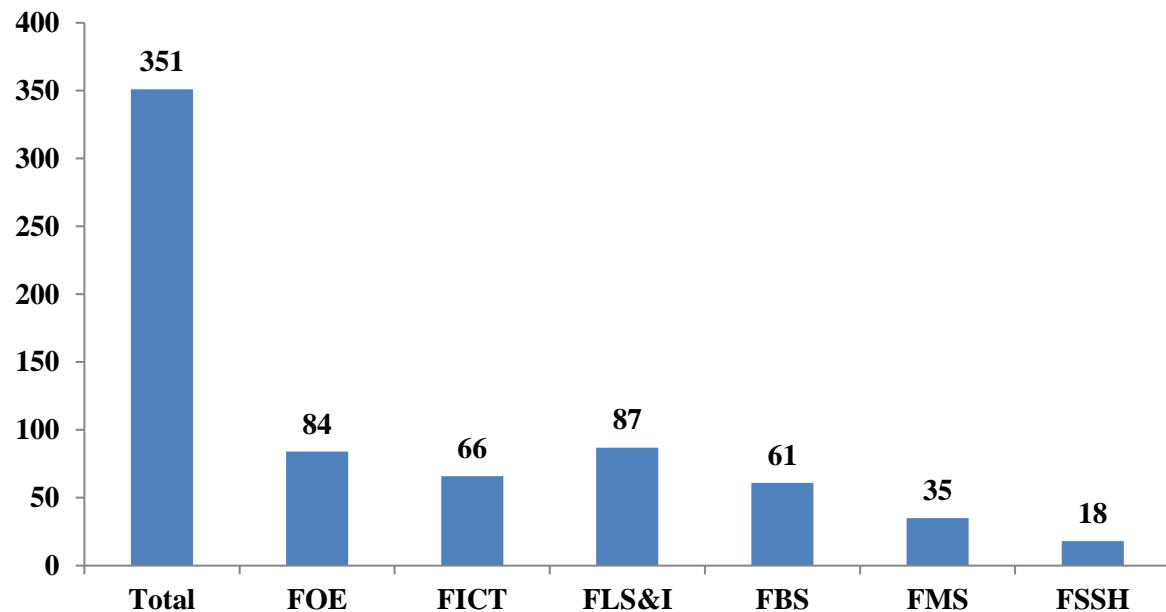
Financial Self-Efficacy and Moderating Role of Mindfulness. SAGE Open. 2(3).

21582440221117140. (**IF:2.032` (HEC W Category).**

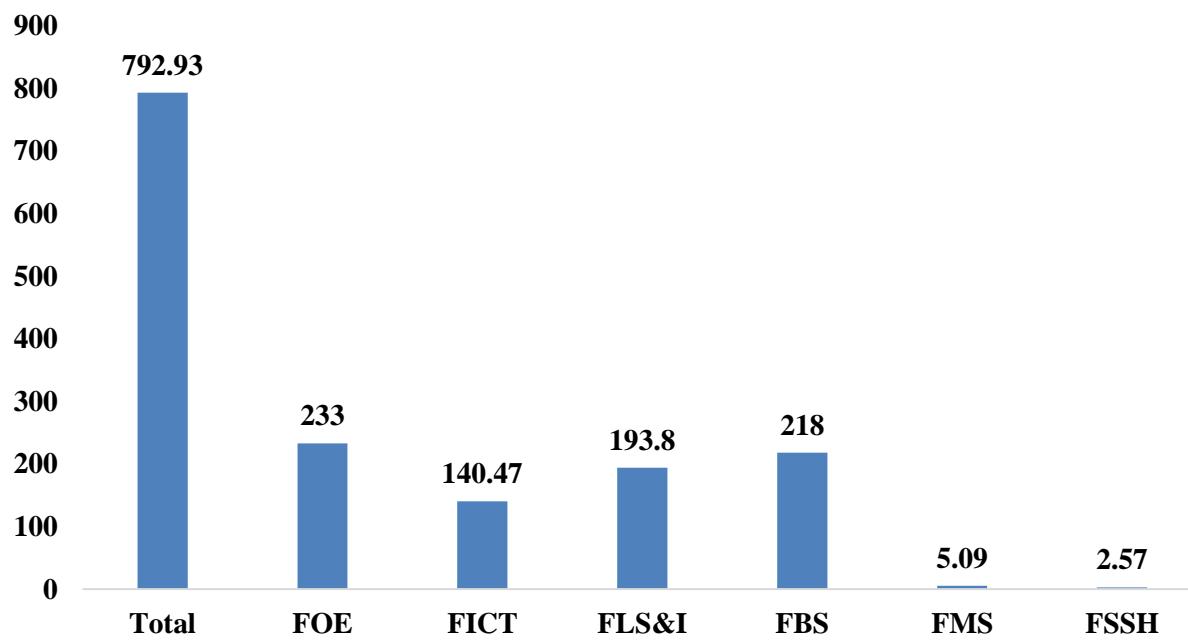
375. **Muhammad Zaheer Khan**, Said R, Hafeez A, Maqsood N, Qadir F. Asymmetries in the Labor Demand in Pakistan: Estimating Own and Cross Wage Elasticities Using Frictional Probit Model. 18:31-37. (**HEC X Category**).
376. **Muhammad Zaheer Khan**, Said R, Hafeez A, Maqsood N, Qadir F. Asymmetries in the Labor Demand in Pakistan: Estimating Own and Cross Wage Elasticities Using Frictional Probit Model. Montenegrin Journal of Economics. 18(4):31-7.. (**HEC X Category**).
377. **Zahid Majeed**. (2022). Metacognition and opportunity recognition: Evidence from Emerging Economy of Pakistan. Business & Economic Review, 14(1):93-113. (**HEC Y Category**)
378. Kakar AS, **Mrestyal Khan**. Exploring the impact of green HRM practices on pro-environmental behavior via interplay of organization citizenship behavior. Green Finance. 2022;4(3):274-94. (**HEC Y Category**).
379. Jan G, Mohamed Zainal SR, **Babruk ali Panezai**. (2022). Service innovative work behavior in the hotel firms: The role of servant leadership and harmonious passion. Journal of Human Behavior in the Social Environment. 32(5):646-662. (**HEC X Category**).
380. **Mirwaise Khan**, Khan F, Khan M, Ahmed S, Awan SH, Bakhtiar B. (2022). The Mediating Effect Of Job Satisfaction On The Link Between Reward And Job Performance: A Case of hospitals in Pakistan. PalArch's Journal of Archaeology of Egypt/Egyptology. 19(4):1424-42. (**HEC Y Category**).

RESEARCH PUBLICATIONS 2021

Publications 2021 (Number)



Publications 2021 (Impact Factor)



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. **Muhammad Asif, Abrar Hussain, Abdul Wali, Nazeer Ahmed, Irfan Ali, Zafar Iqbal, Muhammad Amir, Muhammad Shafique, Mahmood Rasool.** (2021). Molecular, Cytogenetic and Hematological Analysis of Chronic Myeloid Leukemia Patients and Follow up by Imatinib Mesylate and Nilotinib. *Analytical Cellular Pathology*. Volume 2021, Article ID 4909012, 1-19. **(IF: 2.97).**
2. Iqbal Z, Absar M, Akhtar T, Aleem A, Jameel A, Basit S, Ullah A, Afzal S, Ramzan K, Rasool M, Karim S, Mirza M, Iqbal M, AlMajed M, AlShehab B, AlMukhaylid S, AlMutairi N, Al-anazi N, Sabar MF, Arshad M, **Muhammad Asif**, Shammas M, Mahmood A. (2021). Integrated genomic analysis identifies ANKRD 36 gene as a novel and common biomarker of disease progression in Chronic Myeloid Leukemia. *Biology*. 10(11):1182. **(IF: 5.01).**
3. Amir M, **Abrar Hussain, Muhammad Asif** Ahmed S, Alam H, Moga MA, Cocuz ME, Marceanu L, Blidaru A. (2021). Full-Length Genome and Partial Viral Genes Phylogenetic and geographical Analysis of Dengue Serotype 3 Isolates. *Microorganisms*. 9(2):323. **(IF: 4.12).**
4. Rasool M, Malik A, Waquar S, Zaheer A, **Muhammad Asif** Iqbal Z, Gauthaman K, Kamal MA. (2021). Cellular and molecular mechanisms of Dementia: Decoding the causal link of Diabetes Mellitus in Alzheimer's disease. *CNS & Neurological Disorders-Drug Targets*. 20. 602-612. **(IF: 4.38).**

5. Mamood R, Malik A, Waqar S, Ain QT, **Muhammad Asif** Anfinan N, Haque A, Alam H, Ahmed S, Hamid Hamdard M. (2021). Assessment of clinical variables as predictive markers in the development and progression of colorectal cancer. Bioengineered. 12:2288-2298. (**IF: 3.26**).
6. Rasool M, Malik A, Abdul Basit Ashraf M, Mubbin R, Ayyaz U, Waqar S, **Muhammad Asif** Umar M, Siew Hua G, Iqbal Z. (2021). Phytochemical analysis and protective effects of Vaccinium macrocarpon (cranberry) in rats (*Rattus norvegicus*) following ethylene oxide-induced oxidative insult. Bioengineered 12:4593-460 (**IF: 3.26**).
7. Rasool M, Carracedo A, Sibiany A, Al-Sayes F, Karim S, Haque A, Natesan Pushparaj P, **Muhammad Asif**, Achakzai NM. (2021). Discovery of a novel and a rare Kristen rat sarcoma viral oncogene homolog (KRAS) gene mutation in colorectal cancer patients. Bioengineered 12:5099-5109. (**IF: 3.26**).
8. Rafique S, Alam H, Umar Z, Shoaib M, **Samiullah Khan**, Syed Inayatullah, **Abrar Hussain**. (2021). Prevalence of Iron–Deficiency Anemia in Pregnant Women of Rural and Urban Areas of Balochistan, Pakistan. Pak-Euro Journal of Medical and Life Sciences, 4(4):164-169. (**HEC Y Category**).
9. Nasrullah, **Abrar Hussain**, Ahmed S, Rasool M, Shah AJ. (2021). DNA methylation across the tree of life, from micro to macro-organism. Bioengineered. 13: 1666-1685. (**IF: 3.26**).

10. Ahmed S, Khan H, Khan A, Bangash MH, **Abrar Hussain**, Qayum M, Hamdard MH. (2021). Inter-ethnic genetic variations and novel variant identification in the partial sequences of CYP2B6 gene in Pakistani population. PeerJ. 9: e11149. (**IF: 2.98**).
11. Altaf F, Gul S, Chandio TA, Rehman GB, Kakar AU, Ullah S, Khan N, Shaheen U, **Muhammad Naeem Shahwani**, Ajmal M, Manzoor M. (2021). Influence of biochar-based organic fertilizers on growth and concentration of heavy metals in tomato and lettuce in chromite mine tailings contaminated soil. Sarhad Journal of Agriculture. 137:315-24. (**HEC Y Category**).
12. Kousar T, Sabir N, Mushtaq A, Rizwan S, Jabeen U, Bashir F, Ismail T, Jakro MI, **Muhammad Naeem Shahwani**. (2021). Influence of Silica Gel on Ion Homeostasis in Salt Stressed Wheat Varieties of Balochistan. Silicon. 13(11): 4133-4138. (**IF: 2.67**).
13. Rahman F, Malik IR, Mujtaba G, Umer Z, **Asma Yousafzai, Muhammad Asif, Abrar Hussain**, Rasool M (2021). Investigation and Prevalence of Hepatitis C Virus Genotypes in Pregnant Women. International Journal Of Human Genetics 21 (2):79-84. (**IF: 0.23**).
14. Amir M, Khan MA, Iram S, **Samiullah Khan, Muhammad Asif**, (2021). Molecular evolution of zika virus by phylogenetic analysis of individual structural Capsid (C) gene and whole-genome sequences worldwide. Molecular evolution of zika virus by phylogenetic analysis. Pak-Euro Journal of Medical and Life Sciences. 4(4):170-177. (**HEC Y Category**).

15. Ullah H, Ullah A, Gul A, Mousavi T, **Muhammad Waseem Khan**. (2021). Novel coronavirus 2019 (COVID-19) pandemic outbreak: A comprehensive review of the current literature. Vacunas (English Edition). 22(2): 106-113. (**HEC Y Category**).
16. **Muhammad Waseem Khan**, Juutilainen J, Auvinen A, Naarala J, Pukkala E, Roivainen P. (2021). A cohort study on adult hematological malignancies and brain tumors in relation to magnetic fields from indoor transformer stations. International Journal of Hygiene and Environmental Health. 233:113712. (**IF:5.84**)
17. Fiaz Bukhari SM, Ali G, Abbas SR, Anjum Z, Ahmed N, Munir A, **Abdul Wali**, Ayub M, Khan K, Khames A, Musthafa MM. (2021). Ethnobotanical and Biochemical Study of Berberis Lycium Royle Collected from Different Areas of Azad Jammu and Kashmir. Evidence-Based Complementary and Alternative Medicine. Volume 2021: Article 9916305. (**IF:2.62**)
18. Ijaz A, Shah K, Aziz A, Rehman FU, Ali Y, Tareen AM, Khan K, Ayub M, **Abdul Wali**. (2021). Novel frameshift mutations in XPC gene underlie xeroderma pigmentosum in Pakistani families. Indian Journal of Dermatology. 66(2): 220. (**IF:1.49**).
19. Ali G, Foo JN, Nasir A, Chang CH, Chew EG, Latif Z, Azeem Z, Ain-ul-Batool S, Kazmi SA, Awan NB, Khan AH, **Abdul Wali**. (2021). Identification of a Novel Homozygous Missense (c. 443A> T: p. N148I) Mutation in BBS2 in a Kashmiri Family with Bardet-Biedl Syndrome. BioMed research international. Volume 2021: Article ID 6626015. (**IF:3.41**)

20. Kakar K, Ajmal N, Khan SZ, Shehzad P, Malik M, Haleema Sadia, Abdul Wali, **Rozeena Shaikh.** (2021). A Novel Heterozygous Missense Mutation in COL7A1 Gene in Dystrophic Epidermolysis Bullosa. International Journal Of Human Genetics. 21(3): 102-109. **(IF:0.23)**
21. Khichi TA, Ahmad T, Naqvi AM, Hussain S, Andleeb S, Mansoor, Noureen A, HussainT, **Haleema Sadia**, Aami S. (2021). A comparative study for evaluation of uric acid among age-wise and gender-wise in district Toba Tek Singh. Internation Journal of Biosciences. 18(5):1-6. **(ISI Indexed)**
22. Ajma N, Khan S.Z, Asmat, R, Khan, P, Haleema Sadia, Sajjad N, **Rozeena Shaikh.** (2021). Association of SNP rs700519 in CYP19A1 Gene with Polycystic Ovary Syndrome (PCOS) among Females of Quetta, Pakistan. International Journal of Human Genetics. 21(3): 96-101. **(IF: 0.23)**
23. Fatima S, Liaqat F, Akbar A, Sahfee M, Samad A, Anwar M, **Shazia Iqbal** , Khan SA, Haleema Sadia, Makai G. (2021). Virulent and multidrug-resistant Klebsiella pneumonia from clinical samples in Balochistan. International Wound Journal. 8(4):510-8. **(IF:3.31).**
24. Javed Z, Khan K, Rasheed A, **Haleema Sadia, Muhammad Naeem Shahwani**, Irshad A, Raza S, Salehi B, Sharifi-Rad J, Suleria HA (2021). Targeting androgen receptor signaling with MicroRNAs and Curcumin: a promising therapeutic approach for Prostate Cancer Prevention and intervention. Cancer Cell International 21:1-13. **(IF:5.72).**

25. Javed Z, Khan K, Rasheed A, **Haleema Sadia**, Raza S, Salehi B, Cho WC, Sharifi-Rad J, Koch W, Kukula-Koch W, G³owniak-Lipa (2021). MicroRNAs and Natural Compounds Mediated Regulation of TGF Signaling in Prostate Cancer. *Frontiers in Pharmacology*. 11:613464. (**IF: 4.22**)
26. Javed Iqbal M, Quispe C, Javed Z, **Haleema Sadia**, Qadr, QR, Raza et al., (2021). Nanotechnology-based strategies for berberine delivery system in cancer treatment: Pulling strings to keep berberine in power. *Frontiers in Molecular Biosciences* 7:624494. (**IF:4.18**).
27. Javed Z, Khan K, **Haleema Sadia**, Raza S, Sharifi-Rad J, Cho WC. (2021). MicroRNA Regulation of TRAIL in Renal Carcinoma: Tiny Juggernauts at Work. *Current Molecular Pharmacology*. 14(4): 520-526. (**IF:3.11**).
28. Khan K, Javed Z, **Haleema Sadia**, Sharifi-Rad J, Cho WC, Luparello C. (2021). Quercetin and MicroRNA Interplay in Apoptosis Regulation in Ovarian Cancer. *Current Pharmaceutical Design*. 27(20):2328-36. (**IF: 3.11**).
29. Javed Z, Khan K, Herrera-Bravo J, Naeem S, Iqbal MJ, **Haleema Sadia**, Qadri QR, Raza S, Irshad A, Akbar A. (2021). Genistein as a regulator of signaling pathways and microRNAs in different types of cancers. *Cancer Cell International*, 21: 388 (**IF:5.72**).
30. Iqbal MJ, Javed Z, **Haleema Sadia**, Qureshi IA, Irshad A, Ahmed R, Malik K, Raza S, Abbas A, Pezzani R, Sharifi-Rad J. (2021). Clinical applications of artificial intelligence and machine learning in cancer diagnosis: Looking into the future. *Cancer cell international*. 21: 270. (**IF:5.72**).

31. **Haleema Sadia**, Ullah I, Said A, Ullah H, Khan MS, Khan H, Khan MK. (2021). Evaluation of Cyclin-Dependent Kinase Inhibitor Signalling network in esophageal Adenocarcinoma Via computational and statistical approaches. Bioscience Research. 18(3): 2022-2029. (**HEC Y Category**).
32. **Haleema Sadia**, Iqbal MJ, Shamas S, Malik K, Ahmed R, Raza S, Butnariu M, Cruz-Martins N, Sharifi-Rad J. (2021). Apigenin role as cell-signaling pathways modulator: implications in cancer prevention and treatment. Cancer Cell International. 21(1): 1-11. (**IF:5.72**).
33. **Haleema Sadia**, Raza S, Irshad A, Koch W, Kukula-Koch W, Głowniak-Lipa A, Cho WC, Sharifi-Rad J. (2021). Regulation of hedgehog signaling by miRNAs and nanoformulations: A Possible Therapeutic Solution for Colorectal Cancer. Frontiers in Oncology. 10: 607607 (**IF:4.84**).
34. **Haleema Sadia**, Javid A, Rashid M, Taseer MS, Zeng Z. (2021). Canine Populations in Vicinity are Propagating Canine Transmissible Venereal Tumour in Pakistan–A Pilot Study. Pakistan Journal of Zoology. 2021: 1-6. (**HEC X Category**).
35. **Nusrat Jahan**, Javed MA, Khan A, Abd Manan F, Tabassum B. (2021). Genetic architecture of Al³⁺ toxicity tolerance in rice F2: 3 populations determined through QTL mapping. Ecotoxicology. 30(5):794-805. (**IF: 2.43**).
36. Ahmed S, Khan ST, Zargaham MK, Khan AU, Khan S, **Abrar Hussain**, Uddin J, Khan A, Al-Harrasi A. (2021). Potential therapeutic natural products against Alzheimer's disease with Reference of Acetylcholinesterase. Biomedicine & Pharmacotherapy. 39:111609. (**IF: 3.74**).

37. Ahmed S, Ayub M, Naeem M, Nazir FH, **Abrar Hussain**, Ghilzai D, Magnus LO, Sajjad A, Norder H. (2021). Thalassemia Patients from Baluchistan in Pakistan Are Infected with Multiple Hepatitis B or C Virus Strains. *The American journal of tropical medicine and hygiene*. 104(4):1569. **(IF: 2.33)**.
38. Din M, Khan MB, Dawood S, Ghulam S, Saleem K, Humaira S, **Shahjahan Shabbir Ahmed Rana**, Faiza LA, Muhammad Y, **Nazeer Ahmed**. (2021). Dissemination of NDM-1 in pseudomonas aeruginosa and Klebsiella pneumonia isolated from pus samples in tertiary care hospitals of Quetta, Pakistan. *Journal of the Pakistan Medical Association*. 71:228-232. **(IF: 0.64)**.
39. Irfan S, **Nazeer Ahmed**, Shahjahan Shabbir Ahmed Rana. (2021). Characterization of the complete chloroplast genome sequence of Juniperus polycarpous K. Koch (Cupressaceae), from Ziarat, Pakistan. *Indian Journal of Science & Technology*. 14(36):2806-2814. **(IF: 0.25)**.
40. Shahid D, **Nazeer Ahmed**, SS Ahmed Rana, Imran Ali Sani, Siddiqui MF, Ali A, Irfan S, Leghari S, Rehman AU. (2021). Molecular Identification of Parasitic Mistletoe (*Arceuthobium oxycedri*) of Juniper Ecosystem from District Ziarat, Balochistan, Pakistan. *FUUAST Journal of Biology*. 11(1):9-16. **(HEC Y Category)**.
41. Mazhar N, Farhan S, Ahmed N, Khanum A, Arshad S, Fatima J, **Nazeer Ahmed**. (2021). Effect of hormonal contraceptives on fibrinogen and plasma antithrombin. *Pakistan Journal of Medical and Health Sciences*. 5(3):649-53. **(IF: 0.78)**.
42. Akram Ali Baloch, **Agha Muhammad Raza**, Shahjahan Shabbir Ahmed Rana, **Saad Ullah**, Samiullah Khan, Humera Zahid, **Gohram Khan Malghani**, and **Kaleem U. Kakar**. (2021). BrCNGC gene family in field mustard: genome-wide

- identification, characterization, comparative synteny, evolution, and expression profiling. *Scientific reports.* 11(1):1-6. **(IF:4.37).**
43. ul Qamar MT, Ahmad S, Khan A, Mirza MU, Ahmad S, **Asma Abro**, Chen LL, Almatroudi A, Wei DQ. (2021). Structural probing of HapR to identify potent phytochemicals to control Vibrio cholera through integrated computational approaches. *Computers in Biology and Medicine.* 138:104929. **(IF:4.58).**
44. Ahmad S, Waheed Y, **Asma Abro**, Abbasi SW, Ismail S. (2021). Molecular screening of glycyrrhizin-based inhibitors against ACE2 host receptor of SARS-CoV-2. *Journal of Molecular Modeling.* 27(7):1-3. **(IF:1.81).**
45. Mehmood I, Ijaz M, Ahmad S, Ahmed T, Bari A, **Asma Abro**, Allemailem KS, Almatroudi A, Tahir ul Qamar M. (2021). SARS-CoV-2: An update on genomics, risk assessment, potential therapeutics and vaccine development. *International Journal of Environmental Research and Public Health.* 18(4):1626. **(IF:3.39).**
46. Afrasiab Khan Tareen, **Imrana Niaz Sultan**, Mohammad Waseem Khan, Vittaya Punsuvon, Pramuk Parakulsuksatid. (2021). Cellulase addition and pre-hydrolysis effect of high solid fed-batch simultaneous saccharification and ethanol fermentation from combined pretreated oil palm trunk. *ACS Omega.* 6(40): 26119. **(IF: 3.53).**
47. Ali S, Mehmood F, Ayaz Y, Sajid M, **Haleema Sadia**, Nawaz R (2021). An Experimental Trial: Multi-Robot Therapy for Categorization of Autism Level Using Hidden Markov Model. *Journal of Educational Computing Research.* 60(3):722-741. **(IF: 2.9).**

48. Ashiq K, Ashiq S, **Haleema Sadia**. (2021). Pharmacy Education and Role of the Teachers During the COVID-19 Pandemic. *Bangladesh Journal of Medical Science*. 20:183-184. (**HEC Y Category**).
49. Javed Z, Khan K, Raza Q, **Haleema Sadia**, Shah FA, Ahmad T, Bentivegna A, Bazzoni R, Setzer WN, Alshehri MM. (2021). Notch signaling and MicroRNA: The dynamic duo steering between neurogenesis and glioblastomas. *Cellular and Molecular Biology*. 67(2):33-43. (**IF: 1.7**).
50. Javed Z, Raza Q, Shah FA, **Haleema Sadia**, Alam A, Anum F, Saleem MA, Raza S. (2021). Notch Signaling & Micro RNAs-two tumblers of neurogenesis and Gliomas. *Journal of the Pakistan Medical Association*. 71 (1):1-23. (**IF: 0.78**).
51. Khurram M, Irshad A, Alamgir M, Awan UA, Syed A, **Haleema Sadia**. (2021). Epidemiological Survey of the Prevalence of HCV and HBV among the Factory Workers in the Periphery of Lahore. *BioScientific Review*. 3:25-33. (**ISI Indexed**).
52. Majeed F, Akbar A, Shafee M, **Haleema Sadia**, Iqbal S, Phadungchob B, Khan G, Khan S. (2021). Detection of Mycotoxicogenic Fungi and Mycotoxins in Poultry Feed of Balochistan Pakistan. *Journal of the Hellenic Veterinary Medical Society*. 72:2741-2746. (**HEC Y Category**).
53. Naveed M, Bukhari B, Afzal N, **Haleema Sadia**, Meer B, Riaz T, Ali U, Ahmed N. (2021). Geographical, Molecular, and Computational Analysis of Migraine-Causing Genes. *Journal of Computational Biophysics and Chemistry*. 20 (4):391-403. (**IF:0.97**).

54. **Haleema Sadia**, Sheikh S, Atta MA. (2021) COVID-19 Pandemic Verses Students

Promotion Criteria At Higher Education Level. Elementary Education Online

20(4):3120-3127. (**HEC Y Category**).

55. **Shakeela Daud**, Asma Yousafzai. (2021). Study on Amyotrophic lateral Sclerosis:

A Disease of Motor Neuron in Pakistan. International Journal of Pathology. 19(3):155-

64. (**IF: 1.18**).

56. Ahmed S, Gul S, Akhlaq M, **Abrar Hussain**, Tariq Khan S, Rehman H, Hanif

Bangash M, Al Mughairbi F, Hamid Hamdard M. (2022) Estimation of

polymorphisms in the drug-metabolizing enzyme, cytochrome P450 2C19 gene in

six major ethnicities of Pakistan. Bioengineered. 2021 Jan 1;12(1):4442-51. (**IF:**

3.23).

57. Luqman, Muhammad, Muhammad Umer Farooq Awan, Sohaib Muhammad,

Shakeela Daud, Asma Yousafzai, and Fariha Arooj. (2021). Microbial pollution in

inland recreational freshwaters of Quetta, Pakistan: an initial report. Journal of Water

and Health. 20: 575-588. (**HEC Recognized**)

58. Aaliya K, Nasir IA, **Anwar Khan**, Toufiq N, Yousaf I, Adeyinka OS, Iftikhar S,

Farooq AM, Tabassum B. (2021). Expression of ice recrystallization inhibition

protein in transgenic potato lines associated with reduced electrolyte leakage and

efficient recovery post freezing injury. Journal of Biotechnology. 10: 327:97-105. (**IF:**

3.15).

59. **Ashiq Khan**, Ding Z, Ishaq M, Bacha AS, Khan I, Hanif A, Li W, Guo X. (2021).

Understanding the effects of gut microbiota dysbiosis on nonalcoholic fatty liver

disease and the possible probiotics role: Recent updates. International Journal of Biological Sciences. 17(3): 818. **(IF:6.58).**

60. Ishaq M, **Ashiq Khan**, Bacha AS, Shah T, Hanif A, Ahmad AA, Ke W, Li F, Ud Din A, Ding Z, Guo X. (2021). Microbiota Targeted Interventions of Probiotic Lactobacillus as an Anti-Ageing Approach: A Review. Antioxidants. 10(12): 1930. **(IF:6.31).**
61. Zada S, Xie J, Yang M, Yang X, Sajjad W, **Muhammad Rafiq**, Hasan F, Hu Z, Wang H. (2021). Composition and functional profiles of microbial communities in two geochemically and mineralogically different caves. Applied microbiology and biotechnology. 105(23):8921-8936. **(IF:4.81).**
62. Varliero G, **Muhammad Rafiq**, Singh S, Summerfield A, Sgouridis F, Cowan DA, Barker G. (2021). Microbial characterization and Cold-Adapted Predicted Protein (CAPP) database construction from the active layer of Greenland's permafrost. FEMS Microbiology Ecology. 97(10):27. **(IF:4.19).**
63. Khan I, **Muhammad Rafiq**, Zada S, Jamil SU, Hasan F. (2021). Calcium Carbonate Precipitation by Rock Dwelling Bacteria in Murree Hills, Lower Himalaya Range Pakistan. Geomicrobiology Journal. 38(3): 231-236. **(IF:2.3).**
64. **Muhammad Rafiq**, Hassan N, Hayat M, Ibrar M, Sajjad W, Haleem A, Maqsood-ur-Rehman M, Raza AM, Hasan M. (2021). Geochemistry and Insights into the Distribution of Biotechnological Important Fungi from the third Pole of the World, Karakoram Mountains Range. Geomicrobiology Journal. 38(5): 395-403. **(IF:2.3).**

65. Zada S, Sajjad W, **Muhammad Rafiq**, Ali S, Hu Z, Wang H, Cai R. (2021). Cave Microbes as a Potential Source of Drugs Development in the Modern Era. *Microbial ecology*. 1-12. **(4.55)**.
66. Wajid A, Mayahi V, Yin R, Ain Q, Mohiuddin A, Khalid F, **Asif Rehim**, Manan A, Baksh M. (2021). Genomic and biological characteristics of Avian Orthoavulavirus-1 strains isolated from multiple wild birds and backyard chickens in Pakistan. *Tropical Animal Health and Production*. 53(1):1-12. **(IF: 1.02)**.
67. **Anwar Khan**, Nosheen F, Tabassum B, Adeyinka OS, Shehzad K, Shahid N, Khan AM, Nasir IA. (2021) Comparative Silencing Effect of Different siRNA Fragments on Potato Virus X Coat Protein in Transient Transfection Assays. *Pakistan Journal of Zoology*. 54(1). 1-7. **(HEC X Category)**.
68. Jamila Tabassum, Muhammad Luqman, Fariha Hasan, **Asma Yousafzai**. (2021). Efficacy of cavern Isolates for Biodegradation of Synthetic Plastic. *Letters in organic chemistry*. 9(3): 198-207. **(IF: 0.86)**.
69. Cui Z, Huntley RB, Schultes NP, **Kaleem Ullah Kakar**, Yang C-H, Zeng Q. (2021). Expression of the type III secretion system genes in epiphytic *Erwinia amylovora* cells on apple stigmas benefits endophytic infection at the hypanthium. *Molecular Plant-Microbe Interactions*. 34 (10):1119-1127. **(IF: 4.17)**.
70. Peng Z, Wang Y, Geng G, Yang R, Yang Z, Yang C, Xu R, Zhang Q, **Kaleem Ullah Kakar**, Li Z. (2021). Comparative Analysis of Physiological, Enzymatic, and Transcriptomic Responses Revealed Mechanisms of Salt Tolerance and Recovery in *Tritipyrum*. *Frontiers in plant science* 12:800081-800081. **(IF: 4.07)**.

71. Wajid A, Mayahi V, Yin R, Ain Q, Mohiuddin A, Khalid F, **Asif Rehim**, Manan A, Baksh M. (2021). Genomic and biological characteristics of Avian Orthoaulavirus-1 strains isolated from multiple wild birds and backyard chickens in Pakistan. Tropical Animal Health and Production. 53(1):1-12. **(IF: 1.02)**.
72. Ali SA, Taj MK, Syeda Hafsa Ali. (2021). Antimicrobial Resistance Pattern of Bacterial Meningitis Among Patients in Quetta, Pakistan. Infection and Drug Resistance. 14:5107. **(IF:4.0)**.
73. Mehboob J, **Ali SH**, Kasi FA, Ali SA, Farooqi S, & Arbab M. (2021). Biosynthesis Of Silver Nanoparticles Using Cynara Scolymus, Lavandula Angustifolia, Alkanna Tinctoria And Its Antimicrobial Activities—A comparative study. Pakistan Journal of Weed Science Research. 27(3):277-2. **(HEC Y Category)**.
74. Yahya S, Muhammad F, Sohail M, Khan SA. **(2021)**. Amylase production and growth pattern of two indigenously isolated aspergilli under submerged fermentation: influence of physico-chemical parameters. Pak Journal of Botany. 53(3):1147-55. . **(IF: 0.97)**.
75. Raza SA, Rashid A, Mumtaz MW, Bashir S, **Maqsood Ahmad**, Touqeer T, Mukhtar H, Akhtar MT, Ali S, William J. (2021). Metabolites in Conocarpus erectus leaves attenuate α -amylase activity by modulating amino acid residues of α -amylase: an in vitro and docking study Bol Latinoam Caribe Plant Med Aromat. 21(3): 352 - 364. **(IF:0.9)** .
76. Mushtaq N, Badar M, **Faiza Akhtar** et al., (2021). The efficiency of Power Distribution Companies in Pakistan (Application of Non-Parametric Approach).

77. Farhan M, **Maqsood Ahmad**, Kanwal A, Butt ZA, Khan QF, Raza SA, Qayyum H, Wahid A. (2021). Biodegradation of chlorpyrifos using isolates from contaminated agricultural soil, its kinetic studies. *Scientific reports*. 11:1-4. (**IF: 4.01**).
78. Raza SA, **Maqsood Ahmad**, Mumtaz MW, Bashir S, Rashid A. (2021). Atributos farmacologicos in vitro y huellas dactilares de metabolitos de Conocarpus lancifolius. *Boletín Latinoamericany del Caribe de Plantas Medicinalesy Aromaticas*. 20(6):660-671. (**IF: 1.0**).
79. Ehsan M, Gu H, Ali A, **Malik Muhammad Akhtar**, Abbasi SS, Miraj MA, Shah M. (2021). An integrated approach to evaluate the unconventional hydrocarbon generation potential of the Lower Goru Formation (Cretaceous) in Southern Lower Indus Basin, Pakistan. *Journal of Earth System Science*. 130(2):1-6. (**IF: 1.42**).
80. Dawooda F, **Malik Muhammad Akhtar**, Ehsanc M. (2021). Evaluating urbanization impact on stressed aquifer of Quetta Valley, Pakistan. *Esalination And Water Treatment*. 222:103-113. (**IF: 1.21**).
81. **Faheem, Nawaz**, ullah Khan B, **Ullah H**, Islam ZU, ullah Khan G, Khayam M, Waseem M, Khan G, Khan MA. (2021). Efficient hydroxyl radical production with Sodium salts of surfactants ozonation for treatment of organic acid pollutants in wastewater. *Environmental Technology & Innovation*. 22:101451. (**IF: 5.2**).
82. Raza SA, **Maqsood Ahmad**, Mumtaz MW, Bashir S, Ch AR (2021). In vitro pharmacological attributes and metabolite's fingerprinting of Conocarpus

lancifolius. Boletin Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas. 20(6):660-671. (**IF:0.9**).

83. **Anilaa Ali**, Hussain RM, Asghar A, Hassan SZU, **Gohram Khan Malghani**, Dom NC, Khan MQ. (2021). The effect of noise on motor task functioning among young motorcyclists: A controlled experiment. Journal of Applied and Emerging Sciences. 11:95-101. (**HEC Y Category**).
84. Mushtaq F, Ullah A, Khan A, Waheed A, Sultan SH, Kakar, **Gorham Khan Malghani**, Abbasi AMR. (2021). Desulfurization of Mach Coal of Balochistan by Leaching Method. Journal of Applied and Emerging Sciences 11:63-66. (**HEC Y Category**).
85. Arshad M, Chaudhary AR, Mumtaz MW, Raza SA, **Maqsood Ahmad**, Mukhtar H, Bashir R. (2021). Polyphenol fingerprinting and hypoglycemic attributes of optimized Cycas circinalis leaf extracts. Journal of the Science of Food and Agriculture. 10(4):1530-1537. (**IF: 3.6**).
86. Shaukat Ali, **Javid Hussain**, Salar Ali, Sarwat Aslam, Nilma Khan, Saif Ud Din. (2021). Bioaccumulation Efficacy of Heavy Metals in Body Organs of Rainbow (Oncorhynchus Mykiss) And Brown (Salmo Trutta Fairo) Troutsof Gilgit-Baltistan. International Journal of Innovations in Science and Technology. 3(3): 126-141. (**HEC Y Category**).
87. Khalil, Ashi, Nauman Ali, Abdullah M. Asiri, Tahseen Kamal, Sher Bahadar Khan, and **Jawad Ali**. (2021). Synthesis and catalytic evaluation of silver@ nickel oxide and

alginate biopolymer nanocomposite hydrogel beads. *Cellulose*. 28:11299-11313. (IF: 6.12).

FACULTY F SOCIAL SCIENCES AND HUMANITIES

88. Manan SA, **Channa LA**, David MK, Amin M. (2021). Negotiating English-only gatekeepers: teachers' agency through a public sphere lens. *Current Issues in Language Planning*. 22(3):290-307. (ISI Indexed).
89. Manan SA, **Channa LA**, Tul-Kubra K, David MK. (2021) Ecological planning towards language revitalization: The Torwali minority language in Pakistan. *International Journal of Applied Linguistics*. 31:438-457 . (IF: 1.23).
90. **Shahab Naimat Khan**. (2021). Traces of Advertising in the holy Quran and the Tradition of the Holy Prophet (PBUH) and its Shariah Ruling. *rahatulquloob*. 1:1-10 (HEC Y Category).
91. **Shahab Naimat Khan**. Islamic Perspective to the Responsibilities of Parents and teachers towards children's education in The modern era. *Al Khadim Research journal of Islamic culture and Civilization*. 2:1-12. (HEC Y Category).
92. **Shahab Naimat Khan**. (2021). Shiekh Ali-Al-Thanvi famous Islamic Intellectual. *Hazara Islamicus*.10:13-36. (HEC Y Category).
93. Hashmi AH, **Shahab Naimat Khan**. (2021). السيرة مجال في غازى احمد محمود الدكتور مائز. (النبوية: Memorable Contribution of Dr. Mahmood Ahmad Ghazi in Seerah Studies. *Al-Duhaa*. 2(02):53-71. (HEC Y Category).

94. **Sabeen Akbar**, Akram Z. (2021). Establishing Links Through Minds: A Comparative Study of Quranic Concept Of Husnu'l Zann And Deleuze And Guattari's Becoming Theory. *Epistemology*.9-10: 1-15. (**HEC Y Category**).
95. **Sabeen Akbar** Manzoor S. (2021). The human mind and its psychological disposition: A Comparative Analysis of Ghazalian Nafs-e-Lawwammma and Freudian Superego. *Al-Hidhth*. 39:32-35. (**HEC Y Recognized**).
96. **Usman M**, Muhammad SB. (2021). سیرت کے اسلوب علی امیر سید جسٹس اور خان احمد سید سر. *جائزہ تقابلی کا نگاری*: A Comparative Analysis of Sir Syed Ahmad Khan and Justice Syed Amir Ali as Sirah writers. *Al-Azhār* 7 (01):453-470. (**HEC Y Category**).
97. **Sohail Anwar, Muhammad Hassan, Allahudin, K.** (2021). Afghan Refugees: Implications on Pakistan. *Journal of Int'L Affairs*. 14:16-29. (**HEC Y Category**).
98. **Haider**, Syed Zubair, Uzma Munawar, and Shaista Noreen. (2021). Push And Pull Factors Of Negative Social Behaviours Among Secondary School Students. *Gomal University Journal of Research* 37.3 (2021): 311-322. (**HEC Y Category**).
99. **Sumera Zakir**. (2021). Alternate dispute resolution mechanism for dealing the gender-based violence in Baluchistan. *Webology*.18 (2). (**HEC X Category**).
100. **Sumera Zakir**. (2021). Management of speedy justice system: A road towards progress of Balochistan. *Indian Journal of Economics and Business*. 20(2):831-847. (**HEC X Category**).
101. Gul R, **Sumera Zakir**, Ali I, Karim H, Hussain R. (2021). The Impact of Education on Business Opportunities for Women Entrepreneurs in Public & Private Television

Advertisements in Pakistan. Industrial Engineering & Management Systems. 20(2):140-1477. (**HEC Y Category**).

102. **Sumaira Zakir**, Adila Batool, Fariha Zakir, Sumaira Farman, Shahida Batool. (2021). COVID-19 Pandemic: Facebook Hate Speech in Escalation of Interethnic & Sectarian Hatred. Elementary Education Online. 20(5): 1699-1708. (**HEC Y Category**).

103. Bukhari SK, Gul R, Bashir T, **Sumaira Zakir**, Javed T. (2021). Exploring managerial skills of Pakistan Public Universities (PPUs)'middle managers for campus sustainability. Journal of Sustainable Finance & Investment. 10:1-9. (**HEC X Category**).

104. Hussain, Shabir, Syed Abdul Siraj, and **Tariq Mahmood**. (2021). Evaluating war and peace potential of Pakistani news media: Advancing a peace journalism model. Information Development. 37: 105-121. (**HEC Y Category**).

105. Malik Muhammad Akhtar, Mohammad AD, Ehsan M, **Rabia Akhtar**, ur Rehman J, Manzoor Z. (2021). Water resources of Balochistan, Pakistan-a review. Arabian Journal of Geosciences. 14(4):1-6. (**IF: 1.34**).

FACULTY OF BASIC SCIENCES

106. Maria Yousuf Lodhi, Muhammad Azhar Khan, Abdul Majeed, Majid Niaz Akhtar, Mukhtar Ahmad, Altaf Hussain, Misbah ul Islam, **Gulfam Nasar**. (**2021**). Structural,

magnetic and dielectric properties of Dy-Co substituted Sr-Ba-Mg-based magnetic oxides. *Applied Physics A.* 127:872. (**IF: 3.15**).

107. Shaista Zahoor, **Shazia Iqbal**, Imran Hashmi, Ali Akbar, Hamid Ullah, Hamida Panezai, **Anwar Khan, Haleema Sadia**, Majid. (2021) Chemical and biological food safety threats associated with fresh juices consumed in Capital territory Islamabad Pakistan. *Progress in Nutrition.* 23 (4): 2021144. (**IF:0.53**)

108. **Hamid Ullah**, Khan D, Rehman FU, Ahmad N, Khan S. (2021). Three New Compounds Isolated from Bauhinia variegata Plant. *Pharmaceutical Chemistry Journal.* 55 (1):76-80. (**IF 0.83**)

109. Ujan R, Channar PA, Bahadur A, Abbas Q, Shah M, Rashid SG, Iqbal S, Saeed A, Abd-Rabboh HS, Raza H, **Muhammad Nawaz**, et al.,. (2021). Synthesis, kinetics and biological assay of some novel aryl bis-thioureas: A potential drug candidates for Alzheimer's disease. *Journal of Molecular Structure.* 1246, 131136. (**IF:3.19**)

110. Abas M, Bahadur A, Ashraf Z, Iqbal S, Rajoka MSR, Rashid S, Jabeen E, Iqbal Z, Abbas Q, Bais A, Abdul Bais, Hassan M, Liu H, Feng K, Lee SH, **Muhammad Nawaz**, Qayyum MA. (2021). Designing novel anticancer sulfonamide based 2,5-disubstituted-1,3,4-thiadiazole derivatives as potential carbonic anhydrase inhibitor. *Journal of Molecular Structure.* 1246:131145. (**IF:3.19**)

111. Iqbal S, A. Bahadur, M. Javed, O. Hakami, R. M. Irfan, Z. Ahmad, A. AlObaid, M. M. Al-Anazy, H. B. Baghdadi, H. S. M. Abd-Rabboh, T. I. Al-Muhimeed, G. Liu, **Muhammad Nawaz**. (2021). Design Ag-doped ZnO heterostructure photocatalyst

- with sulfurized graphitic C₃N₄ showing enhanced photocatalytic activity. *Materials Science & Engineering B*. 272: 115320. (**IF:4.05**)
112. Iqbal S, Bahadur A, Ali S, Ahmad Z, Javed M, Irfan RM, Ahmad N, Qamar MA, Liu G, Akbar MB, **Muhammad Nawaz**, (2021). Critical role of the heterojunction interface of silver decorated ZnO nanocomposite with sulfurized graphitic carbon nitride heterostructure materials for photocatalytic applications. *Journal of Alloys and Compounds*. 858: 158338. (**IF :4.63**)
113. Alarfaji SS, Hussain S, Al-Sehemie AG, Muhammad S, Khan IU, Rabbani F, Gilani MA, **Hamid Ullah**. (2021). Synthesis, characterization, and computational study of copper bipyridine complex [Cu (C₁₈H₂₄N₂)(NO₃)₂] to explore its functional properties. *Zeitschrift für Naturforschung C*. (**IF:1.64**)
114. Alamzeb M, Setzer WN, Ali S, Khan B, **Mamoon-Ur-Rashid**, Ihsanullah, Salman SM, Adnan, Omer M, Ali J and Ullah A. (2021). Spectral, Anti-Inflammatory, Anti-Pyretic, Lpension of tiny metalr Docking Studies, Against Selected Protein Targets, of a New Bisbenzylisoquinoline Alkaloid. *Front. Chemistry*. 9: 711190. (**IF:3.99**)
115. Alamzeb, M, Ali, S., **Mamoon-Ur-Rashid**, Khan, B, Ihsanullah, Adnan, & Shah, A. (2021). Antileishmanial Potential of Berberine Alkaloids from *Berberis glaucocarpa* Roots: Molecular Docking Suggests Relevant Leishmania Protein Targets. *Natural Product Communications*. 16(9):1934578X211031148. (**IF:0.96**)
116. **Mujtaba Ellahi**, Jan Muhammad, M Furqan Ali, Kashif Hussain Mangi, Adnan Murad Bhayo, Mehak Iqbal. (2021). Preparation of silver nanoparticles (AgNPs)-doped epoxy-based thin PDLC films (smart glass). *Polymer Bulletin*. 1-19. (**IF:2.87**)

117. Ujan R, Bahadur A, Shabir G, Iqbal S, Saeed A, Channar PA, Mahmood Q, Shoaib M, Arshad I, Saifullah M, Liu G., Rana Muhammad Irfan, Zahoor Ahmad, Mohsin Javed, **Muhammad Raheel**, Muhammad Abdul Qayyum, Bilal Khalid, Komal Rizwan., (2021). Facile Synthesis of Novel Fluorescent Thiazole Coumarinyl Compounds: Electrochemical, Time Resolve Fluorescence, and Solvatochromic Study. *Journal of Molecular Structure*. 1227:129422. (**IF:3.19**).
118. Shahid Iqbal, Sohail Nadeem, Ali Bahadur, Mohsin Javed, Zahoor Ahmad, Mirza Nadeem Ahmad, Muhammad Shoaib, Guocong Liu, Ayesha Mohyuddin and **Muhammad Raheel**. (2021). The Effect of Ni-Doped ZnO NPs on the Antibacterial Activity and Degradation Rate of Polyacrylic Acid-Modified Starch Nanocomposite. *JOM*. 73: 380-386, (**IF:2.47**).
119. Tariq Aziz, Mudassir Iqbal, Roh Ullah, Muhammad Imran Jamil, **Muhammad Raheel**, Amjad Ali, Farman Ullah Khan, Asmat Ullah and Nasrullah Wazir. (2021). Improving Adhesive Properties of Cellulose Nanocrystals Modifying By 3-Glycidoxypolytrimethoxy Silane (KH-560) Coupling Agents, *Biomedical Journal of Scientific and Technical Research (BJSTR)*, 34:26402-26407. (**IF:1.09**).
120. Tariq Aziz, Sahid Mehmood, Fazal Haq, Roh Ullah, Farman Ullah Khan, Bakhtar Ullah, **Muhammad Raheel**, Mudassir Iqbal, Asmat Ullah. (2021). Synthesis and modification of silica-based epoxy nanocomposites with different sol-gel process enhanced thermal and mechanical properties. *Journal of Applied Polymer Science*. 51191. (**IF:3.12**).
121. Wajid Ullah, Tariq Aziz, Bakhtar Ullah, Muhammad Imran Jamil, Sandeep Kumar Das, Roh Ullah, Nasrullah Wazir, Farman Ullah Khan, **Muhammad Raheel**, (2021)

Hybrid material for the fabrication of electron transport layer in perovskite solar cell, Polymer Bulletin. <https://doi.org/10.1007/s00289-021-03904-6>, (**IF:2.87**).

122. Bushra Naureen, G. A. Miana, Khadija Shahid, Mehmood Asghar, Samreen Tanveer, Muhammad Faheem, **Aziza Sarwar**, Ahmad Danial Azzahari, (2021). Iron(III) and Zinc(II) Metal Alkaloid Complexes: Synthesis, Characterization and Biological Activities. Malaysian Journal of Chemistry. 23(3): 55-73. ((**HEC Y Category**)).
123. **Aziza Sarwar**, Saharin SM, Bahron H, Alias Y. (2021). Dual emissive dinuclear Iridium (III) azomethine complexes: Synthesis, luminescence, thermal stability and antibacterial studies. Journal of Luminescence. 233:117861. (**IF:0.52**)
124. Naureen B, Miana GA, Shahid K, Asghar M, Tanveer S, **Aziza Sarwar**. (2021). Iron (III) and zinc (II) monodentate Schiff base metal complexes: Synthesis, characterisation and biological activities. Journal of Molecular Structure. 129946. (**IF:3.19**).
125. Haleem A, Chen SQ, **Mohib Ullah** Siddiq M, He WD. (2021). Highly Porous Cryogels Loaded with Bimetallic Nanoparticles as an Efficient Antimicrobial Agent and Catalyst for Rapid Reduction of Water-Soluble Organic Contaminant. Journal of Environmental and Chemical Engineering. 106510. (**IF:5.8**).
126. Irfan M, Shah LA, Khan A, Farooq MM**Mohib Ullah**, Ismaile M. (2021). Formulation of zwitter-ionic terpolymeric hydrogels and their comprehensive rheological. Journal of Dispersion Science and Technology. 1-11. (**IF:2.26**).

127. Hameed, A, Nazir S, Rehman JU, **Nisar Ahmad**, Hussain, A, Alam I, Nazir A, Tahir MB. (2021). Assessment of health hazards related to contaminations of fluorides, nitrates, and nitrites in drinking water of Vehari, Punjab, Pakistan. *Human and Ecological Risk Assessment: An International Journal*. 27(6):1509-1522. **(IF: 5.19)**.
128. **Javed Rehman**, Fan X, Zheng W. (2021.) 2D SnC sheet with a small strain is a promising Li host material for Li-ion batteries. *Materials Today Communications*. 26:101768. **(IF: 3.3)**.
129. Channa N, Khalid M, Chandio AD, Akhtar MS, Khan JK, Mustafa G, **Zaheer Abbas Gilani**. (2021). Structural, dielectric, impedance, and electric modulus properties of Cu²⁺-substituted Cu_xMn_{1-x}Fe₂O₄ spinel ferrites nanoparticles. *Journal of Materials Science: Materials in Electronics*. 32 (3):2832-2844. **(IF:2.1)**.
130. **Noor-ul-Huda Khan, Asghar**, Hussain M, Aslama S, **Zaheer Abbas Gilani**, Ahmedb M, Khalidd M, Shifac M, Afzalc M (2021). Turning the dielectric and structural properties of erbium substitution on cobalt ferrites. *Journal of Ovonic Research*. 17 (4):383-394. **(IF:1.16)**.
131. Shifa MS, Khan M, Mustaqeem M, Munir T, **Zaheer Abbas Gilani, Noor-ul-Huda Khan, Asghar**, Khan NU, Ahmed MS, Qureshi I. (2021). Structural, morphological study of neodymium substituted cobalt zinc ferrites nanoparticles synthesized via co-precipitation method. *Journal of Ovonic Research*.17(1):89-98. **(IF:1.16)**.
132. Khalid M, Chandio AD, Akhtar MS, Khan JK, Mustafa G, Channa NU, **Zaheer Abbas Gilani, Asghar H.** (2021). Aluminum Substitution in Ni-Co Based Spinel

Ferrite Nanoparticles by Sol–Gel Auto-Combustion Method. *Journal of Electronic Materials.* 50 (6):3302-3311. (**IF:1.9**).

133. Murtaza G, **Zaheer Abbas Gilani**, Mehmood S, Rehman JU, Khan EU. (2021). Optimization of user-selectable volumetric modulated arc therapy (VMAT) planning parameters: A study of VMAT arcs for prostate and head-and-neck cancers. *Journal of the Pakistan Medical Association.* 71 (4):1093-1099. (**IF:0.78**)

134. Shifa MS, Khan WA, Albalawi H, Al-Muhimeed TI, AlObaid AA, Mahmood Q, Khan MA, Gulbadan S, **Zaheer Abbas Gilani**, Qureshi I. (2021). Effects of heat treatment on the structural, spectral, morphological, dielectric, and magnetic properties of Ba_{0.5}Sr_{0.1}Zn_{0.4}Fe₁₂O₁₉ ferrite. *Ceramics International.* 47 (17):24817-24822. (**IF:4.52**).

135. **Javed Rehman**, Fan X, Butt M, Laref A, Dinh VA, Zheng W. (2021). First principles predictions of Na and K storage in layered SnSe₂. *Applied Surface Science.* 566:150522. (**IF:6.73**).

136. **Javed Rehman**, Fan X, Laref A, Dinh VA, Zheng W. (2021). Potential anodic applications of 2D MoS₂ for K-ion batteries. *Journal of Alloys and Compounds.* 865:158782. (**IF:5.3**).

137. Rehman J, Fan X, Samad A, Zheng W. (2021). Lithiation and Sodiation of Hydrogenated Silicene: A Density Functional Theory Investigation. *ChemSusChem.* 14(24):5460-5469. (**IF:8.9**).

138. Alamin NU, Khan AS, Nasrullah A, Iqbal J, **Zahoor Ullah**, Din IU, Muhammad N, Khan SZ. (2021). Activated carbon-alginate beads impregnated with surfactant as

- sustainable adsorbent for efficient removal of methylene blue. International Journal of Biological Macromolecules. 176. 233-243. (**IF: 6.95**).
139. Biag M, Ghaffar A, Khan MA, **Farooq Khan**, Niaz S. (2021). Slow light effect in hybrid optomechanical system. (2021). International Journal of Quantum Chemistry. 122: e26814. (**IF:2.4**).
140. **Sunila Bakhsh**, Liu X, Wang Y, He L, Ren X. (2021). Beryllium and Magnesium Metal Clusters: New Globally Stable Structures and G 0 W 0 Calculations. The Journal of Physical Chemistry A. 125(7):1424-35. (**IF: 2.78**)
141. Khan AT, Khan AR, Li S, **Sunila Bakhsh**, Mehmood A, Zaib J. (2021). Optimally configured gated recurrent unit using hyperband for the long-term forecasting of photovoltaic plant. Renewable Energy Focus. 39:49-58. (**ISI Indexed**)
142. **Naheeda Iftikhar, Rehman A**, Sadaf H. (2021). Theoretical investigation for convective heat transfer on Cu/water nanofluid and (SiO₂-copper)/water hybrid nanofluid with MHD and nanoparticle shape effects comprising relaxation and contraction phenomenon. International Communications in Heat and Mass Transfer. 120:105012. (**IF:5.68**).
143. Baloch ZA, Tan Q, **Muhammad Zubair Khan**, Alfakhri Y, Raza H. (2021). Assessing energy efficiency in the Asia-Pacific region and the mediating role of environmental pollution: Evidence from a super-efficiency model with a weighting preference scheme. Environmental Science and Pollution Research. 29:1-4. (**IF: 3.3**).
144. Iqbal N, Sakhani MA, Khan AR, Ajmal Z, **Muhammad Zubair Khan**. (2021) Socioeconomic impacts of domestic biogas plants on rural households to strengthen

- energy security. Environmental Science and Pollution Research. 28(21):27446-56. (IF: 3.30).
145. **Hasrat Hussain Shah**, Chu YM, Abbas SZ, Issakhov A, Khan S. (2021). Gravitational collapse of an anisotropic fluid and interacting vacuum energy density: The curvature effect. International Journal of Modern Physics D. 30(3):2150022. (IF: 2.45).
146. Khan S, Zaman S, Arshad M, Kang H, **Hasrat Hussain Shah**, Issakhov A. (2021). A well-conditioned and efficient Levin method for highly oscillatory integrals with compactly supported radial basis functions. Engineering Analysis with Boundary Elements. 131:51-63. (IF: 4.2).
147. Shah H, Ahmad Z, **Hasrat Hussain Shah**. (2021) Quintessence background for 4D Einstein-Gauss-Bonnet black holes. Physics Letters B. 24:136383. (IF: 4.7).
148. Yaseen M, Ali I, **Sardar Muhammad Hussain**, Ro J-S. (2021). Subclasses of Uniform Univalent Functions Associated with Srivastava and Attiya Operator. Symmetry. 13(8):1536. (IF: 2.71).
149. Al-Zubaidi A, Nazeer M, Khalid K, Yaseen S, Saleem S, **Farooq Hussain**. (2021). Thermal analysis of blood flow of Newtonian, pseudo-plastic, and dilatant fluids through an inclined wavy channel due to metachronal wave of cilia. Advances in Mechanical Engineering. 13 (9):16878140211049060. (IF:1.31).
150. Chu Y-M, Ahmad F, Khan MI, Nazeer M, **Farooq Hussain**, Khan NB, Kadry S, Mei L. (2021). Numerical and scale analysis of non-Newtonian fluid (Eyring-Powell) through pseudo-spectral collocation method (PSCM) towards a magnetized

stretchable Riga surface. Alexandria Engineering Journal. 60 (2):2127-2137. (IF:3.73)

151. Chu Y-M, Nazeer M, Khan MI, **Farooq Hussain**, Rafi H, Qayyum S, Abdelmalek Z. (2021). Combined impacts of heat source/sink, radiative heat flux, temperature dependent thermal conductivity on forced convective Rabinovitch fluid. International Communications in Heat and Mass Transfer. 120:105011. (IF:5.68).

152. Ge-JiLe H, Nazeer M, **Farooq Hussain**, Khan MI, Saleem A, Siddique I. (2021). Two-phase flow of MHD Jeffrey fluid with the suspension of tiny metallic particles incorporated with viscous dissipation and Porous Medium. Advances in Mechanical Engineering 13 (3):16878140211005960. (IF:2.31).

153. **Farooq Hussain**, Nazeer M, Altanji M, Saleem A, Ghafar M. (2021). Thermal analysis of Casson rheological fluid with gold nanoparticles under the impact of gravitational and magnetic forces. Case Studies in Thermal Engineering. 28:101433. (IF:4.72).

154. **Farooq Hussain**, Subia GS, Nazeer M, Ghafar M, Ali Z, Hussain A. (2021). Simultaneous effects of Brownian motion and thermophoretic force on Eyring-Powell fluid through porous geometry. Zeitschrift für Naturforschung A. 76(7):569-580. (IF: 1.64)

155. Nazeer M, **Farooq Hussain**, Ahmad F, Iftikhar S, Subia GS. (2021). Theoretical study of an unsteady ciliary hemodynamic fluid flow subject to the Newton's boundary conditions. Advances in Mechanical Engineering. 13(8):16878140211040462. (IF: 2.31)

156. Nazeer M, **Farooq Hussain**, Khan MI, Gohar F, Malik M, Sun T-C, Saleem A. (2021). Numerical analysis of multiphase flow of couple stress fluid thermally effected by moving surface. International Journal of Modern Physics B. 35(18):2150188. **(IF:1.63)**
157. Nazeer M, **Farooq Hussain**, Ahmad MO, Saeed S, Khan MI, Kadry S, Chu Y-M. (2021). Multi-phase flow of Jeffrey Fluid bounded within magnetized horizontal surface. Surfaces and Interfaces. 22:100846. **(IF: 5.83)**
158. Nazeer M, **Farooq Hussain**, Hameed M, Khan MI, Ahmad F, Malik M, Shi Q-H. (2021). Development of mathematical modeling of multi-phase flow of Casson rheological fluid: Theoretical approach. Chaos, Solitons & Fractals. 150:111198. **(IF:5.99).**
159. Nazeer M, **Farooq Hussain**, Iftikhar S, Ijaz Khan M, Ramesh K, Shehzad N, Baig A, Kadry S, Chu YM. (2021). Mathematical modeling of bio-magnetic fluid bounded within ciliated walls of wavy channel. Numerical Methods for Partial Differential Equations. **(IF:3.6).**
160. Nazeer M, **Farooq Hussain**, Khan MI, El-Zahar ER, Chu Y-M, Malik M. (2021). Theoretical study of MHD electro-osmotically flow of third-grade fluid in micro channel. Applied Mathematics and Computation. 420:126868. **(IF:5.09).**
161. Nazeer M, **Farooq Hussain**, Khan MI, Shahzad Q, Chu YM, Kadry S. (2021). MHD two-phase flow of Jeffrey fluid suspended with Hafnium and crystal particles: Analytical treatment. Numerical Methods for Partial Differential Equations. Volume 2021. 1-20. **(IF:3.6).**

162. Nazeer M, **Farooq Hussain**, Shabbir L, Saleem A, Khan MI, Malik M, Sun T-C, Hussain A. (2021). A comparative study of MHD fluid-particle suspension induced by metachronal wave under the effects of lubricated walls. International Journal of Modern Physics B. 35 (20):2150204. (**IF: 1.63**).
163. Nazeer M, **Farooq Hussain**, Shahzad Q, Khan MI, Kadry S, Chu Y-M. (2021). Perturbation solution of the multiphase flows of third grade dispersions suspended with Hafnium and crystal particles. Surfaces and Interfaces. 22:100803. (**IF:5.83**).
164. Nazeer M, Saleem S, **Farooq Hussain**, Iftikhar S, Al-Qahtani A. (2021). Mathematical modeling of bio-magnetic fluid bounded by ciliated walls of wavy channel incorporated with viscous dissipation: discarding mucus from lungs and blood streams. International Communications in Heat and Mass Transfer. 124:105274. (**IF:5.68**).
165. Saleem S, Subia GS, Nazeer M, **Farooq Hussain**, Hameed M. (2021). Theoretical study of electro-osmotic multiphase flow of Jeffrey fluid in a divergent channel with lubricated walls. International Communications in Heat and Mass Transfer. 127:105548. (**IF:5.68**).
166. Xu Y-J, Nazeer M, **Farooq Hussain**, Khan MI, Hameed M, Shah NA, Chung JD. (2021). Electro-osmotic flow of biological fluid in divergent channel: drug therapy in compressed capillaries. Scientific Reports 11:1-13. (**IF:4.37**).

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167. He XY, Wang T, Pan ZC, **Abdul Qadeer Dayo**, Wang J, Liu WB. (2021). Curing characteristics, kinetics, and thermal properties of multifunctional fluorene

- benzoxazines containing hydroxyl groups. Journal of Applied Polymer Science.138(13):50131. **(IF: 2.52).**
168. **Azmat Ali Khan** Tahir M. (2021). Well-designed 2D/2D Ti₃C₂TA/R MXene coupled g-C₃N₄ heterojunction with in-situ growth of anatase/rutile TiO₂ nucleates to boost photocatalytic dry-reforming of methane (DRM) for syngas production under visible light. Applied Catalysis B: Environmental. 285:119777. **(IF: 14.22).**
169. Tahir, Muhammad, **Azmat Ali Khan**, Sehar Tasleem, Rehan Mansoor, and Wei Keen Fan. (2021). Titanium carbide (Ti₃C₂) MXene as a promising co-catalyst for photocatalytic CO₂ conversion to energy-efficient fuels: a review. Energy & Fuels. 35(13): 10374-10404. **(IF:3.6).**
170. . Naveed H, Imran S, Saleem MW, Asad Ullah, **Kamran Sami**. (2021) Investigation of Capacitive Deionization; Performance Assessment Based on Operational Parameters and Single-Objective Optimization. Arabian Journal for Science and Engineering. 16:1-3. **(IF: 2.53).**
171. **Azmat Ali Khan**, Tahir M. (2021). Synergistic effect of Co/La in oxygen vacancy rich ternary CoAlLa layered double hydroxide with enhanced reductive sites for selective photoreduction of CO₂ to CH₄.Energy & Fuels. 35:(10): 8922-8943. **(IF:3.6).**
172. **Azmat Ali Khan**, Tahir M, and Zakaria ZK. (2021). Synergistic effect of anatase/rutile TiO₂ with exfoliated Ti₃C₂TR MXene multilayers composite for enhanced CO₂ photoreduction via dry and bi-reforming of methane under UV-visible light. Journal of Environmental Chemical Engineering. 9(3):105244. **(IF:5.8).**

173. **Azmat Ali Khan**, Tahir M. (2021). Construction of an S-Scheme Heterojunction

with Oxygen-Vacancy-Rich Trimetallic CoAlLa-LDH Anchored on Titania-Sandwiched Ti₃C₂ Multilayers for Boosting Photocatalytic CO₂ Reduction under Visible Light. *Industrial & Engineering Chemistry Research*. 60(45):16201-16223.

(IF:3.7).

174. **Azmat, Ali Khan**, Tahir M. (2021) Constructing S-Scheme Heterojunction of

CoAlLa-LDH/g-C₃N₄ through Monolayer Ti₃C₂-MXene to Promote Photocatalytic CO₂ Re-forming of Methane to Solar Fuels." *ACS Applied Energy Materials*.

(IF:5.7).

175. **Azmat Ali Khan**, Tahir M, Mohamed AR. (2021). Constructing S-scheme

heterojunction of carbon nitride nanorods (g-CNR) assisted trimetallic CoAlLa LDH nanosheets with electron and holes moderation for boosting photocatalytic CO₂ reduction under solar energy. *Chemical Engineering Journal*. 133693. (IF: 13.27).

176. **Azmatullah Khan, Muhammad Habib, Muhammad Irfan, Muhammad Akram, Naik Muhammad, Nawaz Ali, Zafar Baloc, Gohram Khan Malghani**. (2021).

Removal of Hazardous Materials from Residential and Commercial Liquid Waste Using Solid Sorbents. *Journal of Applied and Emerging Sciences* 11 (1): 47-51. (HEC Y Category).

177. Wang T, He XY, Zhang LL, **Abdul Qadeer Dayo**, Wang J, Liu WB. (2021)

Synthesis, curing characteristics, and kinetics of tetra-functional fluorene-based benzoxazines having saturated aliphatic groups. *Materials Today Communications*. 26:101788. (IF: 2.67).

178. Wang H, **Abdul Qadeer Dayo**, Wang J, Wang JY, Liu WB. (2021). Trifunctional quinoxaline-based maleimide and its polymer alloys with benzoxazine: Synthesis, characterization, and properties. *Journal of Applied Polymer Science.* 138(3):49694. **(IF: 3.1).**
179. **Zahid Naeem Qaisrani**, Nuthammachot N, Techato K. (2021) Drought monitoring based on Standardized Precipitation Index and Standardized Precipitation Evapotranspiration Index in the arid zone of Balochistan province, Pakistan. *Arabian Journal of Geosciences.* 14:1-3 **(IF: 1.32).**
180. Nawaz, Imran Rab, Ting Wang, Athar Ali Khan Gorar, Adnan Ghani Soomro, Syed **Kamran Sami**, Ahmer Hussain Shah, Jun Wang., Sultan SH, Babar AA, Abdul Qadeer **Dayo.** (2021). Pinecone particles filled polybenzoxazine composites: Thermomechanical and mechanical properties. *Journal of Applied Polymer Science.* 138(43): 51279. **(IF: 3.12).**
181. Wang T, Guo ZY, Wang JY, **Abdul Qadeer Dayo**, Liu WB, Wang J. (2021). Modification of traditional benzoxazine by blending with polyfunctional benzoxazines containing aromatic group and fluorene group. *High Performance Polymers.* 33(6): 615-22,. **(IF: 2.16).**
182. Wang T, Shi CY, **Abdul Qadeer Dayo**, Guo ZY, Wang J, Wang Y, Gorar AA, Qiu J, Liu WB. (2021). Synthesis and properties of novel self-catalytic phthalonitrile monomers with aliphatic chain and their copolymerization with multi-functional fluorene-based benzoxazine monomers. *European Polymer Journal.* 161:110862. **(IF: 4.59).**

183. **Asadullah**, Kaewsichan L Techato K, **Zahid Naeem Qaisrani**, Chowdhury MS,

Yilmaz M. (2021). limination of selected heavy metals from aqueous solutions using biochar and bentonite composite monolith in a fixed bed operation. Journal of Environmental Chemical Engineering. 10(1):1-11. **(IF:5.8)**.

184. Arslan Mazhar, Asif Hussain Khoja, Abul Kalam Azad, **Faisal Mushtaq**, Salman

Raza Naqvi, Sehar Shakir, Muhammad Hassan, Rabia Liaquat, and Mustafa Anwar. (2021). Performance analysis of TiO₂-modified Co/MgAl₂O₄ catalyst for dry reforming of methane in a fixed bed reactor for syngas (H₂, CO) production. Energies. 14(11): 3347. **(IF:3.0)**.

185. **Mushtaq Faisal**, Asad Ullah, Asfandyar Khan, Abdul Waheed, Syed Haseeb Sultan,

Ghulamullah Kakar, Gohram Khan, and Abdul Malik Rehan Abbasi. (2021) Desulfurization of Mach Coal of Balochistan by Leaching Method. Journal of Applied and Emerging Sciences. 11: 63-67. **(HEC Y Category)**.

186. Pervaiz Ahmad, Mayeen Uddin Khandaker, Fida Rehman, Nawshad Muhammad,

Mohammad Rashed Iqbal Faruque, Zahoor Ullah, Muhammad Abdul Rauf Khan, **Ghulamullah Khan et al.**, (2021). Facile Synthesis of High-Quality Nano-Size 10B-Enriched Fibers of Hexagonal Boron Nitride. Crystals. 11. 222. **(IF:2.58)**

187. Shah Rukh Shahbaz, Zohaib Fazal, Zafar Javed, Usman Javed, **Syed Zameer Ul**

Hassan, Ali Asghar, Anila Ali, Faisal Mushtaq, Ali RazaShafqat. (2021). Mathematical Model to Determine the Repeat Size of Fabric Weave Design. Balochistan Journal of Engineering & Applied Sciences. 4(1): 2021. **(HEC Y Category)**.

188. **Asad Ullah**, Rathnasiri PG, Dinithi Warnasurya, Zahid Naeem Qaisrani, **Fahim Ibupoto**, Syed Zameer Ul Hassan, **Anila Ali**, **Ali Asghar**, **Syed Kamran Sami**, and **Syed Haseeb Sultan**. (2021). Treatment of Palm oil mill effluent using activated biochar obtained from the residue of the gasifier. *Journal of Applied and Emerging Sciences* 11(1):1-3. (**HEC Y Category**).
189. Akhter F, Soomro SA, Jamali AR, Chandio ZA, **Muhammad Siddique**, Ahmed M. (2021). Rice husk ash as green and sustainable biomass waste for construction and renewable energy applications: a review. *Biomass Conversion and Biorefinery*. 1-11. (**IF: 4.98**).
190. Akhter F, Soomro SA, **Muhammad Siddique** Ahmed M. (2021). Plant and Non-plant based Polymeric Coagulants for Wastewater Treatment: A Review. *Jurnal Kejuruteraan*. 33: 175-181. (**ISI Indexed**).
191. Faheem A, Soomro SA, **Mohammad Siddique**, Ahmed M. (2021) Pollutant Removal efficiency of electrocoagulation method from industrial wastewater: Comparison with other treatment methods and key operational parameters—a comparative study review." *Water, Air, & Soil Pollution* 232(3): 1-13. . (**IF: 2.52**).
192. **Mohammad Siddique**, Soomrob Sa, Azizb S, and Faheem Akhterb. (2021) An Overview of Recent Advances and Novel Synthetic Approaches for Lignocellulosic derived Biofuels. *Jurnal Kejuruteraan* 33(2):165-173. . (**ISI Indexed**).
193. Suri SUK, and **Mohammad Siddique**. (2021). Potential Investigation on Multiphase Flow of Loaded Dispersion for the Production of Metallized Paper: Investigation on

Multiphase Flow of Loaded Dispersion." Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences. 58:1-16. (**HEC Y Category**).

194. **Zahid Naeem Qaisrani**, Shahriar Shams, and **Asad Ullah**. (2021). Analysis of Debris Flow in Kedayan River of Brunei Darussalam. Journal of Applied and Emerging Sciences. 11: 137-140. **HEC Y Category**.

195. Sheikh Z, **Muhammad Amin**, Khan N, **Muhammad Najam Khan**, Syed Kamran Sami, Khan SB, Hafeez I, Khan SA, Bakhsh EM, Cheng CK. (2021). Potential application of Allium Cepa seeds as a novel biosorbent for efficient biosorption of heavy metals ions from aqueous solution. Chemosphere. 279:130545. (**IF:5.77**).

196. **Muhammad Amin**, Pakamas Chetpattananondh, Chin-Kui Cheng, Syed **Kamran Sami**, **Muhammad Najam Khan**. (2021). Drying characteristics and impacts on quality of marine Chlorella sp. biomass and extracts for fuel applications. Journal of Environmental Chemical Engineering. 9(6): 106386. (**IF: 5.8**).

197. **Syed Haseeb Sultan**, Arkom Palamanit, Kua-Anan Techato, **Muhammad Amin**, Khurshid Ahmed Baloch. (2021). Physiochemical characterization and potential of synthesis gas production from rubber wood biomass by using downdraft gasifier." Mehran University Research Journal of Engineering & Technology. 40:1-15. (**HEC Y Category**).

198. **Tufail Mustafa**, Jilong Huang, Jie Gao, Peng Yan, Yongping Liu, Karla Hernandez Ruiz, Shikuan Sun, Jishi Du, Yuchi Fan, and Wan Jiang. (2021). Nanoplates forced alignment of multi-walled carbon nanotubes in alumina composite with high strength and toughness. Journal of the European Ceramic Society. 41:5541-5547. (**IF: 5.3**).

199. Bughio M, Khan MS, **Waqas Ahmed Mahar**, Schuetze T. (2021) Impact of Passive Energy Efficiency Measures on Cooling Energy Demand in an Architectural Campus Building in Karachi, Pakistan. *Sustainability*. 13(13):7251. (**IF: 3.25**).
200. Matallah ME, **Waqas Ahmed Mahar**, Bughio M, Alkama D, Ahriz A, Bouzaher S. (2021). Prediction of Climate Change Effect on Outdoor Thermal Comfort in Arid Region. *Energies*. 14(16):4730. (**IF: 3.0**).
201. Ibrahim HS, Khan AZ, **Waqas Ahmed Mahar**, Attia S, Serag Y. (2021) Assessment of Passive Retrofitting Scenarios in Heritage Residential Buildings in Hot, Dry Climates. *Energies*. 14(11):3359. (**IF: 3.0**).
202. Naeem M A, **Muhammad Qasim Siddiqui**, et al,. (2021). The production and characterization of microbial cellulose-electrospun membrane hybrid nano-fabrics. *Journal of Industrial Textiles*, 51(3), 380-395. (**IF: 3.7**).
203. Zamir Ahmed Abro, Chengyu Hong, Yifan Zhang, **Muhammad Qasim Siddiqui**, **Abdul Malik Rehan Abbasi**, Zafarullah Abro, and **Syed Qutaba Bin Tariq**. (2021). Development of FBG pressure sensors using FDM technique for monitoring sleeping postures. *Sensors and Actuators A: Physical*. 331: 112921. (**IF: 4.2**).
204. Chand, Kishore, Cheng Jiao, Muhammad Nazim Lakhani, **Ahmer Hussain Shah**, Vinod Kumar, Diaa Eldin Fouad, Muhammad Basit Chandio, Asif Ali Maitlo, Mukhtiar Ahmed, and Dianxue Cao. (2021) Green synthesis, characterization and photocatalytic activity of silver nanoparticles synthesized with Nigella Sativa seed extract." *Chemical Physics Letters* 763. 138218. (**IF: 2.3**).

205. Chengyu Hong, Zamir Ahmed Abro, **Abdul Malik Rehan Abbasi**, Faisal Mushtaq, Zafarullah Abro, Syed Zameer Ul Hassan, (2021) Development of FBG-based Sensor Manufactured by FDM Technology to Monitor Pressure Changes. *Balochistan Journal of Engineering & Applied Sciences.* 4 (1): 1-5. (**HEC Y Category**)
206. Hong Cheng-Yu, **Zamir Ahmed Abro**, Zhang Yi-Fan, Rafique Ahmed. (2021). An FBG based smart wearable ring fabricated using FDM for monitoring body joint motion. *Journal of Industrial Textile.* 50 (10):1660-1673. (**IF: 3.7**).
207. Ramli Mat, Faisal Mushtaq, Fawad Israr, Muhammad Shehryar, Asadullah, Syed Haseeb Sultan, Syed **Zameer Ul Hassan**, Zamir Ahmed Abro, Anila Ali. (2021). Assessment of Thermal Behavior of Coal and bio-char solids. *Balochistan Journal of Engineering & Applied Sciences.* 4(1): (**HEC Y Category**).
208. Imran U, Weidhaas J, Ullah A, **Kaleemullah Shaikh**. (2021) Risk associated with spatio-temporal variations in trace metals and a metalloid in a major freshwater reservoir of Pakistan. *Human and Ecological Risk Assessment: An International Journal.* 27(2):431-50. (**IF: 2.01**).
209. Imran U, Mahar RB, Ullah A, **Kaleemullah Shaikh**. (2021). Seasonal Variability of Heavy Metals in Manchar Lake of Arid Southern Pakistan and Its Consequential Human Health Risk. *Polish Journal of Environmental Studies.* 30(1):163-175. (**IF:1.38**).
210. Salam A, Hassan T, Jabri T, Riaz S, **Saifullah Khan**, Iqbal KM. (2021). Electrospun Nanofiber-Based Viroblock/ZnO/PAN Hybrid Antiviral Nanocomposite for Personal Protective Applications. *Nanomaterials,* 11(9):2208. (**IF:5.07**).

211. **Saifullah Khan**, Labonne, L., Ouagne, P., & Evon, P. (2021). Continuous Mechanical Extraction of Fibres from Linseed Flax Straw for Subsequent Geotextile Applications. *Coatings*. 11(7), 852. **(IF:2.88)**.
212. Wasim, M, Shi, F, Liu J, Farooq,A, **Saifullah Khan**, Salam A. (2021). An overview of Zn/ZnO modified cellulosic nanocomposites and their potential applications. *Journal of Polymer Research*. 28(9):1-19. **(IF:3.07)**.
213. Hassan, T., Salam, A., Khan, A **Saifullah Khan**, Khanzada H, Wasim M. (2021). Functional nanocomposites and their potential applications: A review. *Journal of Polymer Research*. 28(2):1-22. **(IF:3.07)**.
214. **Nazakat Ali**, Xie Jiao, Xu GuangYu, Sun Tian, and JiaJun Wang. (2021). Enhanced thermoelectric performance of graphene based nanocomposite coated self-powered wearable e-textiles for energy harvesting from human body heat. *RSC Advances*. 11:16675-16687. **(IF:3.36)**.
215. Huang F, Pu C, Gu X, Ye Z, **Nasir Khan**, An J, Wu F, Liu J. (2021) Study of a low-damage efficient-imbibition fracturing fluid without flowback used for low-pressure tight reservoirs. *Energy*. 222:119941. **(IF:5.5)**.
216. **Hafeezur Rehman, Abdul Muntaqim**, Nam K, Ahmad S, Muhammad K, Yoo HK. (2021). Impact of construction method and ground composition on headrace tunnel stability in the Neelum–Jhelum Hydroelectric Project: A case study review from Pakistan. *Applied Sciences*. 11(4):1655. **(IF: 2.47)**
217. Ha, Sang-gui, **Abdul Muntaqim Naji**, **Hafeezur Rehaman**, Kyoung-min Nam, Han-eol Kim, Jae-won Park, and Han-kyu Yoo. (2021) Expanded Longitudinal

Deformation Profile in Tunnel Excavations Considering Rock Mass Conditions via 3D Numerical Analyses. *Applied Sciences*. 11(12): 5405. (**IF: 2.47**)

218. **Muhammad Junaid**, RA Abdullah, R Saari, W Ali, **Hafeezur Rehman**, MNA Alel, U Ghan. (2021). 2D Electrical Resistivity Tomography an advance and expeditious exploration technique for current challenges to mineral industry. *Journal of Himalayan Earth Sciences* 54(1): 1-11. (**ISI Indexed**).
219. Ahmad, Saeed, **Abdul Muntaqim Naji**, Ijaz Hussain, **Hafeezur Rehman**, and Hankyu Yoo. (2021). Ground saturation response during first filling of lined pressure tunnels: A case study. *Rock Mechanics and Rock Engineering*. 54(2):513-35. (**IF: 4.14**).
220. **Shaikh, Azizullah**, Caili Dai, Yongpeng Sun, Qing You, Abdul Sami Qureshi, Guang Zhao, Varel Foutou, **Zafarullah Abro et al.**, (2021). Performance evaluation of a novel CO₂-induced clean fracturing fluid in low permeability formations. *Journal of Petroleum Science and Engineering*. 208: 109674. (**IF: 5.13**).
221. **Shaikh, Azizullah**, Caili Dai, Yongpeng Sun, Varel Foutou, Mingwei Zhao, Qing You, Guang Zhao et al. (2021). Formation and rheology of CO₂-responsive anionic wormlike micelles based clear fracturing fluid system. *Journal of Dispersion Science and Technology*. Volume 2021. 1-14. (**IF:2.02**).
222. Khan NU, Shafee M, Khan JA, Ashraf K, Khan R., **Azmatullah Khan**. (2021). Sero-epidemiological study of ecto-and endo-parasites and their hematological effects in small ruminants reared under pastoral system in district Bannu, Pakistan. *Pure and Applied Biology* 4: 50-56. (**HEC Y Category**).
223. **Siddiquea, Mohammad**, Suhail Ahmed Soomrob, Shaheen Azizb, and Faheem Akhterb. (2021). An Overview of Recent Advances and Novel Synthetic Approaches

for Lignocellulosic derived Biofuels. Jurnal Kejuruteraan. 33:165-173. (**HEC Y Category**).

224. Liu W, Ma L, Sun H, **Naseer Muhammad Khan**. (2021). Using the characteristics of infrared radiation b-value during the rock fracture process to offer a precursor for serious failure. Infrared Physics & Technology. 114:103644. (**IF: 4.4**).
225. Shahani, Niaz Muhammad, Muhammad Jawad Sajid, Izhar Mithal Jiskani, Barkat Ullah, and **Abdullah Rasheed Qureshi**. (2021) Comparative analysis of coal Miner's fatalities by fuzzy logic. Journal of Mining and Environment. 12(1):77-87. (**IF: 0.14**).
226. Cao K, Ma L, Wu Y, **Naseer Muhammad Khan**, Spearing AJ, Hussain S, Yang J. (2021) Cyclic fatigue characteristics of rock failure using infrared radiation as precursor to violent failure: Experimental insights from loading and unloading response. Fatigue & Fracture of Engineering Materials & Structures. 44(2):584-94. (**IF: 4.4**).
227. Yuan Q, Xie G, Wang L, Jiao Z, Zou P, Liu H, **Naseer Muhammad Khan**, (2021). Experimental Study on Stress Uniformity and Deformation Behavior of Coals with Different Length-to-Diameter Ratios under Dynamic Compression. Shock and Vibration. Article ID 6675200 13: (**IF: 2.2**).
228. Kazmi, Syed Ali Abbas, Usama Ameer Khan, Waleed Ahmad, Muhammad Hassan, **Fahim Ahmed Ibupoto**, Syed Basit Ali Bukhari, Sajid Ali, M. Mahad Malik, and Dong Ryeol Shin. (2021). Multiple (TEES)-Criteria-Based Sustainable Planning Approach for Mesh-Configured Distribution Mechanisms across Multiple Load Growth Horizons. Energies. 14(11): 3128. (**IF:3.0**).

229. Cao KW, **Naseer Muhammad Khan**, Liu W, Hussain S, Zhu YG, Cao ZT, Bian YC. (2021). Prediction model of dilatancy stress based on brittle rock: A case study of sandstone. *Arabian Journal for Science and Engineering*. 46(3):2165-76. (**IF: 3.3**)
230. Xu D, Wu Y, Cao K, **Naseer Muhammad Khan** Hussain S, Lee S, Ma C. (2021). Analysis of Mudstone Fracture and Precursory Characteristics after Corrosion of Acidic Solution Based on Dissipative Strain Energy. *Sustainability*. 13(8):4478. (**IF: 3.25**).
231. **Naseer Muhammad Khan** Ma L, Cao K, Hussain S, Liu W, Xu Y, Yuan Q, Gu J. (2021). Prediction of an early failure point using infrared radiation characteristics and energy evolution for sandstone with different water contents. *Bulletin of Engineering Geology and the Environment*. 80(9): 6913-6936. (**IF: 4.4**).
232. Barvor YJ, Bacha S, Qingxiang C, Zhao CS, **Naseer Muhammad Khan**, Jiskani IM, Khan NM. (2021). Research on the coupling effect of the composite slope geometrical parameters. 15:35-46. (**HEC X Recognized**).
233. Saleem MW, Abbas A, Asim M, Uddin GM, Chaudhary TN, Ullah A. (2021). Design and cost estimation of solar powered reverse osmosis desalination system. *Advances in Mechanical Engineering*. 13(6):1687. (**IF: 2.31**).
234. **Bilal M**, Emad MZ, Hassan FU, Ahmed Z. (2021) Empirical Support Design for Proposed Diversion Tunnels at Dasu Dam Site Pakistan. *Pakistan Journal of Scientific & Industrial Research Series A: Physical Sciences*. 64(2):131-6. (**HEC Y Recognized**).
235. Wang X, Bu X, Alheshibri M, **Bilal M**, Zhou S, Ni C, Peng Y, Xie G. (2021). Effect of scrubbing medium's particle size distribution and scrubbing time on scrubbing

- flotation performance and entrainment of microcrystalline graphite. International Journal of Coal Preparation and Utilization. 5:1-22. **(IF: 2.69).**
236. **Bilal M**, Ito M, Koike K, Hornn V, Hassan FU, Jeon S, Park I, Hiroyoshi N. (2021) Effects of coarse chalcopyrite on flotation behavior of fine chalcopyrite. Minerals Engineering. 163:106776. **(IF: 4.76).**
237. Zang, Zesheng, Zhonghui Li, Yue Niu, He Tian, Xin Zhang, Xiaoliang Li, and **Muhammad Ali**. (2021). Energy Dissipation and Electromagnetic Radiation Response of Sandstone Samples with a Pre-Existing Crack of Various Inclinations under an Impact Load. Minerals. 11: 1363. **(IF: 2.64).**
238. Lin, Song, Zhentang Liu, Jifa Qian, Hui Zhao, **Muhammad Ali**, and Zhoujie Gu. (2021). Inertant effects and mechanism of Al (OH) 3 powder on polyethylene dust explosions based on flame propagation behavior and thermal analysis. Fire Safety Journal. 124:103392. **(IF: 2.67).**
239. Ali M, Enyuan Wang, Zhonghui Li, Haishan Jia, Dexing Li, Izhar Mithal Jiskani, and **Barkat Ullah**. (2021). Study on Acoustic Emission Characteristics and Mechanical Behavior of Water-Saturated Coal. Geofluids. 2021. Article ID 5247988. **(IF:2.02).**
240. Sadiq, Shamsher, Aaqib Muhammad, **Saeed-ullah Jan Mandokhail**, Maqsood-Ur Rehman, Alam Mehtab, Naik Muhammad, and Muhammad Bilal Adeel. (2021). Evaluation of Site Amplification Factors for Shallow Rock Sites of Islamabad, Pakistan. Kuwait Journal of Science. 48 (2): **(IF: 0.94)**
241. Maqsoom, Ahsen, Zeeshan Babar, Iram Shaheen, Muhammad Abid, Muhammad Rafiq Kakar, **Saeedullah Jan Mandokhail**, and Ahsan Nawaz. (2021). Influence of Construction Risks on Cost Escalation of Highway-Related Projects: Exploring the

Moderating Role of Social Sustainability Requirements. Iranian Journal of Science and Technology, Transactions of Civil Engineering 1-13. (**IF: 1.46**)

242. **Asad Naeem**, Kim J. (2021). Seismic retrofit of 3000 kVA power transformer using friction dampers and prestressed tendons. Structures. 32:641-650). (**IF: 2.98**)

243. **Javed, M., Muhammad, N., Sarwar, B., Irfan, M., Khan, H., & Habib, M.** (2021). Extent of Corporate Social Responsibility Disclosures in Pakistan's Food Industry. Balochistan Journal of Engineering and Applied Sciences, 4(1): 1-9. (**HEC Recognized**).

244. Ullah, Z., **Naik Muhammad.**, Choi, D. H. (2021). On the importance of nonlinear hydrostatic stiffness of offshore floating wind turbine platforms. Applied Ocean Research. 113(8):1-19. (**IF: 2.97**)

245. **Shah Nawaz Khan**, Haroon R. Mian, Kasun Hewage & Rehan Sadiq. (2021). Environmental and economic performance of a water distribution system through a lens of life cycle thinking: A case study of the City of Kelowna. Sustainable and Resilient Infrastructure. 1888396. (**HEC Recognized**).

246. **Syed Nasir Shah**, Kim Hung Mo, Soon Poh Yap, and Mohammed KH Radwan. (2021). Towards an energy efficient cement composite incorporating silica aerogel: A state of the art review. Journal of Building Engineering. 44:103227. (**IF:5.31**).

247. **Syed Nasir Shah**, Mo KH, Yap SP, Yang J, Ling TC. (2021). Lightweight foamed concrete as a promising avenue for incorporating waste materials: A review. Resources, Conservation and Recycling. 164:105103. (**IF:10.20**).

248. **Syed Nasir Shah**, Mo KH, Yap SP, Putra A, Othman MN. (2021). Assessment of lightweight recycled crumb rubber-cement composite produced by preplaced method. *Adv Concrete Construct.* 11:409-17. (**IF:3.21**).
249. **Syed Nasir Shah**, Mo KH, Yap SP, Radwan MK. (2021). Effect of micro-sized silica aerogel on the properties of lightweight cement composite. *Construction and Building Materials.* 290:123229. (**IF:6.21**).
250. Mo KH, Ling TC, Tan TH, Leong GW, Yuen CW, **Syed Nasir Shah**. (2021). Alkali-silica reactivity of lightweight aggregate: A brief overview. *Construction and Building Materials.* 270:121444. (**IF:6.21**).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

251. Khan HA, **Faisal Khan**, Surat Khan, Ahmad N, Soomro JB, Sami I. (2021). Design and Performance Investigation of 3-Slot/2-Pole High Speed Permanent Magnet Machine. *IEEE Access.* 9:41603-14. (**IF: 4.09**).
252. Ahmed T, Baloch MH, Khan N, **Mehr Gul**, Mirjat BA, Memon YA. (2021). Experimental Analysis and Control of a Wind-Generator System through a DC-DC Boost Converter for Extremum Seeking. *Engineering, Technology & Applied Science Research.* 11:6714-8. (**IF: 3.58**).
253. Atiq ur Rehman, Khan ZW, Rehman B, Iqbal S, **Mehr Gul**. (2021). Study on Dynamic Characteristics of UHVDC System under Hierarchical Infeed Mode with STATCOM. *Advances in Electrical and Electronic Engineering.* 19:1-12. (**HEC Y Category**).

254. Kiani SH, Altaf A, Anjum MR, Afridi S, Arain ZA, Anwar S, Khan S, Alibakhshikenari M, Lalbakhsh A, Khan MA, Abd-Alhameed RA, **Muhammad Abbas Khan.** (2021.) MIMO Antenna System for Modern 5G Handheld Devices with Healthcare and High Rate Delivery. *Sensors.* 21(21):7415. (**IF: 3.57**).
255. **Atiq ur Rehman**, Guo C, Zhao C. (2021). AC system's strength evaluation of UHVDC system under hierarchical connection mode. *Electrical Engineering.* 103(4):2047-2056. (**IF: 1.83**).
256. Yousuf M, Khan F, Soomro JB, **Surat Khan**, Naseer Ahmad. (2021). Analysis and Reduction of DC Winding Induced Voltage Pulsation in Five-Phase Non-Overlapped Stator Wound Field Flux Switching Machine. *IEEE Access.* 9: 105696-105710. (**IF: 3.36**).
257. Kiani SH, Ren XC, Anjum MR, Mahmood K, Ali H, Jan N, Bashir MA, **Muhammad Abbas Khan.** (2021). A Novel Shape Compact Antenna for Ultrawideband Applications. *International Journal of Antennas and Propagation.* Article ID 7004799 (**IF: 1.17**).
258. Ahmad Z, Hassan A, Khan F, **Naseer Ahmad**, Khan B, Ro JS. (2021). Analysis and design of a novel outer mover moving magnet linear oscillating actuator for a refrigeration system. *IEEE Access.* 9:121240-52. (**IF: 3.36**).
259. Ullah B, Khan F, Milyani AH, **Naseer Ahmad**, Cheema KM. (2021). Design and analysis of dual stator hybrid excited linear flux switching machine for long stroke applications. *IET Electric Power Applications.* 15(12):1678-9.1 (**IF: 2.56**).

260. Ali H, Ren XC, Hashmi AM, Anjum MR, Bari I, Majid SI, Jan N, Tareen WU, Iqbal A, **Muhammad Abbas Khan**. (2021). An Eight Element Dual Band Antenna for Future 5G Smartphones. *Electronics*.10 (23):3022. **(IF: 2.39)**.
261. Rehman B, **Atiq ur Rehman**, Khan WA, Sami I, Ro JS. (2021). Operation and Challenges of Multi-Infeed LCC–HVDC System: Commutation Failure, AC/DC Power Flow, and Voltage Stability. *Applied Sciences*. 11(18):8637. **(IF: 2.67)**.
262. Atiq ur Rehman, output power operatin Gul, Talha Mir, Syed Mudassir Hussain, **Zahid Rauf..** (2021). Transient performance analysis of reactive power compensators at LCC-HVDC station feeding weak AC system. *Mehran University Research Journal Of Engineering & Technology*. 1;40(4):835-41. **(HEC Y Category)**.
263. Syed Mudassir Hussain,, Talha Mir, Mehr Gul, Atiq Ur Rehman, and **Zahid Rauf.** (2021). GaN based HEMT power amplifier design with 44.5 dBm output power operating at 5-7GHz. *Mehran University Research Journal Of Engineering & Technology*. 40(4):883-888. **(HEC Y Category)**.
264. Malik MZ, Baloch MH, **Mehr Gul**, Kaloi GS, Chauhdary ST, Memon AA. (2021). Research on conventional and modern algorithms for maximum power extraction from wind energy conversion system: a review. *Environmental Science and Pollution Research*. 28(5):5020-35. **(IF: 3.3)**.
265. Zahid A, Khan F, **Naseer Ahmad**, Sami I, Ullah W, Ullah N, Ullah N, Alkhammash HI. (2021). Design and Analysis of Dual Mover Multi-Tooth Permanent Magnet Flux Switching Machine for Ropeless Elevator Applications. *InActuators Multidisciplinary Digital Publishing Institute*. 10(4):81. **(IF: 1.95)**.

266. Nadeem MH, Zheng X, Tai N, **Mehr Gul**, Yu M, He Y. (2021). Non-communication-based protection scheme using transient harmonics for multi-terminal HVDC networks. International Journal of Electrical Power & Energy Systems. 127:106636. **(IF: 4.6)**.
267. Siddiqui MA, Khir MH, Witjaksono G, Ghumman AS, **Muhammad Junaid**, Magsi SA, Saboor A. (2021). Multivariate Analysis Coupled with M-SVM Classification for Lard Adulteration Detection in Meat Mixtures of Beef, Lamb, and Chicken Using FTIR Spectroscopy. Foods. 10(10):2405. **(IF: 4.35)**.
268. Witjaksono G, **Muhammad Junaid**, Khir MH, Ullah Z, Tansu N, Saheed MS, Siddiqui MA, Ba-Hashwan SS, Algamili AS, Magsi SA, Aslam MZ. (2021). Effect of Nitrogen Doping on the Optical Bandgap and Electrical Conductivity of Nitrogen-Doped Reduced Graphene Oxide. Molecules. 26(21):6424. **(IF: 4.41)**.
269. Wan J, Waqas M, Tu S, **Syed Mudassir Hussain**, Shah A, Rehman SU, Hanif M. (2021). An efficient impersonation attack detection method in fog computing. CMC Comput. Mater. Contin. 68(1):267-81. **(IF: 3.77)**.
270. Zhang B, Waqas M, Tu S, **Syed Mudassir Hussain**, Rehman SU. (2021). Power Allocation Strategy for Secret Key Generation Method in Wireless Communications. CMC Comput. Mater. Contin 68(2): 2179-2188. **(IF: 3.77)**.
271. Siddiqi MZ, **Talha Mir**, Hao M, MacKenzie R. (2021). Low complexity joint active and passive beamforming for RIS aided MIMO systems. Electronics Letters. 57(9):384-396. **(IF:1.31)**.

272. Tu S, Waqas M, Rehman SU **Talha Mir**, Abbas G, Abbas ZH, Halim Z, Ahmad I. (2021). Reinforcement learning assisted impersonation attack detection in device-to-device communications. *IEEE Transactions on Vehicular Technology*. 20:70(2):1474-9. **(IF: 1.31)**.
273. Tu S, Waqas M, Rehman SU, **Talha Mir**, Halim Z, Ahmad I. (2021.) Social phenomena and fog computing networks: A novel perspective for future networks. *IEEE Transactions on Computational Social Systems*. 9(1): 32-34. **(HEC Y Category)**.
274. Ehsan, Syed Muhammad, **Muhammad Imran**, **Anayat Ullah**, and Ersin Elbasi. (2021). A Single Image Dehazing Technique Using the Dual Transmission Maps Strategy and Gradient-Domain Guided Image Filtering. *IEEE Access*. 9:89055-89063. **(IF: 3.09)**.
275. **Mirza Aamir Mehmood**, Muhammad Naeem Ahmed Khan, Raja Asif Wagan, Muhammad Bux Laghari, Muhammad Ashraf, Muhammad Akram, and Muhammad Bilal. (2021). Context Drive: Towards a functional scenario-based testing framework for context-aware applications. *IEEE Access*. 9: 80478-80490 **(IF: 3.36)**.
276. Hifza Afzal, Mumraiz Khan. Kasi, **Bakhtiar Kasi**, **Bushra Naeem**, and Syed Kamran Sami. (2021). An Ontology-Driven Decision Support System for Rice Crop Production. *Journal of Applied and Emerging Sciences*. 11(1):85-90. **(HEC Y Category)**.
277. **Bushra Naeem**, Sarah Javed, Mumraiz K. Kasi, and Kamran Sani. (2021). Hybrid fuzzy logic engine for ping-pong effect reduction in cognitive radio network. *Wireless Personal Communications*. 116:177-205. **(IF: 1.06)**.

278. Khan MS, Qadeem A, Ali F, **Bushra Naeem**, Shabbir B, Ali R, Shoaib MA. (2021).

Movement Aware Smart Street-lights for Efficient Energy Utilisation: Movement Aware Smart Street-lights for Efficient Energy Utilisation. Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences. 58:77-84. (**IF:3.9**).

279. **Mumraiz Khan Kasi**, Abu Ghazalah S, Akram RN, Sauveron D. (2021). Secure mobile edge server placement using multi-agent reinforcement learning. Electronics. 10(17):2098. (**IF: 2.39**).

280. Fahim A, Tan Q, Mazzi M, Sahabuddin M, Naz B, **Sibghat Ullah Bazai**. (2021) Hybrid LSTM Self-Attention Mechanism Model for Forecasting the Reform of Scientific Research in Morocco. Computational Intelligence and Neuroscience. Article ID 6689204. (**IF: 3.63**).

281. Fahim A, Tan Q, Naz B, **Sibghat Ullah Bazai**. (2021). Sustainable Higher Education Reform Quality Assessment Using SWOT Analysis with Integration of AHP and Entropy Models: A Case Study of Morocco. Sustainability. XIX :117971. (**IF: 3.25**)..

282. Nawaz SA, Li J, Bhatti UA, **Sibghat Ullah Bazai**, Zafar A, Bhatti MA, Mehmood A, Ain QU, Shoukat MU. (2021). A hybrid approach to forecast the COVID-19 epidemic trend. Plos One. 16(10): e0256971. (**IF: 3.24**).

283. Aamir M, Li Z, **Sibghat Ullah Bazai**, **Raja Asif Wagan**, Bhatti UA, Nizamani MM, Akram S. (2021). Spatiotemporal Change of Air-Quality Patterns in Hubei Province-A Pre-to Post-COVID-19 Analysis Using Path Analysis and Regression. Atmosphere. 12(10):1338. (**IF: 2.84**).

284. Jamil A, ali Hameed A, **Sibghat Ullah Bazai**. (2021) Land Cover Classification using

Machine Learning Approaches from High Resolution Images. Journal of Applied and Emerging Sciences.11:108-112. (**HEC Y Category**).

285. **Sibghat Ullah Bazai**, Jang-Jaccard J, Alavizadeh H. (2021). A novel hybrid approach for multi-dimensional data anonymization for apache spark. ACM Transactions on Privacy and Security. 25:1-25. (**IF: 1.9**).

286. Khan MN, **Mirza, Aamir Mehmood**, Saleem I, Rehman SU, Rafja Asif Wagan (2021). Addressing Communication, Coordination and Cultural Issues in Global Software Development Projects. EMITTER International Journal of Engineering Technology. 9(1):13-30. (**ISI Indexed**).

287. **Rahila Umer**, Susnjak T, Mathrani A, Suriadi L. (2021). Current stance on predictive analytics in higher education: opportunities, challenges, and future directions. Interactive Learning Environments. 1-26. (**IF: 3.92**).

288. Mathrani A, Sarvesh T, **Rahila Umer** (2021) Digital divide framework: online learning in developing countries during the COVID-19 lockdown. Globalisation. Societies and Education. 24:1-6. (**IF: 2.92**).

289. Khan S, **Rahila Umer**, Umer S, Naqvi S. (2021). Antecedents of trust in using social media for E-government services: An empirical study in Pakistan. Technology in Society. 64:101400. (**IF:4.19**).

290. Noor F, Masood S, Sabar Y, Shah SB, Ahmad T, Abdollahi A, **Ahthasham Sajid**. (2021). Bayesian Analysis of Cancer Data Using a 4-Component Exponential Mixture Model. Computational and Mathematical Methods in Medicine. 12:2021. (**IF:2.2**).

291. Tahirkheli AI, Shiraz M, Hayat B, Idrees M, **Ahthasham Sajid**, Ullah R, Ayub N, Kim KI. (2021). A Survey on Modern Cloud Computing Security over Smart City Networks: Threats, Vulnerabilities, Consequences, Countermeasures, and Challenges. *Electronics*.10(15):1811. **(IF:2.39)**.
292. Usman N, Usman S, **Faizullah Khan**, Jan MA, Ahthasham Sajid, Alazab M, Watters P. (2021) Intelligent dynamic malware detection using machine learning in IP reputation for forensics data analytics. *Future Generation Computer Systems*. 118:124-41. **(IF:7.18)**.
293. Baig I, Farooq U, Zghaibeh M, Hasan NU, **Ahthasham Sajid**. (2021) A Power Domain UFMC System Design for Underwater Optical Communication with Reduced PAPR. *Journal of Internet Technology*. 22(2):395-401. **(IF:1.1)**.
294. Butt MA, Khattak AM, Shafique S, Hayat B, Abid S, Kim KI, Ayub MW, **Ahthasham Sajid**. Adnan A. (2021). Convolutional neural network-based vehicle classification in adverse illuminous conditions for intelligent transportation systems. *Complexity*. Volume 2021. Article ID 6644861. **(IF:2.8)**.
295. Shahzad K, Ahthasham Sajid, Khan I, Mehmood N, Iqbal T and **Raja Asif Wagan**. (2021) Comparative Analysis of IPv4 & IPv6: Intended for Learning Object Repository to Setup an E-Learning Environment. *Sir Syed University Research Journal of Engineering & Technology*. 11(1):15-20. **(HEC Y Category)**.
296. Rathore MM, **Attique Shah S**, Awad A, Shukla D, Vimal S, Paul A. (2021). A cyber-physical system and graph-based approach for transportation management in smart cities. *Sustainability*.13(14):7606. **(IF: 3.25)**.

297. Hameed S, **Syed Attique Shah**, Saeed QS, Siddiqui S, Ali I, Vedeshin A, Draheim D. (2021) A scalable key and trust management solution for IoT sensors using SDN and blockchain technology. *IEEE Sensors Journal*. 21(6):8716-33. (**IF: 3.3**).

298. Mahboob T, Lim JW, **Syed Tariq Shah**, Chung MY. (2021). A Novel Deep-Learning-Enabled QoS Management Scheme for Encrypted Traffic in Software-Defined Cellular Networks. *IEEE Systems Journal*. 1-15. (**IF: 3.74**).

299. Mughal DM, **Syed Tariq Shah**, Chung MY. (2021). An Efficient Spectrum Utilization Scheme for Energy-Constrained IoT Devices in Cellular Networks. *IEEE Internet of Things Journal*. 8(17): 13415-134125. (**IF: 9.47**).

300. **Muhammad Bux Laghari**, Shahwani H, Shah SA, Wagan RA, Rauf Z, Ali I, Alshamrani SS, Frnda J. (2021) Towards Enabling Multihop Wireless Local Area Networks for Disaster Communications. *Wireless Communications and Mobile Computing*. Article ID 5540480. (**IF: 2.33**).

301. **Muhammad Bux Laghari.** (2021). A state-of-The-Art Review on Discrete Optimization-based Approaches for Multi-hop Wireless Local Area Network. *Balochistan Journal of Engineering of Applied Sciences*. 4(1). (**HEC Y Category**).

302. **Ali Israr**, Yang Q, Li W, Zomaya AY. (2021) Renewable energy powered sustainable 5G network infrastructure: Opportunities, challenges and perspectives. *Journal of Network and Computer Applications*. 1:175 (**IF: 6.28**).

303. Shakir S, Bilal M, Abbas SM, Saleem N, Rauf Z, **Raja Asif Wagan**, Saleem R, Shafique MF. (2021). A Compact 8-Element 3D UWB Diversity Antenna System for Off Device Installation. *IEEE Access*. 9:44117-27. (**IF: 4.09**).

304. **Muhammad Bilal**, Saleem R, Jabbar A, Shafique MF. (2021). A Miniaturized and

Polarization Independent Electromagnetic Shield for C and X-Band Applications.

Wireless Personal Communications. 117(2):405-416. (**IF: 1.06**).

305. **Hamayoun Shahwani**, Syed Attique Shah, Muhammad Ashraf, Muhammad

Akram, Jeong JP, Shin J. (2021). A comprehensive survey on data dissemination in

Vehicular Ad Hoc Networks. Vehicular Communications. 100420. (**IF: 6.91**).

306. **Muhammad Ashraf**, Tae Ho Cho, Muhammad Akram, Hamayoun Shahwani, Syed

Attique Shah, Surat Khan, Faizullah Khan, Akbar Khan, and Muhammad Qasim

Khan. (2021). Improving TICK efficiency by GA-based fuzzy membership functions

optimization in Wireless Sensor Networks. Journal of Applied and Emerging

Sciences. 11(1):102-107. (**HEC Y Category**).

307. Khan MS, Faizullah Khan, Saeed M, Khan A, Ali B, Ashraf M, Khan S, **Abdul**

Wahid Tareen. (2021) Economic analysis of DC power sources used in impressed

current cathodic protection of underground pipelines. Indian Journal of Science and

Technology. 14(10):897-904. (**ISI Indexed**).

308. Hussain, Irshad, **Faizullah Khan**, Ishtiaq Ahmad, Surat Khan, and Muhammad

Saeed. (2021). Power loss reduction via distributed generation system injected in a

radial feeder. Mehran University Research Journal of Engineering & Technology 40:

160-168. (**HEC Y category**).

309. Hamayoun Shahwani, Niamat Ullah Shah, Syed Attique Shah, Mohammad Imran,

Muhammad Ashraf, Muhammad Akram, Muhammad Qasim, Zahid Rauf, and

Bakhtiar Khan Kasi. (2021). Analysis of Digital Video Broadcast Second

Generation Satellite (DVB-S2) for Simultaneous Voice Communication & TV Broadcast. Journal of Applied and Emerging Sciences. 8;11(1): 42. (**HEC Y category**).

310. **Muhammad Ayub**, Syed Sabir Hussain Bukhari, Ghulam Jawad, Arsalan Arif, and Byung-il Kwon. (2021). Utilization of reluctance torque for improvement of the starting and average torques of a brushless wound field synchronous machine. Electrical Engineering. 103: 2327-2333. (**IF: 1.63**).
311. **Muhammad Paend Bakht**, Salam Z, Bhatti AR, Anjum W, Khalid SA, Khan N. (2021). Stateflow-Based Energy Management Strategy for Hybrid Energy System to Mitigate Load Shedding. Applied Sciences. 11(10):4601. (**IF: 2.67**).
312. Khan N, Kamaruddin MA, Sheikh UU, **Muhammad Paend Bakht**. (2021). Two-fold complex network approach to discover the impact of word-order in Urdu language. Ijeecs. 23(2):1039 (**HEC Y category**).
313. Ali R, Chuah JH, Talip MS, Mokhtar N, **Muhammad Shoaib Ali**. (2021). Automatic pixel-level crack segmentation in images using fully convolutional neural network based on residual blocks and pixel local weights. Engineering Applications of Artificial Intelligence. 104:104391. (**IF: 6.21**).
314. Chen C, Chuah JH, **Raza Ali**, Wang Y. (2021) Retinal vessel segmentation using deep learning: a review. IEEE Access. (9): 111985 - 112004 (**IF: 3.09**).
315. Razzaq A, Shahid S, **Muhammad Akram**, Muhammad Ashraf, Iqbal S, Hussain A, Azam Zia M, Qadri S, Saher N, Shahzad F, Shah AN. (2021). Stomatal State

Identification and Classification in Quinoa Microscopic Imprints through Deep Learning. Complexity. Volume 2021. Article ID 9938013. (**IF:2.8**).

316. Arfeen ZA, Sheikh UU, Azam MK, Hassan R, Faisal Shehzad HM, Ashraf S, Abdullah MP, **Lubna Aziz**. (2021) A comprehensive review of modern trends in optimization techniques applied to hybrid microgrid systems. Concurrency and Computation: Practice and Experience.33(10): e6165. (**IF: 1.5**).

FACULTY OF MANAGEMENT SCIENCES

317. Hussain R, Hassali MA, Hashmi F, **Tayyaba Akram**. (2021). Exploring healthcare professionals' knowledge, attitude, and practices towards pharmacovigilance: a cross-sectional survey. Journal of pharmaceutical policy and practice. 14:1-13. (**ISI Indexed**).

318. Hussain ST, Lei S, Haider MJ, **Tayyaba Akram**. (2021). Transformational Leadership and Organizational Change Examining the Mediational Approach of Knowledge Sharing. International Journal of Asian Business and Information Management (IJABIM). 12(2):84-95. (**HEC X Category**).

319. Bilal MA, Khan H, **Muhammad Irfan**, Haq S, Ali M, Kakar A, Ahmed W, Rauf A. (2021). Influence of Financial Literacy and Educational Skills on Entrepreneurial Intent: Empirical Evidence from Young Entrepreneurs of Pakistan. The Journal of Asian Finance, Economics. and Business. 8:697-710. (**ISI Indexed**).

320. Syed A, **Nagina Gul**, **Hadi Hassan Khan**, Danish M, Haq S, **Bilal Sarwar, Usman Azhar**, Ahmed W. (2021). The Impact of Knowledge Management Processes on

Knowledge Sharing Attitude: The Role of Subjective Norms. *The Journal of Asian Finance, Economics, and Business.* 8:1017-30. **(ISI Indexed).**

321. **Rehan Anjum, Hadi Hassan Khan**, Bano S, Nazir S, Gulraiz H, Ahmed W. (2021). A Latent Factor (PLS-SEM) Approach: Assessing the Determinants of Effective Knowledge Transfer. *The Journal of Asian Finance, Economics, and Business.* 8(2):851-60. **(ISI Indexed).**
322. **Muhammad Irfan**, Khan SZ, Hassan N, Hassan M, Habib M, Khan S, Hadi Hassan Khan. (2021). Role of project planning and project manager competencies on public sector project success. *Sustainability.* 13(3):1421. **(IF: 3.25).**
323. Ahmed W, **Hadi Hassan Khan**, Rauf A, UlhaQ S, Bano S, **Bilal Sarwar**, Khan M, Wali A, Durrani MN. (2021). Simultaneous equation estimation in finance and corporate financial decision: Empirical evidence from Pakistan stock exchange. *The Journal of Asian Finance, Economics and Business.* 8(3):11-21. **(ISI Indexed).**
324. Ibrahim K, **Nadeem uz Zaman**, **Bilal Sarwar**, Muhammad N, Hadi Hassan Khan, Kasi MK. (2021). Impact of Social Networks on Entrepreneurial Success of Mobile Phone Retailers. *European Online Journal of Natural and Social Sciences.* 10(1):70. **(ISI Indexed).**
325. Atta A, **Nadeem uz Zaman**, **Hadi Hassan Khan**. **Muhammad Adeel Anjum.** (2021). Battling the Threat of Workplace Harassment: An Appraisal Based on Protection Motivation Theory. *The Journal of Asian Finance, Economics and Business.* 8(6):491-504. **(ISI Indexed).**
326. Zaman M, Naeem A, **Hadi Hassan Khan**, **Brohi MA**, **Naeem uz Zaman.** (2021). Moderation by Job Satisfaction on the Relationship between Emo-tional Intelligence

and Workplace Advice Network Coreness. Jinnah Business Review. 9:37-58. (**HEC Recognized**).

327. Jan G, Mohamed Zainal SR, **Babrak Ali Panezai**. (2021). Service innovative work behavior in the hotel firms: The role of servant leadership and harmonious passion. Journal of Human Behavior in the Social Environment. 1-17. (**ISI Indexed**).
328. Yahya F, Manan A, **Muhammad Waseem Jan Khan**, Hashmi MS. (2021). The moderating role of board gender diversity between power-based corporate governance and tax aggressiveness. Economics and Business Letters. 10(2). 1-7. (**ISI Indexed**).
329. Khan KU, Wang CM, **Muhammad Waseem Khan**, Liang Z, Li S, Li BL. (2021). Influence of rainfall infiltration on the stability of unsaturated coal gangue accumulated slope. Journal of Mountain Science. 18(6):1696-1709. (**ISI Indexed**).
330. **Muhammad Waseem Khan**, Batool MS, Qadri MU, Ahmed Z. (2021). Critical Success Factors for Pharmaceutical Firms: The Case of Pakistan. Market Forces. 16(1):22-22. (**HEC Y Category**).
331. **Nadeem uz Zaman**, Bibi Z, Karim J, Din SU. (2021). Roles of Emotional Intelligence in Determining Workplace Advice Network Centrality: Betweenness and Coreness. 11(4):1-13. (**ISI Indexed**).
332. Khalid S, **Nadeem uz Zaman** (2021). Why a Lending Relationship for Small and Medium Enterprises is indispensable for Economic Development of Baluchistan. Jinnah Business Review. 9: 37-58. (**HEC Y Category**).
333. Qadir R, **Bilal Sarwar**, **Usman Azhar**, **Nadeem uz Zaman**. (2021). Moderation by Emotional Intelligence on Perceived Leadership Effectiveness and Workplace Performance Outcomes. Jinnah Business Review. 9: 95-109. (**HEC Y Category**).

334. **Hadi Hassan Khan, Bilal Sarwar, Muhammad N, Haq SM, Magsi R.** (2021). The Dilemma of Child Labor: A Case of Pakistan's Football Manufacturing Industry Sialkot: Balochistan Journal of Engineering and Applied Sciences. 4(1):24-31. (**HEC Y Category**).
335. Tareen L, Mengal NM, Nadeeum uz Zaman, **Brohi MA, Hadi Hassan Khan.** (2021). Business Motives among Students: A Qualitative Appraisal of Drive Theory. Jinnah Business Review. 9(2): 61-74. (**HEC Y Category**).
336. Khan K, **Nadieum uz Zaman, Bilal Sarwar, Hadi Hassan Khan.** (2021) Behavior-Based Perceived Leadership Styles as Determinants of Organizational Functionality. Jinnah Business Review. 9(2):75-102. (**HEC Y Category**).
337. Fazal A, Khan H, Ahmed W, **Bilal Sarwar, Muhammad N, Ul Haq SMN.** (2021). Influence of Cognitive Ability, Money Management Skills, and Cultural Norms on Financial Literacy of Women Working in the Cottage Industry Quetta, Balochistan: Asian Journal of Business and Accounting. 14(2): 255-278. (**ISI Indexed**).
338. Zaheer H, **Bilal Sarwar, Noor Muhammad.** (2021). Demographic Differences in Experiencing Workplace Incivility: Evidence from Public Sector Universities of Quetta. Journal of Managerial Sciences. 25:157-1169. (**HEC Y Category**).
339. Zaheer H, Bibi Z, **Bilal Sarwar, Muhammad N.** (2021). Incivility Within and Beyond Classrooms: Exploring the Perceptions of Targets, Instigators, and Observers. Qualitative Report. 26(10).1-11. (**ISI Indexed**).

340. **Nadeem uz Zaman**, Ahmed T, Ramayah T, Khalid Z, **Asad M.** (2021). Career

stages at the bottom line: Revisiting the relationship between organizational justice
and turnover intentions. *Human Systems Management*. 1-18. (**HEC X Category**).

341. Aneela Syed, Muhammad Danish, **Nagina Gul**. (2021). The Mediating Role of
Attitude Towards Knowledge Sharing In The Relationship Between Organizational
Learning Environment and Teacher's Knowledge Sharing Intention Among Academic
Staff at Higher Education Institution. *Global Management Sciences Review*. 6:106-
119. (**HEC Y Category**).

342. Birah Khalid, Beenish Malik, **Nagina Gul**. (2021). The Effect of Machiavellianism,
Narcissism and Psychopathy on Depression. *Global Social Sciences Review*. 6:109-
119. (**HEC Y Category**).

343. Muhammad Anwer, **Nagina Gul**, Safdar Hussain. (2021). Mobility Across One
Road One Regions: Influencing Factor Toward Internationalization and experience of
International Studies In China. *Global Educational Studies Review*. 1-8. (**HEC Y
Category**).

344. GhazalaYaqoob, SaubiaRamzan, **Nagina Gul**. (2021). Impact of Community of
Practice (COPs) on Inter-University Research Partnerships and Socio-Collaborative
Culture in Balochistan. *Global Educational Studies Review*. 1-6. (**HEC Y Category**).

345. Bahadur, A, Baza, ZA, **Syed Muhammad Khai**, Nafisa Bahadur F, Bokhari SMA.
(2021). Modeling crop water requirement of grapes by using FAO-CROPWAT model
in Quetta district, Balochistan. *Journal of Agrometeorology* 23(4): 468-470. (**IF 0.55**).

346. Reza S, **Bilal Sarwar**, Nawaz RR, Haq SN. Application of Logistic Regression on

Passenger Survival Data of the Titanic Liner. Journal of Accounting and Finance in

Emerging Economies. 7(4):861-867. (**HEC Y Category**).

347. **Nagina Gul** ,Snober A, Anwer M, Ahmed M. (2021). The Impact Of Fairness

Perception And Motivation On Employee's Commitment Of Higher Education

Institutes In Pakistan. International Journal of Management.12(1). 1340-1355. (**HEC**

Y Category).

348. Anjum MR, Hadi Hassan Khan, **Nagina Gul**. (2021). Impact of Work-Life Balance

on Performance of Police in baluchistan with moderating effect of occupational stress.

Global Educational Studies Review.VI, (IV): 174-185. (**HEC Y Category**).

349. Ahmed A, **Nagina Gul**, Magsi HA. (2021). Evidential Analysis of Terrorism and I-

VEO Knowledge Matrix in the Context of Security as Pure Public Good: The case of

Pakistan from 1990 to 2010. Global Management Sciences Review. 6:62-73. (**HEC Y**

Category).

350. Ali, Syed Ammad, **Usman Azhar**, Syed Muhammad Zia, Sajjida Reza, Sana Aziz,

and Aziz H. (2021). Information Technology and Job Searching Behavior in

Pakistan. Journal of Applied and Emerging Sciences. 11: 125-129. (**HEC Y**

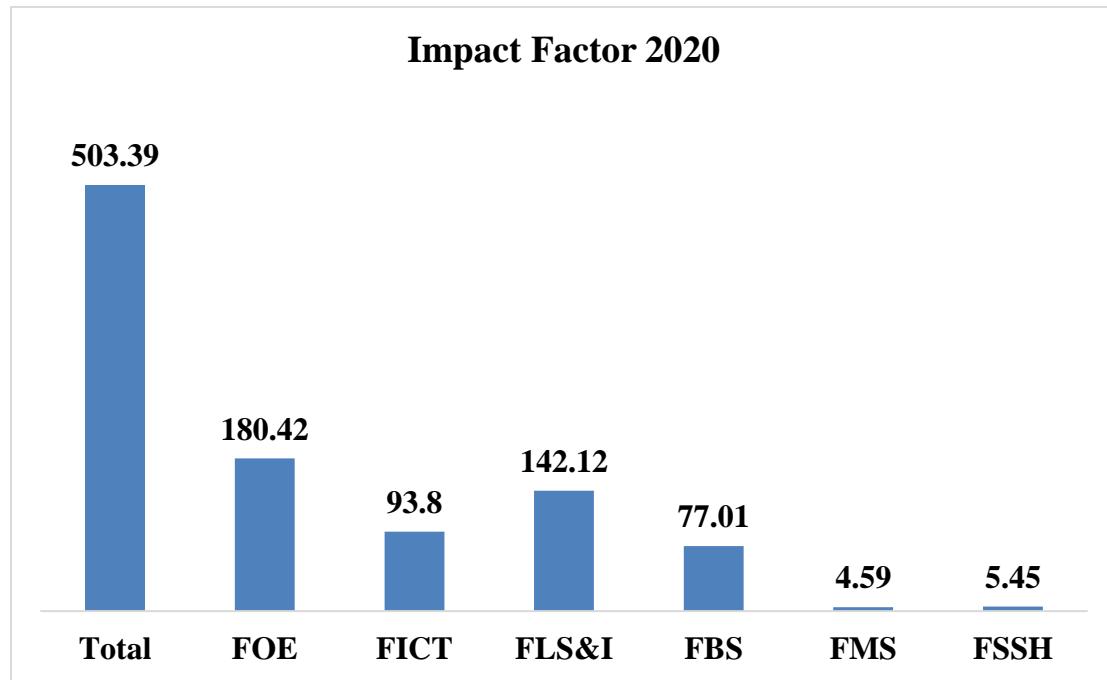
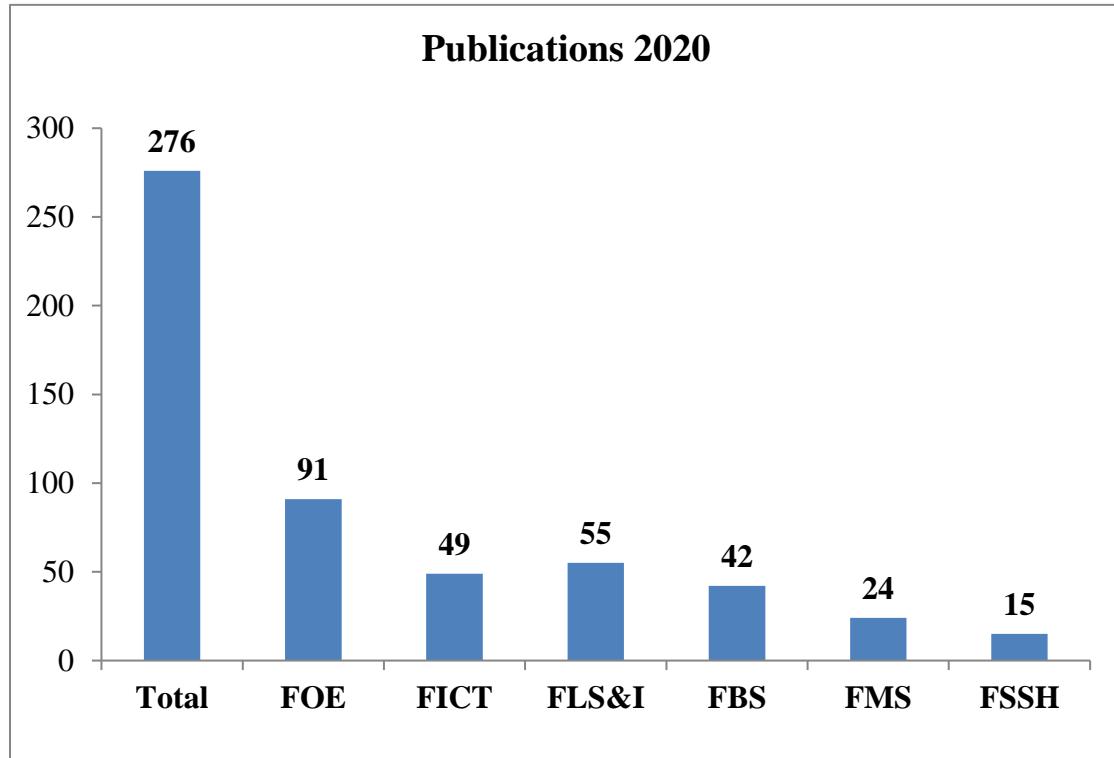
Category).

351. Khan A, **Reham Anjum**, Khan M. (2021). Investor Perception of Cryptocurrency:

A Moderating Role of social media on Decision-Making. Global Economics Review.

VI:136-49. (**IF: 1.84**).

RESEARCH PUBLICATIONS 2020



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Iqbal Z, Absar M, Jamil A, Akhtar T, Basit S, Afzal S, Ramzan K, Qureshi K, Sabar MF, Arshad, **Muhammad Asif** et al. (2020). Next-Generation Sequencing Identifies a Previously Uncharacterized Gene ANKRD36 as a Common Biomarker for Blast Crisis Chronic Myeloid Leukemia: Molecular and Protein Bio-Modeling Studies. *Blood*. 136:32-33. **(IF: 18.89)**.
2. Sajjad W, Zheng G, Ma X, Xu W, Ali B, **Muhammad Rafiq**, Zada S, Irfan M, Zeman J. (2020). Dissolution of Cu and Zn-bearing ore by indigenous iron-oxidizing bacterial consortia supplemented with dried bamboo sawdust and variations in bacterial structural dynamics: A new concept in bioleaching. *Science of The Total Environment*. 709:136136. **(IF:5.58)**.
3. Din G, Hassan A, **Muhammad Rafiq**, Hasan F, Badshah M, Khan S, Chen G, Ripp S, Shah AA. (2020). Characterization of Organic Acid Producing *Aspergillus tubingensis* FMS1 and its Role in Metals Leaching from Soil. *Geomicrobiology Journal*. 37(4):336-344. **(IF:1.60)**.
4. Bhatti MU, Riaz S, Toufiq N, Adeyinka OS, **Anwar Khan**, Yousaf I, Tariq M, Murtaza S, Nasir IA, Tabassum B. (2020). The potential and efficacy of *Allium sativum* leaf lectin (ASAL) against sap-sucking insect pests of transgenic maize. *Biologia*. 75(11):1-8. **(IF:0.72)**.
5. Baloch, Iftekhar Ahmed, Saima Johar, Bibi Hani Mengal, Ambreen Khadija Alvi, Shehnaz Shair Qambrani, **Muhammad Naeem Shawani**, and Bibi Sadia. (2020). Computational identification of six salt stress responsive genes in *Cynara scolymus*. *Pure and Applied Biology*. 9(3):1723-1736. **(HEC Y Category)**.

6. Ali E, Hussain A, Ullah I, Khan FS, Kausar S, Rashid SA, Rabbani I, Imran M, **Kaleem Ullah Kakar**, Shah JM. (2020). Cadmium phytotoxicity: issues, progress, environmental concerns and future perspectives. *Revista de la Facultad de Ciencias Agrarias UNCuyo*. 52(1):391-405. **(IF: 3.60)**.
7. Kaleem Ullah Kakar, Nawaz Z, Cui Z, **Nazeer Ahemd**, Ren X. (2020). Molecular breeding approaches for production of disease-resilient commercially important tobacco. *Briefings in Functional Genomics*. 19:10-25. **(IF: 3.13)**.
8. Yu S, **Kaleem Ullah Kakar**, Yang Z, Nawaz Z, Lin S, Guo Y, Ren X-l, Baloch AA, Han D. (2020). Systematic study of the stress-responsive Rboh gene family in Nicotiana tabacum: Genome-wide identification, evolution and role in disease resistance. *Genomics*. 112(2):1404-1418. **(IF: 1.15)**.
9. Ali J, Khan S, **Anwar Khan**, Waqas M, Nasir MJ. (2020). Contamination of soil with potentially toxic metals and their bioaccumulation in wheat and associated health risk. *Environmental Monitoring and Assessment*. 192(2):138. **(IF:1.90)**.
10. Khan MS, **Anwar Khan**, Adeyinka OS, Yousaf I, Riaz S, Bashir B, Tariq M, Tabassum B. (2020). Molecular cloning and expression of recombinant *Trichoderma harzianum* chitinase in *Pichia pastoris*. *Advancements in Life Sciences*. 7(3):122-128. **(ISI Indexed)**.
11. Hassan N, Anesio AM, **Muhammad Rafiq**, Holtvoeth J, Bull I, Williamson CJ, Hasan F. (2020). Cell membrane fatty acid and pigment composition of the psychrotolerant cyanobacterium *Nodularia spumigena* CHS1 isolated from Hopar glacier, Pakistan. *Extremophiles*. 24(1):135-145. **(IF: 2.04)**.
12. Ibrar M, Ullah MW, Manan S, Farooq U, **Muhammad Rafiq**, Hasan F. (2020). Fungi from the extremes of life: an untapped treasure for bioactive compounds. *Applied Microbiology and Biotechnology*. 104:2777–2801. **(IF: 3.67)**.

13. Irshad A, Sarwar N, **Haleema Sadia**, Malik K, Javed I, Irshad A, Afzal M, Abbas M, Rizvi H. (2020). Comprehensive facts on dynamic antimicrobial properties of polysaccharides and biomolecules-silver nanoparticle conjugate. International Journal of Biological Macromolecules. 145:189-196. **(IF: 4.78)**.
14. Khan SZ, Ajmal N, **Rozeena Shaikh**. (2020). Diabetic Retinopathy and Vascular Endothelial Growth Factor Gene Insertion/Deletion Polymorphism. Canadian Journal of Diabetes. 44 (3):287-291. **(IF: 3.19)**.
15. **Muhammad Mushtaq**, Kovalevska L, Darekar S, Abramsson A, Zetterberg H, Kashuba V, Klein G, Arsenian-Henriksson M, Kashuba E. (2020). Cell stemness is maintained upon concurrent expression of RB and the mitochondrial ribosomal protein S18-2. Proceedings of the National Academy of Sciences. 117(27):15673-15683. **(IF: 12.78)**.
16. Haq A, Adeel S, Khan A, ul ain Rana Q, Muhammad Abbas Khan, **Muhammad Rafiq**, Ishfaq M, Khan S, Shah AA, Hasan F, Ahmed S. (2020). Screening of Lipase-Producing Bacteria and Optimization of Lipase-Mediated Biodiesel Production from *Jatropha curcas* Seed Oil Using Whole Cell Approach. BioEnergy Research. 22(6):1-7. **(IF: 2.81)**.
17. Hassan N, Anesio AM, **Muhammad Rafiq**, Holtvoeth J, Bull I, Haleem A, Shah AA, Hasan F. (2020). Temperature Driven Membrane Lipid Adaptation in Glacial Psychrophilic Bacteria. Frontiers in Microbiology. 14(11):824. **(IF: 4.87)**.
18. **Muhammad Rafiq**, Nadeem S, Hassan N, Hayat M, Sajjad W, Zada S, Sajjad W, Hasan F. (2020). Fungal recovery and characterization from Hindu Kush mountain range, Tirich Mir glacier, and their potential for biotechnological applications. Journal of Basic Microbiology. 60(5):44-57. **(IF:2.28)**.

19. Sajjad W, **Muhammad Rafiq**, Din G, Hasan F, Iqbal A, Zada S, Ali B, Hayat M, Irfan M, Kang S. (2020). Resurrection of inactive microbes and resistome present in the natural frozen world: Reality or myth?. *Science of The Total Environment*. 737(13):139275. (**IF:7.93**).
20. Khan S, Chen N, Zhang C, Wang L, Han C, Lu K, Li Y, **Muhammad Rafiq**, Iqbal A, Zhao C. (2020). Soil fungal taxonomic diversity along an elevation gradient on the semi-arid Xinglong Mountain, Northwest China. *Archives of Microbiology*. 202(8):2291-302. (**IF:2.52**).
21. Sajjad W, Din G, **Muhammad Rafiq** Iqbal A, Khan S, Zada S, Ali B, Kang S. (2020). Pigment production by cold-adapted bacteria and fungi: colorful tale of cryosphere with wide range applications. *Extremophiles*. 24(4): 447–473. (**IF:2.35**).
22. Arshad M, Chaudhary AR, Waseem Mumtaz M, Raza SA, **Maqsood Ahmad**, Mukhtar H. (2020). Polyphenol fingerprinting and hypoglycemic attributes of optimized *Cycas circinalis* leaf extracts. *Journal of the Science of Food and Agriculture*. 101(4): 1530-1537. (**IF: 3.63**).
23. IqbL z, **Maqsood Ahmad**, at al. (2020). Phytoremediation potential of native plant species for gaseous pollution from brick kiln. *Journal of biodiversity and Environmental science*. 16(2):1-16. (**ISI Indexed**).
24. Strakova A, Nicholls TJ, Baez-Ortega A, Leathlobhair MN, Sampson AT, Hughes K, Bolton IA, Gori K, Wang J, Airikkala-Otter I, **Haleema Sadia**. et al.,. (2020). Recurrent horizontal transfer identifies mitochondrial positive selection in a transmissible cancer. *Nature communications*. 11 (1):1-11. (**IF: 12.12**).
25. Javed Z, Khan K, Rasheed A, **Haleema Sadia**, Raza S, Salehi B, Cho WC, Sharifi-Rad J, Koch W, Kukula-Koch W. (2020). MicroRNAs and Natural Compounds Mediated

Regulation of TGF Signaling in Prostate Cancer. Frontiers in Pharmacology. 11:613464. (IF: 4.22).

26. Iqbal MJ, Quispe C, Javed Z, **Haleema Sadia**, Qadri QR, Raza S, Salehi B, Cruz-Martins N, Mohamed ZA, Jaafaru MS. (2020). Nanotechnology-based strategies for berberine delivery system in cancer treatment: pulling strings to keep berberine in power. *Frontiers in Molecular Biosciences*. 7: 624494. (IF:4.18).
27. Javed Z, Khan K, **Haleema Sadia**, Raza S, Sharifi-Rad J, Cho WC. (2020). MicroRNA regulation of TRAIL in Renal Carcinoma: Tiny Juggernauts at Work. *Current Molecular Pharmacology*. 14(4):520-526. (IF:3.11).
28. Zafar M, Irum S, Khan L, **Haleema Sadia**, Roshan S, Rahman TU, Yousaf M, Ammar M. (2020). Prevalence of Diabetes Mellitus in Hepatitis C Patients in Wazirabad Tehsil of Gujranwala District of Pakistan: hepatitis C in Diabetic patients. *Baghdad Science Journal*. 17 (4):1154-1154. (ISI Indexed).
29. Abbas A, Arsalan M, Abbas B, Qamar Z, Aziz S, **Haleema Sadia**, Ali W. (2020). The Declining Factors of Fish fauna of Barganat dam FR Bannu, Khyber Pakhtunkhwa, Pakistan. *Bull Env Pharmacol Life Sci*. 9:35-39. (ISI Indexed).
30. Khan MU, **Haleema Sadia**, Irshad A, Baig AA, Ashiq S, Zahid B, Sheikh R, Roshan S, Ali A, Shamas S. (2020). Detection, quantification and genotype distribution of HCV patients in Lahore, Pakistan by real-time PCR. *African Health Sciences*. 20(3):1143-1152. (IF:0.98).
31. Khan K, Quispe C, Javed Z, Iqbal MJ, **Haleema Sadia**, Raza S, ... & Sharifi-Rad J. (2020). Resveratrol, curcumin, paclitaxel and miRNAs mediated regulation of PI3K/Akt/mTOR

- pathway: go four better to treat bladder cancer. *Cancer cell international*. 20(1):1-19. (**IF:4.17**).
32. **Haleema Sadia**, Bhinder M A, Irshad A, Zahid B, Ahmed R, Ashiq S, ... & Akbar A. (2020). Determination of expression profile of p53 gene in different grades of breast cancer tissues by real time PCR. *African Health Sciences*. 20(3):1273-1282. (**IF:0.6**).
33. Javed, Zeeshan, Khushbukhat Khan, Muhammad Zaheer Iqbal, Touqeer Ahmad, Qamar Raza, **Haleema Sadia**, Shahid Raza, Bahare Salehi, Javad Sharifi-Rad, and William C. (2020). Long non-coding RNA regulation of TRAIL in breast cancer: A tangle of non-coding threads. *Oncology Letters*. 20(4):1-1. (**IF: 2.96**).
34. Abbas A, Abbas B, Aziz S, Ullah F, Panhwar WA, Ali A, Khalid M, **Haleema Sadia**, Raza S, Akhter K. (2020). Prevalence of ABO and Rh Blood Group In District Karak (Female). *Bull Env Pharmacol Life Sci*. 9:31-34. (**ISI Indexed**).
35. Javed Z, Khan K, **Haleema Sadia**, Raza S, Salehi B, Sharifi-Rad J, Cho WC. (2020). LncRNA & Wnt signaling in colorectal cancer. *Cancer cell international*. 20(1):1-10. (**IF: 4.17**).
36. **Haleema Sadia** et al. (2020). Canine Populations in Vicinity are Propagating Canine Transmissible Venereal Tumour in Pakistan -A Pilot Study. *Pakistan Journal of Zoolog*. 52:1-5. (**ISI Indexed**).
37. Aziz S, Sqeqi MB, Khna GI, **Haleema Sadia** et al. (2020). Composition Functional and Medicinal Importance of Propolis A Review. *Bioscience research*. 17(2):740-752. (**ISI Indexed**).

38. Raziq A, Lateef M, Ullah A, Ullah H, **Muhammad Waseem Khan**. (2020). Single cell protein (SCP) production and potential substrates: A comprehensive review. Pure and Applied Biology. 9(3):1743-1754. (**HEC Y Category**).
39. **Muhammad Waseem Khan**, Juutilainen J, Roivainen P. (2020). Registry of Buildings With Transformer Stations as a Basis for Epidemiological Studies on Health Effects of Extremely Low-Frequency Magnetic Fields. Bioelectromagnetics. 41(1):34-40. (**IF:2.01**).
40. **Muhammad Waseem Khan**. Ullah H, Raziq A, Khan AA, Khan MW. (2020). Molecular genetic analysis of leucine tRNA in relevance to type 2 diabetes mellitus. Clinical Diabetology. 9(3):167-173. (**IF:0.32**).
41. Ullah H, Ullah A, **Muhammad Waseem Khan**. (2020). Assessment of factors affecting and causing Hepatitis B in Balochistan-Pakistan. Pure and Applied Biology. 1:471-477. (**HEC Y Category**).
42. Ullah H, Ullah A, Raziq A, Lateef M, Khan NM, **Muhammad Waseem Khan**. (2020). Role of phytochemicals in regulation of cancer cells: A comprehensive literature review. Annals of Cancer Research and Therapy. 28(2):143-151. (**ISI Indexed**).
43. Alhothily IA, Dom NC, Salleh SA, **Anila Ali**. (2020). A Comparison of Demographic Parameters of Aedes albopictus (Skuse)(Diptera: Culicidae) in Dengue Risk Area at Shah Alam, Selangor. Malaysian Journal of Medicine and Health Sciences. 16(2):91-98. (**ISI Indexed**).
44. **Ashiq Khan**, Ding Z, Ishaq M, Khan I, Ahmed AA, Khan AQ, Guo X. (2020). Applications of beneficial plant growth promoting rhizobacteria and mycorrhizae in rhizosphere and plant

- growth: A review. International Journal of Agricultural and Biological Engineering. 13(5):199-208. **(IF:2.03).**
45. Uddin SA, Cesarato N, Humbatova A, Schmidt A, Rehman U, Naeem M, **Abdul Wali**, Wolf S, Pansezai MA, Thiele H. (2020). Apparent Missense Variant in COL7A1 Causes a Severe Form of Recessive Dystrophic Epidermolysis Bullosa via Effects on Splicing. Acta Dermato-venereologica. 100(16):275. **(IF:4.43).**
46. Akhtar T, Ali G, Shafi N, Akhtar W, Khan AH, Latif Z, **Abdul Wali** Ain-ul-Batool S, Khan AR, Mumtaz S. (2020). Sequencing and Characterization of Mitochondrial Protein-Coding Genes for Schizothorax niger (Cypriniformes: Cyprinidae) with Phylogenetic Consideration. BioMed research international. 2020(3):1-13. **(IF:3.4).**
47. Anila Ali , Ali Asghar, Hassan, & **Gohram Malghani**. (2020). Traffic-Noise Assessment at Rush Hours in Quetta City. Journal of Applied and Emerging Sciences. 10(1):50. **(HEC Y Category).**
48. Abdullah, Rashid, Shahjahan Shabbir Ahmed Rana, Iftekhar Ahmed Baloch, **Nazeer Ahmed**, Imran Ali Sani, Saadullah Khan, Dawood Shahid, and Saadullah Leghari. (2020). Molecular Characterization Of Amygdalusspinosissima Collected From The Juniper Ecosystem Of Balochistan. FUUAST Journal of Biology. 10(2):109-115. **(HEC Y Category).**
49. Din, Mohammad, Khan Muhammad Babar, Dawood Shah, Ghulam Sarwar, Saleem Khan, Humaira Sadaf, **Shahjahan Shabbir Ahmed**, Faiza Liaqat Ali, Muhammad Yasir, and Nazeer Ahmed. (2020). Dissemination of NDM-1 in pseudomonas aeruginosa and

klebsiellapneumoniae isolated from pus samples in tertiary care hospitals of Quetta, Pakistan. Journal of the Pakistan Medical Association. 71(1):228-232. (IF:0.79).

50. Kakar, Bilal Ahmed Khan, Saeed Ur Rehman, **Shahjahan Shabir Ahmed Rana**, Saadullah Khan Leghari, Aziz Ahmed, Muhammad Yousuf Tareen, and Shams Ullah. (2020). Effect of salt stress on the vegetative and reproductive growth of two genotypes of tomato (*Solanum lycopersicum L.*) plants in climatic condition of district Quetta, Balochistan. Pure and Applied Biology. 9(1):576-586. (HEC Y Category).
51. **Janeen Panezai**, Ali A, Ghaffar A, Benchimol D, Altamash M, Klinge B, Engström P-E, Larsson A. (2020). Upregulation of circulating inflammatory biomarkers under the influence of periodontal disease in rheumatoid arthritis patients. Cytokine. 131:155117. (IF: 3.07).
52. Mohammad, Abida Dost. **Malik Muhammad Akhtar**. (2020). Appraisal of Fluoride Contamination in Ground water Using Statistical Approach in Rural Areas of Quetta, Balochistan. Pakistan Journal of Analytical and Environmental Chemistry. 21(2):314-321. (IF:0.14).
53. Ishtiaq, Muhammad, Rashid Ahmad, Nadia Qazi, Faqir Ullah, Adeela Mustafa, Haseeba Mukhtar, Syed Shahmeer Raza , **Jawad Ali**, et al. (2020). Assessment of Risk Factors of Covid-19 in Peshawar Pakistan: A Cross Sectional Study. Annals of the Romanian Society for Cell Biology: 1274Environmental Chemistry 21(2):314-321. (HEC Y Category).
54. Mustafa, Adeela, Nadia Qazi, Rubina Shah, Waqas Mohyuddin, Rashid Ahmad, Owais Kareem, Muhammad Ishtiaq , **Jawad Ali**, et al.(2020). Prevalence, Pattern & Risk Factors of Tobacco Smoking among Male Adult Population of Hayatabad Peshawar Khyber Pakhtunkhwa Pakistan. Annals of the Romanian Society for Cell Biology. 25(7):1321-1332. (HEC Y Category).

55. Nadeem, Faiza, Salman Pervaiz Rana, Faqir Ullah, Mohsana Urooj Rana, M. Asghar Khattak, Rizwan Zafar Ansari, Muhammad Ishtiaq, Muhammad Nasir Khabir, Said Akbar Khan, and **Jawad Ali.** (2020). Association between Maternal Vitamin D Levels during 3rd Trimester Prolonged Labor and Tobacco Smoking. Annals of the Romanian Society for Cell Biology. 25(7):1342-1351. (**HEC Y Category**).

FACULTY OF SOCIAL SCIENCES HUMANITIES

56. **Liaqat Ali Channa.** (2020). Agentive apprenticeship of observation and English teacher identity: A Pakistani case of learning to teach English. Canadian Journal of Applied Linguistics/Revue canadienne de linguistique appliquée. 23(1):117-36 (**ISI Indexed**).

57. **Liaqat Ali Channa**, Manan SA, David MK. (2020). Global aspirations versus local resources: planning a sustainable English teaching policy in Pakistan. Asian Englishes. 25:1-10. (**ISI Indexed**).

58. Khubaib M, Agha SB, **Sabeen Akber.** (2020). English-Delayed Marriage in Pakistan and Its Impacts On Society: A Critical Study in The Light of Seerah of The Prophet (PBUH). The Scholar-Islamic Academic Research Journal. 5-6(1):163-88. (**HEC Y Category**).

59. Bibi K, **Sabeen Akbar.** (2020). خل خدو کے مملکت فلاحی اسلامی اور مدینہ ریاست: Characteristics of the State of Madinah and the Islamic Welfare State. Al-Qamar. 3(2):129-142. (**HEC Y Category**).

60. Shuja KH, **Shahidullah**, Aqeel M, Khan EA, Abbas J. (2020). Letter to Highlight the Effects of Isolation on Elderly During COVID-19 Outbreak. International Journal of Geriatric Psychiatry. 35(12):1477-1478. (**IF:3.48**).

61. Khubaib M, Agha SB, **Sabeen Akber**. (2020). English-Delayed Marriage inPakistan and ItsImpacts on Society: A Critical Study In The Light Of Seerah Of The Prophet (PBUH). The Scholar-Islamic Academic Research Journal. 5-6(1):163-88. (**HEC Y Category**).
62. Zaidi S, **Mehwish Sahibzada**. (2020) Deconstruction of gender in Post-cyberpunk literature through a Post structural feminist approach. Gender, Technology and Development. 24(2):236-49. (**IF:1.97**).
63. Muhamamid Hassan & **Aurangzaib Alamgir**. (2020). Rising China: Implications for South Asia. Balochistan Review. 46(2): 159-170. (**HEC Y Category**).
64. Pervaiz Ahmed & **Aurangzaib Alamgir** Jameel Ahmed. (2020). British Attack on Balochistan and its Causes. Bilingual/Bi-annual Pakistan Studies English / Urdu Research Journal. 11: 403-416. (**HEC Y Category**).
65. Ahmed, Aziz, **Abdul Wadood**, and Noor Mohammad. (2020). Tracer Study of Socio-economic and demographic Impacts of Technical and Vocational Education and Training (TVET) for Women in Baluchistan. Pakistan Soc. Sci. Rev. 4(3):824-838. (**HEC Y Category**).
66. Ayaz, Ameer, and **Abdul Wadood**. An Analysis of European Union Policy towards Syrian Refugees. Journal of Political Studies. 27(2):1-19. (**HEC Y Category**).
67. Hamid, Mairaj, and Memoona Mehmood, **Abdul Wadood**. (2020). Afghanistan after NATO Withdrawal: Insurgency and Peace Dialogue. Orient Research Journal of Social Sciences. 27:11-20. (**HEC Y Category**).

68. Maooz, Abdul Wali, Mati Ullah Tareen, and **Abdul Wadood**. (2020). Chaos, Disorder and Uncertainty: US Misplaced Priorities Behind the Rise of Militancy in Iraq. *Asian Journal of International Peace & Security*. 4(1):70-81. (**HEC Y Category**).
69. ur Rehman, Najeeb, **Abdul Wadood**, and Mohammad Dilshad Mohabbat. (2020). Superior Judiciary and the Changing Concept of Human Rights in Pakistan: A Historical analysis. *Asian Journal of International Peace & Security*. 4(1):146-160. (**HEC Y Category**).
70. Ahmed, Aziz, Noor Mohammad, and **Abdul Wadood**. (2020). Balochistan: Overview of its Geo-economic and Socio-economic Perspectives. *Review of Applied Management and Social Sciences*. 3(2):235-246. (**HEC Y Category**).

FACULTY OF BASIC SCIENCES

71. Channa N, **Muhammad Khalid**, Chandio AD, Mustafa G, Akhtar MS, Khan JK, Ahmad J, Kalhoro KA. (2020). Nickel-substituted manganese spinel ferrite nanoparticles for high-frequency applications. *Journal of Materials Science Materials in Electronics*. 31(2):1661-1671. (**IF: 2.19**).
72. **Gulfam Nasar**, Ishfaq M, Ahmad F, Nazir S, ur Raheem F. (2020). Magnesium ferrite/polyvinyl alcohol (PVA) nanocomposites: Fabrication and characterization. *Journal of Materials and Physical Sciences*. 1(2):87-97. (**ISI Indexed**).
73. Junaid, Muhammad, Muhammad Azhar Khan, Zubair Mahmood Hashmi, **Gulfam Nasar**, Nessrin A. Kattan, and A. Laref. (2020). Structural, spectral, magnetic and dielectric properties of Bi Substituted Li-Co spinel ferrites. *Journal of Molecular Structure*. 1221(6):128859. (**IF: 0.53**).

74. Shaliha Aziz, Muhammad Bilal Sadiq, Maria Khan Panni, Ghulam Ishaq Khan¹, Haleema Sadia, Imran Ali, **Shazia Iqbal**, Muhammad Anwar and Ali Akbar. (2020). Composition, functional and medicinal importance of propolis: A review. *Bioscience Research.* 17: 740-745. (**IF: 0.06**).
75. Rasheed, Habiba, **Shazia Iqbal**, Hamid Ullah, Ali Akbar, Abida Farooqi, and Shazia Syed. (2020). Analysis of heavy metals as toxic elements in cosmetics available at local markets of Quetta, Balochistan, Pakistan. *International Journal of Environmental Analytical Chemistry.* 2020:1-14. (**IF: 0.44**).
76. Ali S, Alamzeb M, **Mamoon Ur Rashid**, Setzer WN. (2020). Effect of temperature on ¹H NMR spectra, antitypanosomal activity, conformational analysis, and molecular docking of curine derivatives from Berberis brevissima. *Journal of Natural Products.* 83(5):1383-93. (**IF: 1.32**).
77. Khan R, Naz I, Hussain S, Khan RA, Ullah S, **Mamoon Ur Rashid**, Siddique I. (2020). Phytochemical management of root knot nematode (*Meloidogyne incognita*) kofoid and white chitwood by *Artemisia* spp. in tomato (*Lycopersicon esculentum* L.). *Brazilian Journal of Biology.* 80:829-38. (**HEC X Category**).
78. Ullah, Amir, Aman Ullah, Mateen Ullah, Aurang Zeb, Zeeshan Khan, M. Ikram, **Hamd Ullah**, and Ill Won Kim. (2020). Dielectric, ferroelectric, and strain properties of lead-free (1- y) BNT-yST ceramics. *Journal of Materials Science: Materials in Electronics* 31(7):5667-5673. (**IF: 0.51**).

79. Rehan I, Rehan K, Khan MZ, Sultana S, Muhammad R **Hamd Ullah**. (2020). Detection of nutritional and toxic elements in Pakistani pepper powders using laser induced breakdown spectroscopy. *Analytical Methods*. 12(20):2590-8. (**IF: 0.86**).
80. Shahzadi K, Chandio AD, Mustafa G, Khalid M, Khan JK, Akhtar MS, **Noor ul Huda Khan Asghar, Zaheer Abbas Gilani**. (2020). Impact of aluminum substitution on the structural and dielectric properties of Ni–Cu spinel ferrite nanoparticles synthesized via sol–gel route. *Optical and Quantum Electronics*. 52(4):1-17. (**IF: 1.54**).
81. Iqbal S, Bahadur A, Anwer S, Ali S, Irfan RM, Li H, Shoaib M, **Muhammad Raheel**, Anjum TA, Zulqarnain M. (2020). Effect of temperature and reaction time on the morphology of L-cysteine surface capped chalcocite (Cu₂S) snowflakes dendrites nanoleaves and photodegradation Study of Methyl orange dye under visible light. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 601:124984. (**IF: 3.1**).
82. Iqbal S, Bahadur A, Anwer S, Ali S, Saeed A, Irfan RM, Li H, Javed M, **Muhammad Raheel**, Shoaib M. (2020). Shape and phase-controlled synthesis of specially designed 2D morphologies of L-cysteine surface capped covellite (CuS) and chalcocite (Cu₂S) with excellent photocatalytic properties in the visible spectrum. *Applied Surface Science*. 526:146691. (**IF: 5.1**).
83. Iqbal S, Iqbal MM, Javed M, Bahadur A, Yasien S, Hurr A, Ahmad N, **Muhammad Raheel**, Liu G. (2020). Modified QuEChERS extraction method followed by simultaneous quantitation of nine multi-class pesticides in human blood and urine by using GC-MS. *Journal of Chromatography B*. 1152:122227. (**IF:2.81**).

84. **Nisar Ahmed** , Niamatullah, Hussain J, Ahmad I, Asif M. (2020). Estimation of health risk to humans from heavy metals in soil of coal mines in Harnai, Balochistan. International Journal of Environmental Analytical Chemistry. 2020:1-12. (**IF: 1.21**).
85. Ali H, Khan MI, **Muhammad Zubair** Ahmad P, Khandaker MU, Ali T, **Farooq Khan**. (2020). Control over Spectral Hole Burning Via Spontaneously Generated Coherence and Kerr non-linearity. Optik. 30:165558. (**IF: 2.44**).
86. Iqbal S, Bahadur A, Anwer S, Shoaib M, Liu G, Li H, **Muhammad Raheel**, Javed M, Khalid B. (2020). Designing novel morphologies of L-cysteine surface capped 2D covellite (CuS) nanoplates to study the effect of CuS morphologies on dye degradation rate under visible light. CrystEngComm. 22 (24):4162-4173 (**IF: 3.54**).
87. Jiang D, Li X, Qin S, Li J, Shi S, Tan Y, Li P **Hafiz Noor ul Huda Khan Asghar**. (2020). Separation of SiC from Si by addition of Al with electromagnetic induction melting. Journal of Alloys and Compounds. 835:155310. (**IF: 4.10**).
88. **Gulfam Nasar**, Muhammad Abbas Khan, Nadeem Q, Amin H, **Nisar Ahmed**, ur Rehman J, Khalil U, Khan MS. (2020). Silver-polymer nanocomposites: Structural, thermal and electromechanical elucidation for charge storage applications. Measurement. 156:107615. (**IF: 2.7**).
89. Rehman JU, **Nisar Ahmed**, Ullah N, Alam I, Ullah H. (2020). Health Risks in Different Age Group of Nitrate in Spring Water Used for Drinking in Harnai, Balochistan, Pakistan. Ecology of Food and Nutrition. 59(5):462-471. (**IF: 1.1**).
90. Saeed M, Uddin W, Saleemi, Sunila **Ali**, Hafeez M, Kamil M, Mir IA, Ullah R, Rehman SU, Ling Z. (2020). Optoelectronic properties of MoS₂-ReS₂ and ReS₂-MoS₂ heterostructures. Physica B: Condensed Matter. 577:411809. (**IF: 1.87**).

91. Yousaf M, Zahir S, Riaz M, **Sardar Muhammad Hussain**, Shah K. (2020). Statistical analysis of forecasting COVID-19 for upcoming month in Pakistan. Chaos, Solitons & Fractals. 138: 109926. **(IF: 3.06)**.
92. **Aziza Sarwar**, Saharin SM, Bahron H, Alias Y. (2020). Synthesis, structures, luminescence and thermal stability of Visible/NIR emitting binuclear azomethine-Zn (II) complexes. Journal of Luminescence. 223:117227. **(IF: 2.96)**.
93. Mustafa G, **Muhammad Khalid**, Chandio AD, Shahzadi K, Uddin Z, Khan JK, Channa NU, **Noor ul Huda Khan Asghar**, Zaheer Abbas Gilani. (2020). Dielectric, impedance, and modulus spectroscopic studies of lanthanum-doped nickel spinel ferrites NiLa_xFe_{2-x}O₄ nanoparticles. Journal of Sol-Gel Science and Technology. 31:1-0. **(IF:2.32)**.
94. **Sardar Muhammad Hussain**, Rehman AU, Baleanu D, Nisar KS, Ghaffar A, Abdul Karim SA. (2020). Generalized 5-point approximating subdivision scheme of varying arity. Mathematics. 8(4):474. **(IF: 2.25)**.
95. Abbas SZ, **Hasrat Hussain Shah** Chammam W, Sun H, Ul Haq W, Shah H. (2020). The curvature effect on the gravitational collapse of interacting and non-interacting combination of dark matter and dark energy. International Journal of Modern Physics A. 35(17):2050078. **(IF: 1.38)**.
96. ur Rehman J, Alam I, **Nisar Ahmed** , Hameed A, Nazir A, Ullah H, Hussain A. (2020). An overview on radiometric assessment and excess lifetime cancer risk of soil in Pakistan by using High Purity Germanium (HPGe) detector. Reviews on Environmental Health. 35(4):531-543. **(IF:3.45)**.
97. Kiyani A, Shah M, Ahmed A, **Hasrat Hussain Shah** Hameed S, Adil MA, Naqvi NA. (2020). Seismo ionospheric anomalies possibly associated with the 2018 Mw 8.2 Fiji earthquake detected with GNSS TEC. Journal of Geodynamics. 29:101782. **(IF: 2.34)**.

98. Ellahi R, Zeeshan A, **Farooq Husain**, Safaei MR. (2020). Simulation of cavitation of spherically shaped hydrogen bubbles through a tube nozzle with stenosis. International Journal of Numerical Methods for Heat & Fluid Flow. 30(5)2535-2549. (**ISI Indexed**).
99. Ellahi R, **Farooq Husain**, Abbas SA, Sarafraz MM, Goodarzi M, Shadloo MS. (2020). Study of two-phase newtonian nanofluid flow hybrid with hafnium particles under the effects of slip. Inventions. 5(1):6-13. (**ISI Indexed**).
100. Ahmad P, Khandaker MU, Jamil S, Rehman F, Muhammad N, **Zahoor Ullah**, Muhammad Abbas Khan, **Ghulamullah Khan**, Alotaibi MA, Alharthi AI, Din IU. (2020). Dual role of magnesium as a catalyst and precursor with enriched boron in the synthesis of magnesium diboride nanoparticles. Ceramics International. 1:46(17):26809-12. (**IF: 3.45**).
101. Ahmad P, Khandaker MU, Muhammad N, Rehman F, **Zahoor Ullah**, Khan G, Khan MI, Haq S, Ali H, Khan A, Saeed Y. (2020). Synthesis of enriched boron nitride nanocrystals: A potential element for biomedical applications. Applied Radiation and Isotopes. 166:109404. (**IF: 1.34**).
102. Win AN, Chu YM, **Hasrat Hussain Shah** Abbas SZ, Shah M. (2020). Electromagnetic counterpart to gravitational waves from coalescence of binary black hole with magnetic monopole charge. International Journal of Modern Physics A. 35(31):2050205. (**IF: 1.54**).
103. **Naheed Iftikhar**, Rehman A, Sadaf H. (2020). Inspection of physiological flow in the presence of nanoparticles with MHD and slip effects. Journal of Thermal Analysis and Calorimetry. 1-11. (**IF: 2.47**).
104. Hussain S, Muhammad S, Chen X, Akkurt M, Alshehri A, Din SU, **Hamid Ullah**, Al-Sehemi AG. (2020). Synthesis, Crystal Structure, and Nonlinear Optical Properties of Zn (II) Complex with 4, 4', 4"-Tri-tert-Butyl-2, 2': 6', 2"-Terpyridine: A Dual Exploration. Russian Journal of Inorganic Chemistry 65 (3):368-377. (**IF:0.81**).

105. **Hamid Ullah.** (2020). Three new cholinesterase inhibitory cassioates from Cassia fistula.

Pharmaceutical Chemistry Journal. 53(11):1-19. (**IF:0.51**).

106. Abbas SZ, Sun H, **Hasrat Hussain Shah**, Khan WA, Ahmad S, Waqas M. (2020).

Mathematical modelling and analysis of gravitational collapse in curved geometry.

Computer methods and programs in biomedicine. 184:105283. (**IF: 2.5**).

107. Aziz T, Fan H, Haq F, Khan FU, Numan A, Iqbal M, **Muhammad Raheel**, Kiran M, Wazir N. (2020). Adhesive properties of poly (methyl silsesquioxanes)/bio-based epoxy nanocomposites. Iranian Polymer Journal. 29 (10):911-918. (**IF: 1.7**).

108. Mustaqeem M, Mahmood K, Saleh TA, ur Rehman A, Ahmad M, **Zaheer Abbas Gilani** , Asif M. (2020). Synthesis of CuFe_{2-x}Er_xO₄ nanoparticles and their magnetic, structural and dielectric properties. Physica B: Condensed Matter. 588:412176(**IF: 2.4**).

109. Ramesh K, Kumar D, Nazeer M, Waqfi D, **Farooq Husain**. (2020). Mathematical modeling of MHD Jeffrey nanofluid in a microchannel incorporated with lubrication effects: a Graetz problem. Physica Scripta. 96(2):025225. (**IF:2.34**).

110. Nazeer M, **Farooq Husain**, Shahzad Q, Ali Z, Kadry S, Chu Y-M. (2020). Computational study of solid-liquid supercritical flow of 4th-grade fluid through magnetized surface. Physica Scripta 96(1):015201. (**IF: 2.34**).

111. Junaid M, Nadeem M, Abubshait SA, Abubshait HA, Muhammad Abbas Khan, **Zaheer Abbas Gilani** , Warsi MF. (2020). Impact of Bi–Cr substitution on the structural, spectral, dielectric and magnetic properties of Y-type hexaferrites. Ceramics International. 46(16):25478-25484. (**IF: 3.8**).

112. **Javed Rehman**, Fan X, Laref A, Zheng W. (2020). Adsorption and diffusion of potassium on 2D SnC sheets for potential high-performance anodic applications of potassium-ion batteries. *ChemElectroChem.* 7(18):3832-3838. (**IF: 4.5**).

FACULTY OF ENGINEERING AND ARCHITECTURE

113. Mushtaq M, Jindani R, Farooq A, Li X, Saba H, Wasim M, Wei Q, **Muhammad Qasim Siddiqui**. (2020). Characterization of electrospun polylactide nanofibers modified via atom transfer radical polymerization. *Journal of Industrial Textiles.* 1528083720930381. (**IF: 2.01**).

114. Mushtaq M, Wasim M, Naeem MA, Khan MR, Yue S, Saba H, Hussain T, **Muhammad Qasim Siddiqui** Farooq A, Wei Q. (2020). Composite of PLA Nanofiber and Hexadecyl Trimethyl-Ammonium Chloride-Modified Montmorillonite Clay: Fabrication and Morphology. *Coatings* 10 (5):484. (**IF: 2.41**).

115. aeem M A, **Muhammad Qasim Siddiqui**, Mushtaq M, Farooq A, Pang, Z, & Wei Q. (2020). Insitu self-assembly of bacterial cellulose on banana fibers extracted from peels. *Journal of Natural Fibers.* 17(9):1317-1328. (**IF: 2.68**).

116. Feroze MT, **Syed Kamran Sami**, Doonyapisut D, Kim B, Chung CH. (2020). Electrochemical reduction of CO₂ into C1 and C2 hydrocarbons using dendritic Cu and Cu₂O electrodes. *Chem Electro Chem.* 7(3):730-736. (**IF: 3.97**).

117. **Abdul Qadeer Dayo**, Babar AA, Qin Q-r, Kiran S, Wang J, **Ahmer Hussain Shah**, Zegaoui A, Ghouti H, Liu W-b. (2020). Effects of accelerated weathering on the mechanical

- properties of hemp fibre/ polybenzoxazine based green composites, Composites Part A: Applied Science and Manufacturing. 128:105653. (**IF 6.44**).
118. **Imran Ullah Khan**. (2020). Intra-Net Cognitive Radio Intelligent Utility Maximization using Adaptive PSO-Gradient Algorithm. Sir Syed University Research. Journal of Engineering & Technology. 10(2):11-19. (**HEC Y Category**).
119. Farzana NO, **Ahthasham Sajid**, Ghazal M, İmranullah KH, Zaman M, İmran BA. (2020). Bayesian estimation of Rayleigh distribution in the presence of outliers using progressive censoring. Hacettepe Journal of Mathematics and Statistics. 49(6):2119-2133. (**IF: 0.60**).
120. Malik S, **Ahthasham Sajid**, Ahmad A, Almogren A, Hayat B, Awais M, Kim KH. (2020). An efficient **skewed** line segmentation technique for cursive script OCR. Scientific Programming. 4:8866041. (**IF: 0.96**).
121. Shar AH, Lakhan MN, Alali KT, Liu J, Ahmed M, **Ahmer Hussain Shah** Wang J. (2020). Facile synthesis of reduced graphene oxide encapsulated selenium nanoparticles prepared by hydrothermal method for acetone gas sensors. Chemical Physics Letters. 755:137797. (**IF: 2.02**).
122. Shar A H, Lakhan M N, Liu J, Ahmed M, Chandio M B, **Ahmer Hussain Shah**, Wang J. (2020). Facile synthesis and characterization of mesoporous titanium oxide nanoparticles for ethanol sensing properties. Sukkur IBA Journal of Emerging Technologies. 3(1):16-22. (**HEC Y Category**).
123. Lakhan, M N, Chen R, Shar A H, Chand K, Chandio MB, **Ahmer Hussain Shah**, Wang, J. (2020). Illicium verum as a green source for the synthesis of silver nanoparticles and

- investigation of antidiatom activity against Paeodactylum Tricornutum. Sukkur IBA Journal of Emerging Technologies. 3(1):23-30. (**HEC Y Category**).
124. Saleemi S, **Zameer Abro, Ahmer Hussain Shah**, Rind N, Anwar A, & Rajput AW. (2020). A Green and Cost-effective Approach to Reutilize the Effluent from Bleaching Process. Journal of Applied and Emerging Sciences. 9(2):75-85. (**HEC Y Category**).
125. Abro, Zamir Ahmed, Chengyu Hong, Yifan Zhang, Muhammad Qasim Siddiqui, Abdul Malik Rehan Abbasi, Zafarullah Abro, and **Syed Qutaba Bin Tariq**. (2020). Development of FBG pressure sensors using FDM technique for monitoring sleeping postures. Sensors and Actuators A: Physical. 331:112921. (**IF: 0.89**).
126. Salleh NA, Anwar A, Satori M, Ter Teo P, **Ahmer Hussain Shah**, Othman, Z, & Zulhumadi F. (2020). Biodegradable material in composting: Green initiatives in northern Malaysia and Indonesia. Journal of Critical Reviews. 2020:7(8). (**IF:1.09**).
127. Ali T, Irfan M, Shaf A, Saeed Alwadie A **Ahthasham Sajid**, Awais M, Aamir M. (2020). A secure communication in IoT enabled underwater and wireless sensor network for smart cities. Sensors. 20(15):4309. (**IF 3.03**).
128. **Abdul Qadeer Dayo**, Zhang L-l, Wang J, Liu W-b, Kiran S, Zegaoui A, Ghouti HA, Arse YB. (2020). Study of gamma-ray radiation effects on series of bisphthalonitrile resins: Thermomechanical, mechanical, and thermal properties, Journal of Applied Polymer Science. 137(4):48313. (**IF 2.52**).
129. Wang H, **Abdul Qadeer Dayo** , Wang J, Wang J-Y, Liu W-b. (2020). Synthesis, curing kinetics and thermal properties of two novel quinoxaline-based mono- and bismaleimides, Thermochimica Acta. 689: 178629, (**IF 2.76**).

130. **Abdul Qadeer Dayo**, Zhang Ll, Wang J, Liu Wb, Kiran S, Zegaoui A, Ghouti HA, Arse YB. (2020). Study of gamma-ray radiation effects on series of bisphthalonitrile resins: Thermomechanical, mechanical, and thermal properties. *Journal of Applied Polymer Science*. 137 (4):4831. (**IF 2.52**).
131. Zegaoui A, Derradji M, Medjahed A, Ghouti HA, Cai W-A, Liu W-b, **Abdul Qadeer Dayo**, Wang J, Liu Y-G. (2020). Exploring the hybrid effects of short glass/basalt fibers on the mechanical, thermal and gamma-radiation shielding properties of DCBA/BA-a resin composites, *Polymer-Plastics Technology and Materials*. 59(3): 3-11. (**IF 1.70**).
132. Zu L-W, Li J-D, Gao B-C, Pan Z-C, Wang J, Liu W-b, Zegaoui A, **Abdul Qadeer Dayo**. (2020). Studies on the curing behavior, thermal, and mechanical properties of epoxy resin co-amine functionalized lead phthalocyanine. *Journal of Applied Polymer Science*. 137(34):48983. (**IF 2.52**).
133. Chand K, Cao D-X, Fouad DE, **Ahmer Hussain Shah**, **Abdul Qadeer Dayo**, Zhu K, Lakhan MN, Mehdi G, Dong S. (2020). Green synthesis, characterization and photocatalytic application of silver nanoparticles synthesized by various plant extracts. *Arabian Journal of Chemistry*. 13(11):8248-8261. (**IF 4.76**).
134. **Waqas Ahmed Mahar**, Verbeeck G, Reiter S, **Attia Sarwar**. (2020). Sensitivity Analysis of Passive Design Strategies for Residential Buildings in Cold Semi-Arid Climates. *Sustainability*. 12 (3):1091. (**IF: 3.25**).
135. Shah KS, bin Mohd Hashim MH, Emad MZ, bin Ariffin KS, Junaid M, **Naseer Muhammad Khan**. (2020). Effect of particle morphology on mechanical behavior of rock mass. *Arabian Journal of Geosciences*. 13(15):1-17. (**IF 1.32**).
136. Zhang L, Zhuang W, **Nasir Khan**, Zheng L. (2020). Effect of stress relaxation and creep recovery on transportation in porous medium and fracture of the millimeter-scale polymer

- gel particles for conformance control of heterogeneous oil reservoir. Journal of Petroleum Science and Engineering. 185:106648. **(IF: 2.88).**
137. Bughio M, Schuetze T, **Waqas Ahmed Mahar.** (2020). Comparative Analysis of Indoor Environmental Quality of Architectural Campus Buildings' Lecture Halls and its Perception by Building Users, in Karachi, Pakistan. Sustainability. 12 (7):2995. **(IF: 3.25).**
138. Shathi MA, Minzhi C, **Nazakat Ali Khoso**, Deb H, Ahmed A, Sai WS. (2020). All organic graphene oxide and Poly (3, 4-ethylene dioxythiophene)-Poly (styrene sulfonate) coated knitted textile fabrics for wearable electrocardiography (ECG) monitoring. Synthetic Metals 263:116329. **(IF: 2.5).**
139. Touhid SSB, Shawon MRK, Deb H, **Nazakat Ali Khoso**, Ahmed A, Fu F, Liu XD. (2020). Nature inspired rGO-TiO₂ micro-flowers on polyester fabric using semi-continuous dyeing method: A binder-free approach towards durable antibacterial performance. Synthetic Metals. 261:116298. **(IF: 3.26).**
140. Rehman H, **Abdul Muntaqim Naji**, Ali W, Junaid M, Abdullah RA, Yoo H-k. (2020). Numerical evaluation of new Austrian tunneling method excavation sequences: A case study. International Journal of Mining Science and Technology. 30: 381-386. **(IF: 3.9).**
141. Wang Q, Miao X, Wang Y, Gan M, **Syed Mubashir Aftab**, Li X, Zhang L, Wang Z. (2020). Simulation of uranium mobilization potential in a deep aquifer under geological carbon storage conditions. Applied Geochemistry. 118: 104620. **(IF: 2.90).**
142. Imran U, Weidhaas J, **Asad Ullah, Kaleemullah Shaikh.** (2020). Risk associated with spatio-temporal variations in trace metals and a metalloid in a major freshwater reservoir of Pakistan. Human and Ecological Risk Assessment: An International Journal. 27(2):1-2. **(IF: 2.3).**

143. Imran U, **Asad Ullah, Kaleemullah Shaikh**. (2020). Pollution Loads and Ecological Risk Assessment of Metals and a Metalloid in the Surface Sediment of Keenjhar Lake, Pakistan. Polish Journal of Environmental Studies. 29 (5):3629-3641. (**IF: 1.18**).
144. **Kaleemullah Shaikh**, Imran U, Khan A, Khokhar WA, Bakhsh H. (2020). Health risk assessment of emissions from brick kilns in Tando Hyder, Sindh, Pakistan using the AERMOD dispersion model. SN Applied Sciences. 2 (7):1-11. (**ISI Indexed**).
145. Ali A, Asghar Ali, Hassan SZU, **Gohram Malghani**. (2020). Traffic-Noise Assessment at Rush Hours in Quetta City. Journal of Applied and Emerging Sciences. 10 (1):50-56. (**HEC Recognized**).
146. Lakhan MN, Chen R, Shar AH, Chand K, **Ahmer Hussain Shah Ahmed M, Ali I, Ahmed R**, Liu J, Wang J. (2020). Eco-friendly green synthesis of clove buds extracts functionalized silver nanoparticles and evaluation of antibacterial and antidiatom activity. Journal of Microbiological Methods. 173:105934. (**IF: 1.80**).
147. Niu Y, Li Z, Wang E, Shen R, Cheng Z, Gao X, Zhang X, Wang H, **Muhammad Ali**. (2020). Study on characteristics of EP responding to coal mining. Engineering Fracture Mechanics. 224:106780. (**IF: 2.90**).
148. Wang H, Wang E, Li Z, Wang X, Zhang Q, Li B, **Muhammad Ali**. (2020). Study on sealing effect of pre-drainage gas borehole in coal seam based on air- gas mixed flow coupling model. Process Safety and Environmental Protection. 136:15-27. (**IF: 4.38**).
149. **Asad Ullah**, Soomro MI, Kim WS, Saleem MW. (2020). The recovery of waste heat from the absorber vent gases of a CO₂ capture unit by using membrane distillation technology for freshwater production. International Journal of Greenhouse Gas Control. 95:102957. (**IF: 3.63**).

150. Shathi MA, Minzhi C, Nazakat **Ali Khoso**, Rahman T, Bidhan B. (2020). Graphene coated

textile based highly flexible and washable sports bra for human health monitoring. Materials & Design. 2020:1-12. (**IF: 6.28**).

151. **Syed Mubashir Aftab**, Dean WT. (2020). Groundwater flow and transport modeling of MTBE at Rocky Mount, Virginia, USA. Journal of Himalayan Earth Sciences. 53(1):49. (**ISI Indexed**).

152. **Asad Ullah**, Qaisrani ZN, Shah SA, Nuthamachot N, Techato K, Jha PK. (2020). Journal of Applied and Emerging Sciences. 10:1-5. (**HEC Y Category**).

153. **Azmat Ali, Khan**, Tahir M, Bafaqeer A. (2020). Constructing a Stable 2D Layered Ti₃C₂ MXene Cocatalyst-Assisted TiO₂/g-C₃N₄/Ti₃C₂ Heterojunction for Tailoring Photocatalytic Bireforming of Methane under Visible Light. Energy & Fuels. 34(8):9810-28. (**IF: 3.6**).

154. Umair M, Shaker K, Javaid MU, Hussain M, **Muhammad Kashif**, Nawab Y. (2020). Effect of weaving patterns on damage resistance of 3D woven jointless T and H shaped reinforcements. Mechanics of Advanced Materials and Structures. 16:1-4. (**IF:4.03**).

155. Khan MI, Umair M, Shaker K, Basit A, Nawab Y, **Muhammad Kashif**. (2020). Impact of waste fibers on the mechanical performance of concrete composites. The Journal of the Textile Institute. 11:1-9. (**IF: 1. 23**).

156. Shaker K, Khan RM, Jabbar M, Umair M, Tariq A, **Muhammad Kashif**,, Nawab Y. (2020). Extraction and characterization of novel fibers from Vernonia elaeagnifolia as a potential textile fiber. Industrial Crops and Products.152:112518. (**IF:5.64**).

157. **Muhammad Qasim Siddiqui**, Naeem MA, Ndlovu L. (2020). A Preliminary Study on the

Effect of Short Fiber Content on Drafting Force and its Variability. *Journal of Natural Fibers.*

22:1-10. (**IF: 2.62**).

158. Naeem MA, **Muhammad Qasim Siddiqui**, Khan MR, Mushtaq M, Wasim M, Farooq A,

Naveed T, Wei Q. (2020). Bacterial cellulose-natural fiber composites produced by fibers

extracted from banana peel waste. *Journal of Industrial Textiles.* 2020:1-16. (**IF: 3.72**).

159. Semahi S, Benbouras MA, **Waqas Ahmed Maha**, Zemmouri N, Attia S. (2020).

Development of Spatial Distribution Maps for Energy Demand and Thermal Comfort

Estimation in Algeria. *Sustainability.* 12(15):6066. (**IF: 3.25**).

160. Zhang L, Jing C, **Nasir Khan**, He Y, Gu X, Zheng L. (2020). Efficient Preparation of Nano-

Starch Particles and Its Mechanism of Enhanced Oil Recovery in Low-Permeability Oil

Reservoirs. 26(03):1422-35 *SPE Journal.* (**IF:3.47**).

161. **Muhammad Amin**, Chetpattananondh P, **Naseer Muhammad Khan**. (2020). Ultrasound

assisted adsorption of reactive dye-145 by biochars from marine Chlorella sp. extracted solid

waste pyrolyzed at various temperatures. *Journal of Environmental Chemical Engineering.*

8(6):104403. (**IF: 5.90**).

162. **Syed Haseeb Sultan**, Palamanit A, Techato KA, **Muhammad Amin**. (2020). Syngas

Production from Rubber wood Biomass in Downdraft Gasifier Combined with Wet

Scrubbing: Investigation of Tar and Solid Residue. *Sains Malaysiana.* 49(7):1729-43. (**IF:**

.0.5).

163. Kim, Jonguk, Jung-joo Kim, **Hafeezur Rehman**, and Hankyu Yoo. H. (2020). Ground Stability Analysis in Non-Open-Cut Tunneling Method Using Small-Diameter Steel Pipe Piles. *Applied Sciences*. 10(19):6906. (**IF: 2.67**).
164. Wang H, **Abdul Qadeer Dayo**, Wang J, Wang JY, Liu WB. (2020). Trifunctional quinoxaline-based maleimide and its polymer alloys with benzoxazine: Synthesis, characterization, and properties. *Journal of Applied Polymer Science*. 27:49694. (**IF: 2.67**).
165. Cao K, Ma L, Wu Y, **Naseer Ahmed Khan**, Yang J. (2020). Using the characteristics of infrared radiation during the process of strain energy evolution in saturated rock as a precursor for violent failure. *Infrared Physics & Technology*. 109:103406. (**IF:2.63**).
166. Shah KS, bin Mohd Hashim MH, Emad MZ, bin Ariffin KS, **Muhammad Junaid, Naseer Ahmed Khan**. (2020). Effect of particle morphology on mechanical behavior of rock mass. *Arabian Journal of Geosciences*. 13(15):1-7. (**IF:1.8**).
167. Cao K, Ma L, Wu Y, **Naseer Ahmed Khan**, Xie Y. (2020). The Determination of a Damage Model for Mudstone under Uniaxial Loading in Acidic Conditions. *Geofluids*. 2020:12. (**IF:2.17**).
168. Xu Y, Ma L, **Naseer Ahmed Khan**. (2020). Prediction and Maintenance of Water Resources Carrying Capacity in Mining Area-A Case Study in the Yu-Shen Mining Area. *Sustainability*. 12(18):7782. (**IF: 3.25**).
169. Hussain S, Mohammad N, Ur Rehman Z, **Naseer Ahmed Khan**, Shahzada K, Ali S, Tahir M, Raza S, Sherin S. (2020). Review of the Geological Strength Index (GSI) as an Empirical Classification and Rock Mass Property Estimation Tool: Origination, Modifications, Applications, and Limitations. *Advances in Civil Engineering*. 2020:18(**IF:1.92**).

170. Shah KS, **Muhammad Abbas Khan**, Khan S, Rahman A, **Naseer Ahmed Khan**, Abbas N. (2020). Analysis of Underground Mining Accidents at Cherat Coalfield, Pakistan. International Journal of Economic and Environmental Geology. 11(1):113-7. (**IF:1.92**).
171. Khan BA, **Asad Ullah**, Saleem MW, Khan AN, Faiq M, Haris M. (2020). Energy Minimization in Piperazine Promoted MDEA-Based CO₂ Capture Process. Sustainability. 12(20):8524. (**IF: 3.25**).
172. **Asad Ullah** Soomro MI, Kim W-S, Khan BA, Memon S, Soomro SH. (2020). Integration of CO₂ capture unit with membrane distillation technology: CO₂ mitigation and freshwater production. Chemical Engineering and Processing-Process Intensification. 158:108185. (**IF: 3.21**).
173. Wang T, Wang Z-c, Pan Z-c, **Abdul Qadeer Dayo**, Liu W-b, Wang J. (2020). Synthesis of novel allylamine-fluorene based benzoxazine and its copolymerization with typical benzoxazine: curing behavior and thermal properties. New Journal of Chemistry. 44 (43):18917-18928. (**IF: 3.06**).
174. **Naseer Muhammad Khan**, **Mirza Amir Mahmood**, Shahid MR, Raja **Asif Wagan**, Saleem I. (2020). State of Quality Engineering Practices: The Pakistan Perspective. Engineering, Technology & Applied Science Research. 10(5):6309-15. (**ISI Indexed**).
175. **Ahthasham Sajid**, **Muhammad Awais**, **Mirza Amir Mehmood**, Shazia Batool, Amir Shahzad, and Afia Zafa. (2020). Patient's Feedback Platform for Quality of Services via Free Text Analysis in Healthcare Industry. EMITTER International Journal of Engineering Technology. 8(2):316-25. (**ISI Indexed**).

176. Shah KS, Mithal Jiskani I, Shahani NM, **Hafeez ur Rehman**, Khan NM, Hussain S. (2020). Analysis and forecast of mining accidents in Pakistan. *Journal of Mining and Environment*. 11(4):967-76. **(ISI Indexed)**.
177. Chand K, Cao D, Fouad DE, Shah AH, Lakhan MN, **Abdul Qadeer Dayo**, Sagar HJ, Zhu K, Mohamed AM. (2020). Photocatalytic and antimicrobial activity of biosynthesized silver and titanium dioxide nanoparticles: A comparative study. *Journal of Molecular Liquids*. 16:113821. **(IF: 6.16)**.
178. Jiskani, Izhar Mithal, Saleem Raza Chalgri, Safiullah Memon, Niaz Muhammad Shahani, **Abdullah Rasheed Qureshi**, and Zuhaib Aslam Jarwar. (2020). Prospective study on safety climate of surface mining in Pakistan. *Journal of Sustainable Mining*. 19:1-7. **(IF: 1.5)**.
179. Hussain, Gulalai, Uzma Jabeen, Irfan Hafeez, **Najam Khan Malghani**, Ayesha Mushtaq, et al., (2020). Opto-Electrical Investigation of Zn Metal-Doped Cds and Their Application in Soft Lithographic Technique (Kajian Opto-Elektrik ke atas Zn Logam-terdop Cd dan Aplikasinya dalam Teknik Litografi Lembut). *Sains Malaysiana*. 49(8):1875-90. **(IF:0.54)**.
180. Cao K, Ma L, Zhang D, Lai X, Zhang Z, **Naseer Ahmed Khan**. (2020). An experimental study of infrared radiation characteristics of sandstone in dilatancy process. *International Journal of Rock Mechanics and Mining Sciences*. 136:104503. **(IF: 7.13)**.
181. **Ali Asghar**, et al. (2020). Functionalization of cotton fabric with vitamin-E on digital printed textiles. *Balochistan Journal of Engineering and Applied Sciences*. 3(2)1-7. **(HEC Y Category)**.
182. **Ali Asghar**, et al. (2020). Textile Based Woven Ballistic Composites: A Review *Balochistan Journal of Engineering and Applied Sciences*. 3:1-6. **(HEC Y Category)**.

183. **Saeed Jan Mandokhail**, Muhammad N, **Muhammad Habib**, Irfan M, Uddin S, **Muhammad Akram**. (2020). D Effective Stress Site Response Analysis; Using Stress Based Pore Pressure Model and Plasticity Model. Journal of Applied and Emerging Sciences. 10(1):6-12 (**HEC Y Category**).
184. **Hamayoun Yousaf Shahwani**. (2020). Dual band switchable voltage controlled oscillator in 65-nm CMOS technology. Journal of Applied and Emerging Sciences. 10(1):31-34 (**HEC Y Category**).
185. **Muhammad Habib**, **Naik Muhammad**, **Saeed Jan Mandokhail**, **Zafar Baloch**, **Muhammad Irfan**, **Azmatullah Khan**, **Muhammad Akram**, **Gohram Khan**, **Anila Ali**, **Ali Asgher**. (2020). Dynamic Response Study of a Single Tower Cable Stayed Bridge using Finite Element Method. Journal of Applied and Emerging Sciences. 10(2):85-92. (**HEC Y Category**).
186. Khan, Taimoor, **Muhammad Amin**, **Syed Kamran Sami**, **Muhammad Najam Khan**, **Syed Zameer Ul Hassan**, **Syed Haseeb Sultan**, **Ali Asghar**, **Anila Ali**, **Muhammad Qasim Khan**, and **Muhammad Junaid**. (2020). Valorization of sugarcane bagasse waste for fly ash production and application as an adsorbent. Journal of Applied and Emerging Sciences 10 (2):93-97. (**HEC Y Category**).
187. R Khan, **Muhammad Najam Khan**, Muhammad Amin, S Siddiqui, SH Sultan, Baktair Khan Kasi, G Malghani, SK Sami. (2020). Highly Efficient Zinc Oxide Nanostructure Based Gas Sensor For Domestic Application. Journal of Pakistan Institute of Chemical Engineers. 48(1):49-56. (**HEC Y Category**).

188. **Fahim Ahmed Ibupoto**, Abdullah Rasheed Qureshi, Syed Kamran Sami, Muhammad Amin, Asadullah. (2020). Direct Equivalent Stress Investigation Model of STS316L Steel by small punch Creep testing. Balochistan journal of Engineering and Applied sciences. 3(2):18-23. **(HEC Y Category)**.
189. Muhammad Amin, Syed Kamran Sami, Muhammad Najam Khan, Fahim Ahmed Ibupoto, Syed Haseeb Sultan, Asadullah, **Bakhtiar Khan Kasi**. (2020). Energy consumption and optimization of oven drying of Chlorella Vulgris using Response Surface Methodology. 3(2):1-9. **(HEC Y Category)**.
190. Manzoor, Adnan Fazal, **Asad Ullah Baloch, Kamran Sami**, Shahid Munir Bhatti, and Muhammad Arif Javed. (2020). Safety Measures in Welding and Spray Painting in Pakistan: A Systematic Review.Journal of the Pakistan Institute of Chemical Engineers. 48(1): 35-42. **(HEC Y Category)**.
191. **Zahid Naeem Qaisrani, Asadullah**, Shah SA, Nuthamachot N, Techato K. (2020). Fabrication of Lab Scale Greywater Filtration Plant for Water anagement in Quetta, Pakistan. Journal of Applied and Emerging Sciences. 10:28-45. **(HEC Y Category)**.
192. Ramli Mat, **Faisal Mushtaq**, Fawad israr, Muhammad Shehryar, **Asadullah, Syed Haseeb sultan, Syed Zameer ul hassan, Zameer Ahmed abro, Anila Ali**. (2020). Assessment of thermal behaviour of coal and bio-char solids. Balochistan journal of Engineering and Applied sciences. 4:1-19. **(HEC Y Category)**.
193. **Zahid Naeem Qaisrani**, Shams S, Guo ZR, Mamun AA. (2020). Qualitative Analysis of Plastic Debris on Beaches of Brunei Darussalam. Pollution. 6(3):569-80. **(HEC Y Category)**.

194. Sayed Yaseen Rashdi, Zamir Ahmed Abro, **Abdul Malik Rehan Abbasi**, Ahmer Hussain Shah, Azmat Hussain, Syed Zameer-Ul-Hassan. (2020). Extraction and Concentration Comparison of Dyeing Behavior of Orange dye on Lyocell Fabric, Journal of Applied and Emerging Sciences, BUIITEMS. 10(01):13-18. (**HEC Y Category**).
195. **Zamir Ahmed Abro**, Hong Cheng-Yu, Zhang Yi-Fan, Chen Nan-Liang, Rue Ahmed Lakho, and Sohail Yasin. (2020). A FBG based smart wearable garments belt for monitoring knee joints postures. Textile Research Journal. 90:3-4. (**IF: 1.82**).
196. Wasim M, Mushtaq M, **Saifullah Khan**, Farooq A, Naeem M A, Khan MR, ... & Wei Q. (2020). Development of bacterial cellulose nanocomposites: An overview of the synthesis of bacterial cellulose nanocomposites with metallic and metallic-oxide nanoparticles by different methods and techniques for biomedical applications. Journal of Industrial Textiles. 2022:1886-1915. (**IF: 0.93**).
197. Mehmood, Zahid, Noor Muhammad Khan, Shamsher Sadiq, **Saeed-ullah Jan Mandokhail**, and Syed Zishan Ashiq. (2020). Assessment of subsurface lithology, groundwater depth, and quality of UET Lahore, Pakistan, using electrical resistivity method. Arabian Journal of Geosciences. 13(6): 1-7. (**HEC X category**).
198. **Muhammad, Naik, Saeed Ullah Jan Mandokhail, Zafar Baloch, Muhammad Habib**, and Shamsher Sadiq. (2020). Assessment Of Seismic Performance Of Submerged Floating Tunnel Under Multi-Support Seismic Excitations. NED University Journal of Research. 3 (**HEC Y Category**).

199. **Asad Naeem**, and Jinkoo Kim. (2020). Seismic retrofit of structures using rotational friction dampers with restoring force. *Advances in Structural Engineering*. 23(16): 3525-3540. **(IF: 2.2).**
200. Irfan, Muhammad, Mazlan Hassan, Nasruddin Hassan, **Muhammad Habib**, Salma Khan, and Abdul Muhaimin Nasruddin. (2020). Project management maturity and organizational reputation: A case study of public sector organizations. *IEEE Access*. 8: 73828-73842. **(IF:4.09).**
201. Liu, Botao, **Azmatullah Khan**, Ki-Hyun Kim, Deepak Kukkar, and Ming Zhang. (2020). The adsorptive removal of lead ions in aquatic media: Performance comparison between advanced functional materials and conventional materials. *Critical Reviews in Environmental Science and Technology*. 50(23): 2441-2483. **(IF:5.09).**
202. **Azizullah, Shaikh.** (2020). Investigating the Influence of Heavy Oil Recovery by In Situ Combustion during Air Injection as EOR Technique. *Journal of Applied and Emerging Sciences*. 10(1): 1-75. **(HEC Y Category).**
203. Salim Raza, **Khan Gul Jadoon**, Sajid Hussain, Zaid ur Rehman, Saira Sherin and Noor Mohammad. (2020). Mitigation Plan for Identified Problems Faced by the Marble Industry in Khyber Pakhtunkhwa. *Journal of Engineering and Applied Sciences*. 39(1):77-86. **(IF:0.84).**

FACULTY OF INFORMATION AND COMMUNICATION

TECHNOLOGY

204. Haider ML, **Anayat Ullah**, Ali B, Ali H. (2020). Optimization of stress induced bending in

mems based suspensions. Optik. 203:164048. (**IF: 2.44**).

205. Kasi, Shahrukh Khan, **Mumraiz Khan Kasi**, Kamran Ali, Mohsin Raza, Hifza Afzal,

Aboubaker Lasebae, **Bushra Naeem**, Saif Ul Islam, and Joel JPC Rodrigues. (2020).

Heuristic edge server placement in industrial internet of things and cellular networks. IEEE

Internet of Things Journal. 8(13):10308-10317. (**IF: 2.87**).

206. **Zahid Rauf, Ifrah Ahmed, Bushra Naeem, Jan Muhammad, Shabbar Naqvi, Rahila Umer, Hamayoun Shahwani**. (2020). Comparative Study of Cloud Attenuation for

Millimeter Wave Communications. International Journal of Computer Science and Network

Security. 20(10):58-64. (**IF: 0.11**).

207. Ifrah Ahmed, Zahid Rauf, **Bushra Naeem**, Jan Muhammad, Shabbar Naqvi, † Rahila

Umer, Hamayoun Shahwani, Raja Asif Wagan. (2020). Using Fuzzy Logic to Predict

Millimeter Wave Communication Link on Varying Weather Conditions, IJCSNS

International Journal of Computer Science and Network Security. 20(10):180-187. (**IF:**

0.11).

208. Khan HA, **Faisal Ahmed Khan, Naseer Ahmad**, Ro JS. (2020). Analysis and Design of

Novel High Speed Permanent Magnet Machine Considering Magnet Eddy Current Loss.

IEEE Access. 8:135675-85. (**IF: 4.09**).

209. **Zahid Rauf, Mehr Gul, Atiq Ur Rehman, Syed Mudassir Hussain, Muhammad**

Haroon Nadeem, Talha Mir, Muhammad Ayub, Jan Muhammad. (2020). Balochistan

Journal of Engineering & Applied Sciences. 3(2). (**HEC Y Category**).

210. Arif A, Baloch N, **Muhammad Ayub**, Kwon B-I. (2020). Wide-Speed Range Operation of

PM Vernier Machines Using Wye and Wye-Delta Winding Configurations. IEEE Access.

8:194709-194718 (**IF: 4.09**).

211. **Hamayoun Yousaf Shahwani**. (2020). Dual Band Switchable Voltage Controlled

Oscillator in 65-nm CMOS Technology. Journal of Applied and Emerging Sciences.

10(1):31-34. (**HEC Y Category**).

212. **Muhammad Ayub**, Atiq S, Ali Q, Hussain A, Kwon B-I (2020) Dual-mode wound rotor

synchronous machine for variable speed applications. IEEE Access. 8:115812-115822 (**IF:**

4.09).

213. Kiyani, Anum Tanveer, Aboubaker Lasebae, Kamran Ali, Masood Ur Rehman, and **Bushra**

Haq. (2020). Continuous user authentication featuring keystroke dynamics based on robust

recurrent confidence model and ensemble learning approach. IEEE Access. 8:156177-

156189. (**IF: 4.09**).

214. Sin S, **Muhammad Ayub**, Kwon B-I. (2020). Investigation study of multi-mode multi-

speed operation method for surface-mounted permanent magnet synchronous machines.

IEEE Access. 8:169470-169485 (**IF: 4.09**).

215. Sin S, **Muhammad Ayub**, Kwon B-I. (2020). Operation method of non-salient permanent

magnet synchronous machine for extended speed range. IEEE Access. 8:105922-105935

(**IF: 4.09**).

216. Sirewal GJ, **Muhammad Ayub**, Atiq S, Kwon B-I. (2020). Analysis of a Brushless Wound

Rotor Synchronous Machine Employing a Stator Harmonic Winding. IEEE Access.

8:151392-151402. (**IF: 4.09**).

217. **Muhammad Ayub**, Hussain A, Sirewal GJ, Kwon B-I. (2020). Wye-delta winding configuration for brushless operation of a wound field synchronous machine. International Journal of Applied Electromagnetics and Mechanics. 64:1165-1175. (**IF: 0.69**).
218. **Syed Mudassar Hussain, Talha Mir**, Gul M, ur Rehman A, **Zahid Rauf**, Umer R, Muhammad J. (2020). Power Efficient GaN HEMT High Power Amplifier Design Operating at 5-7GHz Bandwidth. Journal of Applied and Emerging Sciences. 10(2):166-170. (**HEC Y Category**).
219. Haider, Muhammad Luqman, **Anayat Ullah**, Babar Ali, and Haider Ali. (2020). Optimization of stress induced bending in mems based suspensions. Optik. 203: 164048. (**IF:2.4**).
220. **Talha Mir, Muhammad Waqas**, Usama Mir, **Syed Mudassir Hussain**, Ahmet M. Elbir, and Shanshan Tu. (2020). Hybrid precoding design for two-way relay-assisted terahertz massive MIMO systems. IEEE Access. 8: 222660-222671. (**IF: 4.09**).
221. **Talha Mir**, Ubaid Abbasi, Raza Ali, **Syed Mudassir Hussain**, and Usama Mir. (2020). Joint hybrid precoder and combiner for wideband millimeter-wave massive MIMO systems. IEEE Access. 8: 196375-196385. (**IF: 4.09**).
222. Yasir M, Habib MA, **Muhammad Ashraf**, Sarwar S, Chaudhry MU, **Hamayoun Yousaf Shahwani**, Ahmad M, Faisal. (2020). D-GENE: Deferring the GENERation of Power Sets for Discovering Frequent Itemsets in Sparse Big Data. IEEE Access. 8:27375-27392. (**IF: 4.09**).
223. **Asad Ali, Faisal Ahmed Khan**. (2020). Condition and location-aware channel switching scheme for multi-hop multi-band WLANs. Computer Networks 168:107048. (**IF: 3.03**).

224. **Naqeeb Ullah**, Muhammad Shakeel Akram, Hameed Ullah Buzdar, **Atiq Ur Rehman**,

Muhammad Abbas Khan, and Saifullah Khan. (2020). ZigBee-based Parameter Monitoring and Controlling Scheme for Multiple DC Motors. Indian Journal of Science and Technology. 13(1):1-10. **(ISI Indexed).**

225. **Hamayoun Yousaf Shahwani**, Mugabarigira BA, Shen Y, Jeong JP, Shin J (2020). DAPF: Delay-aware packet forwarding for driving safety and efficiency in vehicular networks. IET Communications. 14(9):1404-1411. **(IF: 1.17).**

226. Ullah, Zaka, Gunawan Witjaksono, Illani Nawi, Nelson Tansu, Muhammad Irfan Khattak, and **Muhammad Junaid.** (2020). A review on the development of tunable graphene nanoantennas for terahertz optoelectronic and plasmonic applications. Sensors. 20(5):1401. **(IF:3.03).**

227. Ullah, Zaka, Illani Nawi, Gunawan Witjaksono, Nelson Tansu, Muhammad Irfan Khattak, **Muhammad Junaid, Muhammad Aadil Siddiqui**, and Saeed Ahmed Magsi. (2020). Dynamic absorption enhancement and equivalent resonant circuit modeling of tunable graphene-metal hybrid antenna. Sensors. 20(11):3187. **(IF:3.03).**

228. **Muhammad Junaid**, M Khir, Gunawan Witjaksono, Nelson Tansu, Mohamed Shuaib Mohamed Saheed, Pradeep Kumar, Zaka Ullah, Asfand Yar, and Fahad Usman. (2020). Boron-doped reduced graphene oxide with tunable bandgap and enhanced surface plasmon resonance. Molecules. 25(16):3646. **(IF:4.4).**

229. **Muhammad Junaid**, M. H. Md Khir, Gunawan Witjaksono, Zaka Ullah, Nelson Tansu, Mohamed Shuaib Mohamed Saheed, Pradeep Kumar, Lee Hing Wah, Saeed Ahmed Magsi, and Muhammad Aadil Siddiqui. (2020). A review on graphene-based light emitting functional devices. Molecules. 25(18):4217. **(IF:4.4).**

230. Klah N, **Faizullah Khan**, Abdul Ali Khan, Surat Khan, Abdul Wahid Tareen, Muhammad Saeed, and Akbar Khan. (2020). Optimal Real-time Static and Dynamic Air Quality Monitoring System. Indian Journal of Science and Technology. 13:91-102. (**ISI Indexed**).
231. Khan, Akbar, Jawad Ali Shah, Kushsairy Kadir, Waleed Albattah, and **Faizullah Khan**. (2020). Crowd monitoring and localization using deep convolutional neural network: A review. Applied Sciences. 10(14):4781. (**IF:2.4**).
232. Ahmad, Naseer, Faisal Khan, Hamid Ali Khan, **Surat Khan**, Faizullah Khan, Muhammad Abbas Khan, and Ishtiaq Ahmad. (2020). Effective computational techniques of reducing cogging torque in permanent magnet flux switching machine. Journal of Applied and Emerging Sciences. 10(1):19. (**HEC Y Category**).
233. UlAmin, Riaz, **Muhammad Akram**, **Najeeb Ullah**, **Muhammad Ashraf**, and Abdul Sattar Malik. (2020). IoT Enabled Air Quality Monitoring for Health-Aware Commuting Recommendation in Smart Cities. International Journal of Advanced Computer Science and Applications. 11:1-7. (**ISI Indexed**).
234. Khan MNA, **Mirza Amir Mahmood**, Saleem I. (2020). Software Risk Analysis with the use of Classification Techniques: A Review. Engineering, Technology & Applied Science Research. 10(3):56. (**ISI Indexed**).
235. Khan M, Khan D, **Sibghatullah Bazai**, Ahmed S, Khan H, Ejaz N. (2020). Motion-based smart assistant for visually impaired people. Indian Journal of Science and Technology. 13 (16):1612-1618. (**ISI Indexed**).
236. **Hamayoun Yousaf Shahwani**. (2020). Machine Learning-based Web Application for Early Diagnosis of Diabetes. Journal of Applied and Emerging Sciences. 10(2):133-142. (**HEC Y Category**).

237. Rasheed J, Jamil A, Hameed AA, Aftab U, Aftab J, **Syed Attique Shah**, Draheim D. (2020). A survey on artificial intelligence approaches in supporting frontline workers and decision makers for COVID-19 pandemic. *Chaos, Solitons & Fractals*. 141:110337. (**IF: 3.64**).
238. Ali I, Ahmed AI, Almogren A, Raza MA, **Syed Attique Shah**, Khan A, Gani A. (2020). Systematic literature review on IoT-based botnet attack. *IEEE Access*. 8:212220 – 212232 (**IF: 4.09**).
239. Ali H, Zahir A, Khan S, **Naseer Ahmad**, Fayyaz A. (2020). A hazard-free framework for aerial distribution of pesticides on agricultural land. *Mehran University Research Journal of Engineering & Technology*. 39(3):548. (**ISI Indexed**).
240. **Muhammad Abbas Khan**, Yan P, Tahir M. (2020). Sea Water Parameters Analysis from 2005 to 2017 of all Seas of the World Using Real Time Data. *International Journal of Future Generation Communication and Networking*. 13(3):365-72. (**ISI Indexed**).
241. Usman N, Alfandi O, Usman S, Khattak AM, Awais M, Hayat B, **Ahthasham Sajid**. (2020). An Energy Efficient Routing Approach for IoT Enabled Underwater WSNs in Smart Cities. *Sensors*. 20(15):4116. (**IF:3.57**).
242. **Ahthasham Sajid** Usman N, Khan I, Usman S, **Amir Mehmood Mirza**, Malik MS, Rana JM. (2020). Artificial Intelligence based rule base fire engine testing model for congestion handling in opportunistic networks. *Measurement and Control*. 53(10): 1841-1850. (**IF:1.49**).
243. Ali T, Alwadie AS, Rizwan AR, **Ahthasham Sajid**, Irfan M, Awais M. (2020). Moving towards IoT Based Digital Communication: An Efficient Utilization of Power Spectrum Density for Smart Cities. *Sensors*. 20(10):2856. (**IF:3.57**).

244. Mustafa I, Khan I, Aslam S, **Ahthasham Sajid**, Mohsin SM, Awais M, Qureshi MB. (2020). A Lightweight Post-Quantum Lattice-Based RSA for Secure Communications. IEEE Access. 8: 99273-99285. (**IF: 4.09**).
245. **Awais Sattar Ghori, Rabya Aslam, Muhammad Saqib Siddiqui, and Syed Kamran Sami.** (2020). Recent progress in textile-based flexible super capacitor. Frontiers in Materials. 7:1-7. (**IF: 2.62**).
246. **Mehr Gul**, Tai N, Huang W, Nadeem MH, Yu M. (2020). Evaluation of Wind Energy Potential Using an Optimum Approach based on Maximum Distance Metric. Sustainability. 12(5):1999. (**IF: 3.25**).
247. **Muhammad Bilal**, Saleem R, Abbasi QH, Kasi B, Shafique MF. (2020). Miniaturized and Flexible FSS-Based EM Shields for Conformal Applications. IEEE Transactions on Electromagnetic Compatibility. 62(5):1703-10. (**IF:0.64**).
248. **Muhammad Abbas Khan.** (2020). Sea water parameters Analysis from 2005 to 2017 of all seas of the world using real time data. International Journal of Future Communication and Networking. 13(3):65 - 372. (**ISI Indexed**).
249. **Muhammad Abbas Khan**, Piao Yan MT. (2020). New Analysis of all Seas Water Parameters for all March Months from 2005 to 2017 Using Real Time Data. International Journal of Future Generation Communication and Networking. 13(3):558-73. (**ISI Indexed**).
250. Hayat N, **Muhammad Imran.** (2020). Detailed and enhanced multi-exposure image fusion using recursive filter. Multimedia Tools and Applications. 79(33):25067-88. (**ISI Indexed**).
251. Malik MZ, Kumar M, Soomro AM, Baloch MH, **Mehr Gul**, Farhan M, Kaloi GS. (2020). Strategic planning of renewable distributed generation in radial distribution system using advanced MOPSO method. Energy Reports. 6:2872-2886. (**IF: 3.59**).

252. Malik MZ, Baloch MH, **Mehr Gul**, Kaloi GS, Chauhdary ST, Memon AA. (2020). Research on conventional and modern algorithms for maximum power extraction from wind energy conversion system: a review. *Environmental Science and Pollution Research*. 27:1-6. (**IF: 3.05**).

FACULTY OF MANAGEMENT SCIENCES

253. **Tariq Ahmed**, Chandran V, Klobas JE, Linan F, Kokkalis P. (2020). Entrepreneurship education programmes: How learning, inspiration and resources affect intentions for new venture creation in a developing economy. *The International Journal of Management Education*. 18:100327. (**ISI Indexed**).
254. **Tayyaba Akram**, Lei S, Haider MJ, Hussain ST. (2020). The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. *Journal of Innovation & Knowledge*. 5(2):117-129. (**ISI Indexed**).
255. **Usman Azhar**. (2020). A Dynamic Study Of Child Labor Market And its Determinants in Pakistan: A Time Series Analysis. *Pakistan Journal of Applied Economics*. 30:27-42. (**HEC Y Category**).
256. **Bilal Sarwar, Noor Muhammad**, Uz Zaman N, Rehman ZU. (2020). The conundrum of bank capital structure: Empirical evidence from Pakistan. *Cogent Economics & Finance*. 8(1):1838688. (**ISI Indexed**).
257. Hassan J, **Noor Muhammad, Bilal Sarwar, Nadeem uz Zaman**. (2020). Sustainable Development through Financial Inclusion: The Use of Financial Services and Barriers in Quetta-Pakistan. *European Online Journal of Natural and Social Sciences*. 9(4)691. (**ISI Indexed**).

258. Hameed M, Shah SH, **Hadi Hassan Khan**. (2020). A Nonparametric Analysis for Stability of Wheat Genotypes Tested in Southern Punjab, Pakistan. European Online Journal of Natural and Social Sciences. 3;9(1): pp-153. (**ISI Indexed**).
259. **Bilal Sarwar**, Muhammad N **Nadeem uz Zaman**. (2020). Diversification, industry concentration, and bank margins: Empirical evidence from an emerging south Asian economy. The Journal of Asian Finance, Economics, and Business. 7(7):349-60. (**ISI Indexed**).
260. **Muhammad Irfan**, Hassan M, Habib M, Khan S, Nasruddin AM. (2020). Project Management Maturity and Organizational Reputation: A Case Study of Public Sector Organizations. IEEE Access. 8:73828-42. (**IF: 4.09**).
261. Sarwar D, **Bilal Sarwar**, **Muhammad Asif Raz**. (2020). Relationship of the Big Five Personality Traits and Risk Aversion with Investment Intention of Individual Investors. The Journal of Asian Finance, Economics, and Business. 7(12):819-829. (**ISI Indexed**).
262. Rehman K, **Hadi Hassan Khan**, **Sarwar B**, **Muhammad N**, Ahmed W, Rehman ZU. (2020). A multi-group analysis of risk management practices of public and private commercial banks. The Journal of Asian Finance, Economics, and Business. 7(11):893-904. (**ISI Indexed**).
263. **Bilal Sarwar** et al. (2020). Extent of corporate social responsibility disclosures in Pakistan's food industry. Balochistan journal of Engineering and Applied Sciences. 4 (1). (**HEC Y Category**).
264. **Bilal Sarwar**. et al. (2020). The Dilemma of Child Labor A case of Pakistan's football Manufacturing industry Sialkot. Balochistan journal of Engineering and Applied Sciences. 4(1):24-30. (**HEC Y Category**).

265. **Bilal Sarwar.** at al. (2020). Big Data Analytics New Opportunities in Scientize Research.

Balochistan Journal of engineering and Applied Sciences. 4(1)34-45. (**HEC Y Category**).

266. **Bilal Sarwar.** et al. (2020). Government Size and Economic Performance How Substantial

Are Linkages in the case of Pakistan. (**HEC Y Category**).

267. **Sajida Reza S**, Mubarik MS, Naghavi N, Nawaz RR (2020). Relationship marketing and

third-party logistics: evidence from hotel industry. Journal of Hospitality and Tourism

Insights. . (**HEC Y Category**).

268. Panezai SA, **Hadi Hassan Khan, Bilal Sarwar.** (2020). Discriminating Factors

Influencing Consumer's Floral Buying Decisions. Journal of Managerial Sciences. (**ISI**

Indexed).

269. Siddiqu AH, Ali SA, **Usman Azhar.** (2020). Global Competitiveness and Potential for

Higher Exports. IBT Journal of Business Studies. (**ISI Indexed**).

270. **Nadeem Uz Zaman**, Bibi Z, Karim J, Din SU. (2020). Roles Of Emotional Intelligence In

Determining Workplace Advice Network Centrality: Betweenness And Coreness.11 (4):1-

13. (**ISI Indexed**).

271. Buzdar SU, **Syed Muhammad Khair, Syed Munawar Shah.** (2020). Consumers'

Willingness to Pay for Fresh-Water Grown Leafy Vegetables. Journal of Applied Economics

and Business Studies. 4(4):117-34. (**HEC Y Category**).

272. Shahani, Niaz Muhammad, Muhammad Jawad Sajid, Xigui Zheng, **Manzoor Ali Brohi,**

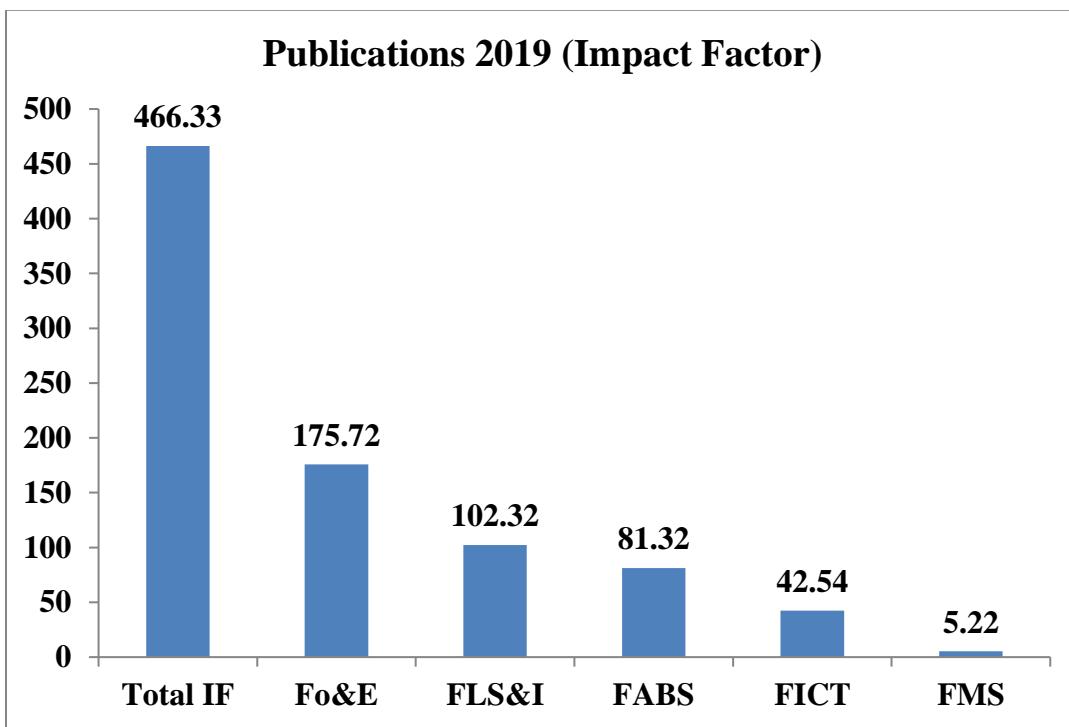
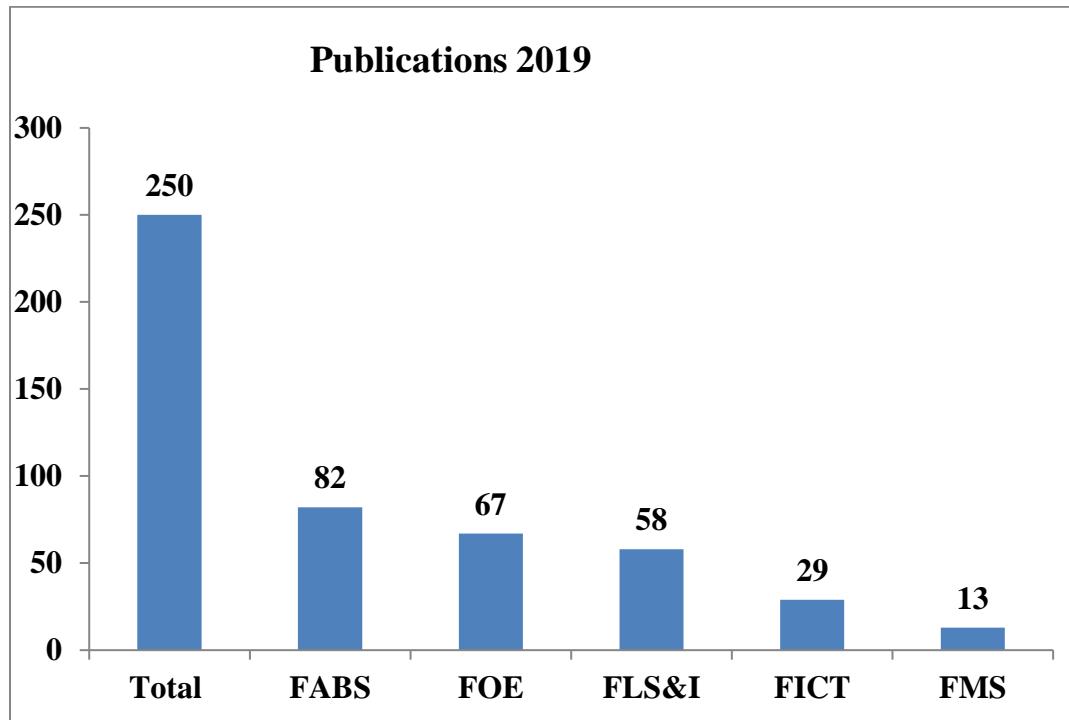
Izhar Mithal Jiskani, Fawad Ul Hassan, and Abdullah Rasheed Qureshi. (2020). Statistical

analysis of fatalities in underground coal mines in Pakistan. Energy Sources, Part A:

Recovery, Utilization, and Environmental Effects. 30:1-6. (**IF: 0.5**).

273. Naz L, **Abdul Salam Lodhi**, Tsegai DW. (2020). Parents' Perception of Education and Choice of Childhood Activities: Evidence from Pakistan. *The Pakistan Development Review*. 59(3):335-55. **(HEC W Category)**.
274. Shakeel M, Ahmed A (2021) Economic growth, exports, and role of energy conservation: evidence from panel co-integration-based causality models in South Asia. *Energy & Environment* 32 (1):3-24. **(HEC X Category)**.
275. Shakeel M, **Aziz Ahmed**, Sharif S (2020) Linkages of corruption with income, inflation and income inequality in Pakistan. *Journal of the Research Society of Pakistan* 57: 323-330. **(HEC Y Category)**.
276. Wadood A, Khan F, **Aziz Ahmed**, (2020) The Efficacy of Nuclear Deterrence in South Asia: A Case Study of Pakistan and India. 4:751-752. **(HEC W Category)**.

RESEARCH PUBLICATIONS 2019



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Baez-Ortega A, Gori K, Strakova A, Allen JL, Allum KM, Bansse-Issa L, Bhutia TN, Bisson JL, Briceño C, Domracheva AC, **Haleema Sadia**, et al. (2019). Somatic evolution and global expansion of an ancient transmissible cancer lineage. *Science*. 365:9923. **(IF: 41.03)**.
2. Ullah I, **Naseebullah Kakar**, Schrauwen I, Hussain S, Chakchouk I, Liaqat K, Acharya A, Wasif N, Santos-Cortez RLP, Khan S. (2019). Variants in KIAA0825 underlie autosomal recessive postaxial polydactyly. *Human Genetics*. 138 (6):593-600. **(IF: 5.2)**.
3. Irshad A, Sarwar N, **Haleema Sadia**, Malik K, Javed I, Irshad A, Afzal M, Abbas M, Rizvi H. (2019). Comprehensive facts on dynamic antimicrobial properties of polysaccharides and biomolecules-silver nanoparticle conjugate. *International Journal of Biological Macromolecules*. **(IF: 4.78)**.
4. Ijaz A, Wolf S, Mandukhail SR, Basit S, Betz RC, **Abdul Wali**. (2019). UV-sensitive syndrome: Whole exome sequencing identified a nonsense mutation in the gene UVSSA in two consanguineous pedigrees from Pakistan. *Journal of dermatological science*. 95 (3):113-118. **(IF: 3.98)**.
5. Irshad A, Sarwar N, **Haleema Sadia**, Riaz M, Sharif S, Shahid M, Khan JA. (2019). Silver nanoparticles: synthesis and characterization by using glucans extracted from Pleurotus ostreatus. *Applied Nanoscience*. 1-10. **(IF: 3.19)**.

6. Yu S, **Kaleem Ullah Kakar**, Yang Z, Nawaz Z, Lin S, Guo Y, Ren X-l, Baloch AA, Han D. (2019). Systematic study of the stress-responsive Rboh gene family in Nicotiana tabacum: Genome-wide identification, evolution and role in disease resistance. *Genomics.* (**IF: 3.1**).
7. Fahim R, Lu X, Jilani G, **Javid Hussain**, Hussain I. (2019). Comparison of floating-bed wetland and gravel filter amended with limestone and sawdust for sewage treatment. *Environmental Science and Pollution Research.* 26(20):20400-20410. (**IF: 2.91**).
8. Khan SZ, Ajmal N, **Rozeena Shaikh**. (2019). Diabetic Retinopathy and Vascular Endothelial Growth Factor Gene Insertion/Deletion Polymorphism. *Canadian Journal of Diabetes.* <https://doi.org/10.1016/j.jcjd.2019.08.005>. (**IF: 2.88**).
9. Karim S, Malik IR, Nazeer Q, Zaheer A, Farooq M, Mahmood N, Malik A, **Muhammad Asif**, Mehmood A, Khan AR. (2019). Molecular analysis of V617F mutation in Janus kinase 2 genes of breast cancer patients. *Saudi Journal of Biological Sciences.* 26 (6):1123-1128. (**IF: 2.82**).
10. Malik A, Butt TT, Ashraf MAB, Rasool R, Zahid A, Waquar S, **Muhammad Asif**, Zaheer A, Jabbar A. (2019). Implications of advanced oxidation protein products (AOPPs), advanced glycation end products (AGEs) and other biomarkers in the development of cardiovascular diseases. *Saudi Journal of Biological Sciences.* 26 (2):334-339. (**IF: 2.82**).
11. **Naveed Iqbal**, Liu X, Yang T, Huang Z, Hanif Q, Asif M, Khan QM, Mansoor S. (2019). Genomic variants identified from whole-genome resequencing of indicine cattle breeds from Pakistan. *PloS one* 14(4):e0215065. (**IF: 2.77**).

12. Lima Cunha D, Alakloby OM, Gruber R, **Naseebullah Kakar**, Ahmad J, Alawbathani S, Plank R, Eckl K, Krabichler B, Altmüller J. (2019). Unknown mutations and genotype/phenotype correlations of autosomal recessive congenital ichthyosis in patients from Saudi Arabia and Pakistan. *Molecular genetics & genomic medicine*. 7(3):e539. **(IF: 2.43)**.
13. Ghori SA, Gul S, Tahir S, Sohail M, Batool S, **Muhammad Naeem Shahwani**, Bano G. (2019). Wood-derived biochar influences nutrient use efficiency of heavy metals in spinach (*spinacia oleracea*) under groundwater and wastewater irrigation. *Journal of Environmental Engineering and Landscape Management*. 27(3):144-152. **(IF: 2.23)**.
14. Bhinder MA, **Haleema Sadia**, Mahmood N, Qasim M, Hussain Z, Rashid MM, Zahoor MY, Bhatti R, Shehzad W, Waryah AM. (2019). Consanguinity: A blessing or menace at population level? *Annals of human genetics*. 214-219. **(IF: 2.1)**.
15. Ajmal N, Khan SZ, **Rozeena Shaikh**. (2019.) Polycystic ovary syndrome (PCOS) and genetic predisposition: A review article. *European journal of obstetrics & gynecology and reproductive biology*: X: 100060. **(IF: 2.02)**.
16. Hassan N, Anesio AM, **Rafiq M**, Holtvoeth J, Bull I, Williamson CJ, Hasan F (2019) Cell membrane fatty acid and pigment composition of the psychrotolerant cyanobacterium *Nodularia spumigena* CHS1 isolated from Hopar glacier, Pakistan. *Extremophiles*. **(IF: 2.04)**
17. Din G, Hassan A, **Muhammad Rafiq**, Hasan F, Badshah M, Khan S, Chen G, Ripp S, Shah AA (2019) Characterization of Organic Acid Producing *Aspergillus tubingensis*

FMS1 and its Role in Metals Leaching from Soil. Geomicrobiology Journal:1-9. (IF: 1.6).

18. Ali, E, Hussain A, Ullah I, **Kaleem Ullah Kakar**, et al. (2019) Cadmium phytotoxicity: issues, progresses, environmental concerns and future perspectives. Revista De La Facultad De Ciencias Agrarias. 1-15. (IF: 1.58).
19. Khan GM, Hassan N, Khan N, Humayun M, Khan K, Khaliq S, Rehman FU, Ahmed S, Shah K, Khan SA, **Abdul Wali**. (2019). Bi-allelic mutations in the LPAR 6 gene causing autosomal recessive wooly hair/ hypo-trichosis phenotype in five Pakistani families. International journal of dermatology. 58:946-952. (IF: 1.56).
20. Ehsan M, Gu H, Ahmad Z, **Malik Muhammad Akhtar**, Abbasi SS. (2019). A Modified Approach for Volumetric Evaluation of Shaly Sand Formations from Conventional Well Logs: A Case Study from the Talhar Shale, Pakistan. Arabian Journal for Science and Engineering. 44 (1):417-428. (IF: 1.51).
21. Ijaz A, Basit S, Gul A, Batool L, **Abrar Hussain**, Afzal S, Ramzan K, Ahmad J, **Abdul Wali**. (2019) XPC gene mutations in families with xeroderma pigmentosum from Pakistan; prevalent founder effect. Congenital anomalies 59 (1):18-21. (IF: 1.23).
22. Din M, Khan MB, Shabir A, Abdul A, Dawood S, Dawood G, **Nazeer Ahmed**. (2019). Prevalence of extensive drug resistance in bacterial isolates harboring blaNDM-1 in Quetta Pakistan. Pak J Med Sci. 35: 4; 1155-1160. (IF: 0.87).
23. Sajid IA, Tabassum B, Yousaf I, **Anwar Khan**, Adeyinka OS, Shahid N, Nasir IA, Husnain T. (2019). In vivo Gene Silencing of Potato Virus X by Small Interference RNAs in Transgenic Potato. Potato Research: 1-13. (IF: 0.86).

24. **Asma Yousafzai**, Luqman M, Nazeer Ahmed, Arbab M, Murad M, Sajjad N, Naudhani S, Daud S, Baloch AH, Khushnaseeb SZ. (2019). Identification of Mutations in Gene BRCA1/2 in Breast Cancer Cases from Balochistan, Pakistan. *Pakistan Journal of Zoology*. 51 (4):1579-1582. **(IF: 0.78)**.
25. Aslam U, bassum B, Aaliya K, Tariq M, Nasir I, Hassan S, Ismail T, Ali N, Ponya Z, **Anwar Khan**. (2019). The effectiveness of recombinant chitinase obtained from barley (*hordeum vulgare l.*) Against potato pathogens. *Applied ecology and environmental research* .17 (2):4147-4157. **(IF: 0.67)**.
26. Mushtaq A, Rizwan S, Jamil N, Ishtiaq T, Irfan S, Ismail T, Malghani MN, **Muhammad Naeem Shahwani**. (2019). Influence of Silicon Sources & Controlled Release Fertilizer on the Growth of Wheat Cultivars of Balochistan under Salt Stress. *Pakistan Journal of Botany*. 51(5):1561-1567. **(IF: 0.67)**.
27. Gul R, Jan SU, Khan A, **Nusrat Jahan**, Rahman R, Sherani S, Tariq N. (2019). Effect of Thyme Oil on the Transdermal Permeation of Pseudoephedrine HCl from Topical Gel. *Dissolution Technologies*. 26(4):18-23. **IF: 0.64**.
28. Yousaf I, Tabassum B, **Anwar Khan**, Sajid IA, Olawale A, Nasir IA. (2019). Heterologous expression of the *Trichoderma harzianum* chitinase gene in *Escherichia coli* and structural analysis of the enzyme with anti-fungal potential. *BioCell*. 43(5). **(IF: 0.63)**.
29. Zeeshan M, Khan SZ, Ajmal N, Shehzad P, Shah SA, Khan MA, **Shakeela Daud Shaikh R**. (2019). DMD Gene Mutation identification in Duchenne Muscular

Dystrophy Patients of Quetta, Balochistan, Pakistan. BioCell. 43(5):361-371. (**IF: 0.63**).

30. **Rehman Gul**, Jan SU, Ahmed M, Faridullah S, Akhtar M (2019). Extraction, formulation and characterization of an in vitro and ex-vivo evaluation of Thymus serpyllum L. (Thymus oil) from topical preparations using dialysis cellulose membrane and natural rabbit skin. Pakistan journal of pharmaceutical sciences 32 (4).1563-1570. (**IF: 0.59**).
31. Manzoor S, Saif R, **Haleema Sadia**, Firyal S, Tayyab M, Mansha M, Mahmood A, Hashmi A, Awan A, Wasim M. (2019). Molecular expression of cyclin dependent kinase inhibitor (p21) in canine tumors. Journal of Animal and Plant Sciences. 29(4):1127-1134. (**IF: 0.56**).
32. Shamas S, Rani S, Afsheen S, Shahab M, Ejaz R, **Haleema Sadia**, Khan L, Rehman T, Roshan S, Mayo A (2019) Changes In Irisin Release In Response To Peripheral Kisspeptin-10 Administration In Healthy And Obese Adult Men. Acta Endocrinologica (Bucharest) 15 (3):283. (**IF: 0.44**).
33. Saad L & **Shahjahan SA**. (2019). Study on Rangelands Issues and their Improving Strategies in Muslim Bagh, Killa Saifullah Balochistan, Pakistan. Accepted in International Network for Natural Sciences (Bangladesh). (**IF: 0.44**).
34. Gul R, Jan SU, Khan A, Qureshi MM, **Jahan N**. (2019) Formulation and Evaluation of Topical Carbamazepine Semi Solid Dosage Forms for Transdermal Drug Delivery. Lat Am J Pharm 38 (1):121-127 (**IF: 0.29**).

35. Shah SA, Rabar ME, **Jamil Ahmad**, Ali Z. (2019). Linkage Analysis of Autosomal Recessive Non-syndromic Mental Retardation Locus in Pakistani Families. International Journal of Human Genetics. 19 (3):152-157. (**IF: 0.26**).
36. Buzdar S, Mushtaq A, Rizwan S, Jabeen U, Bashir F, Safdar F, Baloch M, Khan M, Razaq MA, **Muhammad Naeem Shahwani**. (2019). Impact of haloperidol on four wheat (*Triticum aestivum* L.) Cultivars of Balochistan under saline conditions. Bangladesh Journal of Botany 48 (4):1091-1097. (**IF: 0.21**).
37. Rehman WU, Rehman GU, Jan FU, Rehman HU, Roshan S, Shams S, Khan K, Raza S, Ahmed R, Khanam N, **Muhammad Naeem Shahwani, et al.** (2019). Exploring and Identification of Fish Fauna of River Jindi at District Charsadda, KPK, Pakistan. International Journal of Biosciences. 15:355-362 (**ISI Indexed**).
38. Malik A, Saleem S, Ansari SA, Iqbal J, **Muhammad Asif**, Kamal MA, Al-Qahtani MH, Karim S. (2019). Assessment of circulating biochemical markers in mice receiving cinnamon and glycyrrhizin under carbon tetrachloride induced hepatic injury. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences. 89 (1):105-111. (**ISI Indexed**).
39. Wadood AA, **Haleema Sadia**, Yangqing L, Hussain T, Safdar M, Shahzad Q, Ashiq K, Ali A, Ashiq S. (2019). Identification of variations in the coding region of myostatin (MSTN) gene of thalli and Pak-Karakul sheep breed in Pakistan. Journal of Microbiology, Biotechnology and Food Sciences 2019:335-337. (**ISI Indexed**).
40. Ashiq S, Ashiq K, Shabana S, Shahid SU, Qayyum M, **Haleema Sadia**. (2019). Prevalence And Role of Different Risk Factors with Emphasis on Genetics in

Development of Pathophysiology of Coronary Artery Disease (CAD). Pakistan Heart Journal 52 (4). **(ISI Indexed)**.

41. **Haleema Sadia**, Batool R, Mansoor R, Qureshi B, Ashiq S, Irshad A, Riaz M, Ashiq K. (2019). Investigation of liver function tests (LFTs) and renal function tests (RFTs) in pregnant women affected with hypertensive disorders of pregnancy (HDP). International Journal of Biosciences. 14:86-94. **(ISI Indexed)**.
42. Malik K, Hussain M, Sadaqat R, Ahmad H, Basit MH, Azam S, Qamar H, Nazir A, **Haleema Sadia**, et al. (2019). Molecular medicines for neutralization of Clostridium botulinum neurotoxin. International Journal of Biosciences. 14:78-90. **(ISI Indexed)**.
43. Batool T, Mahmood Z, Riaz M, Dogar MZUH, Irshad S, Murtaza MA, Mehmood K, Rasool G, Irshad A, **Haleema Sadia**. (2019). Comparative study of nutritional status, minerals and heavy metal contents in tetra pack branded milk samples with fresh milk from selected milk producing animals. International Journal of Biosciences. 15:161-167. **(ISI Indexed)**.
44. Khan F, Ayaz M, Arshad A, Fouzia, Rehman HU, Ali A, Ashiq S, Ashiq K, **Haleema Sadia**, et al. (2019). Microcephaly in General Population of Districts Karak and Bannu Khyber Pakhtunkhwa (KP), Pakistan. Biological Forum. 11:284-289. **(ISI Indexed)**.
45. **Ullah I, Ullah H, Rehman HU, Khan F, Ashiq S, Ashiq K, Haleema Sadia**. (2019). Preoperative Anxiety Level among Patients Undergoing Elective General Surgery in District Head Quarter Hospital (DHQ) Timergara. Biological Forum. 11:271-279. **(ISI Indexed)**.

46. Gul N, Rehman AU, Rehman HU, Noor H, Khan NA, Mahmood N, Matiullah, Ashiq S, Ashiq K, **Haleema Sadia**, Raza S, Mehmood H, Khan M, Aziz A, Malik K. (2019). Prevalence of Gingivitis in Tehsil Takht Bhai District Mardan KPK Pakistan. International Journal of BioSciences. 15:447-452. (**ISI Indexed**).
47. Malik K, Razzaq A, Ghufran H, Naseer MA, Tariq Y, Abbas Z, Basit MH, Nazir A, Saeed A, Bhatti R, Shahid M, Fatima A, **Haleema Sadia**. (2019). Urgency of novel anti-tuberculosis strategies: a prospective challenge. International Journal of Biosciences. 15(2): 281-296. (**ISI Indexed**).
48. Ali L, Shujaat N, Gilani SM, Rehman HU, Khan F, Noor H, Khan NA, Ayaz U, Ghani U, **Haleema Sadia**. (2019). Foam Mat Drying of Banana (*Musa acuminate*) Pulp. Biological Forum. 11(1): 273-276. (**ISI Indexed**).
49. Ghilzai MY, Arshad GH, **Imran Ali Sani**, Nisar A, Mohammad A, Zafarullah, Azhar S, Essa K, Zia, Umair A & Sajid N. (2019). Food Preferences of Quetta Boer, Aeolesthes sarta Coleoptera; (*Cerambycidae*) under Contro Condition. Indo American J. Pharmaceutical Sciences. 06:10; 12712-12727. (**ISI Indexed**).
50. Ara T, Asmatullah K, Samiullah J, Asim I, Arsia S, **Imran Ali Sani**, Nisar A, Dawood S (2019). To Investigate the Prevalence & Distribution of Predatory Insect, *Hierodula patellifera* a Prominent Species of *Praying mantis* (Insecta: Mantodea) in Quetta and Pishin Districts of Balochistan, Pakistan. Indo American J. Pharmaceutical Sciences. 06 :(02); 3591-3598. (**ISI Indexed**).
51. Aziz S, Imran AS, Yujie L, **Shahjahan Shabir Ahmed**, Nazeer A, Nisar A, Dawood S & Sajid N (2019). Biological Control of Insect Pests using *Trichogramma minutum*

- as Biological Control Agent against Thrips on Roses. Indo American Journal of Pharmaceutical Sciences. 06: (10), 12728-12734. (**ISI Indexed**).
52. Javed Z, Farooq HM, Ullah M, Zaheer M, Iqbal QR, **Haleema Sadia**, Pezzani R, Salehi B, Sharifi-Rad J, Cho WC (2019) Wnt signaling: A potential therapeutic target in head and neck squamous cell carcinoma. Asian Pacific Journal of Cancer Prevention 20 (4):995-1003. (**ISI Indexed**).
53. Rehman WU, Hussain A, Yar A, Khan K, Rehman HU, Khanam N, Akhter K, Raza S, **Haleema Sadia**, et al. (2019). Water quality parameters of River Jindi at District Charsadda, KPK, Pakistan. International Journal of Biosciences. 15(2):363-369. (**ISI Indexed**).
54. Liaqat F, Naeem W, Shafee M, Anwar M, **Haleema Sadia**, Ghilzai D, Akbar A. (2019). Virulence factors and drug resistance in Klebsiella pneumoniae; an emerging superbug. Pure and Applied Biology. 8 (2):1314-1337. (**HEC Recognized in Y Category**).
55. Sarwar N, Ahmed R, Saadullah M, Khan KU , Kamran S , Baig FA , Mansoor MK, Aqib AI, Prince K , Saleem MZ, Manzoor AW, **Haleema Sadia**. (2019). Prevalence of Helicobacter pylori infection and its associated diseases in low socio-economic workers in tertiary care hospital of Lahore, Pakistan. Biomedical letters. 5(1):1-6. (**HEC Recognized in Z recognized**).
56. Nawaz M, Mengal N, Mureed S, **Agha Muhammad Raza**, Saeed M, Ahmed J. (2019). A missense mutation of msx1 gene in Pakistani families with hypodontia. Pakistan Armed Forces Medical Journal 69 (3):571-576. (**HEC Recognized in Y Category**).

57. Ahmad Z, **Malik Muhammad Akhtar** et al. (2019). Evaluation of Groundwater Vulnerability to Contamination by drastic Risk Mapping In Quetta Valley, Balochistan. Bahria University Research Journal of Earth Sciences. 4(1): 1-7. (**HEC Indexed**).
58. Javeed, Hafiz Muhammad Rashad, Rafi Qamar, Shahid Ibni Zamir, **Fahim Nawaz**, Muhammad Maooz Faheem, Mazhar Ali, Abdul Rehman, Amjad Farooq, and Ali Zakir. "Selenate uptake through roots improves the tolerance to cell disruptors and fungal infection in canola seedlings after exogenous Selenium application." Pakistan Journal of Agricultural Sciences 56, no. 2 (2019). (**HEC Indexed**).

FACULTY OF ARTS AND BASIC SCIENCES

59. Qaisrani MA, Fang J, Jin Y, Wan Z, Tu N, **Muhammad Khalid**, Rahman MU, Wei J. (2019). Thermal losses evaluation of an external rectangular receiver in a windy environment. Solar Energy. 184:281-291. (**IF: 8.24**).
60. Shakeel A, Mahmood H, Farooq U, **Zahoor Ullah**, Yasin S, Iqbal T, Chassagne C, Moniruzzaman M. (2019). Rheology of pure ionic liquids and their complex fluids: A review. ACS Sustainable Chemistry & Engineering. 7 (16):13586-13626. (**IF: 6.97**).
61. , **Zahoor Ullah**, Man Z, Khan AS, Muhammad N, Mahmood H, Ghanem OB, Ahmad P, Shah M-UH, Raheel M. (2019). Extraction of valuable chemicals from sustainable rice husk waste using ultrasonic assisted ionic liquids technology. Journal of Cleaner Production. 220:620-629. (**IF: 6.39**).

62. Ullah Z, Man Z, Khan AS, Muhammad N, Mahmood H, Ghanem OB, Ahmad P, **Mamoon ur Rashid**, Raheel M. (2019). Extraction of valuable chemicals from sustainable rice husk waste using ultrasonic assisted ionic liquids technology. *Journal of Cleaner Production*. 220:620-629. **(IF: 6.39)**.
63. Shi S, Li P, Sheng Z, Jiang D, Tan Y, Wang D, Wen S, **Noor-ul-Huda Khan Asghar**. (2019). Energy efficiency improvement in electron beam purification of silicon by using graphite lining. *Energy*. 185:102-110. **(IF: 5. 53)**.
64. **Javed ur Rehman**, Fan X, Zheng W. (2019). Computational insight of monolayer SnS₂ as anode material for potassium ion batteries. *Applied Surface Science*. 496:143625. **(IF: 5.15)**.
65. Shi S, Guo X, An G, Jiang D, Qin S, Meng J, Li P, Tan Y, **Noor-ul-Huda Khan Asghar**. (2019) Separation of boron from silicon by steam-added electron beam melting. *Separation and Purification Technology* 215:242-24. **(IF: 5.10)**.
66. Iqbal J, Muhammad N, Rahim A, Khan AS, **Zahoor Ullah**, Girma Gonfa, Pervaiz Ahmad. (2019). COSMO-RS Predictions, Hydrogen Bond Basicity Values and Experimental Evaluation of Amino Acid-based Ionic Liquids for Lignocellulosic Biomass Dissolution. *Journal of Molecular liquids*. 273: 215-221. **(IF: 4.56)**.
67. Zhang G, Wei J, Wang Z, Xie H, Xi Y, **Muhammad Khalid**, (2019). Investigation into effects of non-uniform irradiance and photovoltaic temperature on performances of photovoltaic/thermal systems coupled with truncated compound parabolic concentrators. *Applied Energy*. 250:245-256. **(IF: 4.26)**.

68. Rehman J, Ali R, **Nisar Ahmad**, Lv X, Guo C. (2019). Theoretical investigation of strain-engineered WSe₂ monolayers as anode material for Li-ion batteries. *Journal of Alloys and Compounds* 804:370-375. (**IF: 4.17**).
69. **Javed ur Rehman**, Ali R, Ahmad N, Lv X, Guo C. (2019). Theoretical investigation of strain-engineered WSe₂ monolayers as anode material for Li-ion batteries. *Journal of Alloys and Compounds*. 804:370-375. (**IF: 4.17**).
70. Qaisrani MA, Wei J, Fang J, Jin Y, Wan Z, **Muhammad Khalid**, (2019). Heat Losses and Thermal Stresses of an External Cylindrical Water/Steam Solar Tower Receiver. *Applied Thermal Engineering*. 114241. (**IF: 4.06**).
71. Rashid M, Alamzeb M, Ali S, **Zahoor Ullah**, Shah ZA, Naz I, Khan MR. (2019). The chemistry and pharmacology of alkaloids and allied nitrogen compounds from Artemisia species: A review. *Phytotherapy Research* 33 (10):2661-2684. (**IF: 3.76**).
72. Ahmad P, Khandaker MU, Muhammad N, Khan G, Rehman F, Khan AS, **Zahoor Ullah**, Khan A, Ali H, Ahmed SM. (2019). Fabrication of hexagonal boron nitride quantum dots via a facile bottom-up technique. *Ceramics International*.45:22765-22768. (**IF: 3.44**).
73. Abbas S, Sun H, **Hasrat Hussain Shah**, Khan W, Ahmad S, Waqas M (2019) Mathematical modelling and analysis of gravitational collapse in curved geometry. *Computer methods and programs in biomedicine* 184:105283. (**IF: 3. 42**).
74. **Aslam S**, Shifa MS, **Zaheer Abbas Gilani**, Usmani MN, Rehman JU, Khan MA, Perveen A, Khalid M. (2019). Structural, optical and magnetic elucidation of co-doping

- of Nd³⁺ and Pr³⁺ on lithium nanoferrite and its technological application. Results in Physics 12:1334-1339. (**IF: 3.04**).
75. **Nisar Ahmad**, Nasir T, ur Rehman J, Ullah H, Uddin Z. (2019). Risk assessment of radon in soil collected from chromite mines of Khanozai and Muslim Bagh, Balochistan, Pakistan. Environmental Technology & Innovation 16:100476. (**IF: 2.80**).
76. Shi S, Li P, Jiang D, Tan Y, Li X, Yang J, Zhang L, Wang F, Li J, **Noor-ul-Huda Khan Asghar**. (2019). Kinetics of evaporation under vacuum in preparation of solar-grade silicon by electron beam melting. Materials Science in Semiconductor Processing 96:53-58. (**IF: 2.72**).
77. Wang W, Shi S, Li P, Jiang D, Yang Y, Li J, Tan Y, **Noor-ul-Huda Khan Asghar**. (2019). Exploration on the removal of arsenic in silicon under electron beam melting conditions. Vacuum. 166:191-195. (**IF: 2.51**).
78. Tayyab Z, Safi SZ, Rahim A, Khan AS, Sharif F, Khan ZUH, Rehman F, **Zahoor Ullah**, Iqbal J, Muhammad N. (2019). Preparation of cellulosic Ag-nanocomposites using an ionic liquid. Journal of Biomaterials Science, Polymer Edition. 30(9):785-796. (**IF: 2.12**).
79. Mahmood S, Srivastava HM, Khan N, Ahmad QZ, Khan B, **Irfan Ali**. (2019). Upper bound of the third Hankel determinant for a subclass of q-starlike functions. Symmetry. 11(3):347. (**IF: 2.1**).
80. Ellahi R, Zeeshan A, **Farooq Hussain**, Asad Ullah. (2019). Peristaltic blood flow of couple stress fluid suspended with nanoparticles under the influence of chemical reaction and activation energy. Symmetry 11 (2):276. (**IF:2.1**).

81. **Nisar Ahmad**, Rehman J, ur Rehman J, Nasar G. (2019). Assessments of ^{226}Ra and ^{222}Rn concentration in well and tap water from Sik, Malaysia, and consequent dose estimates. *Human and Ecological Risk Assessment: An International Journal*: 1-10. **(IF: 2.01).**
82. **Nisar Ahmad**, ur Rehman J, Rehman J, Nasar G. (2019). Effect of geochemical properties (pH, conductivity, TDS) on natural radioactivity and dose estimation in water samples in Kulim, Malaysia. *Human and Ecological Risk Assessment: An International Journal*: 1-9. **(IF: 2.01).**
83. **Farooq Khan**, Wang L, Khan M, Yi X. (2019). Opto-mechanically induced transparency under the influence of spin ensemble system. *Optic.* 179:1027-1034. **(IF:1.91)**
84. Zeeshan A, Ellahi R, Mabood F, **Farooq Hussain**. (2019). Numerical study on bi-phase coupled stress fluid in the presence of Hafnium and metallic nanoparticles over an inclined plane. *International Journal of Numerical Methods for Heat & Fluid Flow*.1-8 **(IF:1.9).**
85. Khan K, Ahmad N, **Farooq Khan** Syed I. (2019). A framework for head pose estimation and face segmentation through conditional random fields. *Signal, Image and Video Processing*. 1-8. **(IF: 1.89).**
86. Parveen A, Khalid M, **Zaheer Abbas Gilani**, Aslam S, Saleem M, Shaikh FA, Rehman J, Asghar HMN HK. (2019). Dielectric, impedance and modulus spectroscopic studies of $\text{Co}_{0.3}\text{Cd}_{0.7}\text{Zn}_{1.5x}\text{Fe}_{2-x}\text{O}_4$ nanoparticles. *Applied Physics A*. 125 (10):731. **(IF: 1. 71).**

87. Memon JA, **Mehwish QudoosAlizai**, Hussain A. (2019). Who will think outside the sink? Farmers' willingness to invest in technologies for groundwater sustainability in Pakistan. *Environment, Development and Sustainability*. 1-21. (**IF: 1.6**).
88. **Abdil Ghaffar**, Ullah Z, Bari M, Nisar KS, Baleanu D. (2019). Family of odd point non-stationary subdivision schemes and their applications. *Advances in Difference Equations* 2019 (1):171. (**IF: 1.51**).
89. **Muhammad Khalid**, Wei J, Zhang G, Xie H, Fang J, Qaisrani MA, Wang Z, Mujib-Ur-Rehman. (2019). Optical performance of quasi-stationary, low-concentration, and low-profile compound parabolic concentrators. *Journal of Renewable and Sustainable Energy*. 11 (5):053701. (**IF: 1.51**).
90. Asif M, Nadeem M, Imran M, Ahmad S, Musaddiq S, Abbas W, **Zaheer Abbas Gilani**, Sharif MK, Warsi MF, Khan MA. (2019). Structural, magnetic and dielectric properties of NiCo doped BiFeO₃ multiferroics synthesized via micro-emulsion route. *Physica B: Condensed Matter* 552:11-18. (**IF: 1.45**).
91. **Hamdullah Khan**, Ishaq Ahmad, Ting-kai Zhao, Farhana Sparis, et al. (2019). Gamma irradiation-induced phase transitions of boron nitride nanoparticles. *Materials Research Express*. (**IF: 1.44**).
92. Jan T, Azmat S, Mansoor Q, Ilyas S, Ahmad I, **Hamdullah Khan**, Ismail M. (2019). Structural, Raman, optical and novel antibacterial characteristics of Al doped CuO nanostructures. *Materials Research Express*. 6 (10):1050a1053. (**IF: 1.44**).

93. Ghaffar A, **Mudasir Iqbal**, Bari M, Muhammad Hussain S, Manzoor R, Soopy Nisar K, Baleanu D. (2019). Construction and Application of Nine-Tic B-Spline Tensor Product SS. *Mathematics* 7 (8):675. **(IF: 1.42)**.
94. Ghaffar A, Bari M, Ullah Z, **Mudasir Iqbal**, Nisar KS, Baleanu D. (2019). A New Class of 2q-Point Nonstationary Subdivision Schemes and Their Applications. *Mathematics* 7 (7):639. **(IF: 1.42)**.
95. **Nisar Ahmad** Uddin Z, Rehman Ju, Bakhsh M, Ullah H. (2019). Evaluation of radon concentration and heavy metals in drinking water and their health implications to the population of Quetta, Balochistan, Pakistan. *International Journal of Environmental Analytical Chemistry*:1-10. **(IF: 1.41)**.
96. **Nisar Ahmad** Nasir T, Rizwan S, Ullah H, Bakhsh M. (2019). Evaluation of ^{222}Rn and ^{226}Ra concentrations in cement and limestone of Sheikh Buddin Hill, Pezu, Pakistan using different techniques. *International Journal of Environmental Analytical Chemistry*. 99(7):683-691. **(IF: 1.41)**.
97. Sheikh FA, Khalid M, Shifa MS, Aslam S, Perveen A, ur Rehman J, Khan MA, **Zaheer Abbas Gilani**. (2019). Effects of bismuth on structural and dielectric properties of cobalt-cadmium spinel ferrites fabricated via micro-emulsion route. *Chinese Physics B* 28 (8):088701. **(IF: 1.41)**.
98. Abbas SZ, **Hasrat Hussain Shah**, Sun H, Rahaman F, Ahmed F. (2019). Gravitational collapse of dust fluid and dark energy in the presence of curvature: Black hole formation. *Modern Physics Letters A*. 1950240. **(IF: 1.34)**.

99. Sarkar N, Sarkar S, Rahaman F, Singh KN, **Hasrat Hussain Shah**. (2019). Anisotropic

fluid spheres satisfying the Karmarkar condition. Modern Physics Letters A. 34(15):1950113. **(IF: 1.34)**.

100. **Hasrat Hussain Shah**, Rahaman F, Ali A, Molla S (2019) Gravitational collapse of an interacting vacuum energy density with an anisotropic fluid. Physics of the Dark Universe 24:100291. **(IF: 1.34)**.

101. **Nisar Ahmad**, Khan A, Ahmad I, Hussain J, Ullah N (2019a) Health implications of natural radioactivity in spring water used for drinking in Harnai, Balochistan. International Journal of Environmental Analytical Chemistry:1-8. **(IF: 1.26)**.

102. **Nisar Ahmad**, Nasir T, Rafique M, Rizwan S (2019b) Natural radioactivity and associated radiological hazards in limestone used as raw material in cement of Lucky Cement Factory, Pezu, Pakistan. International Journal of Environmental Analytical Chemistry:1-12. **(IF: 1.26)**.

103. Ikram M, Khan SA, Mushtaq A, Kamran M, **Hamdullah Khan, Zubair Khan M**, Naeem M. (2019). Electrostatic simulations of the radio frequency heating of a non-neutral plasma in an electron trap. Contributions to Plasma Physics. 59(7): e201800101. **(IF: 1.23)**.

104. Zeeshan A, **Farooq Hussain**, Ellahi R, Vafai K. (2019). A study of gravitational and magnetic effects on coupled stress bi-phase liquid suspended with crystal and Hafnium particles down in steep channel. Journal of Molecular Liquids 286:110898. **(IF:1.5)**

105. Ellahi R, **Farooq Hussain**, Ishtiaq F, Hussain A. (2019). Peristaltic transport of Jeffrey fluid in a rectangular duct through a porous medium under the effect of partial slip: An application to upgrade industrial sieves/filters. *Pramana* 93 (3):34. **(IF: 1.15)**.
106. Araci S, Rahman G, **Abdul Ghaffar**, Nisar KS. (2019). Fractional Calculus of Extended Mittag-Leffler Function and Its Applications to Statistical Distribution. *Mathematics* 7 (3):248. **(IF: 1.10)**.
107. Tassaddiq A, Khalid A, Naeem MN, **Abdul Ghaffar**, Khan F, Karim SAA, Nisar KS (2019) A New Scheme Using Cubic B-Spline to Solve Non-Linear Differential Equations Arising in Visco-Elastic Flows and Hydrodynamic Stability Problems. *Mathematics* 7 (11):1078. **(IF: 1.1)**.
108. Zulkifli NAB, Karim SAA, Sarfraz M, **Abdul Ghaffar**, Nisar KS (2019) Image Interpolation Using a Rational Bi-Cubic Ball. *Mathematics* 7 (11):104, **(IF: 1.1)**.
109. Srivastava HM, Ahmad QZ, Darus M, Khan N, Khan B, Zaman N, **Hasrat Hussain Shah**. (2019). Upper Bound of the Third Hankel Determinant for a Subclass of Close-to-Convex Functions Associated with the Lemniscate of Bernoulli. *Mathematics*. 7 (9):848. **(IF: 1.10)**.
110. Khalid A, Naeem MN, Ullah Z, **Abdul Ghaffar**, Baleanu D, Nisar KS, Al-Qurashi MM. (2019). Numerical Solution of the Boundary Value Problems Arising in Magnetic Fields and Cylindrical Shells. *Mathematics*. 7 (6):508. **(IF: 1.10)**.
111. **Naheeda Iftikhar**, Rehman A, Sadaf H, Iqbal S (2018) Study of Al₂O₃/copper–water nanoparticle shape, slip effects, and heat transfer on steady physiological delivery of MHD hybrid nanofluid. 97(12): 1239-1252. . **(IF: 1.01)**.

112. **Noor-ul-Huda Khan Asghar** Shifa MS, Gilani ZA, Ali A, Mahmood K, ur Rehman J, Usmani MN, Wang P, Qin Shuang Shi S, Jiang D. (2019). Mechanism of the effect of electron beam melting on the distribution of oxygen, nitrogen and carbon in silicon. International Journal of Materials Research. 110 (5):476-480. (**IF: 0.85**).
113. **Farooq Khan**, Asghar HMNHK, Khan M, Khan K. (2019). Transmissivity of opto-mechanical system containing a two-level system. International Journal of Modern Physics B. 33(22):1950252. (**IF: 0.78**).
114. Khalid M, Khan J, Mustafa G, Akhtar M, Gilani Z, **Noor-ul-Huda Khan Asghar**., Riaz S, Naseem S. (2019). Design and analysis of normally-on 4h-sic vertical junction field effect transistor (vjfet) using sentaurus tcad simulation. Journal of Ovonic Research.15 (5):335-343. (**IF: 0.71**).
115. Khan S, **Hamid Ullah**, Zhang L. (2019). Bioactive constituents form Buddleja species. Pakistan journal of pharmaceutical sciences 32 (2):721-741. (**IF: 0.67**).
116. Aftab Z, Afzal M, Bushra, Khan H, Badshah S, Khan D, **Hamid Ullah** and Khan S. (2019). Fistuloates A–C: New antioxidative aromatic compounds isolated from Cassia fistula. Journal of Chemical Research: 1747519819875052. (**IF: 0.67**).
117. **Hamdullah Khan**, Hussain S, Ikram M, Ilyas MZ, khan Niazai MZ, Shafiq M. (2019). Stable current sheath dynamics caused by preionization source in a small plasma focus device using He as an operating gas. Radiation Effects and Defects in Solids 174 (3-4):273-283. (**IF: 0.63**).
118. Shifa M, Amisbah A, Munir T, Shahzad A, Usmani M, Khalid M, Mutabar S, Imdadullah Q, **Zaheer Abbas Gilani**, Asghar H. (2019.) Characterization of zirconium

- substituted cobalt zinc ferrites synthesized via co-precipitation technique. Digest journal of nanomaterials and biostructures. 14(3):607-616. **(IF: 0.63).**
119. Saqib A, Ishrat N, Alamzeb **M Mamoon-ur-Rasheed.** (2019). Activity Guided Isolation of Nematicidal Constituents from the Roots of Berberis brevissima Jafri and Berberis parkeriana Schneid. Journal of Agricultural Sciences. 25 (1):108-114. **(IF:0.48)**
120. Khalid A, Naeem M, Agarwal P, **Ghaffar A**, Ullah Z, Jain S (2019) Numerical approximation for the solution of linear sixth order boundary value problems by cubic B-spline. Advances in Difference Equations 2019 (1):492. **(IF: 0.33).**
121. Khan MI, Shakil M, Tahir MB, Rafique M, Iqbal T, Zahoor A, **Javed ur Rehman ,** Iqbal K, Chow JC. (2019). Selection of gamma analysis acceptance criteria in IMRT QA using Gafchromic EBT3 film dosimetry. Journal of Radiotherapy in Practice. 18 (2):127-131. **(ISI Recognized).**
122. Khan MI, Tahir MB, Rafique M, Iqbal T, Zulfiqar S, Zahoor A, **Javed ur Rehman J,** Iqbal K, Chow J. (2019). Commissioning and evaluation of a radiochromic EBT3 film dosimetry system. Journal of Radiotherapy in Practice. 18 (1):55-62. **(ISI Recognized).**
123. **Javed ur Rehman** Syed Z, Hussain G, Ahmad N, Gilani ZA, Nasar G, Akhter MM, Isa M, Iqbal T. (2019). Dose verification of volumetric-modulated arc therapy using one-dimensional and two-dimensional dosimeters. Journal of Radiotherapy in Practice. 18 (3):304-308. **(ISI Recognized).**

124. **Javed ur Rehman** Ahmad N, Gilani ZA, Nasar G, Akhter MM. (2019). Quality assurance of intensity modulated radiation therapy treatment planning using head and neck phantom. *Journal of Radiotherapy in Practice*. 18(3): 239-245. (**ISI Recognized**).
125. Abid S, Quddus N, **Bashir Kakar**, Abid H. (2019). Impacts of depiction of women in male's product commercials. *International Journal of Biology, Pharmacy and Allied Sciences*. 8:664-676. (**ISI Indexed**).
126. **Bashir Kakar** Siddiq M, Khalid N, Rana D, Saba Sultan D. (2019). Reclaiming social inclusion through traditional embroidery-a case study of women embellishers in Balochistan, Pakistan. *International Journal of Biology, Pharmacy and Allied Science*.08:664-475. (**ISI Indexed**).
127. Zaidi S, Salah S, Mehdi AT, **Mehwish Sahibzada**, Rafiq D, Sultan M, Manzor S (2019) Symbolic Portrayal of Social Classes in Pakistani Advertisement. *International Journal Of English Linguistics* 9 (1):194-200. (**ISI Indexed**).
128. **Bashir Kakar** (2019). Impact of depiction of Women in Male's Product Commercials. *International Journal of Biology, Pharmacy and Allied Sciences*, Volume 08, Pages:664-676. (**ISI Indexed**).
129. **Liaqat Ali channa**, Panezai SG. (2019). Top-Down English Policy and Bottom-Up Teacher Take: An Interview-Based Insight from the Balochistan Province of Pakistan. *The Qualitative Report*. 24(9):2281-2296. (**ISI Indexed**).
130. Ellahi R, Zeeshan A, **Hussain F**, Abbas T (2019) Thermally charged MHD bi-phase flow coatings with non-Newtonian nanofluid and hafnium particles along slippery walls. *Coatings* 9 (5):300. (**ISI Indexed**).

131. Xi Z, Khan S, Jichuan Z, **Hamid Ullah**, Khan H, Zhang L (2018) Two new antioxidative geniposides (ulmoside C, ulmoside D) and 10-O-acetylgeniposidic acid from Eucommia ulmoides. *Pharmaceutical Chemistry Journal* 52 (4):334-338. (**ISI Indexed**).
132. Khan I, Tahir B, Rafique M, Iqbal T, Zahoor A, **Rehman J**, Iqbal K, Chow J. (2018). Photon Beam Energy Dependence On IMRT QA for Brain Treatment Plan in Radiotherapy. *MEDICAL PHYSICS* 45(6): 284. (**ISI Indexed**).
133. Ghaffar A, **Zahoor Ullah**, Bari M, Nisar KS, Al-Qurashi MM, Baleanu D (2019) A new class of 2m-point binary non-stationary subdivision schemes. *Advances in Difference Equations* 2019 (1):325. (**ISI Indexed**).
134. **Ghaffar A**, Saif A, Iqbal M, Rizwan M. Two Classes of Integrals Involving Extended Wright Type Generalized Hypergeometric Function. *Communications in Mathematics and Applications*. 2019 Sep 30; 10(3):599-606. (**ISI Indexed**).
135. Shafique MM, **Sabeen Akber**. (2019). Social Issues of Children: A analysis in view of Islamic teachings and international laws. *Rahat ul quloob*. 03(01):84-95. (**HEC Indexed in Y category**).
136. **Sabeen Akber**. (2019). Increasing trend of suicide in youth, reasons and their solution in the light of ul quloob. 03(02):63-74). (**HEC Indexed in Y category**).
137. Hamid S, Shah Zahoor, **Alamgir A**, Wadood A. (2019). Periphery of a Periphery: A critical analysis of Balochistan's underdevelopment. *Balochistan Review*. XLI (1): 130-149. **HEC Indexed in Z category**.

138. Khan H, Wadood A, **Aurangzaib Alamgir**, Pirkhani DM. (2019). Periphery of a Periphery: Regional conflicts and global security under power transition in South Asia. Balochistan Review. XLI: (2): 193-203. (**HEC Indexed in Z category**).
139. **Aurangzaib Alamgir**, Khan H, Roshan N, Inayatullah. (2019). Foreign cinema and its impact on youth: A case study of Quetta, Balochistan. Balochistan Review. XLI: (2): 338-359. (**HEC Indexed in Z category**).
140. Farooq A, Ali S, **Hamid Ullah**, Khan A, Jahan N, Agha I, Tareen RB. (2019). Evaluation of Antioxidant, Antimicrobial activity and GC-MS analysis of Phlomis stewartii. Pure and Applied Biology. 8:2420-2433. (**HEC Recognized in Y Category**).

FACULTY OF ENGINEERING AND ARCHITECTURE

141. **Azmatullah Khan**, Szulejko JE, Samaddar P, Kim K-H, Liu B, Maitlo HA, Yang X, Ok YS. (2019). The potential of biochar as sorptive media for removal of hazardous benzene in air. Chemical Engineering Journal 361:1576-1585. (**IF: 8.35**).
142. Babar AA, Bughio NA, Peerzada MH, Naveed T, **Abdul Qadeer Dayo**. (2019). Exhaust reactive dyeing of lyocell fabric with ultrasonic energy. Ultrasonics Sonochemistry. 58: 104611. (**IF 7.27**)
143. **Nasir Khan**, Pu J, Pu C, Xu H, Gu X, Lei Z, Huang F, Nasir MA, Ullah R. (2019). Experimental and mechanism study: Partially hydrolyzed polyacrylamide gel degradation and deplugging via ultrasonic waves and chemical agents. Ultrasonics sonochemistry 56:350-360. (**IF: 7.27**).

144. Fouad DE, Zhang C, Mekuria TD, Bi C, Zaidi AA, **Ahmer Hussain Shah**. (2019).

Effects of sono-assisted modified precipitation on the crystallinity, size, morphology, and catalytic applications of hematite (α -Fe₂O₃) nanoparticles: A comparative study. Ultrasonics sonochemistry 59:104713. **(IF: 7.27)**.

145. Kim K-H, Szulejko JE, Raza N, Kumar V, Vikrant K, Tsang DC, Bolan NS, Ok YS,

Azmatullah Khan. (2019). Identifying the best materials for the removal of airborne toluene based on performance metrics-A critical review. Journal of Cleaner Production: 118408. **(IF: 6.39)**.

146. Liu B, **Azmatullah Khan**, Kim K-H, Kukkar D, Zhang M (2019) The adsorptive

removal of lead ions in aquatic media: Performance comparison between advanced functional materials and conventional materials. Critical Reviews in Environmental Science and Technology:1-43. **(IF: 5.98)**

147. Khan AA, Tahir M (2019) Recent advancements in engineering approach towards

design of photo-reactors for selective photocatalytic CO₂ reduction to renewable fuels. Journal of CO₂ Utilization 29:205-239. **(IF: 5.18)**.

148. Gu X, Pu C, **Nasir Khan**, Wu F, Huang F, Xu H. (2019). The visual and quantitative

study of remaining oil micro-occurrence caused by spontaneous imbibition in extra-low permeability sandstone using computed tomography. Fuel. 237:152-162. **(IF: 5.12)**

149. Samaddar P, Kim K-H, Yip AC, Zhang M, Szulejko JE, **Azmatullah Khan**, (2019).

The unique features of non-competitive vs. competitive sorption: Tests against single volatile aromatic hydrocarbons and their quaternary mixtures. Environmental research 173:508-516. **(IF: 5.02)**.

150. **Azmatullah Khan**, Szulejko JE, Samaddar P, Kim K-H, Eom W, Ambade SB, Han TH. (2019). The effect of diverse metal oxides in graphene composites on the adsorption isotherm of gaseous benzene. *Environmental research* 172:367-374. (**IF: 5.02**).
151. Maitlo HA, Kim K-H, **Azmatullah Khan**, Szulejko JE, Kim JC, Song HN, Ahn W-S. (2019). Competitive adsorption of gaseous aromatic hydrocarbons in a binary mixture on nonporous covalent organic polymers at various partial pressures. *Environmental research*. 173:1-11. (**IF: 5.02**).
152. Vikrant K, Cho M, **Azmatullah Khan**, Kim K-H, Ahn W-S, Kwon EE. (2019). Adsorption properties of advanced functional materials against gaseous formaldehyde. *Environmental research* 178:108672. (**IF: 5.02**).
153. Humayoun UB, Kwon SB, **Syed Kamran Sami**, Yoon D-H (2019) (NH4) 3AlF6: Mn4+ a novel red phosphor–Facile synthesis, structure and luminescence characteristics. *Journal of Alloys and Compounds* 776:594-598. (**IF: 4.17**).
154. **Muhammad Irfan**, Hassan M, Hassan N (2019) The effect of project management capabilities on project success in pakistan: An empirical investigation. *IEEE Access* 7:39417-39431. (**IF: 4.09**).
155. Dexing L, Enyuan W, Xiangguo K, Haishan J, Dongming W, **Ali Muhammad**. (2019). Damage precursor of construction rocks under uniaxial cyclic loading tests analyzed by acoustic emission. *Construction and Building Materials* 206:169-178. (**IF: 4.04**).
156. **Abdul Muntaqim Naji**, Emad MZ, Hafeez ur Rehman, Yoo H (2019) Geological and geomechanical heterogeneity in deep hydropower tunnels: A rock burst failure case study. *Tunnelling and Underground Space Technology* 84:507-521. (**IF: 3.94**).

157. Li D, Wang E, Kong X, **Ali Muhammad**, Wang D. (2019). Mechanical behaviors and acoustic emission fractal characteristics of coal specimens with a pre-existing flaw of various inclinations under uniaxial compression. International Journal of Rock Mechanics and Mining Sciences. 116:38-51. (**IF: 3.78**).
158. Zhang L, **Khan N**, Pu C. (2019). A New Method of Plugging the Fracture to Enhance Oil Production for Fractured Oil Reservoir using Gel Particles and the HPAM/Cr³⁺ System. Polymers 11 (3):446. (**IF: 3.77**).
159. Chen YP, He X-y, **Abdul Qadeer Dayo**, Wang J-y, Wang J, Liu W-b, Tang T. (2019). Synthesis and characterization of cardanol containing tetra-functional fluorene-based benzoxazine resin having two different oxazine ring structures. Polymer. 179: 121620. (**IF 3.77**).
160. Zu L-w, Gao B-c, Pan Z-c, Wang J, **Abdul Qadeer Dayo**, Liu W-b. (2019). Amino functionalized lead phthalocyanine modified benzoxazine resin: Curing kinetics, thermal, and mechanical properties. Polymers. (**IF 3.16**).
161. Wang T, He X-Y, **Abdul Qadeer Dayo**, Wang J-Y, Wang J, Liu W-b. (2019). Synthesis of novel multi-functional fluorene-based benzoxazine resins: Polymerization behaviour, curing kinetics, and thermal properties. Reactive and Functional Polymers. 143: 104344. (**IF 3.07**).
162. Jia H, Wang E, Song D, Wang X, **Ali Muhammad**. (2019). Precursory changes in wave velocity for coal and rock samples under cyclic loading. Results in Physics. 12:432-434. (**IF: 3.04**).

163. Lu J, Zhang Y, **Muhammad Habib**, Chen Z, Xiao Y, Ye B. (2019). 3D analysis of anchor bolt pullout in concrete materials using the non-ordinary state-based peridynamics. *Engineering Fracture Mechanics* 207:68-85. (**IF: 2.9**).
164. Shah AH, Li X, Xu XD, **Abdul Qadeer Dayo**, Liu W-b, Bai JW, Wang J. (2019). Evaluation of mechanical and thermal properties of modified epoxy resin by using acacia catechu particles, *Materials Chemistry and Physics*. 225: 239-46. (**IF 2.78**).
165. Ghouti HA, Zegaoui A, Derradji M, Zu L-w, Cai W-a, Wang J, **Dayo AQ**, Liu W-b. (2019). Structural and mechanical characteristics of silane-modified PIPD/basalt hybrid fiber-reinforced polybenzoxazine composites, *Materials Chemistry and Physics*. 237:121850. (**IF 2.78**).
166. **Ahmar Hussain Shah**, Li X, Xu X, Abdul Qadeer Dayo, Liu W-b, Bai J, Wang J. (2019). Evaluation of mechanical and thermal properties of modified epoxy resin by using acacia catechu particles. *Materials Chemistry and Physics*. 225:239-246. (**IF: 2.78**).
167. Yang Y, Hong C, Zameer Ahmed Abro, Wang L, Yifan Z (2019) A new Fiber Bragg Grating sensor based circumferential strain sensor fabricated using 3D printing method. *Sensors and Actuators A: Physical* 295:663-670. (**IF: 2.73**).
168. Hong C, Yuan Y, Yang Y, Zhang Y, **Zameer Ahmed Abro**. (2019). A simple FBG pressure sensor fabricated using fused deposition modelling process. *Sensors and Actuators A: Physical* 285:269-274. (**IF: 2.71**).
169. Bibi R, Jabeen U, **Muhammad Najam Khan**, Ahmad I, Fahmid S, Bashir F, Rizwan S, Bibi N, Adhikari T, Pathak D (2019) Structural, optical and photovoltaic properties

of P3HT and metal doped TiO₂ quantum dots based bulk heterojunction layers. Optical Materials 91:376-385. **(IF: 2.68).**

170. **Mehar Gul**, Tai N, Huang W, Nadeem MH, Yu M (2019) Assessment of Wind Power Potential and Economic Analysis at Hyderabad in Pakistan: Powering to Local Communities Using Wind Power. Sustainability 11 (5):1391. **(IF: 2.59).**

171. **Waqas Ahmed Mahar**, Verbeeck G, Singh MK, Attia S. (2019). An Investigation of Thermal Comfort of Houses in Dry and Semi-Arid Climates of Quetta, Pakistan. Sustainability. 11 (19):5203. **(IF: 2.59).**

172. Kasi SK, Naqvi IH, **Mumraiz Khan Kasi**, Yaseen F (2019) Interference management in dense inband D2D network using spectral clustering & dynamic resource allocation. Wireless Networks 25 (7):4431-4441. **(IF: 2.4).**

173. Kim H, Rehman H, Ali W, **Abdul Muntaqim Naji**, Kim J-j, Kim J, Yoo H (2019) Classification of Factors Affecting the Performance of Fully Grouted Rock Bolts with Empirical Classification Systems. Applied Sciences 9 (22):4781. **(IF:2.21).**

174. Chen YP, **Abdul Qadeer Dayo**, Zhang HY, Wang A-r, Wang J, Liu W-b, Yang Y, Qin QR, Yang YG, (2019), Synthesis of cardanol based phthalonitrile monomer and its copolymerization with phenol-aniline based benzoxazine, Journal of Applied Polymer Science. 136(20):47505. **(IF 2.18)**

175. Kim J, **Rehman H**, Ali W, **Abdul Muntaqim Naji**, Yoo H (2019) Weightage effect during back-calculation of rock-mass quality from the installed tunnel support in rock-mass rating and tunneling quality index system. Applied Sciences 9 (10):2065. **(IF: 2.1).**

176. Li Z, Niu Y, Wang E, Liu L, Wang H, Wang M, **Ali M.** (2019). Experimental Study

on Electric Potential Response Characteristics of Gas-Bearing Coal during Deformation
and Fracturing Process. *Processes*. 7 (2):72. (**IF: 1.96**).

177. Zaidi A, Feng R, Malik A, Khan S, Shi Y, Bhutta A, **Shah AH.** (2019). Combining

microwave pretreatment with iron oxide nanoparticles enhanced biogas and hydrogen
yield from green algae. *Processes*. 7 (1):24. (**IF: 1.96**).

178. Mehdi G, Zhou S, Zhu Y, **Shah AH**, Chand K. (2019). Numerical Investigation of

SCR Mixer Design Optimization for Improved Performance. *Processes*. 7 (3):168. (**IF:**
1.96).

179. **Zameer Ahmed Abro**, Yi-Fan Z, Nan-Liang C, Cheng-Yu H, Lakho RA, Halepoto H

.(2019). A novel flex sensor-based flexible smart garment for monitoring body postures.
Journal of Industrial Textiles. 49:262-274. (**IF: 1.88**).

180. **Naeem MA, Siddiqui Q**, Leroy A, Khan MR, Wei Q (2019) The production and

characterization of microbial cellulose–electrospun membrane hybrid nano-fabrics.
Journal of Industrial Textiles:1528083719881813. (**IF: 1.88**).

181. Kashif M, Hamdani STA, Nawab Y, **Muhammad Ayub Asgha**, Umair M, Shaker K

(2019) Optimization of 3D woven preform for improved mechanical performance.
Journal of Industrial Textiles 48 (7):1206-122. (**IF: 1.88**).

182. Zhang L, **Nasir Khan**, Pu C. (2019). Influence of salinity on the properties of the

different HPAM/Al³⁺ systems. *Oil & Gas Science and Technology–Revue d'IFP Energies nouvelles*. 74:37. (**IF: 1.86**).

183. Cai W-a, Zegaoui A, Zhang L-l, **Dayo AQ**, Ghouti HA, Wang J, Liu W-b, Tang T. (2019). One-pot synthesis, characterization and polymerization of hyperbranched benzoxazine resins derived from A₂+ B₃ monomers. *Materials Today Communication*. 21: 100638. (**IF 1.85**).
184. **Muhammad Kashif**, Hamdani ST, Zubair M, Nawab Y. (2019). Effect of interlocking pattern on short beam strength of 3D woven composites. *Journal of Composite Materials*: 0021998319839441. (**IF: 1.75**).
185. Ahmad Q, Wu G, Zhaoyun Z, Jianlu W, Kun L, Tianwei D, **Khan N**. (2019) Analysis of attenuation and dispersion of propagating wave due to the coexistence of three fluid phases in the pore volume. *Geophysical Prospecting*. 2019: 1-21. (**IF 1.62**)
186. Ahmed SM, Kazi SN, **Ghulamullah Khan**, Zubir MN, Dahari M, Ibrahim S, Talip MS, Ahmad P, Chowdhury ZZ. (2019). Toward improved heat dissipation of the turbulent regime over backward-facing step for the AL₂O₃-water nanofluids: An experimental approach. *Thermal Science*. 23(3) :1779-89. (**IF 1.54**).
187. Ahmed SM, Kazi SN, **Ghulamullah Khan**, Akram N, Dahari M, Zubir MNM, Ahmad P, Zaharinie T (2019) Experimental investigation on drag reduction of flowing crop suspensions of the pulp fibers in circular pipe heat exchanger. *Particulate Science and Technology*:1-11. (**IF 1.42**).
188. Naeem MA, **Qasim Siddiqui**, Mushtaq M, Farooq A, Pang Z, Wei Q. (2019). In-situ self-assembly of bacterial cellulose on banana fibers extracted from peels. *Journal of Natural Fibers*.1-12. (**IF: 1.25**).

189. Naeem MA, Alfred M, Saba H, **Qasim Siddiqui** Naveed T, Shahbaz U, Wei. Q. (2019). A preliminary study on the preparation of seamless tubular bacterial cellulose-electrospun nanofibers-based nanocomposite fabrics. *Journal of Composite Materials.*109:1-10 (**IF: 1.25**).
190. Cheng-Yu H, Ahmed, **Zameer Ahmed Abro**, Yi-Fan Z, Ahmed Lakho R (2019) An FBG-based smart wearable ring fabricated using FDM for monitoring body joint motion. *Journal of Industrial Textiles:*1528083719870204. (**IF:1.15**)
191. Shahzad A, Jabbar A, Irfan M, Qadir MB, Ahmad Z (2019) Electrical resistive heating characterization of conductive hybrid staple spun yarns. *The Journal of The Textile Institute:*1-8. (**IF: 1.03**).
192. Jiskani IM, Ullah B, Shah KS, Bacha S, Shahani NM, **Ali Muhammad**, Maqbool A, Qureshi AR. (2019). Overcoming mine safety crisis in Pakistan: An appraisal. *Process Safety Progress.* 1-5. (**IF: 0.88**).
193. Shah AH, Lakhan MN, Wang J, Ahmed M, Alali KT, Ahmed R, Ali I, **Abdul Qadeer Dayo**. (2019). Facile synthesis and characterization of selenium nanoparticles by the hydrothermal approach, *Digest Journal of Nanomaterials and Biostructures.* 14(4): 867-872. (**IF 0.63**).
194. **Abdul Qadeer Dayo**, Ullah S, Kiran S, Wang J, Shah AH, Zegaoui A, Arse YB, Liu W-b. (2019). Tensile and water absorption behaviour of polybenzoxazine/hemp fibres composites: Experimental analysis and theoretical validation, *Digest Journal of Nanomaterials and Biostructures.* 14(1): 231-241 (**IF 0.63**).

195. Akbar A, Sadiq MB, Ali I, Muhammad N, Rehman Z, **Muhammad Najam Khan**, Muhammad J, Khan SA, Rehman FU, Anal AK. (2019). Synthesis and antimicrobial activity of zinc oxide nanoparticles against foodborne pathogens *Salmonella typhimurium* and *Staphylococcus aureus*. *Biocatalysis and agricultural biotechnology* 17:36-42. (**ISI Indexed**).
196. Hussain S, Ghouri AS, Ahmad A. (2019). Pine cone extract as a natural coagulant for the purification of turbid water. *Heliyon*. 5 (3):e01420. (**ISI Indexed**).
197. **Hafeez ur Rehman**, Abdul Muntaqim Naji, Ali W, Mukhta HM, Mandokhail SUJ (2019) Numerical Evaluation of Empirically Suggested Support System for the Diversion Tunnels at Diamer Basha Dam Project, Pakistan. *Journal of Himalayan Earth Science* 52 (2) 1-13. (**ISI Indexed**).
198. Imran U, Ullah A, **Kaleemullah Shaikh**, Mehmood R, Saeed M (2019) Health risk assessment of the exposure of heavy metal contamination in surface water of lower Sindh, Pakistan. *SN Applied Sciences* 1 (6):589. (**ISI Indexed**).
199. **Mehr Gul**, Tai N, Huang W, Nadeem MH, Ahmad M, Yu M (2019) Technical and Economic Assessment of VSC-HVDC Transmission Model: A Case Study of South-Western Region in Pakistan. *Electronics* 8 (11):1305. (**ISI Indexed**).
200. Noreen Azhar, Saleem Iqbal, Sher Muhammad Nasir, **Faiza Akhtar**, Farhana Sarwar and Abdul Rehman (2019). Wind Data Analysis of Coastal Region of Balochistan (Pakistan) by Weibull and Rayleigh Method. *Indian Vol 12(26)*. (**ISI Indexed**).

201. Qudoos A, Ullah Z, **Zafar Baloch**. (2019). Performance Evaluation of the Fiber-Reinforced Cement Composites Blended with Wheat Straw Ash. *Advances in Materials Science and Engineering* 2019. (**ISI Indexed**).
202. Ahmad J, Khan NA, Shafiq MA, **Khan N**. (2019). A Low-Cost Wastewater Treatment Unit for Reducing the Usage of Fresh Water at Car Wash Stations in Pakistan. *Pakistan Journal of Scientific & Industrial Research Series A: Physical Sciences*. 62 (1):57-66. (**ISI Recognized**).
203. **Abdul Malik Rehan Abbasi**, Ahmed Z. (2019). Characterization of tensile properties of the hybrid composite of epoxy resin reinforced with oxidized poly (acrylonitrile). *J.Mech.Cont.& Math. Sci.* 1-15. (**ISI Indexed**).
204. **Abdul Muntaqim Naji**, Rehman H, Emad MZ, Ahmad S, Kim J-j, Yoo H (2019) Static and Dynamic Influence of the Shear Zone on Rockburst Occurrence in the Headrace Tunnel of the Neelum Jhelum Hydropower Project, Pakistan. *Energies* 12 (11):2124. (**ISI Indexed**).
205. **Hafeez ur Rehman**, Abdul Muntaqim Naji, Kim J-j, Yoo H (2019) Extension of tunneling quality index and rock mass rating systems for tunnel support design through back calculations in highly stressed jointed rock mass: An empirical approach based on tunneling data from Himalaya. *Tunnelling and Underground Space Technology* 85:29-42. (**ISI Indexed**).
206. Khari SSH, **Muhammad Ayub**, Kwon B-i (2018) A Three-Phase Line-Interactive UPS System to Eliminate the Inrush Current Phenomenon during Switching-in of an

Auxiliary Load while Powering the Main Load. Journal of Electrical Engineering & Technology 13 (4):1623-1630. (**ISI Indexed**).

207. Ahmad I, Hussain S, Qadir A, **Muhammad Najam Khan**. (2019). Estimation of Cleaning Efficiency of Clay Removal from Bauxite. International Journal of Economic and Environmental Geology: 35-39. (**HEC Indexed in Y category**).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

208. Sattar H, Bajwa IS, **Amin RU**, Sarwar N, Jamil N, Malik MA, Mahmood A, Shafi U (2019) An IoT-based intelligent wound monitoring system. IEEE Access 7:144500-144515. (**IF: 4.09**).
209. **Syed Attique Shah**, Seker DZ, Rathore MM, Hameed S, Yahia SB, Draheim D. (2019). Towards Disaster Resilient Smart Cities: Can Internet of Things and Big Data Analytics Be the Game Changers? IEEE Access. 7:91885-91903. (**IF: 4.09**).
210. **Syed Attique Shah**, Seker DZ, Hameed S, Draheim D. (2019). The Rising Role of Big Data Analytics and IoT in Disaster Management: Recent Advances, Taxonomy and Prospects. IEEE Access. 7:54595-54614. (**IF: 4.09**).
211. Yasir M, Habib MA, **Muhammad Ashraf**, Sarwar S, Chaudhry MU, **Hamayoun Shahwani**, Ahmad M, Faisal CMN (2019) TRICE: Mining Frequent Itemsets by Iterative TRimmed Transaction LattICE in Sparse Big Data. IEEE Access 7:181688-181705. (**IF: 4.09**).

212. **Bushra Naeem**, Ngah R, Hashim SZM. (2019). Reduction in ping-pong effect in heterogeneous networks using fuzzy logic. *Soft Computing*. 23 (1):269-283. **(IF: 2.78)**.
213. Hayat N, **Muhammad Imran**. (2019). Ghost-Free Multi Exposure Image Fusion Technique using Dense SIFT Descriptor and Guided Filter. *Journal of Visual Communication and Image Representation*. 62: 295-308. **(IF: 2.2)**.
214. **Muhammad Amin**, Pakamas Chetpattananondh, and Sukritthira Ratanawilai. "Application of extracted marine Chlorella sp. residue for bio-oil production as the biomass feedstock and microwave absorber. *Energy Conversion and Management* 195 (2019): 819-829. **(IF:20.2)**.
215. Sattar H, Bajwa IS, Ul-Amin R, Mahmood A, Anwar W, **Bakhtair Kasi**, Kazmi R, Farooq U. (2019). An intelligent and smart environment monitoring system for healthcare. *Applied Sciences* 9 (19):4172. **(IF: 2.21)**.
216. Amin F, Saleem R, Shabbir T, **Muhammad Bilal**, Shafique MF. (2019). A Compact Quad-Element UWB-MIMO Antenna System with Parasitic Decoupling Mechanism. *Applied Sciences*. 9 (11):2371. **(IF: 2.21)**.
217. Ibrahim M, Bajwa IS, Ul-Amin R, **Bakhtair Kasi**, (2019). A neural network-inspired approach for improved and true movie recommendations. *Computational intelligence and neuroscience*. 2019. Article ID 4589060:1- 19. **(IF: 2.15)**.
218. Hayat N, **Muhammad Imran**. (2019). Multi-exposure image fusion technique using multi-resolution blending. *IET Image Processing*. 13 (13):2554-2561. **(IF: 2.0)**.

219. Munir D, **Syed Tariq Shah**, Choi KW, Lee T-J, Chung MY. (2019). Performance analysis of wireless-powered cognitive radio networks with ambient backscatter. EURASIP Journal on Wireless Communications and Networking. (1):45. (**IF: 1.59**).
220. Saleem R, **Muhammad Bilal**, Chattha HT, Rehman SU, Mushtaq A, Shafique MF. (2019) .An FSS Based Multiband MIMO System Incorporating 3D Antennas for WLAN/WiMAX/5G Cellular and 5G Wi-Fi Applications. IEEE Access 7:144732-144740. (**IF: 1.57**).
221. Munir D, Mughal DM, **Shah ST**, Chung MY. (2019). Cooperative relay strategy for backscatter communication networks with RF energy harvesting. Physical Communication. 37:100861. (**IF: 1.45**).
222. **Ayesha Iftikhar**, Rauf Z, Khan FA, Ali MS, Kakar M. (2019). Bayesian game-based user behavior analysis for spectrum mobility in cognitive radios. Physical Communication. 32:200-208. (**IF: 1.45**).
223. Sattar H, Bajwa IS, Muhammad J, Mushtaq MF, Kazmi R, **Muhammad Akram**, Ashraf M, Shafi U. (2019). Smart Wound Hydration Monitoring Using Biosensors and Fuzzy Inference System. Wireless Communications and Mobile Computing. 1-11. (**IF 1.39**).
224. Noor F, **Ahtesham Sajid** , Shah SBH, Zaman M, Gheisari M, Mariappan V (2019) Bayesian estimation and prediction for BurrRayleigh mixture model using censored data. International Journal of Communication Systems 32 (15):e4094. (**IF: 1.27**).
225. Imran M, Harvey BA, **Muhammad Atif** , Memon AA. (2019). A block-based secure and robust watermarking scheme for color images based on multi-resolution

- decomposition and de-correlation. Frontiers of Information Technology & Electronic Engineering. 20 (7):946-963. **(IF: 1.03).**
226. Saleem R, **Muhammad Bilal**, Shabbir T, Shafique MF. (2019). An FSS-employed UWB antenna system for high-gain portable devices. Microwave and Optical Technology Letters 61 (5):1404-141. **(IF: 0.93).**
227. Israr A, Israr A, **Faizullah Khan**, Faisal Khan. (2019). Optimal Modulation Technique for MIMO FSO Link. Wireless Personal Communications. 1-20. **(IF: 0.92).**
228. Salih FI, Bakar NAA, Hassan NH, Yahya F, Kama N, Shah J (2019). IOT Security Risk Management Model for Healthcare Industry. Malaysian Journal of Computer Science: 13. **(IF: 0.62).**
229. Chughtai F, **Raiz ul Amin**, Malik AS, Saeed N. (2019). Performance Analysis of Microsoft Network Policy Server and Free radius Authentication Systems in 802.1 x based Secured Wired Ethernet using PEAP. International Arab Journal of Information Technology 16 (5):862-870. **(IF: 0.41).**
230. Azeem M, Ahmed M, **Ahtesham Sajid** Iqbal T, Farooq A, Valsalan P (2019) An Interactive Code Generator and Profiler System. IJCSNS 19 (1):223. **(ISI Indexed).**
231. **Muhammad Zubair Khan et al.** (2019). Artificial Neural Network versus Binary Logistic Regression for Determination of Risk Factors of Myocardial Infarctio. Indian Journal of Science and Technology, Volume 12(2).1-7. **(ISI Indexed).**

232. Arif M, Rehman K, **Muhammad Zubair Khan**. (2019). Financial knowledge and Literacy or emographics: What determine the use of Financial Services in Pakistan? Indian Journal of Science and Technology, Volume 12(4).1-11. (**ISI Indexed**).
233. Ramzan B, Bajwa IS, Jamil N, Amin RU, Ramzan S, Mirza F, Sarwar N (2019) An Intelligent Data Analysis for Recommendation Systems Using Machine Learning. Scientific Programming Volume 2019. (**ISI Indexed**).
234. Ashraf H, Alenezi M, **Muhammad Nadeem**, Javid Y. (2019). Security assessment framework for educational ERP systems. International Journal of Electrical and Computer Engineering. 9 (6):5570-5585. (**Non-ISI Indexed**).
235. Muneer SU, , **Muhammad Nadeem**, Kasi B (2019) Comparison of modern techniques for analyzing NFRs in Agile: A systematic literature review. Journal of Software Engineering Practice 3 (3):1-12. (**Non-ISI Indexed**).
236. Jaffar M, , **Muhammad Nadeem** Javed Y. (2020). Using Public Vulnerabilities Data to Self-Heal Security Issues in Software Systems. ICIC Express Letters.13 (7): 1-11. (**Non-ISI Indexed**).

FACULTY OF MANAGEMENT SCIENCES

237. **Syed Khair Muhammad**, Mushtaq S, Reardon-Smith K, Ostini J. (2019). Diverse drivers of unsustainable groundwater extraction behavior operate in an unregulated water scarce region. Journal of environmental management. 236:340-350. (**IF: 4.86**).

238. **Syed Munawar Shah**, Abdul-Majid M, Karim ZA. (2019). Debt-oriented Capital

Structure and Economic Growth: Panel Evidence for OECD Countries. European

Review. 27(4):519-542. (**IF: 0.36**).

239. **Tariq Ahmed**, Klobas JKE, Ramayah T. (2019). Personality Traits, Demographic

Factors and Entrepreneurial Intentions: Improved Understanding from a Moderated

Mediation Study. Entrepreneurship Research Journal. 11-29. (**ISI Indexed**).

240. **Tariq Ahmed**, Chandran VGR. et al., (2019). Entrepreneurship education programs:

How learning, inspiration and resources affect intentions for new venture creation in a

developing economy. The International Journal of Management Education. Volume

18, Issue 1. (**ISI Indexed**).

241. **Akram Tayba**, Leia, S, Haidera MJ, Hussaina ST. (2019). The impact of

organizational justice on employee innovative work behavior: Mediating role of

knowledge sharing. Journal of innovation and Knowledge. 1-7. (**ISI Indexed**).

242. Shahani N, Sajid M, Zheng X, Jiskani I, Brohi M, **Ali Muhammad**, Ullah B, Qureshi

A. (2019). Fault tree analysis and prevention strategies for gas explosion in

underground coal mines of Pakistan. Mining of Mineral Deposits. 13: 121-128. (**ISI**

Indexed).

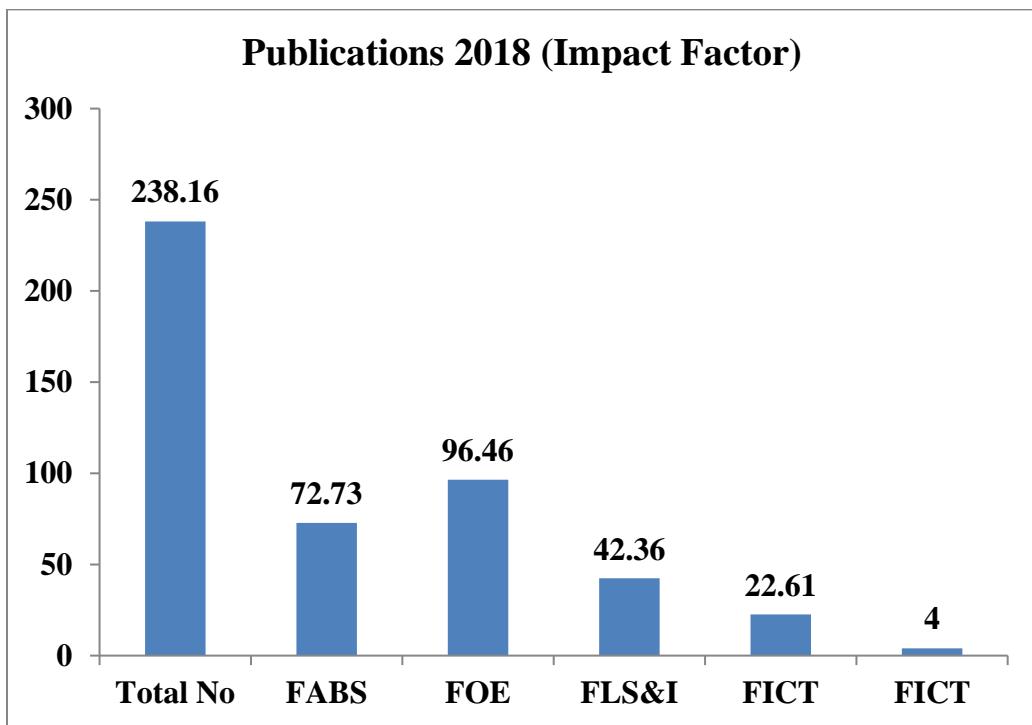
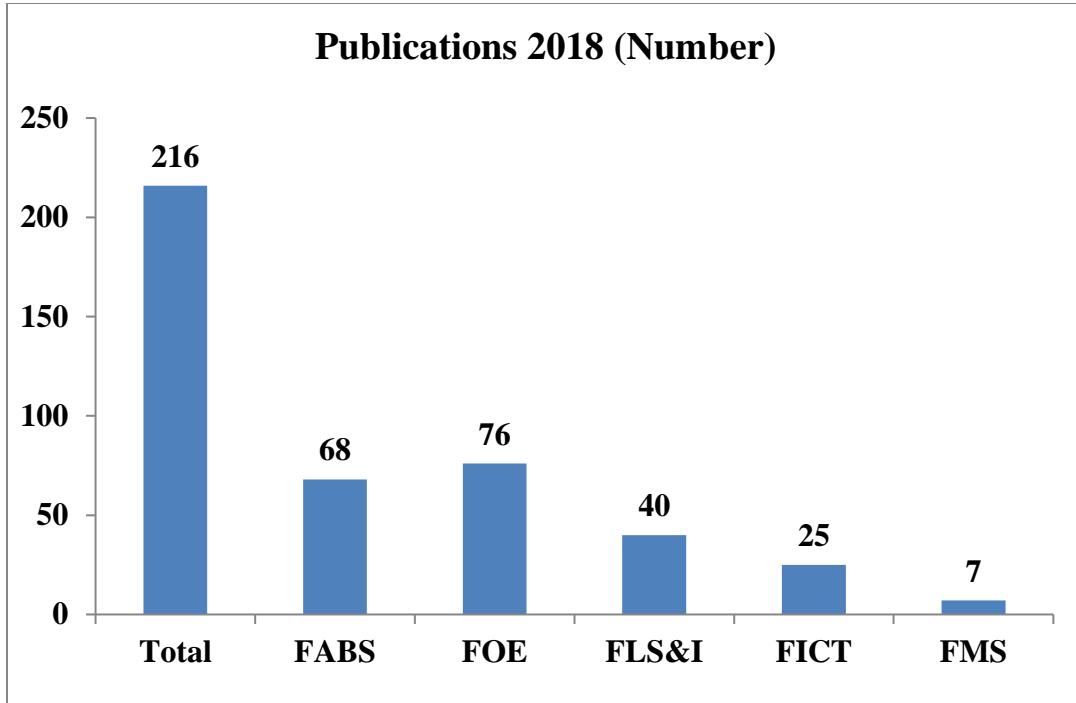
243. Rehman ZU, **Muhammad Noor**, Sarwar B, Raz MA. (2019). Impact of risk

management strategies on the credit risk faced by commercial banks of Balochistan.

Financial Innovation 5 (1):44. (**ISI Indexed**).

244. **Usman Azhar**, Zeshan Inam., and Zeshat Atiq. (2019). A Dynamic Investigation of the Macroeconomic Determinants of Unemployment in Pakistan. *Pakistan Business Review* 21:37-50. (**HEC Recognized Y Category**)
245. Jawaid S, Siddiqui MH, Attiq Z, and **Usman Azhar**. (2019). Fish Exports and Economic Growth: the Pakistan's Experience. *Global Business Review* 20(2): 279, 296. (**HEC Recognized Y Category**).
246. **Aziz Ahmed et al.** (2019). Impacts of Vocational Training for Socio-economic Development of Afghan Refugees in Labor Market of Host Societies in Baluchistan. *Journal of International Migration and Integration. (HEC Recognized Z Category)*.
247. **Aziz Ahmed, et al.** (2019). Analyzing the Economic Modeling of Pashtun Cultural Tradition of "Ashar" for Socio-economic Development of People of tribal setups in Southern Pakhtunkhwa. *Takatu. (HEC Recognized Z Category)*.
248. Ahmad R, **Rehman FU**. (2019). Objectives of Islamic law and their implementation. *Al-Idah*. 37: 1-21. (**HEC Recognized Y Category**).
249. **Manzorr Hamed Brohi**, Shaikh AA. (2019). Assessment of perceived service quality using servqual mod-el: a case study of Pakistan international airline (PIA) in-flight hospitality. *International Journal of Basic and Applied Sciences*. 8(2):11-19. (**Non-ISI Indexed**).
250. Talib, Mahwish, Zainab Bibi, and **Nadeem Uz Zaman**. (2019). Mediating Effect of Psychological Safety on the relationship between Ethical Leadership and Employee's Work Passion: Case Study of HEI's of Baluchistan, Quetta. *J. Manag. Sci.* 14: 192-202.

RESEARCH PUBLICATIONS 2018



Faculty of Life Sciences and Informatics (FLSI)

- 1.Jamil J, Ashraf S, Anum H, Bilal M, Ambreen, **Muhammad Naeem Shahwani**, Siddique S, Ubaid A. (2018). Comparative study of the blood lead level among outdoor and indoor traffic police sergeants in Quetta city of Pakistan. Biological Forum-An International Journal. 10 :(02):28-32. **(ISI Indexed)**.
- 2.Mushtaq A, Jamil N, Rizwan S, Mandokhel F, Riaz M, Hornyak G, Malghani MN, **Muhammad Naeem Shahwani**. (2018). Engineered Silica Nanoparticles and silica nanoparticles containing Controlled Release Fertilizer for drought and saline areas. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414: 012029.
- 3.Haider F, Gul S Hussain J, Ghori SA, **Muhammad Naeem Shahwani**. (2018.) Influence of Biochar on Yield and Heavy Metal Accumulation in Roots of Brassica Rapa under Groundwater and Wastewater Irrigation. Sarhad Journal of Agriculture. 134:02:28,418-427. **(HEC X-Category)**.
- 4.Ijaz A, Basit S, Gul A, Batool L, **Abrar Hussain**, Afzal S, Ramzan K, Ahmad J, Wali A. (2018). XPC Gene Mutations in Families with Xeroderma Pigmentosum from Pakistan; prevalent founder effect. Congenital anomalies. **(IF: 1.14)**.
- 5.Alam MS, Shaheen G, Hashmi M, **Muhammad Mushtaq** (2018) Isolation and Characterization of Secondary Metabolites from a Killer and Antagonistic Yeast Strain, Y21-Bullera pseudoalba. Chemistry of Natural Compounds 54 (6):1152-1153. **(IF: 0.45)**.
- 6.Alam MS, Choudhary M, Sultankhodzhaev M, **Muhammad Mushtaq** (2018) Phytochemical Investigation of Lonicera nummulariifolia, a Locally used Herb in Uzbekistan. Chemistry of Natural Compounds 54 (6):1157-1159. **(IF: 0.45)**.

7. **Naseebullah Kakar**, Horn D, Decker E, Sowada N, Kubisch C, Ahmad J, Borck G, Bergmann C. (2018). Expanding the Phenotype Associated With Biallelic Wdr60 Mutations: Siblings With Retinal Degeneration And Polydactyly Lacking Other Features Of Short Rib Thoracic Dystrophies. *American Journal of Medical Genetics Part A.* 176(2):438-442. **(IF: 2.26).**
8. Dulce Lima Cunha, Omar Mohammed Alakloby, Robert Gruber, **Naseebullah Kakar**, Jamil Ahmad, Salem Alawbathani, Roswitha Plank, Katja Eckl, Brigit Krabichler, Janine Altmuller, Peter Nurnberg, Johannes Zschocke, Guntram, Borck, Matthias Schmuth, Adnan S, Alabdulkareem, Kholood Abdulaziz Alnutaifi and Hans Christian Henies. (2018). Unknown mutations and genotype/phenotype correlations of autosomal recessive congenital ichthyosis in patients from Saudi Arabia and Pakistan. *Molecular Genetics and Genomic Medicine*. DOI: 10.1002/mgg3.539. **(IF: 2.69).**
9. khan S Z, **Rozeena Shaikh**, Azhar M, Wali A, Ahmad J. (2018). 18bp Fragment Insertion/Deletion Polymorphism of Vascular Endothelial Growth Factor (VEGF) Gene with Diabetic Mellitus Type 2 and Diabetic Retinopathy Patients of Quetta, Pakistan. *Journal of Diabetes & Metabolism*. 9(3):1-6. **(ISI Indexed).**
10. Ijaz A, Jelani M, Panezai A, Rabbani T, Rasool IA, and Ahmad J, **Abdul Wali**. (2018). Novel Insertion and A Previously Reported Nonsense Variant of ALOXE3 gene lead to autosomal recessive ichthyosis in two Balochi families. *Congenital anomalies*. **(IF: 1.14).**
11. Ullah A, Gul A, Umair M, Ahmad F, Aziz A, **Abdul Wali**, Ahmad W. (2018). Homozygous Sequence Variants in the WNT10B Gene Underlie Split Hand/Foot Malformation. *Genetics and molecular biology*. 41(1):1-8. **(IF: 1.49).**

12. Malik, Abdul, Saadullah Khan Leghari, Mudassir Asrar, **Shahjahan Shabbir Ahmed**, Tariq Ismail Rana, Zsolt Ponya, Abdul Kabir Saeed-ur-Rahman Kakar, Khan Achackzai, and Atta Muhammed Sarangzai. "Households waste water effects on medicinal plant (*Achillea santolina L.*) and its soil characteristics. International Journal of Bioscieces. 13(5): 389-401. **(ISI Indexed)**.
13. **Shakeela Daud**, Ahmed N, Naudhani S, Younus M, Manzoor S, Firyal S, Yaqub T, Hashmi AS, Wasim M, Umar S. (2018). In-Silico Analysis of Gene ALS2 Genetic Variants Identified in the Affected Horses and Humans with Motor Neuron Disease. Journal of Equine Veterinary Science. 62:60-65. **(IF: 0.88)**.
14. Hashmi N, **Asma Yousafzai** et al. (2018). Isolation and biochemical characterization of chrome resistant bacteria from soil samples of Muslim Bagh Mines. Indo American Journal of Pharmaceutical Sciences. 5(1), 185-19. **(ISI Indexed)**.
15. Arsalan M, Abbas A, Gul SU, Rehman H, **Haleema Sadia** et al. (2018). Vertebrate and Invertebrate fauna of Barghanati Dam FR Domel Bannu, Khyber Pakhtunkhwa, Pakistan. Journal of Biodiversity and Environmental Sciences.13:240-248. **(ISI Indexed)**.
16. Zeeshan M, Anwar M, Navid S, Riaz M, Momin F, Aslam A, Qayyum A, Rehman WR, Khan A, Ullah A, **Haleema Sadia**. (2018). Incidence of Human Malaria Infection in District Karak. International Journal of Mosquito Research 5:59-64. **(ISI Indexed)**.
17. Usman K, Khan RU, Rehman, HU, Pervaiz K, Malik IU, **Haleema Sadia** et al. (2018). Evaluation of heavy metals in River Indus at Jubda Khyber Pakhtunkhwa, Pakistan. Journal of Biodiversity and Environmental Sciences. 13:263-267. **(ISI Indexed)**.
18. Usman K, Khan RU, Rehman, HU, Pervaiz K, Malik IU, **Haleema Sadia**. (2018). Estimation of Heavy Metals in River Harrow at Pambala Khyber Pakhtunkhwa, Pakistan. International Journal of Biosciences. 13: 382-386. **(ISI Indexed)**.

19. Ashraf H, Meer B, Naz R, Saeed A, **Haleema Sadia**, Sajid U, Nisar K, Aslam Z, Anwar P. (2018). 3D-Bioprinting: A stepping stone towards enhanced medical approaches. *Advancements in Life Sciences.* 5(4):143-153. (**ISI Indexed**).
20. Noureen S, Khatoon N, Gul SU, Rehman, HU, **Haleema Sadia** et al. Sabreen. Parasitic fauna of the fishes of District Karak, Khyber Pakhtunkhwa Province of Pakistan. *Journal of Biodiversity and Environmental Sciences.* 13: 211-215. (**ISI Indexed**).
21. Javed MA, Ahmad N, Saleem G, **Haleema Sadia** et al. (2018). Effect of age and Season on Semen Characteristics of Buffalo Bull - A Review. *Journal of Innovation Science.* 4(1):65-82. (**HEC Recognized Z Category**).
22. Rahman Gul, Syed Umer Jan, M. Taimor, Tahmina Rabbani and **Nusrat Jahan**. (2018). Validation of a high performance liquid investigation of thymol and carvacrol in Thymus sepyllum L. indigenous to Balochistan. *Indo American Journal of Pharmaceutical Sciences.* 05(8): 7429-7435. (**ISI Indexed**).
23. Fazal S, Ahmed F, **Imran Ali Sani** et al. (2018). Population dynamics of Tribolium castaneum (herbst) in different abiotic conditions on stored fig Ficus carica. *Indo American Journal of Pharmaceutical Sciences.* 05(01):151-160. (**ISI Indexed**).
24. Fazal S, Ahmed F, **Imran Ali Sani** et al. (2018). Population dynamics of Tribolium castaneum (herbst) in different abiotic conditions on stored fig Ficus carica. *Indo American Journal of Pharmaceutical Sciences.* 05(01):151-160. (**ISI Indexed**).
25. Ahmad S, Raza S, **Asma Abro**, Liedl KR, Azam SS (2018) Toward novel inhibitors against KdsB: a highly specific and selective broad-spectrum bacterial enzyme. *Journal of Biomolecular Structure and Dynamics.* 1-20. (**IF: 3.10**).

26. Bellomo E, **Asma Abro**, Hogstrand C, Maret W, Domene C (2018) Role of zinc and magnesium ions in the modulation of phosphoryl transfer in protein tyrosine phosphatase 1B. *Journal of the American Chemical Society*. 140 (12):4446-4454. (**IF: 14.35**).
27. **Muhammad Waseem**. (2018). Detection of arsenic (as), antimony (sb) and bacterial contamination in drinking water biological forum.9: 133-238. (**ISI Indexed**).
28. Nawaz M, Mengi M, **Agha Muhammad Raza**, Ahmed N, Saeed M, Jamil A. (2018). The role of MSX1 gene in affected families of hypodontia attending in Tertiary Care Hospital of Quetta. 13:426-430. (**ISI Indexed**).
29. Aslam U, Tabassum B, Nasir IA, **Anwar Khan**, Husnain T. (2018). A Virus-Derived Short Hairpin Rna Confers Resistance Against Sugarcane Mosaic Virus In Transgenic Sugarcane. *Transgenic Research*. 27(2):203-210. (**IF: 2.19**).
30. Noor M, Ali N, Nisar M, ABD, Allah E, Hashem A, Alqarawi A, **Anwar Khan**. (2018). Genetic Diversity within Natural Populations of the Medicinal Plant Rhynchosia Minima (L.) DC. *Applied Ecology And Environmental Research*. 16(5):5633-5651. (**IF: 0.72**).
31. **Faiz Muhammad**, Alam J, Hussain J, Fareed SK, Zafar U, Khan S, Ahmad A. (2018). Development of ELISA and Its Comparison with other Diagnostic tests for Avian Mycoplasmosis. *International Journal of Biology and Biotechnology*. 15: 39-45. (**ISI Indexed**).
32. **Faiz Muhammad**, Hussain J, Fareed S, Ahmad TK, Ahmad SK, Ahmad A (2018). Diagnosis of Avian Mycoplasmas: A Comparison between PCR and Culture Technique. *Archives of Razi Institute* 73 (3):239-244. (**ISI Indexed**).
33. Hassan N, Rafiq M, **Malhia Rehman**, Sajjad W, Hasan F, Abdullah S (2018) Fungi in acidic fire: A potential source of industrially important enzymes. *Fungal Biology Reviews*. (**IF: 0.72**).

34. Ehsan M, Gu H, Ahmad Z, **Malik Muhammad Akhtar**, Abbasi SS. (2018). A Modified Approach for Volumetric Evaluation of Shaly Sand Formations from Conventional Well Logs: A Case Study from the Talhar Shale, Pakistan. Arabian Journal for Science and Engineering 2018:1-12. (**IF: 1.09**).
35. Ehsan M, Gu H, **Malik Muhammad Akhtar**, Abbasi SS, Ehsan U. (2018). A geological study of reservoir formations and exploratory well depths statistical analysis in Sindh Province, Southern Lower Indus Basin, Pakistan. Kuwait Journal of Science. 45(2):84-93. . (**IF: 0.69**).
36. ShahKhan S, Akhtar F, Iqbal S, **Malik Muhammad Akhtar**, Moghira B, Uddin M. (2018). Role of NO_x and O₃ in Micro Climate Change: Policy Dimension and Human Facet Impact for Quetta (Pakistan). Indian Journal of Natural Sciences. 9(50): 14557-14572. (**ISI Indexed**).
37. Zhao Z, Qin Z, Zhang D, **Javaid Hussain**. (2018). Dissipation Characteristics of Pyrene and Ecological Contribution of Submerged Macrophytes and their biofilms-leaves in constructed wetland. Bio resource Technology. 267:158-166. (**IF: 5.80**).
38. Hussain I, Lu X, **Javaid Hussain**, Fahim R, Lako S (2018) Nutrients Removal Efficiency Assessment of Constructed Wetland for the Rural Domestic Wastewater Growing Distinct Species of Vegetation. J Environ Anal Toxicol 8 (588):2161-0525.1000588. (**Non-ISI Indexed**).
39. Ghazi ZA, Khattak AM, Iqbal R, Ahmad R, Khan AA, Usman M, **Faheem Nawaz**, Ali W, Felegari Z, Jan SU. (2018). Adsorptive removal of Cd 2+ from Aqueous Solutions by a Highly Stable Covalent Triazine-Based Framework. New Journal of Chemistry 42(12):10234-10242. (**IF: 3.20**).

40. Hussain Z, Khan NM, Shah SMA, **Faheem Nawaz**, Khan MN, Hussain S, Ahmad I. (2018). Investigation of raw materials for cement industry of Upper Hunza, Gilgit-Baltistan, Pakistan. In: IOP Conference Series: Materials Science and Engineering. IOP Publishing. 012012. (**ISI Indexed**).

Faculty of Fine Arts and Basic Sciences (FABS)

41. **Fouzia Abdul Sattar**, Ahmed F, Yu R, Lu C (2018) Eosin Y mediated Facile and efficient metal free synthesis of organosulfur compounds under the visible light. Journal of Emerging Trends in Engineering and Applied Sciences 9 (5):234-237. (**Non ISI Indexed**).
42. Fouzia A. Sattar, **Fayaz Ahmed Audhal**, Lu Canzhong, Metal Free Synthesis of Organosulfur Compounds Employing Eosin Y as Photoredox Catalyst, Chemical Methodologies. (Paper Accepted) (**Non ISI Indexed**).
43. Khan AS, Man Z, Bustam MA, Kait CF, Nasrullah A, **Zahoor Ullah**, Sarwono A, Ahamed P, Muhammad N. (2018). Dicationic ionic liquids as sustainable approach for direct conversion of cellulose to levulinic acid. Journal of Cleaner Production.170:591-600. (**IF: 5.65**)
44. Shah SN, Pranesh M, Raj JJ, Mutalib MA, Lethesh KC, Ghanem OB, **Zahoor Ullah**. (2018). De-acidification of crude oil using supported ionic liquids phases. Separation and Purification Technology. 196:96-105 (**IF: 3.92**)
45. Khan AS, Nasrullah A, **Zahoor Ullah**, Bhat A, Ghanem OB, Muhammad N, Rashid MU, Man Z. (2018). Thermophysical properties and ecotoxicity of new nitrile functionalised protic ionic liquids. Journal of Molecular Liquid. 249:583-590. (**IF: 3.92**)

46. Sarwono A, Man Z, Idris A, Nee TH, Muhammad N, Khan AS, **Zahoor Ullah**. (2018). Alkyd paint removal: Ionic liquid vs volatile organic compound (VOC). *Progress in Organic Coatings*. 122:79-87. (**IF: 2.95**).
47. **Zahoor Ullah**, Bustam M, Man Z, Khan A, Sarwono A, Muhammad N, Farooq M, Shah S, Ahmad P, Haider S. (2018). Phosphonium-based hydrophobic ionic liquids with fluorous anions for biodiesel production from waste cooking oil. *International Journal of Environmental Science and Technology*. 8:1-8. (**IF: 2.03**)
48. Ahmad P, Khandaker MU, Muhammad N, Ahmad I, Khan MAR, Khan AA, Khan G, Khan AS, **Zahoor Ullah**, Rehman F. (2018). Decomposition-adsorption-deposition: An effective and novel technique for synthesis of hexagonal boron nitride microsheets. *Materials Science in Semiconductor Processing*. 88:161-166. (**IF: 2.59**).
49. Sarwono A, Man Z, Bustam MA, Idris A, Majeed Z, Khan AS, **Zahoor Ullah**, Muhammad N. (2018). Box-Benken optimization of urea crosslinked starch film as slow release fertilizer. *Academia Journal of Scientific Research*. 05: 468-481. (**Non ISI Indexed**).
50. Bushra, Khan DF, **Hamid Ullah**, Khan S. (2018). Isolation and Characterization of Two New Compounds from the Plant Bauhinia Variegata. *Indo American Journal of Pharmaceutical Sciences*. 5(2): 862-867. (**ISI Recognized**).
51. Xi Z, Khan S, Jichuan Z, **Hamid Ullah**, Khan H, Zhang L. (2018). Two New Anitoxidative Geniposides (Ulmoside C, Ulmoside D) and 10-O-Acetylgeniposidic Acid from Eucommia Ulmodies. *Pharmaceutical Chemistry Journal*. 52(04): 334-338. (**IF: 0.67**).
52. Khan AS, Nasrullah A, Ullah Z, Bhat A, Ghanem OB, Muhammad N, **Mamoon-ur-Rashid**, Man Z. (2018). Thermophysical properties and ecotoxicity of new nitrile

- functionalised protic ionic liquids. *Journal of Molecular Liquids.* 249:583-590. (**IF: 4.51**).
53. Alamzeb M, Omer M, **Mamoon-ur-Rashid** Raza M, Ali S, Khan B, Ullah A. (2018). NMR, Novel Pharmacological and In Silico Docking Studies of Oxyacanthine and Tetrandrine: Bisbenzylisoquinoline Alkaloids Isolated from Berberis glaucocarpa Roots. *Journal of analytical Methods in Chemistry.* 7692913, 1-7. (**ISI Recognized**).
54. Ahmad M, Khan MA, Mahmood A, Liu S-S, Chughtai AH, Cheong W-C, Akram B, **Gulfam Nasar.** (2018). Role of ytterbium on structural and magnetic properties of NiCr_{0.1}Fe_{1.9}O₄ co-precipitated ferrites. *Ceramics International.* 44(5): 5433-5439. (**IF: 3.05**).
55. **Mujtaba Ellahi**, Ullah H, Ali M, Panezai N. (2018). Study the effects of epoxy/tri functional mercaptan resins structure based PDLC films. In: IOP Conference Series: Materials Science and Engineering. IOP Publishing. 414. 012006 (**ISI Recognized**).
56. Ali MF, Gan J, Chen X, Yu G, Zhang Y, **Ellahi M**, Abdeltawab AA. (2018). Hydrodynamic modeling of ionic liquids and conventional amine solvents in bubble column. *Chemical Engineering Research and Design.* 129:356-375 (**IF: 2.79**).
57. Panezai N, **Mujtaba Ellahi**, Ullah H. (2018). Assessment of Fluoride in drinking water and its correlation with different physicochemical parameters in the selected areas of Quetta, Pakistan. In: IOP Conference Series: Materials Science and Engineering. IOP Publishing. 414. 12047 (**ISI Recognized**).
58. **Hamd Ullah Khan**, Khan MA, Hamayun M, Muhammad F, Raza MW. (2018). Experimental study of the lattice constant and lattice spacing of potassium bromide by Laue and Debye Scherer methods. *International Journal of Scientific and Engineering Research.* 9(4): 180-195 (**ISI Recognized**).

59. **Hamd Ullah Khan**, Ilyas Z, Ahmad I, Ikram, Khan AS, Muhammad F, Raza MW. (2018). Study and Measurement of Different Parameters of Spontaneous Gas Glow Discharge Plasma in Air. International Journal of Scientific & Engineering Research. 9(12): 1011-1018 (**ISI Recognized**).
60. Afsheen S, Tahir MB, Iqbal T, Firdous S, Rehman J-U, **Hafiz Muhammad Noor ul Huda Khan Asghar**. (2018). Abrar M, Naeem M, Rafique MS: Morphological, structural and hardness changes of human dental enamel irradiated with a Nd: YAG laser. Laser Physics. 28(12):126004. (**IF: 1.15**)
61. Li P, Wang K, Ren S, Jiang D, Shi S, Tan Y, Wang F, **Hafiz Muhammad Noor ul Huda Khan Asghar**. (2018). Microstructure and conversion efficiency of multicrystalline silicon ingot prepared by upgraded metallurgical grade silicon. Solar Energy Materials and Solar Cells. 186:50-56. (**IF: 5.018**)
62. **Hafiz Muhammad Noor ul Huda Khan Asghar**, Shi S, Jiang D, Tan Y, Rehman JU, Gilani ZA, An G, Guo X, Li P. (2018). Improvement of Solar Cell Performance After Oxygen Removal by Electron Beam Melting. Silicon. 10(5):1887-1891. (**IF: 1.24**).
63. **Hafiz Muhammad Noor ul Huda Khan Asghar**, Gilani ZA, Anjum MN, Wang P, Tan Y, Shi S, Jiang D, Qin S. (2018). Removal of SiC from Silicon after Electron Beam Melting Technique on Industrial Scale. Silicon. 1-9. 9. (**IF: 1.24**).
64. Li P, Wang Z, Shi S, Ren S, Jiang D, Li J, **Hafiz Muhammad Noor ul Huda Khan Asghar**, Tan Y. (2018). Distribution of Phosphorus in n-Type Multicrystalline Silicon Produced by Directional Solidification. IEEE Journal of Photovoltaic. (99):1-8. (**IF: 3.0**).
65. **Hafiz Muhammad Noor ul Huda Khan Asghar**, Shifa MS, Gilani AZ et al. (2018). Mechanism of the effect of electron beam melting on the distribution of oxygen, nitrogen,

and carbon in silicon, International Journal of material research (DOI 10.3139/146.111736 Int J Mater Res. **(IF: 0.78)**.

66. **Nisar Ahmed**, Rafique M, Nasir T.(2018). Age-dependent annual effective dose estimations of 226Ra, 232Th, 40K and 222Rn from drinking water in Baling, Malaysia. Water Science and Technology: Water Supply. 18(1):32-39. **(IF: 0.67)**.
67. **Nisar Ahmed** Jaafar M, Nasir T, Rafique M. (2018). Determination of radon concentration and heavy metals (Ni, Pb, Cd, As, Cr) in drinking and irrigated water sampled from Kulim, Malaysia. International Journal of Radiation Research. 06(3):341-349 **(ISI Recognized)**.
68. **Zaheer Abbas Gilani**, Shifa M, Chandio A, Usmani M, Asghar H, Huda U, Aslam S, Khalid M, Perveen A, Rehman JU. (2018). Thermogravimetric Analysis, Optical and Dielectric Properties af newly Developed LiNi (0.5) Pr_xFe (2)-xO (4) Nanocrystalline ferrites. Digest journal of nanomaterials and biostructures.13(3):809-816 **(IF: 0.67)**.
69. **Zaheer Abbas Gilani**, Shifa MS, Khan MA, Anjum MN, Usmani MN, Ali R, Warsi MF. (2018). New LiCo0. 5Pr_xFe2– xO4 nanoferrites: Prepared via low cost technique for high density storage application. Ceramics International 2018, 44(2):1881-1885. **(IF: 2.75)**.
70. Akhter J, Gilani S, Ali M, **Zaheer Abbas Gilani**. (2018). Design and Optical Modeling of a Low-Profile Stationary Concentrating Solar Collector for Medium Temperature Heat Supply. Journal of Telecommunication, Electronic and Computer Engineering (JTEC). 10(1-12): 65-71. **(Non- ISI Recognized)**
71. Munir M, Khan MI, Iqbal T, Abrar M, Tahir MB, **Jalil ur Rehman**, Ijaz M, Nabi G. (2018). Efficient bio-sensing through 1D Silver Nanostructured Devices Using Plasmonic Effect. Nanotechnology. 29:1-13 **(IF: 3.0)**.

72. **Jalil ur Rehman**, Isa M, Ahmad N, Nasar G, Khan HNUHA, Gilani ZA, Chow JC, Afzal M, Ibbott GS. (2018). Dosimetric, Radiobiological And Secondary Cancer Risk Evaluation In Head-And-Neck Three-Dimensional Conformal Radiation Therapy, Intensity-Modulated Radiation Therapy, And Volumetric Modulated Arc Therapy: A phantom study. *Journal of Medical Physics*. 43(2):129. (**IF: 0.88**).
73. **Jalil ur Rehman**, Ahmad N, Khalid M, Gilani ZA, Ullah I, Nasar G, Akhtar MM, Usmani MN. (2018). Intensity Modulated Radiation Therapy: A Review of Current Practice and Future Outlooks. *Journal of Radiation Research and Applied Sciences*. 11(4):361-367. (**ISI Recognized**).
74. **Jalil ur Rehman**, Isa M, Ahmad N, Gilani ZA, Chow JC, Afzal M, Ibbott GS. (2018). Quality Assurance Of Volumetric-Modulated Arc Therapy Head and Neck Cancer Treatment using PRESAGE® dosimeter. *Journal of Radiotherapy in Practice*. 17(4):441-446. (**IF: 0.18**).
75. **Jalil ur Rehman**, Syed Z, Hussain G, Ahmad N, Gilani ZA, Nasar G, Akhter MM, Isa M, Iqbal T. (2018). Dose Verification of Volumetric-Modulated Arc Therapy Using One-Dimensional and Two-Dimensional Dosimeters. *Journal of Radiotherapy in Practice*. 1-5. (**ISI Recognized**).
76. Khan MI, Tahir MB, Rafique M, Iqbal T, Zulfiqar S, Zahoor A **Jalil ur Rehman** J, Iqbal K, Chow J.(2018). Commissioning and Evaluation of A Radiochromic Ebt3 Film Dosimetry System. *Journal of Radiotherapy in Practice*. 1-8. (**ISI Recognized**).
77. Aziz A, **Muhammad Khalid**, Akhtar MS, Nadeem M, Gilani Z, Asghar HUHK, Rehman J, Ullah Z, Saleem M. (2018). Structural, Morphological and Optical Investigations of Silver Nanoparticles Synthesized by Sol-Gel Auto-Combustion Method. *Digest Journal of Nanomaterials & Biostructures (DJNB)*. **13**(3).679-683. (**IF: 0.67**).

78. **Muhammad Khalid**, Khan J, Chandio A, Gilani Z, Asghar HUHK, Riaz S, Naseem S. (2018). A Simulation Model Approach to Analysis of High Breakdown Voltage in Normally-Off 4h-Sic Vertical Junction Field Effect Transistor. *Journal of Ovonic Research*. 14(6):459-465. (**IF: 0.61**).
79. **Syed Abdul Manan**. (2018). Myth of English Teaching and Learning: A Study Of Practices In The Low-Cost Schools in Pakistan. *Asian Englishes*. 1-18. (**ISI Recognized**).
80. **Syed Abdul Manan**. (2018). Silencing children's power of self-expression: an examination of coercive relations of power in English-medium schools in Pakistan. *L1 Educational Studies in Language and Literature*. 18:1-25.
81. Manan SA, David MK, **Liaquat Channa**. (2018). Opening Ideological and implementational spaces for multilingual/plurilingual policies and practices in education: a snapshot of scholarly activism in Pakistan. *Current Issues in Language Planning*. 1-23. (**ISI Recognized**).
82. **Mehwish Sahibzada**, Zaidi S (2018) Deconstruction of self and everything as metanarratives in the perspective of Buddhist theory: A comparative analysis through blankets. (**ISI Recognized**).
83. Zaidi S, **Mehwish Sahibzada**, Rafiq D (2018) Destabilization of power and control: A postmodernist and marxist discursive analysis of capitalism in makers. (**ISI Recognized**).
84. Zaidi S, **Mehwish Sahibzada**. (2018) A Political Discourse Analysis of Islamophobia though the novel Home Boy. *Acta Islamica* Vol 6 (2). (**ISI Recognized**).
85. Zaidi S, **Mehwish Sahibzada**, et al. (2018). A Linguistic Discursive Analysis of Techno-Colonialism Through the Post-cyberpunk Literature. *International Journal of English Linguistics*. 8(6), 131-138. (**ISI Recognized**).

86. **Mehwish Naudhani**, Wu Z, Naudhani S. (2018). Exploring the Factors of Foreign Language Anxiety among Chinese Undergraduate English Majors and Non-English Majors. International Journal of English Linguistics. 8(5):142. (**ISI Recognized**).
87. **Aurangzaib Alamgir**. (2018). Social Impact of Early Marriages on Society: A Study in District Kharan Union Council Sarawan. Bilingual/Bi-annual Pakistan Studies Research Journal. 7. (**HEC Recognized in Y Category**).
88. **Aurangzaib Alamgir**. (2018). Islam, State and Women Activism: A Perception Study in Malaysia and Pakistan. Bilingual/Bi-annual Pakistan Studies Research Journal.7. (**HEC Recognized in Y Category**).
89. **Imran Khan**, Alamgir A. (2018). The Issues and Challenges of Polio Campaigns in Balochistan. Balochistan Review. 38(2). (**HEC Recognized in Z Category**).
90. **Imran Khan**, Alamgir A (2018) Polio Vaccination in Balochistan: Issues and Challenges. Amazonia Investiga 7 (17):261-271. (**ISI Index**)
91. Bilal MZ, Ishtiaq N, **Abdul Wadood**. (2018). Effects of Selective Exposure of GEO TV and ARY TV on the Perceptions of Viewers regarding the Electoral Rigging Issue in Pakistan: An Assessment. Orient Research Journal of Social Sciences. 3(2):330-339. (**Non-ISI Index**)
92. **Imran Khan**, Alamgir A. (2018). The Issues and Challenges of Polio Campaigns in Balochistan. Balochistan Review. 38(2). (**HEC Recognized in Z Category**).
93. **Rani Gul**, Rakhshanda, Haseeb A. (2018). Capacity building initiatives for visual impaired students in Khyber Pakhtunkwa, Pakistan. WALIA 34:151-157. (**ISI Indexed**).
94. Sohail M, **Rani Gul**, Mushtaq R. (2018). The Establishment of Azad School Utmanzai and Anjuman-i-Islahul Afaghina: A Successful Methodology of Organizational

Excellence (1921-1946). Global Social Sciences Review. 3(3): 193-206. (HEC X-
Category).

95. **Abdul Ghaffar.** (2018). A Subdivision Approach to the approximate solution of 3rd Boundary value: problem. Communications in Mathematics and Applications. 9(04):499-512. (**ISI Indexed**).
96. **Abdul Ghaffar.** (2018). The (k, s) - Fractional Calculus of Class of a Foundation: Honam Mathematical Journal. 125-138 (**ISI Indexed**).
97. **Naheeda Iftikhar**, Rehman A, Sadaf H, Khan MN. (2018). Impact of Wall Properties on the Peristaltic Flow of Cu-Water Nano Fluid In A Non-Uniform Inclined Tube. International Journal of Heat and Mass Transfer.125:772-779. (**IF: 3.89**)
98. Qi F, Rah G, **Sardar Muhammad Hussain**, Du W-S, Nisar K (2018) Some Inequalities of Čebyšev Type for Conformable k-Fractional Integral Operators. Symmetry 10 (11):614. (**IF: 1.26**).
99. Ellahi R, Zeeshan A, **Farooq Hussain**, Abbas T (2018) Study of Shiny Film Coating on Multi-Fluid Flows of a Rotating Disk Suspended with Nano-Sized Silver and Gold Particles: A Comparative Analysis. Coatings 8 (12):422. (**IF: 4.5**)
100. **Farooq Hussain**, Ellahi R, Zeeshan A (2018) Mathematical Models of Electro-Magnetohydrodynamic Multiphase Flows Synthesis with Nano-Sized Hafnium Particles. Applied Sciences 8 (2):275. (**IF: 1.6**).
101. Iqbal Q, Hasrat Hussain **Hasrat Hussain Shah**, Ahmad Z. (2018). High Speed Cylindrical Gravitational with Anisotropic Pressure. Universe. 4:1-12. 138 (**ISI Indexed**).

102. **Hasrat Hussain Shah.** (2018). Black hole formation due to collapsing dark matter in a presence of dark energy in the brane-world scenario. International Journal of Modern Physics D. 27(03):185002. (**IF: 2.7**).
103. Manna T, Rahaman F, Molla S, Bhadra J, **Hasrat Hussain Shah.** (2018). Strong lensing of a regular black hole with an electrodynamics source. General Relativity and Gravitation. 50(5):54. (**IF: 1.72**).
104. **Hasrat Hussain Shah**, Rahaman F. (2018). Gravitational collapse of interacting combination of dark matter and dark energy in the context of brane world regime. Modern Physics Letters A. 33(23):1850132. (**IF: 1.30**)
105. Bashir J, Wahab Z, **Bashir Ahmed.** (2018). Polyhedron analysis of traditional games of Khyber Pakhtunkhwa, Pakistan. WALIA. 34: 139-144. (**ISI Indexed**).
106. Shah N, Sultan RS, **Bashir Ahmed.** (2018), Balochi Oral Literature and Gender Construction. Pakistan Journal of Gender Studies. 16: 89-102. (**HEC Y-Category**).
107. **Makhtoom Ahmed**, Zaman M (2018) Children's Self-Concept of their Well-Being in Rawalpindi and Islamabad: Actor's Perspectives of Identity and Existence. Child Indicators Research:1-23. (**IF: 1.83**)
108. **Ghina Saleem**, Ajmal MA. (2018). Work-Family Balance: Experiences of Successful Professional Women in Academia in Pakistan. Pakistan Journal of Psychological Research. 33: 101-121. (**HEC X-Category**).

Faculty of Engineering and Architecture (FOE&A)

109. Li D, Wang E, Li Z, Jia H, Wang D, Kong X, Wang X, Wang X, **Mohammad Ali** (2018) A causal mechanism for anomalous electromagnetic radiations from coal and rock failure. Geophysics 83 (6):E423-E43. **(IF:2.3)**
110. Lee J, **Hafeez ur Rehman, Abdul Muntaqim Naji**, Kim J-J, Yoo H-K (2018) An Empirical Approach for Tunnel Support Design through Q and RMi Systems in Fractured Rock Mass. Applied Sciences 8 (12):2659. **(IF:1.68).**
111. **Abdul Malik Rehan Abssi**, Abro ZA, Sami SK Development of Textile Based Strain Sensor from Polypyrrole. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012009. **(ISI Indexed).**
112. Saleemi S, **Abdul Malik Rehan Abssi**, Abro ZA, Rind NA, Xu F-J Preparation of Phase Change Material on Polyester/Cotton Blend. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012024. **(ISI Indexed).**
113. Ahmad Z, Sirkova B, Ahmad S, Naeem M, **Syed Zameer ul Hassan.** (2018). Effect of material and stitching on tensile properties of woven fabrics. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012049. **(ISI Indexed).**
114. Asghar A, Ahmad MR, Yahya MF, **Syed Zameer ul Hassan**, Kashif M (2018) Characterization based on the thermal capabilities of metallized fabrics equipped with hybrid conductive yarns for protective clothing. The Journal of The Textile Institute:1-11. **(IF: 1.74).**
115. Kumar S, Sultan MJ, Ullah A, **Syed Zameer ul Hassan**, Siddiqui S, Sami SK Human Machine Interface Glove Using Piezoresistive Textile Based Sensors. In: IOP Conference

Series: Materials Science and Engineering, 2018. IOP Publishing, p 012041. (**ISI Indexed**).

116. Naeem M, Hassan S, Javed Z, Ramzan B, Rasheed A, **Syed Zameer ul Hassan**, Javed S. (2018). Electromagnetic shielding effectiveness of high loft activated carbon web prepared by using acrylic waste. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012048(**ISI Indexed**).
117. Naeem MA, Akankwasa NT, Leroy A, **Qasim Siddiqui**, Ahmad A. (2018). A Study Of Novel Multifilament Spreading And Feeding Method, To Produce Filament Wrapped-Staple Core Composite Yarn Using Modified Ring Frame. The Journal of the Textile Institute. 1-8. (**IF: 1.74**)
118. **Syed Qutaba Bin Tariq**, Siddiqui Q, Abbasi AMR. Enhancement of anti-microbial activity by natural finishes prepared from herbal spices and wastage peel of fruits applied on textile substrate. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012050. (**ISI Indexed**).
119. Hanif A, Trung TQ, **Siddiqui S**, Toi PT, Lee N-E (2018) Stretchable, Transparent, Tough, Ultrathin, and Self-limiting Skin-like Substrate for Stretchable Electronics. ACS applied materials & interfaces 10 (32):27297-27307. (**IF: 8.14**)
120. Kumar S, Sultan MJ, Ullah A, Zameer S, **Saqib Siddiqui**, Sami SK Human Machine Interface Glove Using Piezoresistive Textile Based Sensors. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing, p 012041. (**ISI Indexed**).
121. Baig RU, Malik A, Ali K, Arif S, Hussain S, Mehmood M, Sami K, Mengal AN, **Mohammad Najam Khan**. (2018). Extraction of oil from algae for biodiesel production, from Quetta, Pakistan. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414: 012022. (**ISI Indexed**).

122. **Akbar A**, Sadiq MB, Ali I, Muhammad N, Rehman Z, **Mohammad Najam Khan**, Muhammad J, Khan SA, Rehman FU, Anal AK (2018). Synthesis and antimicrobial activity of zinc oxide nanoparticles against foodborne pathogens *Salmonella typhimurium* and *Staphylococcus aureus*. *Biocatalysis and Agricultural Biotechnology* 17:36-42. (**ISI Indexed**).
123. **Faisal Mushtaq**, Sami S, Mat R, Ani F. (2018). Process optimization of microwave assisted co-pyrolysis of coal and oil palm shell blend with carbon surfaces. In: IOP Conference Series: Materials Science and Engineering, 2018a. IOP Publishing: 414: 012016. (**ISI Indexed**).
124. **Faisal Mushtaq**, Ullah I, Khan I, Sami S, Alam W, Sadiq M, Tariq Z, Jaan A. (2018). Fluidized bed heat exchange capacity of Alumina, coal-char and bio-char solids. In: IOP Conference Series: Materials Science and Engineering, 2018b. IOP Publishing. 414: 012003. (**ISI Indexed**).
125. **Syed Kamran Sami**, Seo JY, Hyeon S-E, Shershah MSA, Yoo P-J, Chung C-H. (2018). Enhanced Capacitive Deionization Performance by an Rgo-Sno 2 Nanocomposite Modified Carbon Felt Electrode. *RSC Advances*. 8(8):4182-4190 (**IF: 2.93**).
126. **Asadullah**, Kaewsichan L, Tohdee K. (2018). Prospective Sorption Evaluation of Hydrothermally Carbonized *Lepironia articulata* (Grey sedge) for the Removal of Ni (II) from Aqueous Solution. *Chiang Mai Journal of Science*. 45(5):2220-2231. (**ISI Indexed**).
127. Tohdee, K., Kaewsichan, L., **Asadullah** (2018). Potential of BCDMACl modified bentonite in simultaneous adsorption of heavy metal Ni (II) and humic acid. *Journal of environmental chemical engineering*, 6(4), 5616-5624. (**Non- ISI Indexed**).

128. Tohdee, K., Kaewsichan, L., **Asadullah** (2018). Enhancement of adsorption efficiency of heavy metal Cu (II) and Zn (II) onto cationic surfactant modified bentonite. *Journal of Environmental Chemical Engineering*, 6(2), 2821-2828. (**Non- ISI Indexed**).
129. Khan G, Basirun WJ, Badry ABBM, Kazi SN, Ahmed P, Ahmed SM, **Ghulam Ullah Kakar.** (2018). Corrosion Inhibition Performance and Adsorption Mechanism of Novel Quinazoline Schiff Base on Low Alloy Steel in HCl Media. *Int J Electrochem Sci* 13:12420-12436. (**IF: 1.31**).
130. **Ghulam Ullah Kakar**, Kazi S, Syed M, Nasar S, Kakar A. (2018). Comparative analysis of heat transfer coefficient for wood and non-wood pulp fiber. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414: 012027. (**ISI Indexed**).
131. Mahar H, Jatoi AS, Unar IN, Gopang IA, Naeem M, **Muhammad Siddique Nasar.** (2018). Numerical Simulation of Ethanol Production for Different Carbon Sources Using Thermotolerant Kluyveromyces Marxianus. *Journal of Applied and Emerging Sciences* 8 (1): 1-9. (**HEC Recognized in Z Category**).
(**HEC Recognized in Z Category**).
132. **Muhammad Siddique Nasar**, Khan MN, Jatoi AS, Aziz S, Soomro SA. (2018). Parametric Effect of Distillery Effluent as Substrate in Microbial Fuel Cell for Power Generation. *Journal of Applied and Emerging Sciences* 8 (1): 58-64. (**HEC Recognized in Z Category**).
133. **Muhammad Siddique Nasar**, Jatoi A, Rajput M, Khan M, Mengal A, Aziz S, Soomro S, Mushtaq F, Shah A, Sami S. (2018). Effective use of Enzyme Zymase for Enhancement of Ethanol Production Couple with Parametric Effect. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414: 012039. (**ISI Indexed**).

134. **Neelam A, Hany O, Ishteyaq S, Nawaz K, Mahmood SJ, Muhammad Siddique Nasar.**

(2018) Analysis of Physical, Mechanical and Thermal Degradation of Gelatin-Based Film—Exploring the Biopolymer for Plastic Advancement. *Journal of Applied and Emerging Sciences* 8 (1):pp39-47

135. **Muhammad Siddique Nasar, Jatoi A, Rajput M, Soomro S, Aziz S, Mushtaq F, Khan G, Abro M, Khan MN, Shah A.** (2018). Potential Effect of Sugar Mill waste water as Substrate for Bio-Electricity Generation using Laboratory Scale Double Chamber Microbial Fuel Cell. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414: 012038. (**ISI Indexed**).

136. **Abdul Qadeer Dayo, Cao X-m, Cai W-a, Song S, Wang J, Zegaoui A, Derradji M, Xu Y-l, Wang A-r, Liu W-b, Gong L-d.** (2018). Synthesis of Benzophenone-center Bisphenol-A containing Phthalonitrile Monomer (BBaph) and its Copolymerization with P-a Benzoxazine. *Reactive and Functional Polymers*. 129, 46-52. (**IF 2.975**)

137. **Abdul Qadeer Dayo, Ma R-k, Kiran S, Zegaoui A, Cai W-a, Shah AH, Wang J, Derradji M, Liu W-b.** Reinforcement of economical and environment friendly Acacia catechu particles for the reduction of brittleness and curing temperature of polybenzoxazine thermosets. *Composites Part A: Applied Science and Manufacturing*, 105, 258-264, (2018). (**IF 4.514**)

138. **Abdul Qadeer Dayo, Wang A-r, Derradji A, Kiran S, Zegaoui A, Wang J, Liu W-b.** Copolymerization of mono and difunctional benzoxazine monomers with bio-based phthalonitrile monomer: Curing behaviour, thermal, and mechanical properties. *Reactive and Functional Polymers*. 131: 157-163, (2018). (**IF 2.975**).

139. **Abdul Qadeer Dayo**, Wang A-r, Kiran S, Wang J, Qureshi K, Xu Y-l, Zegaoui A, Derradji A, Babar AA, Liu W-b, Impacts of hemp fiber diameter on mechanical and water uptake properties of polybenzoxazine composites, *Industrial Crops and Products*, 111, 277-284, (2018). **(IF 3.849)**.
140. **Abdul Qadeer Dayo**, Zegaoui A, Nizamani AA, Kiran S, Wang J, Derradji M, Cai W-a, Liu W-b, The influence of different chemical treatments on the hemp fiber/polybenzoxazine based green composites: Mechanical, thermal and water absorption properties, *Materials Chemistry and Physics*. 127: 270-277, (2018). **(IF 2.210)**
141. Chen YP, **Abdul Qadeer Dayo**, Zhang HY, Wang A-r, Wang J, Liu W-b, Yang Y, Qin QR, Yang YG, Synthesis of cardanol based phthalonitrile monomer and its copolymerization with phenol-aniline based benzoxazine, *Journal of Applied Polymer Science*, (2018), **(IF 1.901)**
142. Derradji M, Henniche A, Wang J, **Abdul Qadeer Dayo**, Ouyang J-h, Liu W-b, Medjahed A, “High performance nanocomposites from Ti₃SiC₂ MAX phase and phthalonitrile resin”, *Polymer Composites*, 39(10), 3705-3711, (2018). **(IF 1.943)**
143. Derradji M, Zegaoui A, Medjahed A, **Abdul Qadeer Dayo**, Wang J, Arse YB, Liu W-b, Liu Y-G, Cost Effective Surface-Modified Basalt Fibers-Reinforced Phthalonitrile Composites With Improved Mechanical Properties and Advanced Nuclear Shielding Efficiency, *Polymer Composites*, (2018). **(IF 1.943)**
144. Derradji M, Zegaoui A, Xu Y-L, Wang A-r, **Abdul Qadeer Dayo**, Wang J, Liu W-b, Liu Y-g, Khiari K, Toward advanced gamma rays radiation resistance and

shielding efficiency with phthalonitrile resins and composites, Nuclear Instruments and Methods in Physics Research: B 421, 13–17, (2018). (**IF 1.323**)

145. Ghouti HA, Zegaoui A, Derradji M, Cai W-a, Wang J, Liu W-b, **Abdul Qadeer Dayo**, Multifunctional Hybrid Composites with Enhanced Mechanical and Thermal Properties Based on Polybenzoxazine and Chopped Kevlar/Carbon Hybrid Fibers, Polymers, 10(12), 1308, (2018). (**IF 2.935**)
146. Lv D, **Abdul Qadeer Dayo**, Wang A-r, Kiran S, Xu Y-l, Song S, Liu W-b, Wang J, Gao B-c, Curing behavior and properties of benzoxazine-co-self-promoted phthalonitrile polymers, Journal of Applied Polymer Science, 135(31), 46578, (2018). (**IF 1.901**)
147. Shah AH, Zhang Y, Xu X, **Abdul Qadeer Dayo**, Li X, Wang S, Liu W-b, Reinforcement of stearic acid treated egg shell particles in epoxy thermosets: Structural, thermal, and mechanical characterization, Materials, 11(10), 1872, (2018). (**IF 2.467**)
148. Wang A-r, **Abdul Qadeer Dayo**, Lv D, Xu Y-l, Wang J, Liu W-b, Derradji M, Novel amino-containing fluorene-based bisphthalonitrile compounds with flexible group: Synthesis, curing behavior, and properties, High Performance Polymers, 30(7), 767–775 (2018) (**IF 1.047**)
149. Wang A-r, **Abdul Qadeer Dayo**, Zu L-w, Xu Y-l, Lv D, Song S, Tang T, Liu W-b, Wang J, Gao B-c, Bio-based Phthalonitrile Compounds: Synthesis, Curing Behavior, Thermomechanical and Thermal Properties, Reactive and Functional Polymers, 127, 1-9, (2018). (**IF 2.975**)
150. Xu Y-l, **Abdul Qadeer Dayo**, Derradji M, Wang J, Liu W-b, Song S, Tang T, Copolymerization of Bisphthalonitrile/Benzoxazine Blends: Curing Behavior,

Thermomechanical and Thermal Properties, Reactive and Functional Polymers, 123, 97-105, (2018). **(IF 2.975)**

151. Xu Y-l, **Abdul Qadeer Dayo**, Wang J, Wang A-r, Lv D, Zegaoui A, Derradji M, Liu W-b, Mechanical and Thermal Properties of a Room Temperature Curing Epoxy Resin and Related Hemp Fibers Reinforced Composites Using a Novel in-situ Generated Curing Agent, Materials Chemistry and Physics, 203, 293-301, (2018).

(IF 2.210)

152. Zegaoui A, Derradji M, Cai W-a, Liu W-b, **Abdul Qadeer Dayo**, Wang J, Enhancing the mechanical and thermal properties of dicyanate ester of bisphenol-A/bisphenol-A based benzoxazine resin blend by using short glass fibers, Fibres and Polymers (2018). **(IF 1.353)**

153. Zegaoui A, Derradji M, **Abdul Qadeer Dayo**, Medjahed A, Zhang H-y, Cai W-a, Liu W-b, Ma R-k, Wang J, High-performance polymer composites with enhanced mechanical and thermal properties from cyanate ester/benzoxazine resin and short Kevlar/glass hybrid fibers, High Performance Polymers, (2018). **(IF 1.047)**

154. Zegaoui A, Derradji M, Ma R-k, Cai W-a, Liu W-b, Wang J, **Abdul Qadeer Dayo**, Song S, Zhang L-l, High-performance polymeric materials with greatly improved mechanical and thermal properties from cyanate ester/benzoxazine resin reinforced by silane-treated basalt fibers, Journal of Applied Polymer Science 135(21), 46283, (2018) **(IF 1.901)**

155. Zegaoui A, Derradji M, Ma R-k, Cai W-a, Medjahed A, Liu W-b, **Abdul Qadeer Dayo**, Wang J, Wang G-x, Influence of fiber volume fractions on the performances

of alkali modified hemp fibers reinforced cyanate ester/benzoxazine blend composites, Materials Chemistry and Physics, 123, 146-156, (2018). (**IF 2.210**)

156.Zegaoui A, Derradji M, Ma R-k, Cai W-a, Medjahed A, Liu W-b, **Abdul Qadeer Dayo**, Wang J, Silane-modified carbon fibers reinforced cyanate ester/benzoxazine resin composites: Morphological, mechanical and thermal degradation properties, Vacuum, 150, 12-23 (2018). (**IF 2.067**)

157.Zegaoui A, Derradji M, Ma R-k, Cai W-a, Medjahed A, Liu W-b, **Abdul Qadeer Dayo**, Wang J, Zhang L-l, Ramdani Y, Simultaneous toughening and reinforcing of cyanate ester/benzoxazine resins with improved mechanical and thermal properties by using hyperbranched polyesters, Journal of Polymer Engineering, 38(9),839-848 (2018). (**IF 0.778**)

158.Zegaoui A, Derradji M, Medjahed A, **Abdul Qadeer Dayo**, Dong W, Liu W-b, Cai W-a, Wang J, Liu Y-g, Multifunctional polymer materials with enhanced mechanical, thermal and gamma radiation shielding properties from dicyanate ester of bisphenol-A/bisphenol-A based benzoxazine resin and short kevlar/basalt hybrid fibers, Journal of Polymer Research, 25, 250, (2018) (**IF 1.434**).

159.Zegaoui A, Derradji M, Medjahed A, **Abdul Qadeer Dayo**, Wang J, Cai W-a, Liu W-b, Tailoring the desired properties of dicyanate ester of bisphenol-A/bisphenol-A based benzoxazine resin by silane-modified acacia catechu particles, Reactive and Functional Polymers, 131, 333-341, (2018). (**IF 2.975**)

160.Zegaoui A, Ma R-k, **Abdul Qadeer Dayo**, Derradji M, Wang J, Liu W-b, Xu Y-l, Cai W-a, Morphological, mechanical and thermal properties of cyanate

ester/benzoxazine resin composites reinforced by silane treated natural hemp fibers,
Chinese Journal of Chemical Engineering 26, 1219-1228, (2018). (**IF 1.712**)

161. **Mohammad Amin**, Chetpattananondh P, Khan M, Mushtaq F, Sami S. (2018). Extraction and Quantification of Chlorophyll from Microalgae Chlorella sp. In: IOP Conference Series: Materials Science and Engineering. IOP Publishing. 414: 012025.
162. ShahKhan S, **Faiza Akhtar**, Iqbal S, Akhtar MM, Moghira B, Uddin M. (2018). Role of Nox and O₃ in Micro Climate Change: Policy Dimension and Human Facet Impact for Quetta (Pakistan). Indian Journal of Natural Sciences. 9(50):14557-14572. (**ISI Indexed**).
163. Hussain M, **Faiza Akhtar**, Khan SS. (2018) Impact and Ratio of Lead in Ambient Air from Vehicular Emission in Quetta Valley, Pakistan. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414. 012044. (**ISI Indexed**).
164. **Faiza Akhtar**, Shahkhan S: Air Pollution Deterministic Index Modeling: Application in Quetta, Pakistan. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 414. 012014. (**ISI Indexed**).
165. Shahab A, Qi S, **Muhammad Zaheer**. (2018). Arsenic contamination, Subsequent Water Toxicity, And Associated Public Health Risks in the Lower Indus Plain, Sindh Province, Pakistan. Environmental Science and Pollution Research. 1-21. (**IF: 1.80**).
166. Aftab SM, **Rehanul Haque Siddiqui**, Farooqui MA. (2018). Strategies to Manage Aquifer Recharge in Balochistan, Pakistan: An Overview. In: IOP Conference

Series: Materials Science and Engineering. IOP Publishing. 414: 12023. (ISI Indexed).

167. Qazi QA, Kakar M I, Khan M, **Rehanul Haque Siddiqui**. (2018). Petrology and Major Element Geochemistry of Granitic Rocks from Bela Ophiolite; Economic Implications. *The International Journal of Earth Sciences*. 6(5): 1-8. (IF: 2.27)
168. Haider N, Khan S, Rashid MU, Zeb J, Iqbal S, Khan A, **Rehanul Haque Siddiqui Ahmad W** (2018) Geochemistry and Petrographical Study of Langrial Iron Ore from Tethyan Hazara Area Pakistan, with Emphasis on its Economic Characterization and Depositional Setting. *International Journal of Economic and Environmental Geology*:40-48. (HEC recognized Journal in Y-Category).
169. Ogasawara M, Fukuyama M, **Rehanul Haque Siddiqui**, Zhao Y (2018) Origin of the Ordovician Mansehra granite in the NW Himalaya, Pakistan: constraints from Sr–Nd isotopic data, zircon U–Pb age and Hf isotopes. *Geological Society, London, Special Publications* 481:SP481. 485. (IF 2.683).
170. Muhammad A. Farooqui and Syed **Mobasher Aftab**, (2018). China-Pakistan Economic Corridor; Prospects and Challenges for Balochistan, Pakistan. *IOP Conference Series: Materials Science and Engineering*. IOP Publishing. 414: 012046. (ISI Indexed).
171. Rehanul Haq Siddiqui, **Syed Mobasher Aftab** and Asif Hanif Chaudhry, (2018). Hydrothermal Alteration in Porphyry Cu-Mo-Au Mineralizations of the Chagai Arc, Balochistan, Pakistan. *IOP Conference Series: Materials Science and Engineering*. IOP Publishing. 414: 012033. (ISI Indexed).
172. Imran H. Durrani, Shahzada Adnan and **Syed Mobasher Aftab**, (2018). Historical and Future Climatological Drought Projections Over Quetta Valley, Balochistan, Pakistan.

IOP Conference Series: Materials Science and Engineering. IOP Publishing. 414: 012043. (**ISI Indexed**).

173. Lu J, Zhang Y, **Muhammad Habib**, Chen Z . (2018) Peridynamic Model for the Numerical Simulation of Anchor Bolt Pullout in Concrete. Mathematical Problems in Engineering 2018. (**IF: 1.14**)

174. **Azmat ullah Khan**, Szulejko JE, Samaddar P, Kim K-H, Liu B, Maitlo HA, Yang X, Ok YS (2018) The potential of biochar as sorptive media for removal of hazardous benzene in air. Chemical Engineering Journal. (**IF: 6.73**)

175. Maitlo HA, Kim JH, Kim K-H, Park JY, **Azmat ullah Khan** (2018) Metal-air fuel cell electrocoagulation techniques for the treatment of arsenic in water. Journal of Cleaner Production. (**IF: 5.65**).

176. **Naik Muhammad**, et al. (2018). Assessment of the Seismic Performance of Submerged Floating Tunnel under MultiSupport Seismic Excitations. NED University Journal of Research. (Paper Accepted). (**HEC Recognized X Category**).

177. **Saeedullah Jan Mandokhial**, Rehman K, Baloch Z, Sadiq S, Kakar MG. (2018). Effect of the confining method on the cyclic undrained behaviours of sand. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012036. (**ISI Indexed**).

178. Rahman K, **Saeedullah Jan Mandokhial**. (2018). River Flow Dynamics with Two-dimensional Shallow-water Equations. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012037. (**ISI Indexed**).

179. Alam M, Aaqib M, Sadiq S, **Saeedullah Jan Mandokhial**, Adeel MB, Kakar NA

Empirical SPT-CPT correlation for soils from Lahore, Pakistan. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012015. (**ISI Indexed**).

180. Sadiq S, Khan U, Alam M, **Saeedullah Jan Mandokhial**, Ahmed NZ, Ikram A

Numerical Evaluation of Slope Stability measures: A Case Study of Birham Landslide, Murree, Pakistan. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012028. (**ISI Indexed**).

181. Noshin S, Alam M, Sadiq S, **Saeedullah Jan Mandokhial** Stability Analysis of

Flood Bunds: A Study on Geotechnical Health Evaluation of Embankments. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012035. (**ISI Indexed**).

182. Joa BW, Sikandarb MA, **Zafar Baloch**, Naseerd A, Jane N, Jamalb Q (2018) Effect of

w/b ratio and binder content on the properties of self-compacting high performance concrete (SCHPC). Journal of Ceramic Processing Research 19 (2):171-178. (**ISI Indexed**).

183. Muhammad N, **Zafar Ullah Baloch**, Choi D-H (2018) A Numerical Procedure

Accounting for Fluid Drag Forces and Cable Extensibility for the Static Response of Mooring Cables. International Journal of Steel Structures 18 (1):293-303. (**IF: 0.73**).

184. Mandokhail SJ, Rehman K, **Zafar Baloch**, Sadiq S, Kakar MG Effect of the

confining method on the cyclic undrained behaviours of sand. In: IOP Conference

Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012036. (**ISI Indexed**).

Faculty of Information and Communication Technology

185. **Bushra Naeem**, Ngah R, Hashim SZM. (2018). Reduction in Ping-Pong Effect in Heterogeneous Networks Using Fuzzy Logic. *Soft Computing*. 1-15. (**IF: 2.36**).
186. Ghori MU, **Bushra Naeem**, Kakar FK. (2018). Comparative Analysis of Intercell Interference Mitigation Techniques in LTE-A Network. *Wireless Personal Communications*. 99(3):1159-1168. (**IF: 1.20**).
187. Quddus A, **Faizullah Khan**, Muhammad F, Raza MW, Khan S, Qureshi I. (2018). Performance Evaluation and Enhancement of Solar Pv Panels. *International Journal of Scientific and Engineering Research*. 9(2): 1994-2003. (**ISI Indexed**).
188. Khan MS, Kakar FK, **Surat Khan**, Athar SO. (2018). Efficiency and Cost Analysis of Power Sources in Impressed Current Cathodic Protection System for Corrosion Prevention in Buried Pipelines of Balochistan, Pakistan. In: IOP Conference Series: Materials Science and Engineering: IOP Publishing. 012034. (**ISI Indexed**).
189. Raza MW, Muhammad F, **Surat Khan** et.al. (2018). Eco-friendly Energy Harvesting Using Piezoelectric Material for Smart Applications. *International Journal of Scientific & Engineering Research*. 9(5):1165-1170 (**ISI Indexed**).
190. **Rabia Qadar**, Kasi MK, Ayub S, Kakar FA. (2018). Monte Carlo-based channel estimation and performance evaluation for UWOC links under geometric losses. *International Journal of Communication Systems*. 31(6): e3527. (**IF: 1.71**).
191. **Syed Tariq Shah**, da Costa DB, Choi KW, Chung MY. (2018). Dynamic Wireless Energy Harvesting and Optimal Distribution in Multipair DF Relay Network with

Nonlinear Energy Conversion Model. Wireless Communications and Mobile Computing .Article ID 7638215, 1-14. (**ISI Indexed**).

192. **Syed Tariq Shah**, Hasan SF, Seet B-C, Chong PHJ, Chung MY. (2018). Device-to-device Communications: A Contemporary Survey. *Wireless Personal Communications*. 98(1):1247-1284. (**IF: 1.12**).
193. **Syed Tariq Shah**, Choi KW, Lee T-J, Chung MY. (2018). Outage Probability and Throughput Analysis of SWIPT Enabled Cognitive Relay Network with Ambient Backscatter. *IEEE Internet of Things Journal*. 5(4): 3198 – 3208. (**IF: 5.86**).
194. Munir D, **Syed Tariq Shah**, Choi KW, Chung MY (2018) Information Processing and Wireless Energy Harvesting in Interference-Aware Public Safety Networks. *Wireless Personal Communications*:1-21. (**IF: 1.12**).
195. **Syed Tariq Shah**, Shin M, Kwon YM, Shin J, Park A-S, Chung MY (2018) Moving personal-cell network: Characteristics and performance evaluation. *China Communications* 15 (12):159-173. (**IF: 1.51**).
196. Khidrani A, Habibuddin M, **Muhammad Paend Bakht**, Sule AH, Haider R (2018) Improved Control Method to Reduce the Voltage and Current Harmonics in a Microgrid Subjected to Non-linear Load Conditions. *International Journal of Engineering & Technology* 7 (3.25):492-495. (**Non- ISI Indexed**).
197. Haider ML, **Anayat Ullah**, Ali B. (2018). Stress Optimization for a MEMS Multilayer Fixed-Fixed Beam. *Optik-International Journal for Light and Electron Optics*. 157:988-992 (**IF: 1.19**).
198. Sheikh SS, Javed A, Anas M, **Faisal Ahmed Khan** Solar Based Smart Irrigation System Using PID Controller. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: p 012040. (**ISI Indexed**).

199. **Fazal Muhammad** (2018) Low Efficiency of the Photovoltaic Cells: Causes And Impacts International Journal of Scientific & Engineering Research.8 (11): 1201-1207. (ISI Indexed).
200. **Muhammad Waleed Raza**, Muhammad F, Khan S, Ullah Z, Hussain S, Khan HU, Qureshi I. (2018). Eco-friendly Energy Harvesting Using Piezoelectric Material for Smart Applications. International Journal of Scientific & Engineering Research. 9(5):1165-1170. (ISI Indexed).
201. Nawaz M, Saqib MA, Kashif SAR, **Mehr Gul** (2018) Constrained model predictive control for an induction heating load. Transactions of the Institute of Measurement and Control:0142331218758887. (IF: 1.57)
202. **Muhammad Imran Qureshi**, B. A. Harvey, M. Atif, A. A. Memon, “A Block-Based Secure and Robust Watermarking Scheme for Color Images Based on Multi-resolution Decomposition and De-correlation,” Springer Journal of Frontiers of Information Technology & Electronic Engineering, pp. 1—20. (Accepted and in press)
203. **Ishtiaq Ahmed**, Khan F, Khan S, Khan A, Tareen AW, Saeed M (2018) Blackout Avoidance through Intelligent Load Shedding in Modern Electrical Power Utility Network. Journal of Applied and Emerging Sciences 8 (1): 48-57.
204. Khan A, Khan F, Khan S, **Ishtiaq Ahmed**, Saeed M. (2018). Cost Sensitive Learning and SMOTE Methods for Imbalanced Data. Journal of Applied and Emerging Sciences 8 (1):pp32-38
205. Ahmad B, **Ahthasham Sajid**, Nawaz H, Rind M, Hassan B, Maitlo A, Ruk S. (2018). An Analysis of Co-relation between Social Network Citation with H-Index and its Variants. IJCSNS .18(5):119. . (ISI Indexed).

206. **Ahthasham Sajid**, Hussain K, Shah SBH, Iqbal T, Baig I. (2018). History and Buffer Rule Based (Forward Chaining/Data Driven) Intelligent System for Storage Level Big Data Congestion Handling In Smart Opportunistic Network. *Journal of Ambient Intelligence and Humanized Computing*. 1-11. **(IF: 1.42)**.
207. **Amir Mahmood Mirza**, Khan MNA. (2018). an Automated Functional Testing Framework for Context-Aware Applications. *IEEE Access*. 6:46568-46583. **(IF: 3.55)**.
208. **Akbar Khan**, Khan F, Khan S, Khan IA, Saeed M (2018) Cost Sensitive Learning and SMOTE Methods for Imbalanced Data. *Journal of Applied and Emerging Sciences* 8 (1):pp32-38. **(ISI Indexed)**.
209. Ahmad I, Khan F, Khan S, **Akbar Khan**, Tareen AW, Saeed M (2018) Blackout Avoidance through Intelligent Load Shedding in Modern Electrical Power Utility Network. *Journal of Applied and Emerging Sciences* 8 (1):pp48-57. **(ISI Indexed)**.

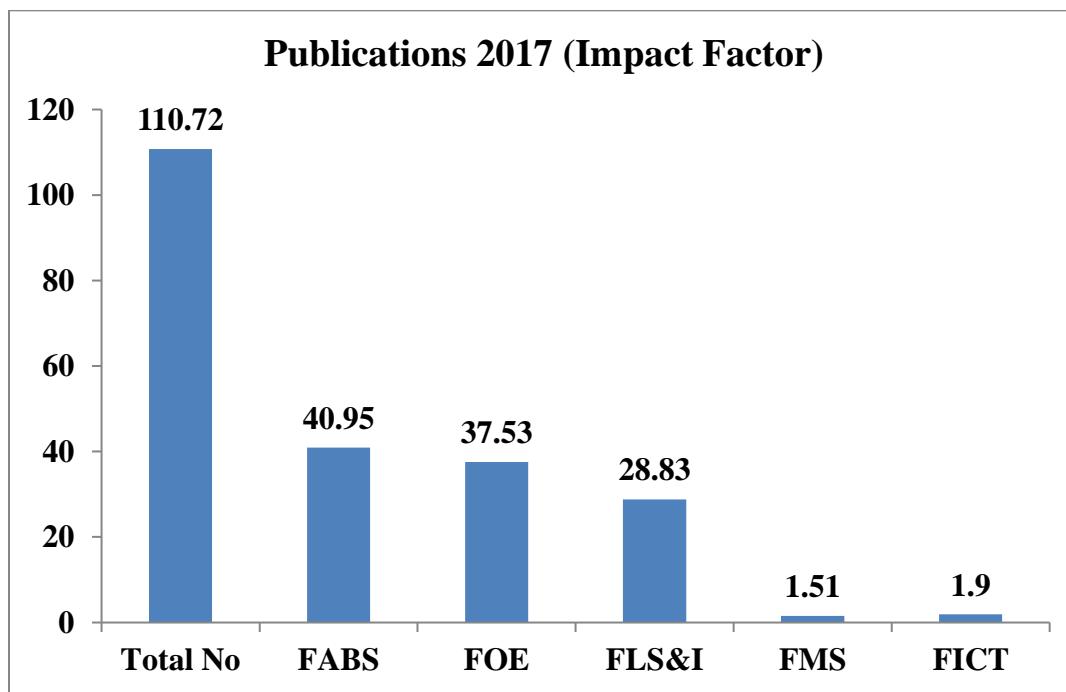
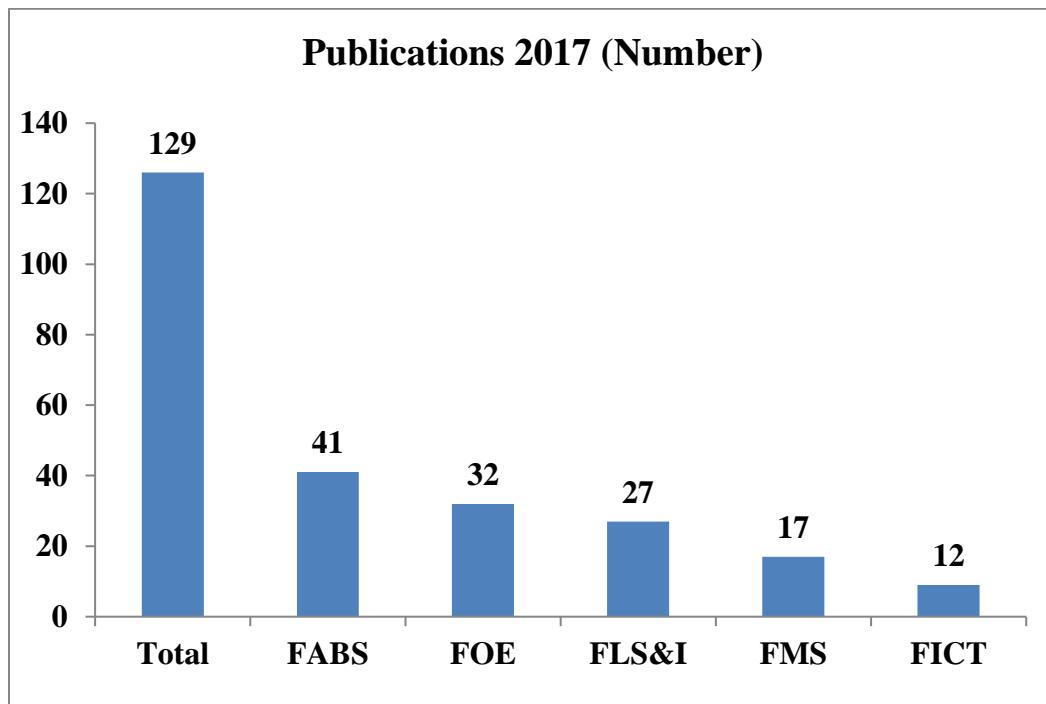
FACULTY OF MANAGEMENT SCIENCES (FMS)

210. Maula-Bakhsh R, **Abdul Raziq** (2018) Relationship between Servant Leadership and Subjective Well-Being: Evidence from Manufacturing and Services based SMEs in Pakistan. *Journal of Management Sciences* 5 (1):62-85. **(HEC Z-Category)**.
211. Kasi A, **Abdul Raziq**. Exploring Environmental Sustainability Practices in Pakistani SMEs. *Journal of Independent studies and Research (Accepted)*. **(HEC Z-Category)**.
212. Nazir MS, Nazir S, **Ayesha Javaid**. (2018) Role of Institutional Owners in Devising Firms' Risk-Taking Behavior: Evidence From a Developing Economy. *International Journal of Applied Behavioral Economics*. 7(4):21-36. **(ISI Indexed)**.

213. **Muhamamid Khair**, Mushtaq S, et al. Diverse drivers of unsustainable groundwater extraction behaviour operate in an unregulated water scarce region. *Journal of Environmental Management*. (Paper Accepted). (**IF:4.00**)
214. Kakar Z, **Syed Munawar Shah**, Khan MA. (2018). Scarcity of water resources in rural area of Quetta District; challenges and preparedness. In: IOP Conference Series: Materials Science and Engineering, 2018. IOP Publishing. 414: 012013. (**ISI Indexed**).
215. **Syed Munawar Shah**, Abdul-Majid M (2018) Corporation's Threshold for Debt: Implications for Policy Reforms toward Equity-Biased Corporate Tax System. *International Finance Review*. 19:145-174. (**ISI Indexed**).
216. Kakar Z, **Syed Munawar Shah**. (2018). The Causes of Depletion in Groundwater in Pishin District of Balochistan. *International Journal of Scientific and Engineering Research*. 9(11):1610-1616. (**ISI Indexed**).

251.

RESEARCH PUBLICATIONS 2017



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Sowada N, Hashem MO, Yilmaz R, Hamad M, **Kakar N**, Thiele H, Arold ST, Bode H, Alkuraya FS, Borck G. (2017). Mutations of PTPN23 in developmental and epileptic encephalopathy. *Human genetics.* 136 (11-12):1455-1461. **(IF: 4.63).**
2. Kakar KU, Nawaz Z, **Kakar K**, Ali E, Almoneafy AA, Ullah R, Ren X-l, Shu Q-Y (2017) Comprehensive genomic analysis of the CNGC gene family in Brassica oleracea: novel insights into synteny, structures, and transcript profiles. *BMC genomics.* 18 (1):869. **(IF: 3.72).**
3. Rasool M, Malik A, Hussain M, A Haq K, Butt K, Abdul Basit Ashraf M, Imran Naseer M, **Asif M**, **Shaikh R**, Zahid Mustafa M. (2017). DARPins Bioengineering and its Theranostic Approaches: Emerging Trends in Protein Engineering. Current pharmaceutical design. 23 (11):1610-1615. **(IF: 2.61).**
4. Rasool M, Ashraf MAB, Malik A, Waquar S, Khan SA, Qazi MH, Ahmad W, **Asif M**, Khan SU, Zaheer A. (2017). Comparative study of extrapolative factors linked with oxidative injury and anti-inflammatory status in chronic kidney disease patients experiencing cardiovascular distress. *PloS One.*12 (2):e0171561. **(IF:2.80).**
5. Akram AM, Iqbal Z, Akhtar T, Khalid AM, Sabar MF, Qazi MH, Aziz Z, Sajid N, Aleem A, Rasool M, **Asif M.** (2017). Presence of novel compound BCR-ABL mutations in late chronic and advanced phase imatinib sensitive CML patients indicates their possible role in CML progression. *Cancer Biology & Therapy.* 18 (4):214-22. **(IF:3.29).**
6. **Mushtaq A**, Jamil N, Riaz M, Hornyak G, **Ahmed N**, **Ahmed SS**, **Malghani MNK**, **Shahwani MN.** (2017). Synthesis of Silica Nanoparticles and their effect on priming of wheat (*Triticum aestivum L.*) under salinity stress. *Biological Forum-An International Journal.* 9: 1-8. **(IF: 2.91).**

7. **Kakar N**, Horn D, Decker E, Sowada N, Kubisch C, **Ahmad J**, Borck G, Bergmann C. (2017). Expanding the phenotype associated with biallelic WDR60 mutations: Siblings with retinal degeneration and polydactyly lacking other features of short rib thoracic dystrophies. American journal of medical genetics Part A. Volume 2017. (**IF: 2.25**).
8. **Nisar S**, Aleem A, Pansezai M, Afridi S, Malik SI, **Shahwani MN**. (2017). Amplification of Mitochondrial DNA for detection of Plasmodiumvivax in Balochistan. Journal of the Pakistan Medical Association. 67(5):677. (**IF: 0.61**).
9. **Murad M**, **Arbab M**, Khan MB, Abdullah S, Ali M, Tareen S, **Khan MW**. (2017). Study of factors affecting and causing preterm birth. Journal of Entomology and Zoology Studies. 5(2): 406-409.
10. **Khajjak MH**, **Saeed M**, **Shahwani MN**, **Ahmed SS**, Shaheen G, **Yousafzai A**, **Ahmad N**. (2017). Seed and cone biometry of Juniperus excela from three Provenances in Balochistan. International Journal of Biosciences.10 (01):345-355. (**IF: 0.55**).
11. Khan YK, **Agha SI**, Shafee M, Ahmed S, **Asif M**, Mastoi AH, Yaqoob M, Ahmed N, Akbar S, Umar M, Ali A. (2017). Staphylococccus aures associated with bovine mastitis in Quetta, Pakistan. International Journal of Biosciences.11: 457-463. (**IF: 0.55**).
12. **Luqman M**, **Yousafzai A**, **Ahmed N**, **Asad-ullah**, **Amin R**, Hameed A, Naudhani A, **Daud S**. (2017). Identification of two Missense Mutations (p.Ile198Thr & p.Ser44Arg) in TYR gene in Pakistani family. International Journal of Biosciences.10 (04):232-238. (**IF: 0.55**).
13. Tahir T, **Ahmed SS**, **Ahmed N**, **Sani IA** **Shahwani MN**, **Saeed M**, **Rashid M**, **Ahmed U**. (2017), Copper Resistant Bacteria at Coal Mines of Sorrang Balochistan. International Journal of Biosciences. 10(3): 288-355, 2017 (**IF: 0.55**).

14. **Daud S, Naudhani S, Ahmed N, Yaqub T, Hashmi AS, Raza AM, Awan S, Wali A, Luqman M, Wasim M.** (2017). Mutational analysis of the equine Cu/Zn superoxide dismutase (SOD1) and amyotrophic lateral sclerosis (ALS2) in horses of Pakistani origin: No evidence found for motor neuron disease. International Journal of Biosciences. 10(03): 157-162. **(IF: 0.55).**
15. **Agha SI, Shafee M, Shafiq M, Asif M, Parveen S, Kakar K, Khan YH, Amir M, Qadir A, Yakoob M, Baloch A.** (2017). Antimicrobial activity of Thyme (*Thymus vulgaris*) essential oil cultivated in Quetta, Balochistan, Pakistan. International Journal of Biosciences. 10 (02):105-110. **(IF: 0.55).**
16. **Raza AM, Mengal N, Nawaz M, Saeed M, Wali A Ahmad J.** (2017. Hypodontia and Cleft lip; A consequence of homozygous Missence mutation in PAX Gene. International Journal of Biosciences. 11: 382-387. **(IF: 0.55).**
17. Rasool M, Malik A, Saleem S, Ansari SA, Iqbal J, **Asif M, Kamal MA, Al-Qahtani MH, Karim S.** (2017). Assessment of Circulating Biochemical Markers in Mice Receiving Cinnamon and Glycyrrhizin Under Carbon Tetrachloride Induced Hepatic Injury. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences:1-7. **(IF: 0.34).**
18. Batool BT, Tareen A, **Ahmed SS, Ejaz H, Kakar MA, Rehman SA, Saeed M, Ahmad Z, Tariq MM, Awan MA, Shahwani MN.** (2017) Prevalence of Zoonotic Tuberculosis and Brucellosis in Animals of Quetta and Pishin Districts, Balochistan. Pakistan Journal of Zoology. 49:363-363. **(IF: 0.32).**
19. Rasool M, Malik A, Arooj M, Alam MZ, Alam Q, Awan M, **Asif M, Qazi MH, Zaheer A, Khan SU** (2017) Evaluation of antimicrobial activity of ethanolic extracts of

- Azadirachta indica and Psidium guajava against clinically important bacteria at varying pH and temperature. Biomedical Research. 28:134-139. (**IF: 0.21**).
20. Khan SR, Malik A, Ashraf MAB, Waquar S, Ahmad S, Khan AR, Zaheer A, Iqbal A, Mustafa MZ, Jabbar A, **Asif M, Shaikh R.** (2017). Implication of prophetic variables and their role in the development of oral squamous cell carcinoma (OSCC). Biomedical Research. 28(19): 8360-8366. (**IF: 0.21**).
21. **Asif M, Hussain A, Wali A, Ahmed N, Sajjad N, Amir M, Ali I, Pushparaj PN, Rasool M** (2017) A rare case of three-way complex variant translocation in chronic myeloid leukemia (6; 9; 22) (p21; q34; q11): A case report. Biomedical Reports. 7 (4):377-379. (**ISI Indexed**).
22. Manzoor H, Naheed H, Ahmad K, Iftikhar S, **Asif M, Shuja J, Sultan N, Ali I, Agha SI, Khan YH** (2017) Pattern of gynaecological malignancies in south western region of Pakistan: An overview of 12 years. Biomedical Reports. 7(5):487-491. (**ISI Indexed**).
23. Ahmed S, Sanjrani M, Ahmad Z, **Asmatullah, khan DA, Rezwan, Sadiq YS, Siddique M, Iram N.** (2017). Microbiological studies of bovine mastitis caused by Escherichia coli in Quetta, Balochistan. Indo American Journal of Pharmaceutical Science. 4(7): 1929-1936. (**ISI Indexed**).
24. Tariq T, Ateeq Ma, Kiyani MT, **Ahmed N, Shahzad F, Yousaf M, Sani IA, Murad M, Yousafzai A, Ahmed N, Shahid D, Sadaf H.** (2017). Characterization ff Micro Flora from Coal Mines of Baluchistan, Pakistan. Indo American Journal of Pharmaceutical Science. 4(12): 4764-4775. (**ISI Indexed**).
25. Usman K, Rehman HU, Khudadad S, Pervaiz K, **Khan MW, Ali SZUA, Maqsood MJ, Jawad SM, Ahmad A.** (2017). Assessment of heavy metals in River Kabul at Warsak Peshawar Khyber Pakhtunkhwa, Pakistan. Journal of Entomology and Zoology Studies.

(6): 1726-1728. (**IF 0.55**).

26. **Khan MW**, Khalid M, HabibUllah HUR, Ayaz Y, Ullah F, Jadoon MA, Waqas M, Afridi S. (2017). Detection of Arsenic (As), Antimony (Sb) and Bacterial Contamination in Drinking Water. *Biological Forum*. 9:133-238. (**ISI Indexed**).
27. **Yousafzai A**, Ahmed N, Luqman M, Naseeb HK, Hashmi N, Rani k, **Murad M, Arbab M**, Ejaz M, **Ahmed U**, **Wali W**, Sajjad N, Baloch AM, **Ahmad J**. (2017). Clinical presentation and lifestyle related risk factors of breast cancer among different age and Ethnic groups. *Indo American Journal of Pharmaceutical Science*. 4: 4464-4475. (**ISI Indexed**).

FACULTY OF ARTS AND BASIC SCIENCES

28. **Waqas M**, Iqbal S, Bahadur A, Saeed A, Raheel M, Javed M. (2017). Designing of a spatially separated hetero-junction pseudobrookite ($\text{Fe}_2\text{TiO}_5\text{-TiO}_2$) yolk-shell hollow spheres as efficient photocatalyst for water oxidation reaction. *Applied Catalysis B: Environmental*. 219:30-35 (**IF 9.44**).
29. **Ullah Z**, Bustam MA, Man Z, Khan AS, Muhammad N, Sarwono A. (2017). Preparation and kinetics study of biodiesel production from waste cooking oil using new functionalized ionic liquids as catalysts. *Renewable Energy*. 114:755-765. (**IF: 4.35**).
30. Shi S, Li P, Meng J, Jiang D, Tan Y, **Asghar NHK**. (2017) Kinetics of volatile impurity removal from silicon by electron beam melting for photovoltaic applications. *Physical Chemistry Chemical Physics*. 19 (41):28424-28433. (**IF: 4.1**).
31. Warsi MF, **Gilani ZA**, Al-Khali NF, Sarfraz M, Khan MA, Anjum MN, Shakir I. (2017). New $\text{LiNi}_{0.5}\text{Pr}_x\text{Fe}_{2-x}\text{O}_4$ nanocrystallites: Synthesis via low cost route for fabrication

of smart advanced technological devices. Ceramics International. 43(17):14807-14812.

(**IF 2.98**).

32. **Shah HH**, Iqbal Q. (2017). Gravitational collapse of dark matter interacting with dark energy: Black hole formation. International Journal of Modern Physics. D: 1750142. (**IF: 2.4**).
33. Shah HH. (2017). Black hole formation due to collapsing dark matter in a presence of dark energy in the brane-world scenario. International Journal of Modern Physics. D:1850020. (**IF: 2.4**).
34. **Khan MN**, Savaniu C, Azad A, Hing P, Irvine J (2017) Wet chemical synthesis and characterisation of Ba 0.5 Sr 0.5 Ce 0.6 Zr 0.2 Gd 0.1 Y 0.1 O 3– δ proton conductor. Solid State Ionics. 303:52-57. (**IF: 2.3**).
35. **Khan MN**, Azad AK, Savaniu CD, Hing P, Irvine JTS. (2017). Robust doped BaCeO_{3-δ} electrolyte for IT-SOFCs. Ionics. 23:2386-2396. (**IF: 2.06**).
36. Nadeem Q, Shen Y, Warsi MF, **Nasar G**, Qadir MA, Alberto R. (2017). Cyclic-RGD penta-peptides cRGDyK derivatized with cyclopentadienyl complexes of technetium and rhenium as radiopharmaceutical probes. Journal of Labelled Compounds and Radiopharmaceuticals. Vol.2017: 394-400. (**IF: 1.74**).
37. **Channa, LA.** (2017). Letter writing as a reflective practice: understanding the shuffling, shifting, and shaping of a researcher identity. Reflective Practice. 1-11. (**IF 1.08**)
38. Ali R, **Gilani ZA**, Shifa MS, **Asghar NUHK**, Khan MA, Anjum MN, Usmani MN, Warsi MF, Khawaja IU (2017) Evaluation and comparison of dc resistivity of NiZr x Co x Fe₂– 2x O₄, Ni0. 5Sn0. 5Co x Mn x Fe₂– 2x O₄, Mg1– x Ca x Ni y Fe₂– y O₄ and Mg1– x Ni x Co y Fe₂– y O₄ nanocrystalline materials. Materials Research Express. 4 (11):115009. (**IF: 1.06**).

39. Aboud FM, Ahmad I, Arshad S, Liaqat S, **Gilani ZA**. (2017). The Effect of Rare Earth Dy³⁺ Ions on Structural, Dielectric and Electrical Behaviour of Ni_{0.4}Co_{0.6}Dy_yFe_{2-y}O₄ Nano-Ferrites Synthesized by Wet Chemical Approach. *Digest Journal of Nanomaterials and Biostructures*, 12: 159-168. (**IF:0.83**).
40. **Asghar NUHK**, Shifa M, **Gilani ZA**, Wang P, **Rehman J**, Anjum M, Usmani M, Tan Y, Shi S, Jiang D. (2017). Redistribution of carbon from silicon by electron beam melting. *Digest journal of Nanomaterials and Biostructures*. 12(3):785-795. (**IF: 0.83**).
41. Ayub A, Shakoor A, **Rizvi TZ**, Elahi E (2017) Study of structural, electrical and dielectric behavior of cadmium selenide quantum dots/polyaniline nanocomposites. *Polymer Science, Series A*. 59(2):233-241. (**IF: 0.82**).
42. **Manan SA**, David MK, Dumanig FP, **Channa LA**. (2017). The glocalization of English in the Pakistan linguistic landscape. *World Englishes*. (**IF 0.76**).
43. **Gilani ZA**, Anjum M, Shifa S, **Asghar NUHK**, Usmani M, Aslam S, Khan M, Shahid M, Warsi M (2017.) Morphological nd Magnetic Behavior of neodymium doped lini0. 5fe2o4 Nanocrystalline ferrites prepared via micro-emulsion technique. *Dig journal of nanomaterial and biostructure*. 12:223-228. (**IF: 0.75**).
44. Khan AK, **Asghar NUHK**, **Gilani ZA**, Ajma HM, Shifa MS, Usmani MN, **Rehman J**. (2017). A comparative study of 16-frame and 8-frame gated SPECT imaging for determination of left ventricular volumes and ejection fraction. *Science International*. 29(4) :847-855. (**IF: 0.75**).
45. Khan AK, Asghar, **Asghar NUHK**, **Gilani ZA**, et al. (2017). A comparative study of 16-frame and 8-frame gated SPECT imaging for determination of left ventricular volumes and ejection fraction. *Science International*. 29(4): 847-855. (**IF: 0.75**).

46. **Manan SA.** (2017). The younger, the better: Idealized versus situated cognitions of educators about age and instruction of English as a second/foreign language in Pakistan. *Language Sciences* 64:54-68. (**IF: 0.66**).
47. Rahman G, **Ghaffar A**, Mubeen S, Arshad M, Khan S. (2017). The composition of extended Mittag-Leffler functions with pathway integral operator. *Advances in Difference Equations*. Volume 2017 (1):176. (**IF 0.33**).
48. **Manan SA**, David MK, Dumanig FP. (2017). Ethno linguistic dilemma and static maintenance syndrome. *Language Problems and Language Planning*. 41(1):66-86. (**IF: 0.28**).
49. **Gilani ZA**, Shifa MS, Ajmal K, **Asghar NUHK**, **Ahmad N**, **Rehman J**, Aslam S, Usmani MN, Zahra, Ahmed K. Measurement of ambient gamma radiation levels at different localities of Quetta, Pakistan. *Interciencia Journal*. 42(11):63-78 (**IF: 0.28**)
50. Rehman AU, Hassan M, **Asghar NUHK**, **Gilani ZA**, Aashiq MN, **Rehman J**, Anjum MN (2017). “Developmental and Reproductive Toxicity of Hydrothermally Synthesized Zirconium dioxide Nanoparticles. *Interciencia Journal*. 42(11):16-34. (**IF:0.28**).
51. **Ahmad N**, Khan IU, **Rehman J**, Nasir T. (2017). An overview of radon concentration in Malaysia. *Journal of Radiation Research and Applied Sciences*. 10:3327-330. (**ISI Indexed**).
52. **Gul R**, Reba A. (2017). A Study of Multiple Intelligence and Social Profiles of Secondary School Teachers, Peshawar. *Journal of Applied Environmental and Biological Sciences*. 7(6): 226-235. (**ISI Indexed**).
53. **Gul R**, Rafique M. (2017). Teachers Preferred Approaches to Multiple Intelligence Teaching, An Enhanced Prospects for Teaching Strategies. *Journal of Research and Reflections in Education*. 7(6): 197-203. (**HEC Recognized Y Category**).

54. **Kakar B**, Waheedullah S, Sultan RS (2017) Challenges and limitations of democracy in Pakistan for promoting peace and stability. WALIA Journal. 33(1): 21-25. (**ISI Indexed**).
55. Shahzad K, Kakar B, Rahim M (2017) Critical analysis of the issue of terrorism published in leading English newspaper (the news) of Pakistan. . WALIA Journal. 33(1): 26-30. (**ISI Indexed**).
56. Siddiq M, **Kakar B.** (2017). Hand Embellished Fabrics – An Adoptable Potential to Empower Household Women in Balochistan. Balochistan Review. 38:283-294. (**HEC Recognized Z Category**).
57. **Kakar B**, Tobwalb U, Sultan RS, Rehmand HU, Khane A. (2017). Marriage Preferences and Girls Education in Rural Baluchistan; A Sociological Assessment Study. J Appl Environ Biol Sci. 7 (4):110-114. (**ISI Indexed**).
58. Waheedullah S, **Kakar B.** (2017). Tracing the Inclinations of Major Powers in Arab Israeli Conflict: IdentifyinReligious ideologies shaping up the Alliance System in Middle East. International Journal of Advanced Biotechnology and Research. 8(3):2542-2549. (**ISI Indexed**).
59. **Ullah Z**, Bustam MA, Man Z, Khan AS, Muhammad N, Sarwono A, Farooq M, Ullah R, **Mengal AN**. (2017) A Detail Description on Catalytic Conversion of Waste Palm Cooking Oil into Biodiesel and Its Derivatives: New Functionalized Ionic Liquid Process. Chemistry Select. 2 (27):8583-8595. (**ISI Indexed**).
60. Panezai SG, **Channa LA**. (2017). Pakistani government primary school teachers and the English textbooks of Grades 1–5: A mixed methods teachers'-led evaluation. Cogent Education. 4:1269712. (**ISI Indexed**).
61. Khan AS, Man Z, Bustam MA, Gonfa G, Chong FK, **Ullah Z**, Nasrullah A, Sarwono A, Ahmad P, Muhammad N. (2017). Effect of Structural Variations on the Thermophysical

- Properties of Protic Ionic Liquids: Insights from Experimental and Computational Studies. *Journal of Chemical & Engineering Data*. 62(10):2993-3003. (**ISI Indexed**)
62. **Channa LA**, Gilhooly D, Lynn CA, **Manan SA**, Soomro NH. (2017). Friend or foe? First language (L1) in second/foreign language (L2/FL) instruction & Vygotsky. *Journal of Language and Cultural Education*. 5 (2):25-39. (**ISI Indexed**).
63. **Channa LA**, Gilhooly D, Channa AR, **Manan SA**. (2017a). Teaching English or producing docility? Foucauldian analysis of Pakistani state-mandated English textbooks. *Cogent Education*. 4:1283101. (**ISI Indexed**).
64. **Ahmed U**, Mehmood K, Kaneez Z, **Ahmed SS**, **Sani IA, K**, Sajjad A, Mehmood Z, Azam M. (2017). Physiochemical Characteristics and fatty acid composition of amygdalus Spinosissima seed oil from Balochistan. *Indo American Journal of Pharmaceutical Science*. 4 (09): 2755-2761. (**ISI Indexed**).
65. **Ellahi M**, **Nawaz M**, Rafique MY. (2017). Morphological Study of PDLC Films with Refractive Index Using Catalyst. *Pakistan Journal of Engineering and Applied Sciences*. 21:1-5. (**HEC Recognized**).
66. Naudhani M, Naudhani S. (2017). The impact of task-based learning on the teaching of writing skills of efl learners in Pakistan. *ELK Asia pacific journal of social sciences*. 3(2):1-17.
67. **Naudhani M**, Jameel A, Naudhani S. (2017). Investigating the factor of English language anxiety in speaking among the students of BUITEMS, Quetta, Pakistan. *International Journal of Humanities and Social development research*. 1:1-15-27.
68. Shahkhan S, **Akhtar F**, Moghria B, and Uddin M. (2017). 3Waste of Electric and Electronic Equipment: WEEE Import Audit of Pakistan. *Austin Environmental Sciences*. 2 (2):1-6.

FACULTY OF ENGINEERING AND ARCHITECTURE

69. Sami SK, **Siddiqui S**, Shrivastava S, Lee NE, Chung CH. (2017). The Pine-Needle-Inspired Structure of Zinc Oxide Nano rods Grown on Electrospun Nano fibers for High-Performance Flexible Supercapacitors. *Small*. 13(46): 1-9. (**IF: 8.64**).
70. **Dayo AQ**, Gao B-c, Wang J, W-b Liu, Derradji M, Shah AH, Babar AA. (2017). Natural hemp fiber reinforced polybenzoxazine composites: Curing behavior, mechanical and thermal properties. *Composites Science and Technology*. 144: 114-124. (**IF 4.87**)
71. **Dayo AQ**, Cao X-m, Cai W-a, Song S, Wang J, Zegaoui A, Derradji M, Xu Y-l, Wang A-r, Liu W-b, Gong L-d. (2017). Synthesis of Benzophenone-center Bisphenol-A containing Phthalonitrile Monomer (BBaph) and its Copolymerization with P-a Benzoxazine. *Reactive and Functional Polymers*. (**IF 3.15**).
72. Derradji M, Song X, **Dayo AQ**, Wang J, W-b Liu. (2017). Highly filled boron nitride-phthalonitrile nanocomposites for exigent thermally conductive applications. *Applied Thermal Engineering*. 115: 630–636. (**IF 3.35**).
73. **Ismail A**, Yasin Q, Du Q, Bhatti AA. (2017). A comparative study of empirical, statistical and virtual analysis for the estimation of pore network permeability. *Journal of Natural Gas Science and Engineering*. (**IF: 2.71**).
74. Derradji M, Henniche A, Wang J, **Dayo AQ**, Ouyang J-h. (2017). W-b Liu, Medjahed A. High Performance Nanocomposites from Ti_3SiC_2 MAX Phase and Phthalonitrile Resin. *Polymer Composites*. DOI 10.1002/pc.24401. (**IF 2.32**).

75. Jo B, **Baloch Z.** (2017). Internet of Things-Based Arduino Intelligent Monitoring and Cluster Analysis of Seasonal Variation in Physicochemical Parameters of Jungnangcheon, an Urban Stream. *Water*. 9(3):220. (**IF: 1.83**).
76. **Siddiqui RH**, Jan MQ, Khan MA, Kakar MI, Foden JD. (2017). Petrogenesis of the Late Cretaceous Tholeiitic Volcanism and Oceanic Island Arc Affinity of the Chagai Arc, Western Pakistan. *Acta Geologica Sinica (English Edition)*. 91(4):1248-1263. (**IF: 1.70**).
77. **Khan G**, Basirun WJ, Kazi SN, Ahmed P, Magaji L, Ahmed SM, Khan GM, Rehman MA (2017) Electrochemical investigation on the corrosion inhibition of mild steel by Quinazoline Schiff base compounds in hydrochloric acid solution. *Journal of colloid and interface science*. 502:134-145. (**IF: 1.5**).
78. Zegaoui A, Wang A-r, **Dayo AQ**, Tian B, W-b Liu, Wang J, Liu Y. (2017). Effects of gamma irradiation on the mechanical and thermal properties of cyanate ester/benzoxazine resin. *Radiation Physics and Chemistry*. 141, 110-117. (**IF 1.31**).
79. Wang A-r, **Dayo AQ**, Lv D, Xu Y-l, Wang J, Liu W-b, Derradji M. (2017). Novel Amino-containing Fluorene-Based Bisphthalonitrile Compounds with Flexible Group: Synthesis, Curing Behavior, and Properties, High Performance Polymers. doi.org/10.1177/0954008317725158. (**IF 1.17**)
80. Sami SK, **Siddiqui S**, Feroze MT, Chung C-H. (2017). Electrodeposited nickel–cobalt sulfide nano sheet on polyacrylonitrile nano fibers: a binder-free electrode for flexible supercapacitors. *Materials Research Express*. 4 (11):116309. (**IF: 1.06**).
81. **Siddiqui RH**, Jan MQ, Kakar MI, Kerr AC, Khan AS, Kakar E. (2017). Petrogenesis of Middle Triassic volcaniclastic rocks from Balochistan, Pakistan: Implications for the break-up of Gondwanaland. *Journal of Earth Science*. 28(2):218-228. (**IF: 0.97**).

82. **Siddiqui RH**, Ma C. (2017) Petrogenesis of Late Cretaceous Volcanism in Kazhaba Area and its relationship with mantle plume activity of Reunion hotspot. *Journal of Earth Science* 28 (2):229-240. (**IF: 0.97**).
83. **Dayo AQ**, Xu Y-l, Zegaoui A, Nizamani AA, Wang J, Lili Zhang, W-b Liu, Shah AH. (2017). Reinforcement of waste hemp fibres in aromatic diamine-based benzoxazine thermosets for the enhancement of mechanical and thermomechanical properties, *Plastics. Rubber and Composites: Macromolecular Engineering.* 46(10):442-449. (**IF 0.6**).
84. Dhuban S, Karuppanan S, **Mengal A**, Patil S (2017) Effect of fiber orientation and ply stacking sequence on buckling behaviour of basalt-carbon hybrid composite laminates. *Indian Journal of Engineering & Materials Sciences.* 23:187-193. (**IF: 0.54**).
85. **Ghouri AS**, Usman MR. (2017). Synthesis of Zeolite-Zeolite (MFI-FAU) Composite Catalysts for the Isomerization of n-Hexane. *Journal of Chemical Society of Pakistan.* 39(6):919-932. (**IF: 0.32**).
86. **Mengal A**, Karuppanan S, Ovinis M. (2017.) In-plane shear properties of basalt–carbon/epoxy hybrid composite laminates. *Materialwissenschaft und Werkstofftechnik.* 48 (3-4):261-266. (**IF: 0.52**).
87. **Saeed N, Amin R, Malik A, Kasi M, Kasi B.** (2017). Performance Evaluation of AODV, DSDV and DSR Routing Protocols in Unplanned Areas. *University of Engineering and Technology Taxila Technical Journal.* 22:143. (**HEC Y Category**)
88. **Ahmed A, Amin R, Anjum M, Ullah I**, Bajwa I. (2017). Big Data Analytics Solutions and Challenges. *Sindh University Research Journal-SURJ (Science Series.)* 49 (4):825-830. (**HEC Y Category**).
89. **Iqbal I, Ali I, Saira S.** (2017). Petro-physical Investigation and Reservoir

- Characterization through Well Logging. Journal of Applied and Emerging Sciences. 7:1-11. **(HEC Z Category).**
90. Ali I, Iqbal, R Saira S, Ullah. H. (2017). Performance of Conventional Drilling Fluids and Nano Based Drilling Fluids. Journal of Applied and Emerging Sciences. 7:12-21. **(HEC Z Category).**
91. **Chandio RH, Kalwar IH**, Memon TD, Mangrio AA, **Ali I.** (2017). FPGA-based Implementation of Maximum Power Point Tracking of Solar Cell. Journal of Applied and Emerging Sciences. 7:22-33. **(HEC Z Category).**
92. **Siddique M, Soomro SA**, Jatoi AS, **Ali, Mengal AN, Mandokhail SJ, Kakar GK, Khan A.** (2017). Effect of Blending Ratio of Coal and Biomass on NOx Emission Regarding Co- Firing. Journal of Applied and Emerging Sciences. 7:34 -39. **(HEC Z Category).**
93. **Mandokhail GJ, Ali N, Siddique N, Kakar E, Mengal AN, Kakar GK.** (2017). Numerical Modeling of 2D Cyclic Simple Shear Test Using Opensees. Journal of Applied and Emerging Sciences. 7:40-46. **(HEC Z Category).**
94. Shah SJ, **Mengal AN, Mandokhail SJ.** (2017). Analysis of Swelling Characteristics of Expansive Soil. Journal of Applied and Emerging Sciences 7:47-52. **(HEC Z Category).**
95. **Mushtaq F, Malghani MNK, Nasar MS, Mengal AW, Mat R Ani. FN.** (2017). Pyrolysis Heating Performance of Oil Palm Shell Waste Biomass with Carbon Surfaces. Journal of Applied and Emerging Sciences. 7:70-75. **(HEC Z Category)**
96. **Khan A, Kakar E, Mandokhail SJ, Shah, Mushtaq F, Siddique M.** (2017). Preliminary Treatment of Sewage Water a Case Study of City Nala, Quetta. Journal of Applied and Emerging Sciences. 7:100-106. **(HEC Z Category).**
97. **Khan MN, Ahmad I, Hussain SS, Ahmed J.** (2017). Beneficiation of Garhi Habib Ullah

(Mansehra) Low Grade Phosphate by Gravity Separation. Journal of Pakistan Institute of Chemical Engineers. 45:83-89. (**HEC Y Category**).

98. **Tariq SQ**, Syed L, Zholing L. (2017). Evolution of eco-friendly antimicrobial finishes extracted from citrus fruits peel for textile cotton fabric with furtherance domestic washing. International Journal of Scientific & Engineering Research. 10:973-979.
99. Nizamani AA, Ismail AR, Junin R, **Dayo AQ**, Tunio AH, Ibupoto ZH, Muhammad Sidek MA. (2017). Synthesis of titania-bentonite nanocomposite and its applications in water-based drilling fluids. Chemical Engineering Transactions. 56: 649-654.
100. **Hussain S**, Mohammad N, Rehman ZU, Mohammad N, Ahmad I, **Khan NM**, Raza S. (2017). Extraction of Gold and Silver by Agitation Cyanidation Process from Complex Ore of Shoughur area Chitral, Kyber Pakhtunkhwa Pakistan. Journal of Engineering and Applied Sciences. 36 (2):1-7. (**HEC X Category**).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

101. Israr A, **Rauf Z**, Muhammad J, **Khan F**. (2017.) Performance Analysis of Downlink Linear Precoding in Massive MIMO Systems under Imperfect CSI. Wireless Personal Communications. 96(2):2603-2619. (**IF: 0.95**).
102. **Ghori MU**, Naeem B, Kakar FK. (2017).Comparative Analysis of Intercell Interference Mitigation Techniques in LTE-A Network. Wireless Personal Communications:1-10. (**IF: 0.95**).
103. **Rehman T**, **Khan F**, **Khan S**, Ali A. (2017). Optimizing Satellite Handover Rate Using Particle Swarm Optimization (PSO) Algorithm. Journal of Applied and Emerging Sciences. 7: 53-63. (**HEC Z Category**).

104. **Imran M, Amin R, Malik AS, Kasi B, Kasi M.** (2017). Constraints Resolution in Semi-Automated Course Allocation Process for Educational Institutes. *Journal of Applied and Emerging Sciences*. 7: 64-69. (**HEC Z Category**).
105. **Raza MW, Amin R, Malik AS, Kasi M, Kasi B, Muhammad F.** (2017). Analysis of the Impact of Environmental Factors on Efficiency of Different Types of Solar Cells. *Journal of Applied and Emerging Sciences*. 7: 76-90. (**HEC Z Category**).
106. **Muhammad F, Raza MW, Khan S, Ahmed A, Khan F.** (2017). Identification of Potential Solar power production areas of Pakistan through cost benefit analysis. *International Journal of Scientific & Engineering Research*. 10:675-680.
107. **Khan A, Khan F, Khan S, Marwat I.** (2017). Performance analysis of different machine learning algorithms and to predict trachoma using R language. *International Journal of Scientific & Engineering Research*. 10:498-502. (**ISI Indexed**).
108. **Marwat I, Khan F, Rehman A.** (2017). Avoidance of blackout using Automatic node switching technique through ETAP. *International Journal of Scientific & Engineering Research*. 10:715-720. (**ISI Indexed**).
109. **Muhammad F, Raza MW, Khan S, Ahmed A, Khan F, Khan F.** (2017). Solar Potential of Different Pakistan Co-ordinates. *International Journal of Scientific & Engineering Research*. (**ISI Indexed**).
110. **Muhammad F, Raza MW, Khan S, Ahmed A, Khan F.** (2017). Socio Economic Prospects and Challenges of Solar Potential in Pakistan. *International Journal of Scientific & Engineering Research*. 8: 1268-1273. (**ISI Indexed**).

111. **Muhammad F, Raza MW, Khan S, Ahmed A, Khan F.** (2017). Low Efficiency of the Photovoltaic cells: Causes and Impacts. International Journal of Scientific & Engineering Research.8(11):1201-1207. **(ISI Indexed).**
112. **Ghori EMU, Khan EAA, Naeem B**, Sheikh A. (2017). Optimized Dynamic Cell Selection Approach towards Intercell Interference Reduction for Cell-edge Users In LTE-A Network. International Journal of Engineering and Advanced Research Technology. 3:1-7.

FACULTY OF MANAGEMENT SCIENCES

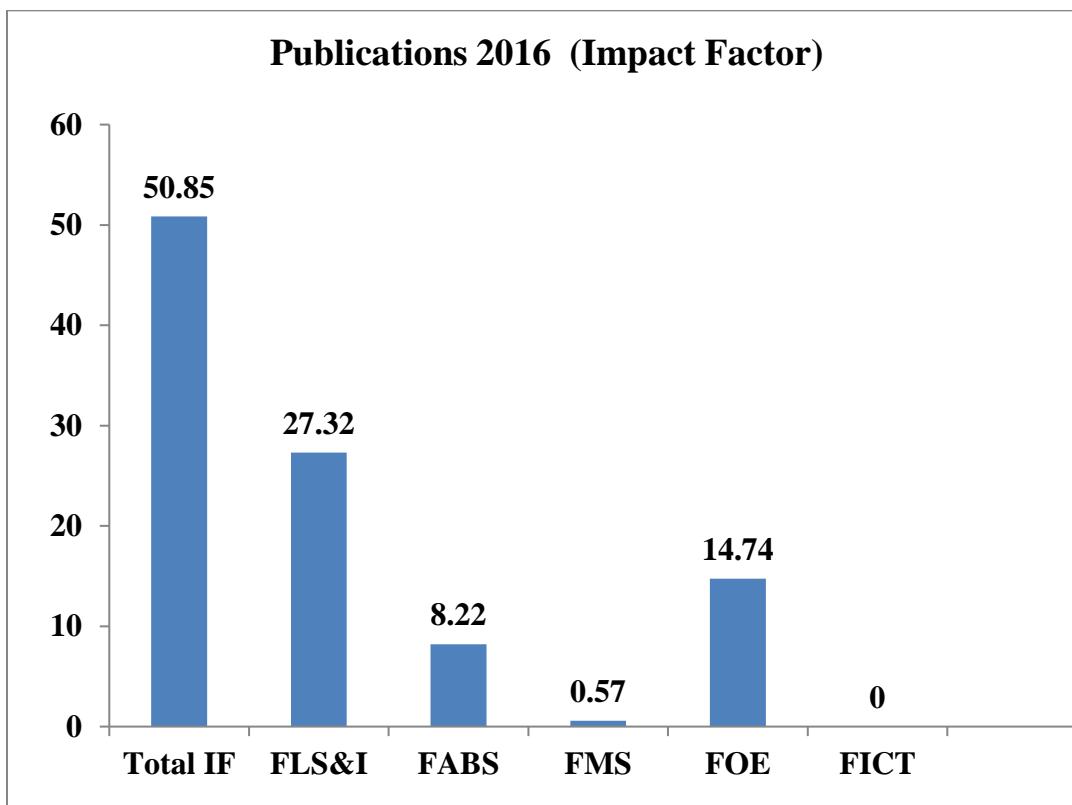
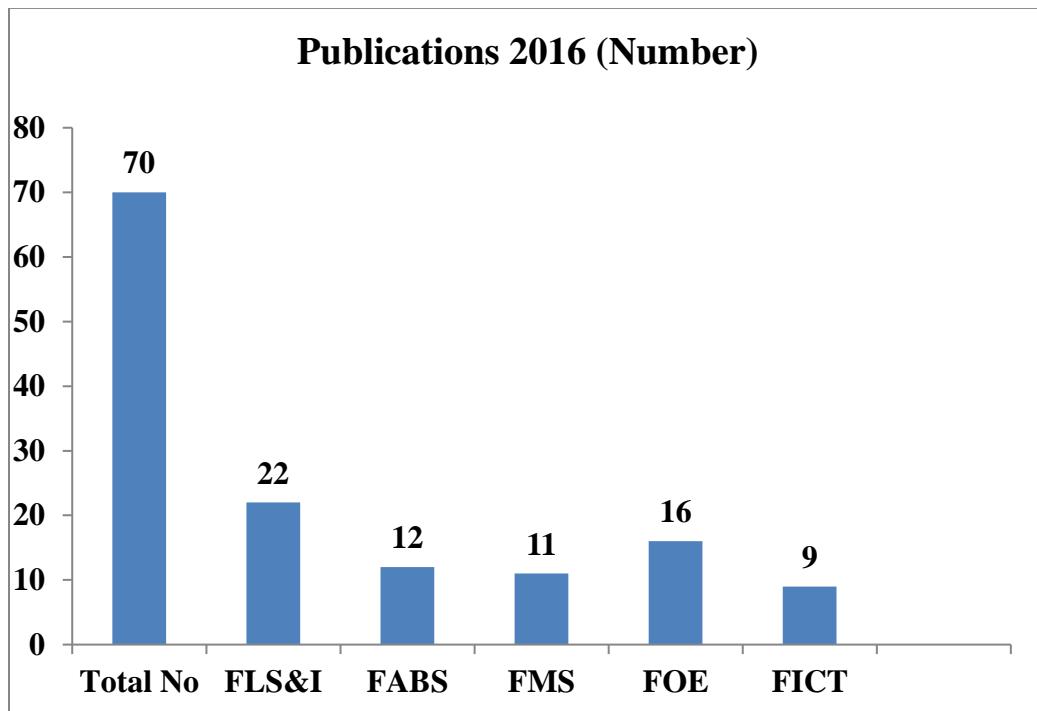
113. **Khan MZ**, Hafeez A. (2017). Economic activities and unmarried labour. Economic Research-Ekonomska Istrazivanja. 30:985-991. **(IF 0.74).**
114. **Ahmed T**, Chandran V, Klobas JE (2017b) Demographic differences in learner response to entrepreneurial education programs in Pakistan. Educational Studies. 43 (4):464-483. **(IF 0.56).**
115. Durrani IH, Adnan S, Ahmad M, **Khair S, Kakar E.** (2017). Observed Long-term climatic variability and its impacts on the ground water level of Quetta alluvial. Iranian Journal of Science and Technology, Transactions A: Science. 1-12. **(IF 0.21).**
116. **Shah SM**, Abdul-Majid M, Karim ZA, and Zahid A. (2017) corporate decision makers overvalue tax benefits. Journal of Global Business and Social Entrepreneurship.3 (7):109-124. **(ISI Indexed).**
117. **Ahmed T**, Chandran V, Klobas J (2017) Specialized entrepreneurship education: does it really matter? Fresh evidence from Pakistan. International Journal of Entrepreneurial Behavior & Research. 23 (1):4-19. **(ISI Indexed).**
118. **Nizamani AR**, Gilal MA, Khushik AG, **Shah SM**, Abid A. (2017) External Shocks and the Macroeconomic Response of Small Open Economy: A Structural-VAR

Approach for Pakistan. Asian Journal of Scientific Research. 10(4): 336-344. (**ISI Indexed**).

119. **Shah SM**, Shah SH, Zahid A, **Nizamani AR**. (2017). Fiscal solvency of Asian developing countries using ad hoc and model-based sustainability tests. Asian Journal of Scientific Research. 10 (4):345-353. (**ISI Indexed**).
120. Khan NR, Haq MA, Ghouri AM, **Raziq A**, Moiz SM (2017) Adaptation of RFID Technology in Business Supply Chain Success: Empirical Findings from a Developing Country Logistic Industry. Quality-Access to Success Calitatea. 18(160):93. (**ISI Indexed**).
121. Dar MS, Ahmed S, **Raziq A**. (2017). Small and medium-size enterprises in Pakistan: Definition and critical issues. Pakistan Business Review 19 (1):46-70. (**HEC X Category**).
122. **Shah SM**, Abdul-Majid M, Karim ZA. (2017) Maqasid-al-Shari'ah and Debt Financing Contracts: Some Observations. Journal of Islamic Banking and Finance. 34:78-88. (**HEC Y Category**).
123. Muhammad G, Shah SH, Muhammad K, **Shah SM**. (2017). Effect of Community, Parents and Teachers Collaboration on Retention in Girls' Primary Schools of Quetta District, Balochistan, Pakistan. Lasbela University Journal of Sciecne and Technology. 6: 190-198. (**HEC Y Category**).
124. Kakar Z, **Shah SM**, Shah SH. (2017). Water Scarcity and It's on the Agricultural Productivity in Pishin Lora Basin of Balochistan. Lasbela University Journal of Science and Technology. 6:207-211. (**HEC Y Category**).

125. **Zaman NU**, Bibi Z, Mohammad J, Karim J (2017) The Mediating Role of Positive Psychological Capital between Perceived Leadership Styles and Workplace Advice Network Closeness. *Pakistan Journal of Commerce & Social Sciences*. 11 (1):66-89. (**HEC Y Category**).
126. Khokher NA, **Raziq A.** (2017). The Relationship between Salary Packages and Employee's Subjective Wellbeing. Evidence from Service-based SMEs in Pakistan. *Sukkur IBA Journal of Management and Business*. 4(1), 64-81. (**HEC Z Category**).
127. Khokher NA, **Raziq A.** (2017). Developing a Conceptual Link between Talent Management Practices and Employee's Subjective Wellbeing. *City University Research Journal*. 7(2), 203-218. (**HEC Z Category**).
128. **Ayesha M**, Kiran M. (2017). Determinants of Salesperson Performance in Selling New Products. *International Journal of Economics, Finance & Business Management Sciences*. 3(1): 53-66.
129. **Asad M.** (2017). Breach of psychological contract and quality of life; Psychosomatic Strain as Mediator and Power Distance as Moderator. *Jinnah Business Review*. 5:23-33.

RESEARCH PUBLICATIONS 2016



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Spielmann M, **Kakar N**, Tayebi N, Leettola C, Nürnberg G, Sowada N, Lupiáñez DG, Harabula I, Flöttmann R, Horn D, Chan WL, Wittler L, Yilmaz R, Altmüller J, Thiele H, van Bokhoven H, Schwartz CE, Nürnberg P, Bowie JU, **Ahmad J**, Kubisch C, Mundlos S, Borck G. (2016). Exome sequencing and CRISPR/Cas genome editing identify mutations of ZAK as a cause of limb defects in humans and mice. *Genome research.* 26 (2):183-191. **(IF: 14.4).**
2. Daud S, **Kakar N**, Goebel I, Hashmi AS, Yaqub T, Nürnberg G, Nürnberg P, Morris-Rosendahl DJ, Wasim M, Volk AE, Kubisch C, **Ahmad J**, Borck G.. (2016) Identification of two novel ALS2 mutations in infantile-onset ascending hereditary spastic paraplegia. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration.* 17 (3-4):260-265. **(IF: 2.4).**
3. **Saeed M**, Thanos CA, **Raza AM**, **Mushtaq M**, **Luqman M** (2016) Comparative ecophysiology of seed germination in two pairs of closely related pines of mediterranean and himalayan origins. *Pak J Bot .* 48 (3):963-969. **(IF: 0.87).**
4. AhmedA, Ismail T, Shaukat K, Qadir A, Masood S, **Yousafzai A.** (2016). Effect of different application rates of organic, inorganic and farmyard manure fertilizer on Zea mays L., growth and yield production. *Int. J. Biosci.* 9(4):321-3237. **(ISI Recognized).**
5. **Ahmed N, Ahmed SS, Rehman F, Shahwani MN , Saeed M, Sani IA**, Naseem M. (2016). Comparative microarray data analysis of *Arabidopsis* genome during interaction with a mutualistic and a pathogenic bacteria. *Int. J. Biosci.* 9(40):281-291. **(ISI Recognized).**
6. Shahwani Z, Aleem A, **Ahmed N, Mushtaq M, Afridi S.** (2016). A PCR method based on 18S rDNA for detection of malarial parasite in Balochistan. *Journal of Pakistan Medical Association* 66(12):1587-1591. **(IF: 0.488).**

7. Khan FA, Ahmed A, Mateen A, Abdullah R, **Ahmed SS, Saeed M, Ahmed N, Shahwani MN.** (2016). Effect of various concentrations of indole butyric acid and plantation techniques on rooting performance of grapes germplasm. 9(6):393-403. (**ISI Recognized**).
8. Ahmed A, Ismail T, Shaukat K, Qadir A, Masood S, **Yousafzai A.** (2016). Effect of different application rates of organic, inorganic and farmyard manure fertilizer on Zea mays L., growth and yield production. Int. J. Biosci. 9(40):321-327. (**ISI Recognized**).
9. Awan Z, Idrees M, **Hussain A**, Ur Rehman I, Ali M, Afzal S, Ali L, Butt S, Saleem S, Amin I (2016) Influence of Hepatitis B Virus Genetic Heterogeneity on Treatment Response Against Lamivudine and Interferon in Pakistani Isolates. Anti-Infective Agents 14 (2):121-125.
10. Khubaib B, Idrees M, **Hussain A.** (2016). Construction of Mammalian Expression Vector of Core Gene of HCV of Pakistani Isolate Genotype 1a. J Hum Virol Retrovirol. 3 (2):00089.
11. **Asif M, Hussain A**, Rasool M. (2016). A Rare Case of Three Way Complex Variant Positive Philadelphia Translocation Involving Chromosome (9; 11; 22) (q34; p15; q11) in Chronic Myeloid Leukemia. Oncology Letters. 12. 1986-1988. (**IF: 1.48**).
12. **Asif M**, Jamal MS, Khan AR, Naseer MI, **Hussain A**, Choudhry H, Malik A, Khan SA, Mostafa M, Ali A (2016) A Novel four-way complex variant translocation involving chromosome 46, XY, t (4; 9; 19; 22)(q25: q34; p13. 3; q11. 2) in a chronic myeloid leukemia patient. Frontiers in Oncology 6:124. (**ISI Recognized**).
13. Hafeez S, Urooj M, Saleem S, Gillani Z, Shaheen S, Qazi MH, Naseer MI, Iqbal Z, Ansari SA, Haque A, **Asif M et al.** (2016). BAD, a Proapoptotic Protein, Escapes ERK/RSK Phosphorylation in Deguelin and siRNA-Treated HeLa Cells. PloS one 11 (1):e0145780. (**IF: 3.32**).

14. Rasool M, Malik A, Jabbar U, Begum I, Qazi MH, **Asif M**, Naseer MI, Ansari SA, Jarullah J, Haque A (2016a) Effect of iron overload on renal functions and oxidative stress in beta thalassemia patients. *Saudi Medical Journal* 37 (11):1239-1242. (**IF: 0.54**).
15. Rasool M, Malik A, Zahid S, Ashraf MAB, Qazi MH, **Asif M**, Zaheer A, Arshad M, Raza A, Jamal MS. (2016) Non-coding RNAs in cancer diagnosis and therapy. *Non-coding RNA Research*. Volume 2016.
16. Arooj M, Malik A, Basit A, Qazi MH, **Asif M**, Jamal MS, Mahmoud MM, Choudhry H, Pushparaj PN, Rasool M. (2016) Implications of prognostic variables in the assessment of autoimmunity in hepatitis C patients receiving interferon therapy. *Bioinformation*. 12 (3):131-134. (**IF: 0.51**).
17. Rasool M, Malik A, Basit A, Parveen G, Iqbal S, Ali I, MH Qazi, **Asif M**, Kamran K, Iqbal A, Iram S, Khan S, Mustafa MZ, Zaheer A, **Shaikh R**. (2016). Evaluation of Matrix Metalloproteinases, Cytokines and Their Potential Role in the Development of Ovarian Cancer. *PLOS ONE*. 11(11): e0167149. (**IF: 3.32**).
18. Masood S, **Yousafzai A** , **Asif M**, Ahamd KN, Ali I , Sultan N, Qadir A, **Shaikh R**, Malik A, Mustafa MZ, **Hussain A**. (2016). Prevalence of hypothyroid disease: A cross sectional study at a higher rate among young male and female Population of Balochistan, Pakistan. *International Journal of Biosciences*. 9(4):305-301. (**ISI Recognized**).
19. Malik A, Saleem S, Ashraf MBA, **Asif M**, et al. (2016). Role of extrapolative factors in the development of Hyperprolactinemia Mediated Depression (HMD) in schizophrenics susceptible to thyroid disorders. *International Journal of Biosciences*. 9(5): 183-189. (**ISI Recognized**).
20. **Khajjak MH, Raza AM, Luqman M, Yousafzai A, Naudhani S, Ali GM, Saeed M**. Evaluation of Seed Viability of Juniperus Excelsa (M. Bieb.) found in

Balochistan by Tetrazolium Assay. Journal of Applied and Emerging Sciences. 6(1): 31-35. (**HEC Recognized**).

21. **Ahmed SS, Sani IA, Ahmed N, Luqman M, Ahmed U, Khan AG, Aziz S, Reki AR, ur Rehman A.** (2016) Detection and Amplification of the E8 Promoter in Tomato Plant and Sequencing of the E8 Gene. Journal of Applied and Emerging Sciences. 6(1): 14-17. (**HEC Recognized**).
22. **Luqman M, Ahmed SS, Naudhani S, Yousafzai A, Raza AM, Saeed M, Javed MM.** (2016) Adaptable technologies of arsenic removal from drinking water for arsenic hit areas of Pakistan. Journal of Applied and Emerging Sciences. 6(1): 43-48. (**HEC Recognized**).

FACULTY OF MANAGEMENT SCIENCES

23. **Anjum A.** (2016). Impacts of Faculty Development Programmes: An Empirical Analysis of Professional and Organizational Development in Higher Education Institutions of Balochistan. PUTAJ – Humanities and Social Sciences. 22:223-235. (**HEC Recognized**).
24. Ahmed M, Khalid, **Lodhi AS.** (2016). Modelling Private Consumption in China from 1987 to 2012. City University Research Journal. 06 (02): 284-294. (**HEC Recognized**).
25. Shah SH, **Lodhi AS**, Ahmed M. (2016). Does Higher Education Really Matter in Improving Women's Social Status? Empirical Evidence from Balochistan. The Sindh University Journal of Education. 45 (01): 141-60. (**HEC Recognized Y Category**).
26. **Anjum MA, Marr, SR, Khan H.** (2016). Thriving at Work: Evidences from Telecom companies in Balochistan. Gomal University Journal of Research. 32(2). ((**HEC Recognized**).

27. **Akram T**, Haider MJ, Feng YX. (2016). The Effects of Organizational Justice on the Innovative Work Behavior of Employees: An Empirical Study from China. *Innovation*. 2: 114-124.
28. **Akram T**, Lei S, Hussain ST, Haider MJ, Akram MW. (2016). Does relational leadership generate organizational social capital? A case of exploring the effect of relational leadership on organizational social capital in China. *Future Business Journal*. 2 (2):116-126. (**HEC Recognized**).
29. **Akram T**, Lei S, Haider MJ, Hussain ST, Puig LCM (2016) The effect of organizational justice on knowledge sharing: Empirical evidence from the Chinese telecommunication sector. *Journal of Innovation & Knowledge*. 12:1-22. (**HEC Recognized**).
30. Hussain ST, Lei S, **Akram T**, Haider MJ, Hussain SH, Ali M. (2016). Kurt Lewin's process model for organizational change: The role of leadership and employee involvement: A critical review. *Journal of Innovation & Knowledge*.3:127-137. (**HEC Recognized**).
31. **Akram T**, Lei S, Haider MJ, Akram MW. (2016). What impact do structural, relational and cognitive organisational social capital have on employee innovative work behaviour? A study from china. *International Journal of Innovation Management*: 1750012. (**HEC Recognized**).
32. **Kakar ZK**. (2016). Financial development and energy consumption: Evidence from Pakistan and Malaysia. *Energy Sources, Part B: Economics, Planning, and Policy*. 11 (9):868-873. (**IF: 0.57**).
33. **Anjum MA**, Marr, SR, Khan H. (2016). Thriving at Work: Evidence from Telecom companies in Balochistan. *Gomal University Journal of Research*. 32(2). (**(HEC Recognized)**.

34. Khan MI, Jiang R, Kiciak A, **Rehman J**, Afzal M, Chow JC. (2016) Dosimetric and radiobiological characterizations of prostate intensity-modulated radiotherapy and volumetric-modulated arc therapy: A single-institution review of ninety cases. *Journal of Medical Physics/Association of Medical Physicists of India* 41 (3):162. (**IF: 0.71**).
35. Abdul-Rauf S, Schwenk H, Lambert P, **Nawaz M**. (2016). Empirical Use of Information Retrieval to Build Synthetic Data for SMT Domain Adaptation. *IEEE/ACM Transactions on Audio, Speech, and Language Processing* 24 (4):745-754. (**IF: 1.22**)
36. Shabbir A, **Gilani Z**, Nawaz A, Warsi M, Khan M. (2016). Enhanced dielectric and photocatalytic behaviour of dy-co co-doped multiferroic Bifeo₃ nanoparticles. *Digest Journal of Nanomaterials and Biostructures*. 11(4):1189-1195. (**IF: 0.7**).
37. **Chana LA.** (2016). Narrative Inquiry: A research tradition Qualitative Research. *Kashmir Journal of Language Research*. 18:1-15 (**HEC Recognized Y Category**).
38. Bakhsh M, Mustafa IS, Keong CS, Abdullah WSW, **Ahmad N**, Dahoud MSA. (2016). Optical Characteristics of Silicon Based Ultra-Sensitive Remote Temperature Sensor. 28(5). 4447-449. (**ISI Recognized IF: 0.74**).
39. Ghafoor A, Khan MA, Islam M, **Gilani ZA**, Manzoor A, Khan HM, Ali I, Warsi MF (2016) Structural and electromagnetic studies of Ni 0.7 Zn 0.3 Ho 2x Fe 2-2x O 4 ferrites. *Ceramics International*. Volume:2016. (**IF: 2.6**).
40. **Gilani ZA.** (2016). Structural, morphological and electrical properties of heat treated CaHPO₄ biomaterials. *Optoelectronics and advanced Materials-Rapid communications*. 9: 171-175. (**ISI Recognized**).
41. **Asgharc K, ul Huda HN**, Ajmal H, Waraich MM, **Gilani ZA**, Khan AK, Khan MA. (2016). A Diagnosing Case Of The Eye And Orbital Tumor Through B-Scan. *Science International*. 28 (4): 3345-3348. (**IF: 0.74**).

42. **Sattar FA, Ahmed F, Yu R, Malghani MAK, Lu C.** (2016). Photocatalytic Potency of Ruthenium Polypyridyl Complex and Eosin Y for the Effective Development of C-C and C-S Bond: A Correlative Analysis. *J.Chem.Soc.Pak.* 38.(04): 803-807. (**IF: 0.73**).
43. Shакoor A, Niaz N, Khan W, Asghar G, Khalid N, Rehman M, Bashir T, Anwer N, **Rizvi T.** (2016). Dielectric Properties Of Polypyrrole Multi-Walled Carbon Nanotubes Nanocomposites. *Digest Journal of Nanomaterials and Biostructures.* 119(4): 1145-1153. (**IF: 0.75**).
44. **Hafsa T.** (2016). The philosophy of pointing finger in art. *Ideal Journal of Art and Humanities.* 2(5).199-203.
45. **Asghar HN, Gilani ZA, Ahmad I, Shi S, Tan Y.** (2016) Study of Current-voltage Characteristic Using Deep Level Transient Spectroscopy Technique of Schottky Diode Made of SIC. *Journal of Applied and Emerging Sciences.* 6(2):111-114. (**HEC Recognized**).

FACULTY OF ENGINEERING

46. Iaremchuk I, **Tariq M, Hrynyiv S, Vovnyuk S, Meng F.** (2016). Clay minerals from rock salt of Salt Range Formation (Late Neoproterozoic–Early Cambrian, Pakistan). *Carbonates and Evaporites:*1-12 . (**IF: 0.4**).
47. **Mushtaq F, Mat R, Ani FN.** (2016) Fuel production from microwave assisted pyrolysis of coal with carbon surfaces. *Energy Conversion and Management* 110:142-153. (**IF: 4.3**).
48. **Akhtar F, Lodhi SA, Khan SS.** (2016). Assessing the Influence of the Cultural Perspective on Cross Cultural Conflict: An Analysis of Cultural Environment. *Pakistan Journal of Commerce and Social Sciences* 10 (1):84-103. (**HEC Recognized Y Category**).

49. Baruah S, **Khan MN**, Dutta J. (2016) Perspectives and applications of nanotechnology in water treatment. Environmental Chemistry Letters 14 (1):1-14. (**IF: 2.6**).
50. **Siddiqui RH**, Jan MQ, Kakar MI, Kerr AC, Khan AS, **Kakar E**. (2016). Petrogenesis of Middle Triassic volcaniclastic rocks from Balochistan, Pakistan: Implications for the break-up of Gondwanaland. Journal of Earth Science: 1-13. (**IF: 0.95**).
51. **Siddiqui RH**, Jan MQ, Kakar MI, **Kakar E**, Haider N. (2016). Petrology and geochemistry of the Juzzak Sill, western Chagai arc (Pakistan): implications for petrogenesis and emplacement. Arabian Journal of Geosciences 9 (13):626. (**IF: 1.22**).
52. **Akhtar F**, Lodhi SA, Khan SS, Sarwar F. (2016) Incorporating permaculture and strategic management for sustainable ecological resource management. Journal of environmental management 179:31-37. (**IF: 3.1**).
53. **Qureshi AA**, **Siddiqui RH**, Manzoor AN, Rana AN, Waheed A. (2016). Radiological implications of Nagarparkar granite, Pakistan, as a building material. Radioprotection. 51(4): 255-263. (**IF: 0.5**).
54. Munawar MA, Khan SM Gull N, Shafiq M, Islam A, Zia S, Sabir A, **Ghouri AS**, Butt MTZ,3 Jamil T. (2016). Fabrication and characterization of novel zirconia filled glass fiber reinforced polyester hybrid composites. J. APPL. POLYM. SCI. Article 43615: 1-9. (**IF: 1.67**).
55. **Siddique M**, Soomro SA, Aziz S, Jatoi AS, Mengal A, **Mahar H**. (2016) Removal of turbidity from turbid water by bio-coagulant prepared from walnut shell. Journal of Applied and Emerging Sciences. 6(2):66-68. (**HEC Recognized**).
56. **Mohammad AD**, Khan MA, **Mahmood A**. (2016) Analysis of Physicochemical Drinking Water Quality Parameters of Ziarat Valley. Journal of Applied and Emerging Sciences. 6(2):69-73. (**HEC Recognized**).

57. Jatoi AS, Siddique M, Mengal AN, Soomro SA, Aziz S. (2016) Comparative

study of different biomass on bio-electricity generation using microbial fuel cell.

Journal of Applied and Emerging Sciences. 6(2): 74-78. (**HEC Recognized**).

58. Sadiq MT, Khalid MF, Abid MU. (2016) Parameters Calculations of Transformer

and its Performance Analysis under Transients. Journal of Applied and Emerging

Sciences. 6(2):92-95. (**HEC Recognized**).

59. Mengal AN, Akilu S, Siddique M. (2016) Strength enhancement of basalt fiber-

reinforced epoxy laminates with biowaste catalyst free carbon nanospheres. Journal

of Applied and Emerging Sciences. 6(2):105-110. (**HEC Recognized**).

60. Siddique M, Khan MN, Mushtaq F, Kakar E, Mengal AN, Soomro SA, Parkash

AP, Jatoi AS. (2016) Potential Effect of Biomass Addition with Pakistani Low Rank

Coal on Emission of SO 2. Journal of Applied and Emerging Sciences. 6(1):6-8.

(**HEC Recognized**).

61. Mustafa T, Soomro SA, Najam MN, Amin M, Ahmad I. (2016) Production of

biodiesel through catalytic transesterification of Jatropha oil. Journal of Applied and

Emerging Sciences. 6(1): 9-13. (**HEC Recognized**).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

62. Bajwa I, Ismail H, Bukhari H, Amin R. (2016) Automated Sentiment Analysis of Natural

Language Text using Machine Learning. Sindh University Research Journal-SURJ

(Science Series) 48 (3): 501-506. (**HEC Recognized Y Category**).

63. Mudassir S, Muhammad J, Akbar J, Mir T, (2016) Zeeshan R Co-Design of Dual-Band

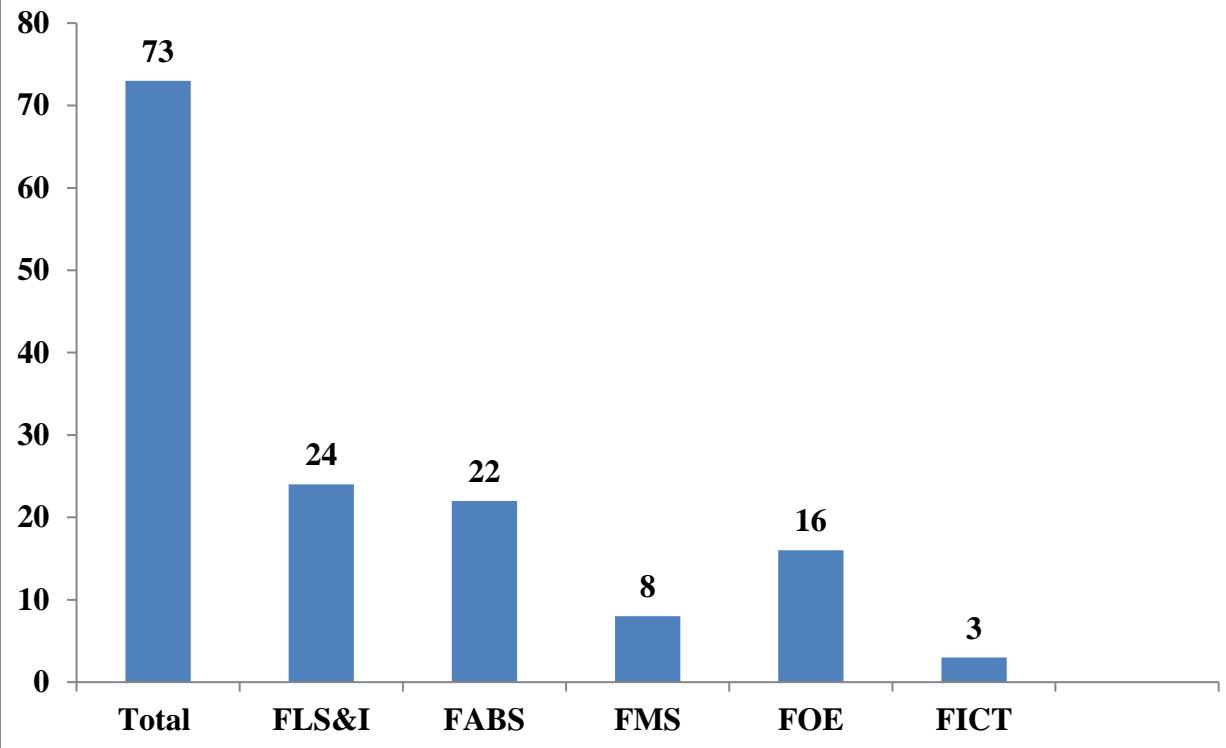
Low Noise Amplifier Operating in 900MHz/1800MHz Bands for Multi-standard wireless

- Receiver. Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan. 21(2):1-10. (**HEC Recognized Y Category**).
64. Bajwa I, Razzaq F, Bukhari A, **Amin R.** (2016) Using Machine Learning to Generate SPARQL Queries from NL for NoSQL Database. Sindh University Research Journal-SURJ (Science Series) 48 (2): 1-10. (**HEC Recognized Y Category**).
65. Hassan I, Ali A, **Khan F**, Khan S, Rahim S, Haq S, Jan T, Asif M. (2016). Using Series Capacitors for the Improvement and Evaluation of Transmission Line Utilization. Sindh University Research Journal-SURJ (Science Series) 48(2):257-260. (**HEC Recognized Y Category**).
66. **Adil Israr**, Junaid M. (2016) Carrier suppressed return-to-zero (csrz) and modified duobinary return-to-zero (mdrz) advance optical modulation formats analysis for long haul rural coverage. Journal of Applied and Emerging Sciences. 6(2): 61-65. (**HEC Recognized**).
67. Abro Z, Tunio AH, **Shar AM, Aftab A.** (2016) Characterization of Fractures in Carbonate Reservoirs of North Zone of Pakistan Using Formation Micro Image Logs Technique. Journal of Applied and Emerging Sciences. 6(2): 96-99. (**HEC Recognized**).
68. Arif M, **Bugti SA, Ali A, Khan A, Magsi SA.** (2016) Interference Mitigation in Femto-Cell Using Power Control Scheme. Journal of Applied and Emerging Sciences. 6(2):100-104. (**HEC Recognized**).
69. Bakht MP, Shaikh AA. (2016) Routing Techniques in Wireless Sensor Networks: Review and Survey. Journal of Applied and Emerging Sciences. 6(1): 18-23. (**HEC Recognized**).

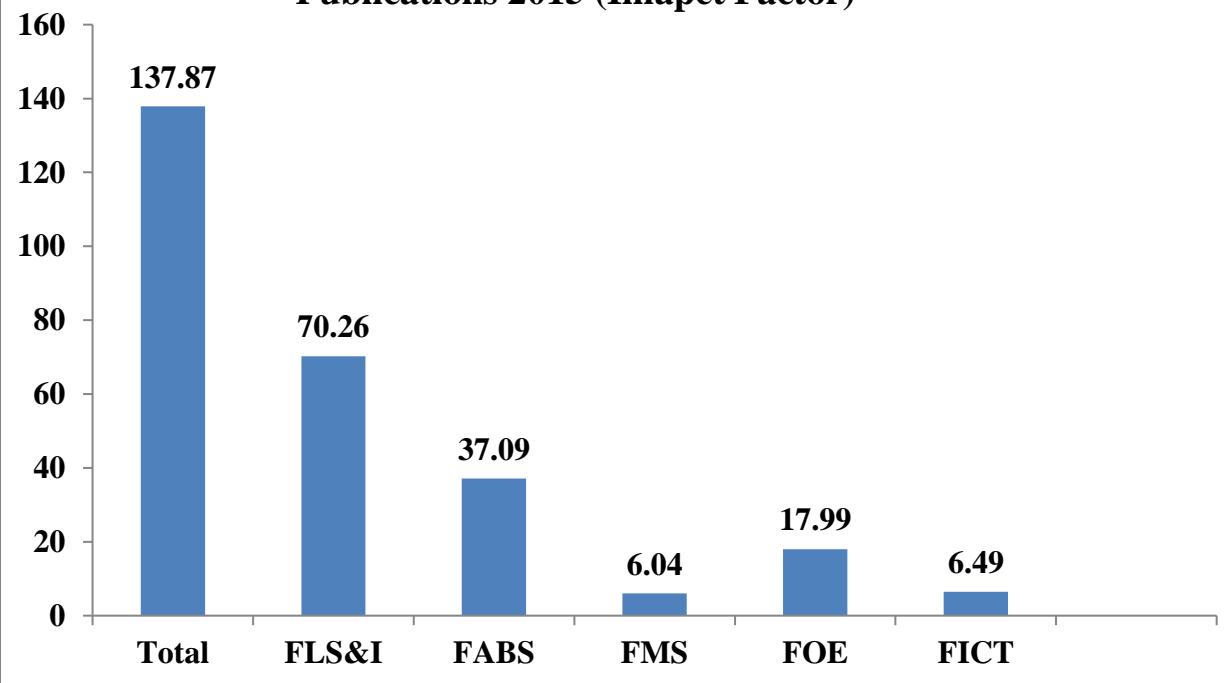
70. Khan A, **Ul-Amin R, Malik AS**, Bajwa IS. (2016) Recovery Path Optimization using Modified Assured Quality Model (MASQ) in MPLS based Network. Journal of Applied and Emerging Sciences. 6(1): 24-27. (**HEC Recognized**).

RESEARCH PUBLICATIONS 2015

Publications 2015 (Number)



Publications 2015 (Impact Factor)



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Muona M, Berkovic SF, Dibbens LM, Oliver KL, Maljevic S, Bayly MA, Joensuu T, Canafoglia L, Franceschetti S, Michelucci R, Markkinen S, Heron SE, Hildebrand MS, Andermann E, Andermann F, Gambardella A, Tinuper P, Licchetta L, Scheffer IE, Criscuolo C, Filla A, Ferlazzo E, **Ahmad J.** et al. (2015). A recurrent de novo mutation in KCNC1 causes progressive myoclonus epilepsy. *Nature Genetics*. 47:39-46. **(IF: 29.9).**
2. Hacıhamdioğlu B, **Kakar N**, Hacıhamdioğlu D, Karademir F, Süleymanoğlu S, Borck G (2015). Two Siblings with Mutation in the Leptin Receptor Gene. *J Clin Res Pediatr Endocrinol* 7: 68-68. **(IF: 1.568).**
3. Shah SA, **Raheem N**, **Daud S**, Baloch AH, Naheed A, Tayyab M, Babar ME, **Ahmad J.** (2015). Mutational spectrum of the TYR and SLC45A2 genes in Pakistani families with oculocutaneous albinism, and potential founder effect of missense substitution (p.Arg77Gln) of tyrosinase. *Clin Exp Dermatol*. 40(7):774-80. **(IF: 1.2).**
4. **Hussain A**, Adrees M, **Asif M**, Ali L, Rasool M. (2015). Phylogenetic and 2D/3D analysis of HCV 1a NS4A gene/ protein, Pakistani isolates. *Hepatitis Monthly*. 154(6):1-3. **(IF: 1.93).**
5. Ejaz H, **Hashmi H**, Awan MA, Azam M, **Shahwani MN**, Ameen S, Bukhari FA, Hameed T, Tariq MM .(2015.) Molecular Study on the Prevalence of Respiratory Mycoplasma Species in Small Ruminants of Kuchlak, District Quetta and Khanozai, District Pishin, Balochistan. *Pakistan J Zool*. 47 (2):473-478. **(IF: 0.34).**

6. **Mushtaq M**, Sharfun-Nahar, Alam MS. (2015). Screening Of Killer, Sensitive And Neutral Phenotypes In Yeasts Using Certain Sensitive Pichia Strains. International Journal of Biotechnology. 12: 3-10. (**HEC Recognized**).
7. Naseem M, Srivastava M, Tehseen M, **Ahmed N**. (2015). Auxin Crosstalk to Plant Immune Networks: A Plant-Pathogen Interaction Perspective. Current Protein and Peptide Science. 16(5): 389-394. (**IF:2.3**).
8. **Wali A**, Liu L, Takeichi T, Jelani M, Rahman OU, Heng YK, Thng S, Lee J, Akiyama M, McGrath JA. (2015). Familial primary localized cutaneous Amyloidosis results from either dominant or recessive mutations in OSMR. Acta Dermato-Venereologica. 95. 1005-1007. (**IF: 3.72**).
9. Ali RH, Mahmood S, Raza SI, Aziz A, Naqvi SK-u-H, Wasif N, Ansar M, Ahmad W, Shah SH, Khan BT, Gul A, **Abdul Wali**. et al. (2015). Genetic analysis of Xp22. 3 micro-deletions in seventeen families segregating isolated form of X-linked ichthyosis. Journal of dermatological science. 80(3): 214-217. (**IF: 3.4**).
10. Riaz R, Sajjid I, Sarwar A, Fazal-ur-Rehman , Akhtar M, Sadiq AB, Nassem M, **Ahmed N**. (2015). Characterization and assessment of Phylogenetic relationship among Tomato Rhizospheric Bacterial Population. Biologia. 61, 7-15. (**HEC Z Category**).
11. **Kakar N, Ahmad J**, Morris-Rosendahl DJ et al. (2015). STIL mutation causes autosomal recessive microcephalic lobar holoprosencephaly. Hum Genet. 134: 45-51 (**IF: 4.8**).
12. Stange K, Desir J, **Kakar N**. et al. (2015). A hypomorphic BMPR1B mutation causes du Pan acromesomelic dysplasia. Orphanet J Rare Disease. 10:84. doi: 10.1186/s13023-015-0299-5 (**IF: 3.3**).

13. Khoja AH, Ali E, **Zafar K**, Ansari AA, Nawar A, Qayyum M. (2015). Comparative study of bioethanol production from sugarcane molasses by using Zymomonas mobilis and Saccharomyces cerevisiae. African Journal of Biotechnology. 14: 2455-2462.
14. **Luqman M**, Javed MM, **Yousafzai A**, Saeed M, Ahmad J, Chaghtai F. (2015). Blooms of pollution indicator micro-alga (*Synedra acus*) in Northern Arabian Sea along Karachi, Pakistan. 14 (9): 1377-1381. **(IF: 0.32)**.
15. Rasool M, Malik A, Manan A, Ansari SA, Imran Naseer M, Husain Qazi M, **Asif M**, Hua Gan S, Amjad Kamal. (2015). Nanoparticle based Therapy in Genomics. Current Drug Metabolism. 16: 1-10. **(IF: 3.5)**.
16. Bibi T, **Asif M**, Khan S, **Hussain A**, Shahwani MN, Malik A, Inayatullah S, Iqbal Z, Rasool M. (2015). Detection of BCR/ABL fusion gene, hematological and cytogenetical analysis of Chronic Myeloid Leukemia patients in Quetta, Pakistan. Asian Pacific Journal of Cancer Prevention. 16(9):3793-3797. **(IF: 2.5)**.
17. Jabbar F, **Asif M**, Dutani H, **Hussain A**, Malik A, Kamal MA, Rasool M. (2015). Assessment of the role of general, biochemical and family history characteristics in kidney stone formation. Saudi journal of Biological Sciences. 22: 65-68. **(IF: 1.54)**.
18. Baig SA, **Asif M**, Irfani TM, **Hussain A**, Cheema AM, Malik A, Kamal MA, Rasool M. (2015). The association of nutritional profile and prognosis of degenerative diseases associated with carbohydrate and lipid metabolism at high altitude of district Ziarat, Pakistan. Saudi journal of Biological Sciences. 22:50-55. **(IF: 1.54)**.
19. Rasool M, Farooq S, Malik A, Shaukat A, Manan A, **Asif M**, Sani S, Qazi MH, Kamal MA, Iqbal Z. (2015). Assessment of circulating biochemical markers and antioxidative

- status in acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML) patients. Saudi journal of Biological Sciences. 22: 106-111. (IF: 1.54).
20. Rasool M, Malik A, Manan A, Arooj M, Husain Qazi M, Amjad Kamal M, Ahmed Sheikh I, Hua Gan S, **Asif M**, Imran Naseer M. (2015). The roles of natural compounds from medicinal plants in cancer treatment: structure and mode of action at the molecular level. Medicinal Chemistry. 11(7):18-628. (IF: 1.38).
21. Rasool M, Malik A, Manan A, Ahmed Ansari S, **Asif M**, Husain Qazi M, Amjad Kamal M, Natesan Pushparaj P. (2015). Scope of Nanomedicines for the Management of Multiple Sclerosis. Current Drug Metabolism. 15(8):602-608. (IF: 3.5).
22. Rasool M, Malik A, Khan KM, Qureshi MS, Shabbir B, Zahid S, **Asif M**, Manan A, Rashid S, Khan SR. Assessment of Biochemical and Ant oxidative status in patients suffering from dengue fever. *Journal of Huazhong University of Science and Technology (Medical Sciences)*. 35(3): 411-418. (IF: 0.79).
23. **Asif M, Hussain A**, Arif M, Rasool M. (2015). A three way Complex Variant translocation involving short arm chromosome (1; 9; 22) (p36;q34;q11) in Chronic myeloid leukemia patient. Oncology Letters. 10(3): 1728-1730. (IF: 1.5).
24. Umar Z, Rasool M, **Asif M**, Karim S, Malik A, Mushtaq G, Kamal MA, Mansoor A. (2015). Evaluation of Hemoglobin Concentration in Pregnancy and Correlation with Different Altitude: A Study from Balochistan Plateau of Pakistan. The Open Biochemistry Journal. 9: 7-14.

FACULTY OF ARTS AND BASIC SCIENCES

25. Ali M, Talpur MHA, **Alamgir A**, Javed MA. (2015). Organizational Information Theory (OIT) a Mechanism to Ensure Community Participation; A Case Study of A Malaysian NGO. NICE Research Journal. 8:1-15. (**HEC Y Category**).
26. **Asghar NHK, Gilani ZA**, Awan MS, Ahmed I, Tan Y. (2015a). Characterization of InGaN by Means of I-V Measurements of Respective Light-Emitting Diode (LED) by DLTS. Arabian Journal for Science and Engineering. 40:263-268. (**IF: 0.36**).
27. **Gilani ZA**, Warsi MF, Anjum MN, Shakir I, Naseem S, Riaz S, Khan MA. (2015). Structural and electromagnetic behavior evaluation of Nd-doped lithium–cobalt nanocrystals for recording media applications. Journal of Alloys and Compounds. 639:268-273. (**IF: 2.72**).
28. Kousar F, Nazim S, Warsi MF, Khan MA, Ashiq MN, **Gilani ZA**, Shakir I, Wadood A. (2015). La 1 – xEuxFeOs 3 nanoparticles: Fabrication via micro-emulsion route for high frequency devices applications. Journal of Alloys and Compounds. 629:315-318. (**IF: 2.7**).
29. **Gilani ZA**, Warsi MF, Khan MA, Shakir I, Shahid M, Anjum MN. (2015). Impacts of neodymium on structural, spectral and dielectric properties of LiNi 0.5 Fe 2 O 4 nanocrystalline ferrites fabricated via micro-emulsion technique. Physica E: Low-dimensional Systems and Nanostructures. 73: 169-174. (**IF: 2.0**).
30. Manan SA, David MK, Dumanig FP. (2015). Disjunction between language policy and children's sociocultural ecology—an analysis of English-medium education policy in Pakistan. Language and Education. 1-21. (**IF: 0.58**).
31. **Manan SA**, Dumanig FP, David MK. (2015). The English-medium fever in Pakistan: analyzing policy, perceptions and practices through additive bi/multilingual education lens. International Journal of Bilingual Education and Bilingualism: 1-17. (**IF: 1.5**).

32. Sadiq I, Naseem S, Ashiq MN, Iqbal MA, Ali I, **Khan MA**, Niaz S, Rana M. (2015). Spin canting effect and microwave absorption properties of Sm-Mn substituted nanosized material. *Journal of Magnetism and Magnetic Materials.* 395:159-165. (**IF: 1.97**).
33. Farooq K, **Khan MA** et al. (2015). Dynamics and transmissivity of optomechanical system in squeezed Environment. *Internaltion Jouranl of Moderan Physics.* 29:1-14. (**IF: 0.93**).
34. **Alamgir A.** (2015). Women activism. A comparative perspective of educated elitem in Malaysia and Pakistan. *Science Internation(Lahore).* 27(5):4437-4442. (**IF: 0.74**).
35. Sadiq I, Naseem S, Ashiq MN, **Khan MA**, Niaz S, Rana M. (2015). Structural and dielectric properties of doped fertile nanomaterials suitable fro microwave and biomedical applications. *Progress in Nationation Science Materials International.* 25(5): 419-424. (**IF: 1.87**).
36. **Khan H**, Anees-ur- Rehman, Shafiq M, Khan MA, Hashim S. (2015). Study of the Theta Pinch Plasma Numerically by Varying β Parameter and Applied Current. *Journal of Fusion Energy.* 35(2): 263-268. (**IF: 0.97**).
37. Khawaja IU, Choudhry Q, Mahmood A, **Gilani ZA**, Shahid SA, Farooq M. (2015). Structural, Morphological and Electrical Properties of Heat Treated CaHPO₄ Biomaterials. *Optoelectronics and Advanced Materials - Rapid Communications.* 9: 1171-1175. (**IF:0.394**)
38. Bashir B, Warsi MF, Khan MA, Akhtar MN, **Gilani ZA**, Shakir I, Wadood A. (2015). Rare Earth Tb³⁺ Doped LaFeO₃ Nanoparticles: New Materials for High Frequency Devices Fabrication. *Ceramics International.* 41:9199-202. (**IF:2.6**).

39. **KHAN HMNUH**, Shi S, Jiang D, Tan Y. (2015). Evaluation on electrical resistivity of silicon materials after electron beam melting. *Bulletin of Materials Science*. 38(5). 1429-1433. (**IF: 1.01**)
40. **KHAN HMNUH**, Gilani ZA, Awan MS, Ahmad I, Tan Y. (2015). : Characterization of InGaN by Means of I-V Measurements of Respective Light-Emitting Diode (LED) by DLTS. *Arabian Journal for Science and Engineering*. 40: 263-268. (**IF: 0.72**).
41. Jiang D, Shi S, Ren S, **KHAN HMNUH**, Tan Y, Li P, Qiu J, Li J. (2015). Formation mechanism of hollow silicon ingot induced by fountain effect. *Renewable Energy*. 77:463-466. (**IF: 3.98**).
42. Jiang D, Shi S, Tan Y, **KHAN HMNUH**, Qin S. (2015). Segregation and evaporation behaviors of aluminum and calcium in silicon during solidification process induced by electron beam. *Semiconductor Science and Technology*. 30(3): 035013. (**IF: 2.19**).
43. Shi S, Tan Y, Jiang D, Qin S, Guo XS, **KHAN HMNUH**. (2015). Removal of aluminum from silicon by electron beam melting with exponential decreasing power. *Separation and Purification Technology*. 152. 32-36. (**IF: 3.49**).
44. Ayub A, Shakoor A, Elahi A, **Rizvi TZ**. (2015). Optical and electronic properties of layer-by-layer and composite polyaniline-cadmium selenide quantum dot films. *Superlattices and Microstructures*. 84:154–164. (**IF: 2.09**).
45. **Manan SA**, Dumanig FP, David MK. (2015). The English-medium fever in Pakistan: analyzing policy, perceptions and practices through additive bi/multilingual education lens. *International Journal of Bilingual Education and Bilingualism*: 1-17. (**IF: 1.5**).
46. **Alamgir A.** (2015). Women activism. A comparative perspective of educated elitems in Malaysia and Pakistan. *Science Internation(Lahore)*. 27(5):4437-4442. (**IF: 0.74**).

FACULTY OF MANAGEMENT SCIENCES

47. **Muhammad N**, Scrimgeour F, Reddy K, Abidin S. (2015). The relationship between environmental performance and financial performance in periods of growth and contraction: evidence from Australian publicly listed companies. *Journal of Cleaner Production*. 102: 325-332. (**IF:3.5**).
48. **Nawaz RB**, Khan RA, **Reza S**. (2015). Prioritization of Quality Care Criteria to Deliver Quality Service, Using Dematel. *Journal of Management and Social Sciences*. 11(2):143-157. (**HEC Y Category**).
49. **Raziq A**, Maulabaksh R. (2015). The Impact of Working Environment on Job Satisfaction. *Procedia Economics & Finance Journal*. 23: 717 -725.
50. **Ahmed A**, **Raziq A**, **Muhammad J**, Brohi MA, Khan MA. (2015). Formulation of low level heuristics. *International Journal of Basic and Applied Sciences*. 4:44-50.
51. **Raziq A**, **Ahmed A**. (2015). Exploring Recruitment & Selection Practices in Pakistani SMEs. *International Journal of Basic and Applied Sciences*. 4: 102-108.
52. **Kakar P**, **Raziq A**, **Khan F**. (2015). Impact of Human Resource Management Practices on Employee Retention: A Case of Banking Sector in Quetta, Balochistan. *Journal of Management Info*. 5:97-119.
53. **Sajjad A**, Eweje, G, Tappin, D. (2015). Sustainable supply chain management: Motivators and barriers. *Business Strategy and the Environment*. 24(7), 643-655. (**IF: 2.54**).
54. **Khan MZ**, **Salam A**, Batool A (2015). Nexus Between Agriculture Raw Material Exports, Trade Openness And Economic Growth Of Pakistan. *J Agric Res* 53 (4):518-588.

FACULTY OF ENGINEERING

55. **Khan MN**, Duptta J. (2015). Comparison of photocatalytic activity of zinc stannate particles and zinc stannate/zinc oxide composites for the removal of phenol from water, and a study on the effect of pH on photocatalytic efficiency. *Materials Science in Semiconductor Processing*. 36: 124-133. **(IF: 1.95)**.
56. **Siddiqui RH**, Khan MA, Jan MQ, Kakar MI, Kerr AC. (2015). Geochemistry and petrogenesis of Oligocene volcaniclastic rocks from the Chagai arc: implications for the emplacement of porphyry copper deposits. *Arab J Geosci.* 8:8655–8667. **(IF: 1.24)**.
57. **Siddiqui RH**, Jan MQ, Kakar MI, **Kakar E**, Chaudhary AH, Baig SA. (2015). Late cretaceous mantle plume activity in Ceno-Tethys: evidences from the Hamrani volcanic rocks, western Pakistan. *Arab J Geosci.* 1-11. **(IF: 1.24)**.
58. **Siddiqui Q, Abro Z**, Yu C. (2015). Study of drafting force variability and sliver irregularity at the break draft zone of a draw frame. *Textile Research Journal*. 85(14):465-1473. **(IF: 1.5)**.
59. **Siddiqui Q**, Yu C. (2015). Drafting force measurement and its relation with break draft and short term silver irregularity. *Indian Journal of Fibre and Textile Research*. 39 (4):358-363 **(IF: 0.63)**.
60. Ayub A, Shakoor A, Elahi A, **Rizvi TZ**. (2015). Optical and electronic properties of layer-by-layer and composite polyaniline-cadmium selenide quantum dot films. *Superlattices and Microstructures*. 84: 154-164. **(IF: 2.08)**.
61. Ndlovu LN, **Siddiqui Q**, Omollo E, Yu C. (2015). Physical properties of plain single jersey-knitted fabrics made from blended and core-spun polysulfonamide /cotton yarns. *Textile Research Journal*. 85(3): 262-27. **(IF: 1.5)**.

62. **Asad RA**, Yu W, Siddiqui Q, Vincent M, Wang Q. (2015). Subjective evaluations of fabric-evoked prickle using the unidimensional rating scale from different body areas. *Textile Research Journal*. doi0040517515591783. (**IF: 1.5**).
63. **Mushtaq F**, Amran T, Abdullah T, Mat R, Ani FN. (2015). Optimization and characterization of bio-oil produced by microwave assisted pyrolysis of oil palm shell waste biomass with microwave absorber. *Bioresource technology*. 190: 442-450. (**IF: 4.49**).
64. **Azhar U**. (2015). Child Labor and Violation of the Right of Child in Pakistan. *Journal of European Studies*. 31: 73-80. (**IF:0.15**).
65. **Ghouri AS**, Noor S, Munawar A, Awan JA. (2015). Production of Ethanol from Quetta Pinus halepensis by Fermentation. *Journal of Chemical Engineering and Process Technology*. 6:254. doi:10.4172/2157-7048.1000254. (**IF: 1.71**).
66. **Khoso A**, Memon H, Hussain M, Sanbhal A, Abro A. (2015). Production and Characterization of wool and Hair fiber in Highlands of Baluchistan, an Economics and Sustainable Approach for Pakistan. *Journal of key Engineering Materials*. 671:473-482.
67. Baruah S, **Khan MN**, Dutta J. (2015). Pollutants in Buildings, Water and Living Organisms. *Environmental Chemistry for a Sustainable World*, Volume 7.
68. **Khan MN**, Duptta J. (2015). Comparison of photocatalytic activity of zinc stannate particles and zinc stannate/zinc oxide composites for the removal of phenol from water, and a study on the effect of pH on photocatalytic efficiency. *Materials Science in Semiconductor Processing*. 36: 124-133. (**IF: 1.95**).
69. **Sadiq I**, Naseem S, Ashiq MN, **Khan MA**, Niaz S, Rana M. (2015). Structural and dielectric properties of doped fertile nanomaterials suitable fro microwave and

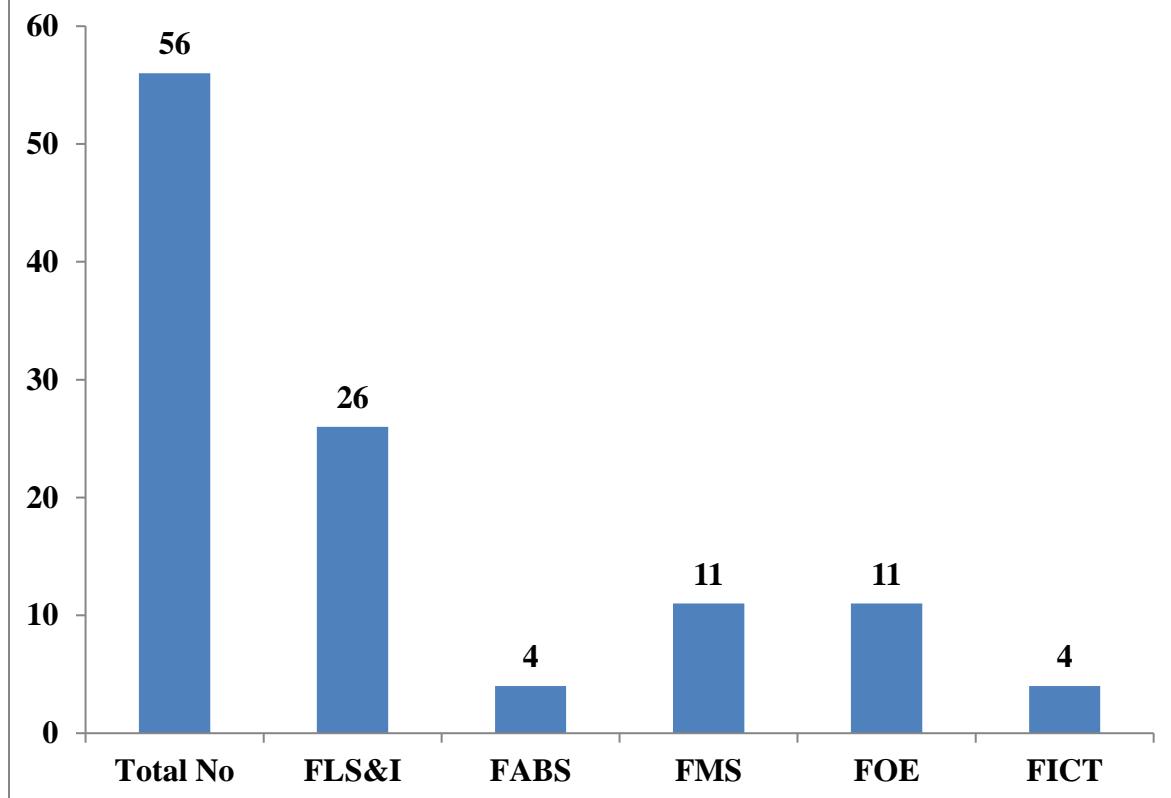
- biomedical applications. Progress in Nationation Science Materials International. 25(5): 419-424. **(IF: 1.87).**
70. **Khan H**, Anees-ur- Rehman, Shafiq M, Khan MA, Hashim S. (2015). Study of the Theta Pinch Plasma Numerically by Varying β Parameter and Applied Current. Journal of Fusion Energy. 35(2): 263-268. **(IF: 0.97).**

**FACULTY OF INFORMATION AND COMMUNICATION
TECHNOLOGY**

71. Ding L, Xue X, LaMarca S, Mohebbi M, **Samad A**, Malmberg RL, Cai L. (2015). Accurate prediction of RNA nucleotide interactions with backbone k-tree model. Bioinformatics. 31(16): 2660-2667. **(IF: 4.99).**
72. Memon I, Shen Y, **Khan A**, Woidt C, t Hillmer H. (2015). Highly uniform residual layers for arrays of 3D nanoimprinted cavities in Fabry-Pérot-filter-array-based nanospectrometers. Applied Nanosciecne. DOI 10.1007/s13204-015-0468-9.
73. **Asad RA**, Yu W, Siddiqui Q, Vincent M, Wang Q. (2015). Subjective evaluations of fabric-evoked prickle using the unidimensional rating scale from different body areas. Textile Research Journal. doi0040517515591783. **(IF: 1.5).**

RESEARCH PUBLICATIONS 2014

Publications 2014 (Number)



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Zhen NJ, Meyer E, Erreger K, Li Y, **Kakar N**, Ahmad J, Thiele H, Kubisch C, Rider NL, Morton DH, Strauss KA, Puffenberger EG, Agnano D, Anikster Y, Carducci C, Hyland K, Rotstein M, Leuzzi V, Borck G, Reith ME, Kurian MA. (2014). Dopamine transporter deficiency syndrome: phenotypic spectrum from infancy to adulthood. *Brain*. 137: 1107-1119. **(IF: 10.85)**.
2. Graul-Neumann LM, Deichsel A, Wille U, **Kakar N**, Koll R, Bassir C, **Ahmad J** et al. (2014). Homozygous missense and nonsense mutations in BMPR1B cause acromesomelic chondrodysplasia-type Grebe. *Eur J Hum Genet*. 22(6):726-33. **(IF: 4.2)**.
3. Gul S, Ahmed S, Kifl N, Tahir Uddi Q, Tahir NB **Hussain A**, Jaafar HZE, Moga M, Zia-Ul-Haq M. (2014). Multiple pathways are responsible for Anti-inflammatory and Cardiovascular activities of Hordeum vulgare L. *Journal of Translational Medicine*. 12:316. **(IF: 3.99)**.
4. Ahmed S, Gul S, Idris F, **Hussain A**, Zia-Ul-Haq M, Jaafar HZ, Moga M. (2014). Anti-inflammatory and antiplatelet activities of plasma are conserved across twelve mammalian species. *Molecules*. 19(8):11385-94. **(IF: 2.2)**.
5. **Baloch AH**, Daud S, **Raheem N**, **Luqman M**, Ahmad A, Rehman A, Shuja J, Rasheed S, Ali A, **Kakar N**, Naseeb HK, Mengal MA, Awan MA, Wasim M, Baloch DM, **Ahmad J**. (2014). Missense mutations (p.H371Y, p.D438Y) in gene CHEK2 are associated with breast cancer risk in women of Balochistan origin. *Mol Biol Rep*. 41(2):1103-7. **(IF: 1.9)**.
6. **Luqman M**, Javed MM, **Daud S**, **Raheem N**, **Ahmad J**, Khan AU. (2014). Risk Factors for lung cancer in the Pakistani Population. *Asian Pacific Journal of Cancer Prevention*. 15 (7): 2064-2068. **(IF: 1.5)**.

7. Shah SA, Din SU, Raheem N, Daud S, Mubeen J, Nadeem A, Tayyab M, **Baloch DM**, Babar ME, **Ahmad J.** (2014). Identification of a novel mutation (p.Ile 198Thr) in gene TYR in Pakistani family with nonsyndromic oculocutaneous albinism. Clinical and Experimental Dermatology. 39: 646-648. **(IF: 1.2).**
8. Siddiqi MH, Akhtar T, Rakha A, Abbas G, Ali A, Haider N, Ali A, Hayat S, Masooma S, **Ahmad J**, et al. (2014). Genetic characterization of Makrani people of Pakistan from mitochondrial DNA control-region data. Leg Med. S1344-223(14)00143-6. **(IF: 1.12).**
9. Sadiq AS, **Baloch DM**, **Ahmed N**, Hidayatullah. (2014). Role of coal-derived humic acid in the availability of nutrients and growth of sunflower under calcareous soil. The Journal of Animal & Plant Sciences. 24(6): 1737-1742. **(IF: 0.51).**
10. Ahmed F, **Baloch DM**, Sadiq SA, Ahmed S, Hanan A, Taran SA, **Ahmed N**, Hasan MJ.(2014). Plant growth regulators induce drought tolerance in sunflower (*Helianthus annuus* L.) Hybrids. The Journal of Animal and Plant Sciences. 24 :(3)886-890. **(IF: 0.51).**
11. Khan F, **Saeed M**, **Shahwani MN**, **Ahmed N**, **Raza AM**, Kakar MA. Ecophysiology of seed germination in native and exotic labiated of Balochistan. Biologia. 60(1): 23-29. **(HEC Recognized).**
12. Sarwar A, Sajid I, Riaz R, Fazal ur- Rehman, **Ahmed SS**, **Shahwani N**, Naseem M, **Ahmad N**, **Mushtaq M.** (2014), Bacterial Community Profiles in Rhizosphere of Paddy Rice based on 16S rRNA Sequence Analysis. International Journal of Biology and Biotechnology. 11: 11-19. **(HEC Recognized).**
13. Din M, Ahmad Z, Aleem A, Pirkani GS, Mohammad A, **Ahmad N.** (2014). Pathogens from drinking water; isolation and antibiogram of pathogenic organisms from drinking

water in Quetta city. The Professional Medical Journal. 21(4): 760-765. (**HEC Recognized**).

14. **Mushtaq M**, Sharfun-Nahar, **Ahmed N**, Alam MS, Hashmi MH. (2014). Careening of killer-sensitive pattern in yeasts using sensitive ascomycetous yeast strains. Int.J. Biol. Biotech.11 (4): 547-554. (**HEC Recognized**).
15. Ahmed F, **Baloch DM**, Hasan MJ, **Ahmed N**. (2014). Role of Plant Growth regulators in Improving Oil Quantity and Quantity of Sunflower Hybrids in drought Stress. Biologia. 59(2):315-322 (**HEC Recognized**).
16. Rasool M, Malik A, Qazi AM, Sheikh IA, Manan A, Shaheen S, Qazi MH, Chaudhary AG, Abuzenadah AM, **Asif M**, et al. (2014). Current view from Alzheimer disease to type 2 diabetes mellitus. CNS & Neurological disorders-Drug Targets. 13(3): 533-542 (**IF: 2.71**).
17. Rasool M, Malik A, Qureshi MS, Manan A, Pushparaj PN, **Asif M**, Qazi MH, Qazi AM, Kamal MA, Gan SH, Sheikh IA. (2014). Recent Updates in the Treatment of Neurodegenerative Disorders Using Natural Compounds. Evidence based complementary and Alternative Medicine. Article ID 979307. (**IF: 2.17**).
18. Rasool M, Iqbal J, Malik A, Ramzan HS, Qureshi MS, **Asif M**, Qazi MH, Kamal MA, Chaudhary AG, Al-Qahtani MH, Gan SH, Karim S. (2014). Hepatoprotective effects of Silybum Marianum (Silymarin) and Glycyrrhiza Glabra (Glycyrrhizin) in Combination: A Possible Synergy" Evidence-Based Complementary and Alternative Medicine. Evidence based complementary and Alternative Medicine. Volume 2014, Article ID 641597, (**IF: 2.17**).
19. Rasool M, Rashid S, Arooj M, Ansari SA, Khan KM, Malik A, Naseer MI, Zahid S, Manan A, Asif M, Razzaq Z, Ashraf S, Qazi MH, Iqbal Z, Gan SH, Kamal MA, Sheikh IA. New

Possibilities in Hepatocellular Carcinoma Treatment. Anticancer Research. 34. 1563-1572. (**IF: 1.87**).

20. Rasool M, Malik A, Qureshi MS, Ahmad R, Manan A, **Asif M**, Naseer MI, Pushparaj PN. (2014). Development of tumor lysis syndrome (TLS): A potential risk factor in cancer patients receiving anticancer therapy. Bioinformation. 10(11): 703-707. (**IF: 0.51**).
21. Rasool M, Malik A, Khan, Iqbal S, Qazi MH, Nasir MI, **Asif M**. (2014). Time dependent changes circulating Biomarkers during Diabetic pregnancies: A prospective case study. Life Science Journal. 11(3s):91-96. (**IF: 0.21**).
22. Rasool M, Zaigham K, Malik A, Naseer MI, Umm-E-Habiba, Manan A, Qazi MH, **Asif M**. (2014). Potential reproductive health effects and oxidative stress associated with exposure to potassium dichromate ($K_2Cr_2O_7$) and magnesium sulphate ($MgSO_4$) in male mice. Pak Journal of Medical Sciences. 30(4): 819-823. (**IF: 0.10**).
23. Rasool M, Naseer MI, **Zaigham K**, Malik A, Riaz N, Alam R, Manan A, Sheikh IA, **Asif M**. (2014). Comparative Study of Alterations in Tri-iodothyronine (T3) and Thyroxine (T4) Hormone Levels in Breast and Ovarian Cancer. Pak Journal of Medical Sciences. 30 (6):1356-1360. (**IF: 0.10**).
24. **Asif M**, Naz T, Arif M, Zaheer A, **Hussain A**, Awan HS, Rasool M. (2014). Process development to augment the production of microbial extra cellular protease by *Bacillus licheniformis* adopting RSM. Journal of Pure Applied Microbiology. 8(4): 2523-2533. (**IF: 0.07**).
25. Zaheer A, Saeed NA, Ahmed M, Habib I, Ashraf MA, Rasool M, **Asif M**. (2014). Cloning and analysis of NBS-LRR super family of resistance (R) genes in wheat *Triticum aestivum L.* Life Science Journal. 11(6s):1-7. (**IF: 0.21**).

26. **Agha SI, Ahmed S, Asif M, Naudhani S, Ahmed SJS**, Muhammad HY, Shafee M (2014)

In vitro antimicrobial activity of Rose marium officinalis essential oil cultivated in Balochistan, Pakistan. Journal of Applied and Emerging Sciences 5 (1):66-69. (**HEC Recognized.**)

FACULTY OF MANAGEMENT SCIENCES

27. **Raziq A.** (2014). Strategic Planning and High-Performance Management Practices in Pakistani SMEs. Management and Marketing. 12(2): 123-132. (**HEC Recognized.**).
28. Kakar A, Sarwar B (2014) Determinants of air pollution: an economic perspective. Journal of Applied and Emerging Sciences 5 (1):1-5. (**HEC Recognized.**).
29. Lodhi AS, Kakar MZ, Ahmed M (2014) Child Labor and Learning Achievements: The Impact of Children's Work on School Performance. Journal of Applied and Emerging Sciences 5 (1):48-58. (**HEC Recognized.**).
30. **Raziq A.** (2014). The relationship between Firm Size and High-Performance Management Practices in Pakistani SMEs. Indian Journal of Commerce and Management Studies. 5(2): 27-36.
31. **Anjum MA**, Karim J, Bibi Z. (2014). The Relationship between an Individual's Dominant Values and Conflict Management Styles. An Empirical Analysis. Pakistan Business Review. 16 (2): 355-376. (**HEC Recognized.**).
32. **Khan ZM and Lodhi SA.** (2014). Nexus between Financial Development, Agriculture Raw Material Exports. Trade Openness and Economic Growth of Pakistan. Pakistan Journal of Commerce and Social Sciences. 8(3): 629-639. (**HEC Recognized.**).

33. **Akram T**, Qayyum A. (2014). An Analysis of the Relationship between Social Capital and Occupational Stress in Banking Industry of Pakistan. *Pakistan Journal of Commerce and Social Sciences* 8 (1): 112-133. (HEC Recognized).
34. **Anjum MA**, Ahmed SJ, Karim J. (2014). Do Psychological Capabilities Really Matter? The Combined Effects of Psychological Capital and Peace of Mind on Work Centrality and In-role Performance. *Pakistan Journal of Commerce & Social Science*. 8(2): 502-520. (**HEC Recognized.**)
35. **Kakar Z, Khair SM**, Khan MZ, Khan MA (2014) Socio-economic impact of water scarcity on the economy of Pishin Lora Basin in Balochistan. *Journal of Applied and Emerging Sciences* 5 (2):90-96. (**HEC Recognized**).
36. **Parvez A, Anjum MA** (2014) Quality assurance: The standards for teaching and learning in higher education institutions of Pakistan. *Journal of Applied and Emerging Sciences* 5 (2):105-118. (**HEC Recognized**).
37. Butt M, Khair SM (2014) Cost of illness of water-borne diseases: a case study of Quetta. *Journal of applied and emerging sciences* 5 (2):133-143. (**HEC Recognized**).

FACULTY OF ARTS AND BASIC SCIENCES

38. **Tareen HK**, Ali SI. (2014). Evaluation of Road Traffic Noise Pollution in Quetta (Pakistan). *American Journal of Modern Physics*. 3(2): 29-36.
39. Farooq M, Shakir WI, Shahid M, Sarfraz M, Nadeem M, **Gilani ZB**. (2014). Conformal coating of cobalt-Nickel Layered double Hydroxide Nan flasks on carbon fiber for high-performance electrochemical energy storage Super capacitor devices. *Electrochimica Acta*. 135: 512-518. (**IF: 3.77**).

40. **Asghar MNH**, Tan Y, Shi S, Jiang D, Qin S, Liao J, Wen S, Dong W, Liu Y. (2014). Removal of oxygen from silicon by electron beam melting. *Applied Physics A*. 115(3) (2014) 753-757. (**IF: 1.70**).
41. Tareen HK, Khan A, Khan SA, Khan A, Ahmed U, Khalid M (2014) Optoelectronic Properties of SiMg₂O₄ and GeMg₂O₄ through mBJ Approximation. *Journal of Applied and Emerging Sciences* 5 (2):97-104. (**HEC Recognized**).

FACULTY OF ENGINEERING

42. **Faheem Udin**. (2014). Environmental Concerns in Antimicrobial Finishing of Textiles. *International Journal of Textile Science*. 3(1A): 15-20.
43. **Faheem Uddin**. (2014). Flame retardant fibrous materials in an aircraft. *Journal of Industrial textiles*. 1-42. (**IF: 1.2**).
44. **Abbasi AMR**, Vik M, Vikova M. (2014). Color difference formulae evaluation by method of adjustment. *World Journal of Engineering*. 11(1):89-94.
45. Naseeb-ullah, Yasin S, **Abro Z**, Liu L, Wei Q. (2014). Mechanically Robust and Antimicrobial Cotton Fibers Loaded with Silver Nanoparticles: Synthesized via Chinese Holly Plant Leaves. *International Journal of Textile Sciences*. 3(1A): 1-5
46. Yasin S, **Ahmed Z**, Chenyang Z, Juming Y. (2014). Altering Sound Absorption in Acoustic Fabrics via Different Honeycomb Cell Patterns. *Research Journal of Textile and Apparel*. 18(3):23-27. (**HEC Recognized**).
47. **Khan MN**, Al-Hinai MH, Al-Hinai A, Dutta J. (2014) Visible light photocatalysis of mixed phase zinc stannate/zinc oxide nanostructures precipitated at room temperature in aqueous media. *Ceramics International*. 40(6):8743–8752. (**IF: 2.06**).

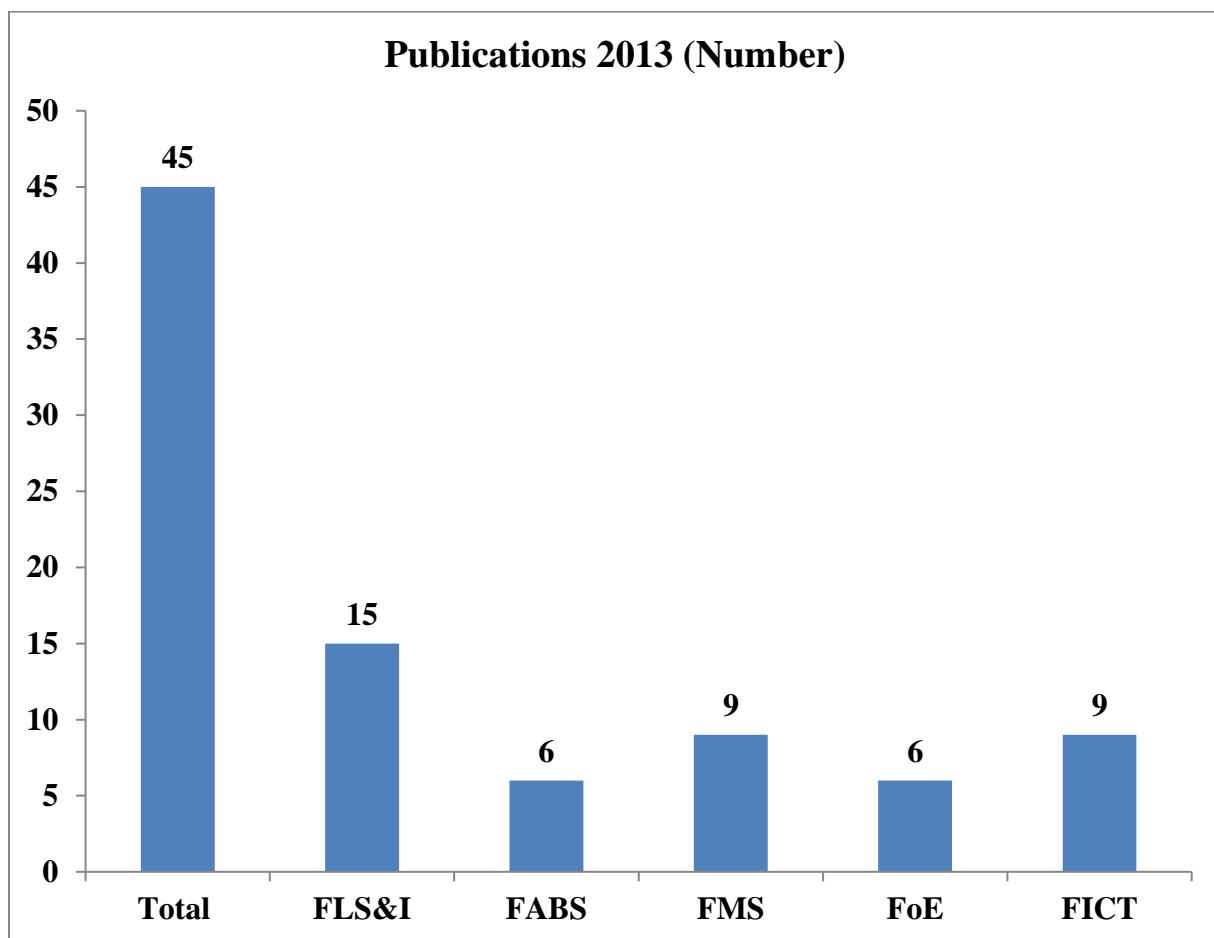
48. **Mushtaq F**, Mat R, Ani FN. (2014). Pyrolysis of Solid Palm Waste Biomass with Microwave Absorber under Microwave Irradiation. *Applied Mechanics and Materials*, 606: 73-77.
49. **Mushtaq F**, Mat R, Ani FN. (2014). The Performances of Intimately Mix and Layer Methods in Microwave Assisted Pyrolysis System. *Applied Mechanics and Materials*. 554: 150-154.
50. **Mushtaq F**, Channa AS, Mat R, Ani FN. (2014). Microwave Assisted Pyrolysis of Waste Biomass Resources for Bio-Oil Production. *Applied Mechanics and Materials*. 554: 307-311.
51. **Mushtaq F**, Mat R, Ani FN. (2014). A Review on Microwave Assisted Pyrolysis of Coal and Biomass for Fuel Production. *Renewable and Sustainable Energy Reviews*. 39: 555-574. (**IF:5.51**).
52. Mengal MH, Mengal MA, Mengal MA, Rautio A, Rehman F, Mengal MA (2014) Prevalence of Drug Resistance Malaria in Pakistan (Plasmodium. vivax and P. falciparum). *Journal of Applied and Emerging Sciences* 5 (1):12-19. (**HEC Recognized**).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

53. Ali A, Ali K, **Shaikh AH**. (2014). Energy and delay aware routing algorithm for fiber-wireless networks. *Wireless Networks*. 20 (6): 1313-1320. (**IF: 0.75**).
54. Ali N, Rehan AM, Ahmed Z, Memon H, Hussain A (2014) Effect of different types of seam, stitch class and stitch density on seam performance. *Journal of applied and emerging sciences* 5 (1):32-43. (**HEC Recognized**).

55. Khan F, Surat K, Tareen AW, Saeed M (2014) Addressing the challenges of E-government in developing countries through public-private partnership model based on cloud computing. *Journal of Applied and Emerging Sciences* 5 (1):59-65. (**HEC Recognized**).
56. Saleem M, Irshad R, Zafar M, Tahir MA (2014) Facebook addiction causing loneliness among higher learning students of Pakistan: a linear relationship. *Journal of Applied and Emerging Sciences* 5 (1):26-31. (**HEC Recognized**).

RESEARCH PUBLICATIONS 2013



Faculty of Life Sciences and Informatics

1. Kakar MUH, Kakar MA, **Shahwani MN, Ahmed N**, Awan MA, Khaskhaili M. (2013). Stabilization of fresh Buffalo milk by activating Lactoperoxidase. *The Journal of Animal and Plant Sciences.* 23(1): 90-93. **(IF: 0.53).**
2. **Asif M**, Karim S, Umar Z, Malik A, Ismail T, Rasool M. (2013). Effect of cigarette smoking based on hematological parameters: comparison between smokers and non-smokers. *Turkish Journal of Biochemistry.* 38 (1):9-13. **(IF: 0.17).**
3. Ashraf MA, **Asif M**, Zaheer Ahmad, Malik A, Ali Q, Rasool M. (2013). Plant growth promoting rhizobacteria and sustainable agriculture. A review. *African Journal of Microbiology Research.* 7(9):704-709. **(IF: 0.576).**
4. **Hussain A**, Sherkheli MA, **Asif M**, Rasool M, Raza AM. (2013). Biochemical Markers of ethnic Pakistanis: A correlation between genetic aloofness and nutritional status affecting average age of each group. *African Journal of Biochemistry Research.* 7(3):26-32.
5. Graul-Neumann LM, Deichsel A, Wille U, **Kakar N**, Koll R, Bassir C, **Ahmad J**, Cormier-Daire V, Mundlos S, Kubisch C, Borck G, Klopocki E, Mueller TD, Doelken SC, Seemann P. (2013). Homozygous missense and nonsense mutations in BMPR1B cause acromesomelic chondrodysplasia-type Grebe. *Eur J Hum Genet.* doi:10.1038/ejhg.2013.222. **(IF: 4.4).**
6. **Mushtaq M**, Sharfun-Nahar, Hashmi H. (2013). Screening of Killer-Sensitive Pattern (KSP) isolated from dairy products. *Pakistan Journal of Botany* (3):1039-1044. **(IF:1.09)**

7. **Taran SA**, Baloch DM, Khan N, Bakht J, Ghaloo SH, Shahwani N, Kakar MS. (2013). Earliness and yield performance of sunflower Hybrids in uplands of Balochistan, Pakistan. *Pakistan Journal of Botany*. 45(4):1397-1402. (**IF: 1.09**).
8. **Kakar N, Ahmad J**, Kubisch C, Borck G. (2013). Exon skinning severe childhood-onset caused by a Leptin receptor mutation. *American Journal of Medical Genetics*. 9999:1-3. (**IF: 2.3**).
9. **Hussain A**, Idrees M. (2013). The First complete sequence of HCV-1a from Pakistan and a phylogenetic analysis with complete genomes from the rest of the world. *Virology Journal*. 10:2. (**IF: 2.3**).
10. **Luqman M**, Javaid MM, Yasar A, **Ahmad J**, Khan A. (2013). An overview of sustainable techniques used for arsenic removal from drinking. *Water. Soil Environment*. 32(2).87-95. (**HEC Recognized**).
11. **Hussain A**, Idrees M, Akram M, Ali L, Malik A, **Asif M** (2013) The Molecular Architecture of HCV: A review. *Journal of Applied and Emerging Sciences* 4 (1):75-85. (**HEC Recognized**).
12. Ahmed SS, Ahmed N, Sani IA, Shahwani MN, Saeed M, Afridi S, Khan MA, Hui GZ (2013) Construction of Expression Vector pVBG2307 by adding Transcription Initiation and Termination Elements. *Journal of Applied and Emerging Sciences* 4 (1):1-9. (**HEC Recognized**).
13. Malik A, Khan KM, Asif M, Arsalan HM, Zahid S, Manan A, Rasool M (2013) Development of resistance mechanism in mosquitoes: Cytochrome P450, the ultimate detoxifier. *Journal of Applied and Emerging Sciences* 4 (2):100-117. (**HEC Recognized**).

14. **Hussain A**, Idrees M. (2013). The First complete sequence of HCV-1a from Pakistan and a phylogenetic analysis with complete genomes from the rest of the world. *Virology Journal*. 10:2. (**IF: 2.3**).
15. **Hussain A**, Sherkheli MA, **Asif M**, Rasool M, Raza AM. (2013). Biochemical Markers of ethnic Pakistanis: A correlation between genetic aloofness and nutritional status affecting average age of each group. *African Journal of Biochemistry Research*. 7(3):26-32.

FACULTY OF ARTS AND BASIC SCIENCES

16. **Tareen HK**. (2013). Order of Magnitude Enhancement in Axial Run-Down Velocity of a Current Sheath and the FocusDuration of a PF Device with Periodization. *Chinese Journal of Physics* 51: 2. (**IF: 0.43**).
17. **Tareen HK** (2013). Effects of pre-ionization on Cu K α emission from a small plasma focus. *Radiation Effects and Defects in Solids* iFirst.1-8. (**IF: 0.98**).
18. **Nawaz M**. (2013) On Boolean, Heyting and Brouwerian Algebras. *Journal of Applied and Emerging Sciences* 4 (1):86-93. (HEC Recognized).
19. Arif M, **Khan MZ** (2013) Stock Investors' Overconfidence: Evidence from Islamabad Stock Exchange. *Journal of Applied and Emerging Sciences* 4 (1):70-74. (HEC Recognized).
20. **Khan H**, **Gilani ZA**, Awan MS, Ahmad I, Wahab Q, Asghar M (2013) Characterization of ZnO by Means of CV Measurement of Respective Schottky Diode by DLTS. *Journal of Applied and Emerging Sciences* 4 (1):46-50. (**HEC Recognized**).
21. **Gilani ZA** (2013) Characterization of ZnO by mean of IV Measurement of respective Schottky diode by DLTS. *Journal of Applied and Emerging Sciences* 4 (2):147-152. (**HEC Recognized**).

FACULTY OF INFORMATION TECHNOLOGY AND COMMUNICATION

22. Saeed N, Nasim F, Riaz-ul- Amin, Hussain W. (2013). In VANET single Network types i.e. WAVE is not sufficient to provide QoS. UMTS in integration with WAVE can provide efficient network connectivity - A Survey. *International Journal of Basic and applied sciences.* 2: 4.
23. Khan MA., Ahmed A, Shah A. (2013). Analysis on Singular Value Decomposition for Compression of a Gray Scale Image. *Sindh University Research Journal.* 45(A-1):119-122. **(HEC RECOGNIZED).**
24. Ali A, Ali K, Ahmad A. (2013). Energy and delay aware routing algorithm for fibber-wireless networks. *Springer, Wireless Networks.* 0679-0685. **(IF:0.9)**
25. Riaz-ul-Amin, Ahmed A, Bugti A, Shah A. (2013). An approach to detect networks availability in VANET. *Sindh University Research Journal.* 45(A-1):123-128. **(HEC RECOGNIZED)**
26. Sajid H, Arra J, Shah A, Ahmed A. (2013). Impact of Ontology based Web Language, Cache Replacement Policies & Design patterns on the performance of Ubiquitous Computing Environment. *Sindh University Research Journal.* 45(A-1):129-134. **(HEC RECOGNIZED)**
27. Khan H, Gilani ZA, Awan MS, Ahmad I, Wahab Q, Asghar M (2013) Characterization of ZnO by Means of CV Measurement of Respective Schottky Diode by DLTS. *Journal of Applied and Emerging Sciences* 4 (1):46-50. **(HEC Recognized).**
28. Rahmanhman A-u, Khan H, Achakzai NUHK (2013) Theoretical Study of Pinching Effect in the Theta Pinch Plasma by Variation in Kinetic Pressure. *Journal of Applied and Emerging Sciences* 4 (1):28-32. **(HEC Recognized).**

29. Riaz S, Bugti SA, Hussain W (2013) Increasing Text Readability Using list Structure for Web. *Journal of Applied and Emerging Sciences* 4 (1):14-18. (**HEC Recognized**).
30. Kakar Z, Ahmad M (2013) Study on the causes of water scarcity in Pishin Lora Basin of Balochistan. *Journal of Applied and Emerging Sciences* 4 (2):135-140. (**HEC Recognized**).

FACULTY OF MANAGEMENT SCIENCES

31. **Anjum MA.** (2013). Counterproductive Behavior at Work: A comparison of Blue Collar and White Collar workers. *Pak J Commer Soc Sci.* 7(3):417-434. (**HEC Recognized**)
32. **Anjum MA,** Parvez A, Bibi Z (2013) Relationship Dynamics of Filing Grievances: A Conceptual Model. *Journal of Applied and Emerging Sciences* 4 (1):19-27. (**HEC Recognized**).
33. **Sajjad, A** and Eweje, G. (2013). Sustainable supply chain management: A conceptual framework. *Meiji Business Review.* 60(4), 53-74. (**HEC Recognized**).
34. hmed M, Lodhi AS (2013) Impact of fiscal decentralizations on education and healthcare outcomes: Empirical evidence from Pakistan. *Journal of Applied and Emerging Sciences* 4 (2):p122-134. (**HEC Recognized**).
35. Kakar Z, Ahmad M (2013) Study on the causes of water scarcity in Pishin Lora Basin of Balochistan. *Journal of Applied and Emerging Sciences* 4 (2):135-140. (**HEC Recognized**).
36. **Maula-Bakhsh R, Raziq A** (2013) Development of conceptual link between servant leadership & employee subjective well-being. *Journal of Applied and Emerging Sciences* 4 (2):157-16. (**HEC Recognized**).

37. **Nawaz RR, Reza S, Sarwar B** (2013) Prioritization of university choice dimensions using Fuzzy DEMATEL. *Journal of Applied and Emerging Sciences* 4 (2):169-177. **(HEC Recognized).**
38. **Ali R, Ali MS, Zaland Z** (2013) Keyless Averaging Encryption Algorithm. *Journal of Applied and Emerging Sciences* 4 (2):153-156. **(HEC Recognized).**
39. **Anjum MA, Parvez A, Bibi Z** (2013) Relationship Dynamics of Filing Grievances: A Conceptual Model. *Journal of Applied and Emerging Sciences* 4 (1):19-27. **(HEC Recognized).**

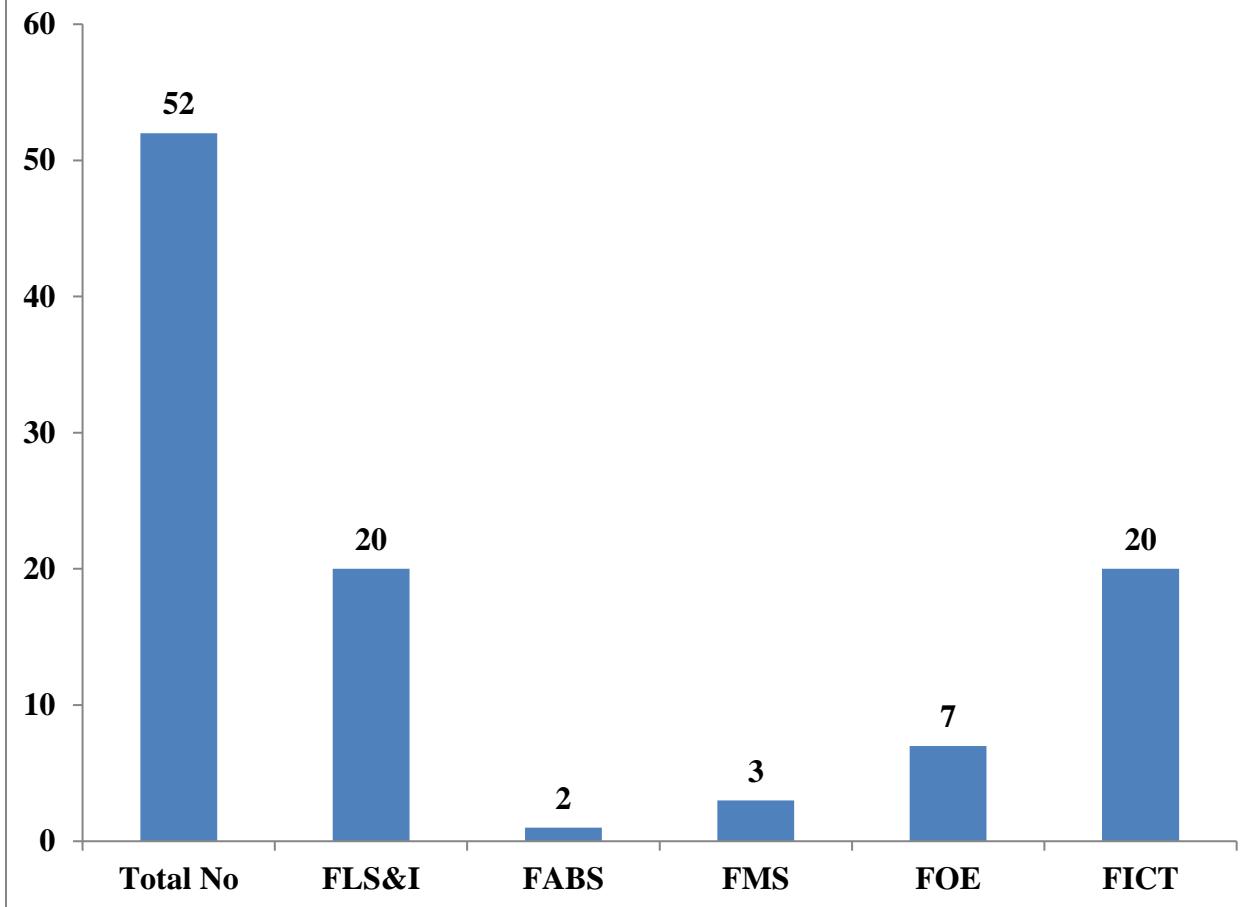
FACULTY OF ENGINEERING

40. **Faheem Udin.** (2013). Recent development in combing flame retardant and easy-care finishing for cotton. *Cellulose Chemical Technology*. 47(4-7):469-477. **(IF: 0.88).**
41. **Faheem Udin.** (2013). Studies in Finishing Effects of Clay Mineral in polymers and synthetic fibbers. *Advances in Material Science and Engineering*. Vol2013, Article ID 243515. **(IF: 0.74).**
42. Jokhio GA, Gul Y, Kakar E (2013) Modular Modeling Approach for Analysis of Cellular Beams. *Journal of Applied and Emerging Sciences* 4 (1):51-56. **(HEC Recognized).**
43. **Jokhio GA, Gul Y, Kakar E** (2013) Mixed Dimensional Hierarchic Partitioned Nonlinear Analysis of Frames with Masonry Infill. *Journal of Applied and Emerging Sciences* 4 (1):10-13. **(HEC Recognized).**
44. **Siddique M, Amin M** (2013) Thermogravimetric analysis (TGA) of lignite coal, tree leaves and their blend. *Journal of Applied and Emerging Sciences* 4 (2):118-121. **(HEC Recognized).**

45. Gul Y, **Kakar E** (2013) Modular Modeling Approach for Analysis of Cellular Beams.
Journal of Applied and Emerging Sciences 4 (1):51-56. (**HEC Recognized**).

RESEARCH PUBLICATIONS 2012

Publications 2012 (Number)



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Zaidi MA, Khan S, **Jahan N, Yousafzai A**, Mansoor A. (2012). Micro propagation and Conservation of three Juniperus species (cupressaceae). Pak. J. Bot, 44:302-304. (**IF: 1.09**).
2. Hussain R, Daud S, **Kakar N**, Ahmad A, Baloch AH, Tareen AM, Kakar MA, **Ahmad J.** (2012). A missence mutation (p.G274R) in gene ASPA causes canavan disease in Pakistani family. Mol Bio Rep. 39:6197-6202. (**IF: 2.2**).
3. **Asif M, Hussain A**, Ali MA, Rasool M. (2012). Scale up studies for the production of protease enzyme using *Bacillus subtilis* adopting response surface methodology. African Journal of Microbiology Research. 6(9):2120-2128. (**IF:0.51**)
4. Ishfaq M, Malik A, Faiz M, Sheikh IA, **Asif M**, Khan MN, Qureshi MS, Zahid S, Manan A, Arooj M. (2012). Molecular Characterization of FLT3 mutation in Acute Leukemia patients in Pakistan. Asian Pacific Journal of Cancer Prevention. 13(9): 4581-4585. (**IF: 2.5**).
5. Sabir N, Iqbal Z, Aleem A, Awan T, Naeem T, Asad S, Tahir AH, Absar M, Hasanato RM, **Asif M**, et al. (2012). Prognostically significant fusion oncogenes in Pakistani patients with adult acute Lymphoblastic Leukemia and their association with disease biology and outcome. Asian Pacific Journal of Cancer Prevention. 13(7):3349-3355. (**IF: 2.5**).
6. Begum M, Karim S, Malik A, Khurshid R, **Asif M**, Salim A, Nagra SA, Zaheer A, Iqbal Z, Abuzenadah AM. (2012). CA 15-3 (mucin-1) and physiological characteristics of breast cancer from Lahore, Pakistan. Asian Pacific Journal of Cancer Prevention. 13(10).5257-61. (**IF: 2.5**).
7. Awan T, Iqbal Z, Aleem A, Sabir N, Absar M, Rasool M, Tahir AH, Basit S, Khalid AM, Sabar MF. Asad S, Ali AS, Mahmood A, Akram M, Saeed T, Saleem A, Mohsin D, Shah IH, Khalid M, **Asif M**. et al. (2012). Five Most Common Prognostically Important Fusion

Oncogenes are detected in majority of Pakistani Pediatric Acute Lymphoblastic Leukemia Patients and are strongly associated with disease biology and treatment outcome. Asian Pacific Journal of Cancer Prevention. 13(11):5469-5475. **(IF: 2.5).**

8. **Ahmad J**, Le Calvez-Kelm F, Daud S, Voegele C, Vallée M, Ahmad A, **Kakar N**, McKay J, Gaborieau V, Leone M, Sinilnikova O, Sangrajrang S, Tavtigian S, Lesueur F. (2012). Detection of BRCA1/2 mutations in breast cancer patients from Thailand and Pakistan. Clinical Genetics.82:594-598. **(IF: 3.9).**
9. Naseem M, Philippi N, Hussain A, Wangorsch G, **Ahmed N**, Dandekar T. (2012). Integrated system view on Networking by Hormones in Arabidopsis Immunity Reveals multiple crosstalk for cytokine. The Plant Cell. 24: 1784-1814. **(IF:10.05)).**
10. **Kakar MA**, Kakar E, **Shahwani MN**, Jan M, Raza A, Hassan J, **Saeed M**, Babar S, **Baloch M.** (2012). Reproductive biotechnologies in dairy industry in Pakistan. Journal of Animal and Plant Sciences. 22(2 Suppl.): 2012, Page: 84-86 ISSN: 1018-7081. **(IF: 0.53).**
11. Khajjak MH, **Saeed M**, **Raza AM**, **Shawani MN**, Ahmed F, Shaheen G. (2012). Comparative analysis of essential oil contents of Juniperus excelsa (M. Beib.) found in Balochistan, Pakistan. African Journal of Biotechnology: 11(32), 8154-8159.
12. Borck G, **Kakar N**, Hoch J, Friedrich K, Freudenberg J, Nürnberg G, Yilmaz R, Daud S, **Baloch DM**, Nürnberg P, Oldenburg J, **Ahmad J**, et al. (2012). An Alu repeat-mediated genomic GCNT2 deletion underlies congenital cataracts and adult i blood group. Human Genetic. **(IF: 4.6).**
13. Iqbal Z, Noreen S, Aamer A, Tashfeen A, Naeem T, Sultan A, Tahir AH, Absar M, Chishti MA, Faiyaz-ul-Haque M, Khalid AM, Sabar MF, Rasool R, Ali Mahmood AS, Akram M, Saeed T, Arsalan S, Mohsin D, Shah IH, Khalid M, **Asif M**, et al. (2012). Characterization of Common Fusion Oncogenes As Prognostic Molecular Identities in Adult Acute

Lymphoblastic Leukemia Identifies the Need for Genetic Testing At Presentation, Molecular Prognostication and Differential Treatment. Blood (ASH Annual Meeting Abstracts) 2012 120: Abstract 5115. (**IF:10.02**)

14. Iqbal Z, Noreen S, Aamer A, Tashfeen A,, Tahir Naeem, , Asad Sultan, Ammara H Tahir, Sultan A, Tahir AH, Absar M, Chishti MA, Faiyaz-ul-Haque M, Khalid AM, Khalid AM, Sabar MF, Rasool R, Ali AS Mahmood A, Akram M, Saeed T, Arsalan S **Asif M** et al. (2012). Detection of Five Common Fusion Oncogenes in Pakistani Children with Acute Lymphoblastic Leukemia and Their Association with Clinical Pattern and Treatment Outcome. Blood (ASH Annual Meeting Abstracts) 2012 120: Abstract 5124. (**IF:10.02**)
15. Khan AR, **Saeed M**, **Shahwani MN**, **Ahmed N**, **Raza A**, Khajak MH. (2012). Ecophysiology of seed germination in native and exotic Labiates of Balochistan. African Journal of Biotechnology. 11(32), 8154-8159. (**IF:0.55**)
16. Kakar M, Kakar M, **Shahwani MN**, **Ahmed N**, Arain M, Khaskhaili M. (2012). Stabilization of Fresh Buffalo Milk By Activating Lactoperoxidase System. The Journal of Animal and Plant Science., 23(1 Suppl.): 90-93. (**IF: 0.54**).
17. **Baloch AH**, Shuja J, Daud S, Ahmed M, Ahmad A, Tareen M, Khan F, Kakar MA, **Baloch DM**, **Kakar N**, **Naseeb HK**, **Ahmad J**. (2012). Various, aspects, patron and risk factors in Breast cancer Patients of Balochistan. Asian Pacific Journal of Cancer Prevention. 13(8):5257-5260. (**IF: 2.5**).
18. **Kakar N**, Goebel I, Daud S, Nurnberg G, Agha N, Ahmad A, Nurnberg P, Kubisch C, **Ahmad J**, Borck G. (2012). A homozygous splice site mutation in TRAPPC9 causes in disability and micecephaly. European Journal of Medical Genetics. 55 : 727-731. (**IF: 6.3**).

19. Mir H, Khan S, Arif MS, Ali G, **Wali A**, Ansar M, Ahmad W. (2012). Mutations in the gene phospholipase C, delta-1 (PLCD1) underlying hereditary leukonychia. European Journal of Dermatology. 22: 736-739. (**IF: 1.95**).
20. Riazuddin S, Belyantseva IA, Giese AP, Lee K, Indzhykulian AA, Nandamuri SP, Yousaf R, Sinha GP, Lee S, Terrell D, Hegde RS, Ali RA, Anwar S, Andrade-Elizondo PB, Sirmaci A, Parise LV, Basit S, **Wali A**, et al. (2012). Alterations of the CIB2 calcium- and integrin-binding protein cause Usher syndrome type 1J and nonsyndromic deafness DFNB48. Nature Genetics. 44:1265-1271. (**IF: 29.65**)

FACULTY OF ARTS AND BASIC SCIENCES

21. **Sattar FA Ahmed F**, Ahmed N , Sattar SA,, Malghani MAK, Choudhary MI. A Double-blind, Randomized, Clinical Trial on the Antileishmanial Activity of a Morindacitrifolia (Noni) Stem Extract and its Major Constituents. Natural Product Communications. 7(2):195 – 196. (**ISI Indexed**).

22. Ahthasham S, **Ahmed A**, Iqbal MJ, **Sajid A**, **Shazad A**. Socio Technical Impact of Broadband Services in Balochistan. International Journal of Engineering and Technology. 1 (2):77-93.

FACULTY OF INFORMATION TECHNOLOGY AND COMMUNICATION

23. Khan A, Malik SA, **Ali A**, Hussain CR, Mahmood MT, Usman I. (2012). Intelligent reversible watermarking and authentication: Hiding depth map information for 3D cameras. Information Sciences. 216:155-175. (**IF: 4.0**).

24. **Khokar AS, Mehmood MA, Ahmed A, Baraylai M.** (2012). Password Security using Text Password. Sindh University Research Journal. 44:57-62. (**HEC recognized Y category**).
25. **Shah A, Ahmed A, Mazhar A.** (2012). Employing information Technology infrastructure library to solve cloud computing security issues. Sindh University Research Journal. 44:75-80. (**HEC recognized Y category**).
26. **Ahmed A, Shah A, et al.** (2012). Particle Swarm Optimization For N-Queens Problem. Journal of Advanced Computer Science and Technology. 1(2): 57-63.
27. **Ahmed A, Hussain W, et al.** (2012). Logic formulation & evaluation of academic constraints. International Journal of Basic and Applied Sciences. 1(1): 26-39
28. **Ahmed A, Mazhar A, Hussain W.** (2012). Bespoke Set of Heuristics for Solving Curriculum Scheduling Problems. Sindh University Research Journal. 44:13-20. (**HEC Recognized**).
29. **Ahmed A, Mazhar A, Shaikh AW.** (2012). Three Novel approaches for solving-Queensproblems. Sindh University Research Journal. 44:33-38. (**HEC Recognized**).
30. Khokar AS, Mehmood MA, **Ahmed A** et al. (2012). Password Security using Text Password. Sindh University Research Journal (Science Series). 44(2AB): 57-62. (**HEC Recognized**).
31. Mashori GA, **Ahmed A**, et al. (2012). Application of Rationality in Strategic Decision Making and its Implementation at Branch level: A Case Study of Habib Bank Limited (HBL) Karachi. International Journal of Basic and Applied Sciences. 1(2): 53-66.
32. Ali M, **Ahmed A**, et al. (2012). Cultural Diversity and its Impact on Organizational Goals: A Case Study of Quetta, Balochistan. International Journal of Basic and Applied Sciences. 1 (1): 40-52.

33. Umer R, Khan S, **Ahmed A**, et al. (2012). Prediction of Possible conversion from MCI to AD using Machine learning. International Journal of Basic and Applied Sciences. 1(2): 100-108.
34. Amin S, Ahthasham S, **Ahmed A**, et al. (2012). Improvement of BGP Session Maintenance. International Journal of Engineering and Technology. 1(2): 94-104.
35. Marium S, Nazir Q, **Ahmed A**, et al. (2012). Implementation of Eap with RSA for Enhancing The Security of Cloud Computing. International Journal of Basic and Applied Sciences. 1(3): 177-183.
36. Manzoor M, Hussain W, **Ahmed A**, et al. (2012). The Importance of Higher Education Websites and its Usability. International Journal of Basic and Applied Sciences. 1(2): 150-163.
37. Hussain W, Sohaib O, **Ahmed A**, et al. (2012). Geographical Information System Based Model of Land Suitability For Good Yield of Rice in Prachuap Khiri Khan Province Thailan. Journal of Science, Technology, and Development. 31: 1-9.
38. Mashori GA, **Aftab Ahmed** and Manzoor Ali Nadir Ali. (2012). Application of Rationality in Strategic Decision Making and its Implementation at Branch level: A Case Study of Habib Bank Limited (HBL) Karachi. International Journal of Basic and Applied Sciences. 1 (2): 53-66.
39. Ali M, Ahmed A, **Mashori GA**, Ali N. (2012). Cultural Diversity and its Impact on Organizational Goals: A Case Study of Quetta, Balochistan. International Journal of Basic and Applied Sciences. 1: 40-52.
40. Ali M, Ahmed A, **Karamat M**, Ali N. (2012). Comparative Analysis of Cost and Benefits of Training. International Journal of Basic and Applied Sciences. 1 (4): 627-636.

41. **Mehmood A, Sajjad A, Khokhar AS, Baryali M.** (2012). Improvement in TCP during Hands off in Wireless Networks. *Sindh University Research Journal*. 44:137-142. (**HEC Recognized**).
42. **Ahthasham S, Sajid A, Mehmood MA, Baryali M.** (2012). Large and Dense Wireless Sensor Networks with Respect to Best possible Number of Clusters. *Sindh University Research Journal*. 44:93-100. (**HEC Recognized**).

FACULTY OF MANAGEMENT SCIENCES

43. **Khair SM**, Mushtaq S, Culas R, Hafeez M. (2012). Groundwater markets under the water scarcity and declining watertable conditions: The upland Balochistan Region of Pakistan. *Agricultural Systems*. 107: 21–32. (**IF: 2.9**).
44. **Anjum MA**, Khan N, Naz H, Raza SA, Fatima S. (2012). Problems & Prospects of Women Entrepreneurs: A Case Study of Quetta-Pakistan. *International Journal of Business and Social Sciences*. 3 (23): 177-183.
45. Parvez A, **Anjum MA**, Wajidi E. (2012). Public Policy Implementation & Women's Empowerment in Balochistan: A Comparison of Expert's Perspectives. *SCHEMA. Annual Journal of Humanities & Social Sciences*. 9: 1-18. (**HEC Recognized**).

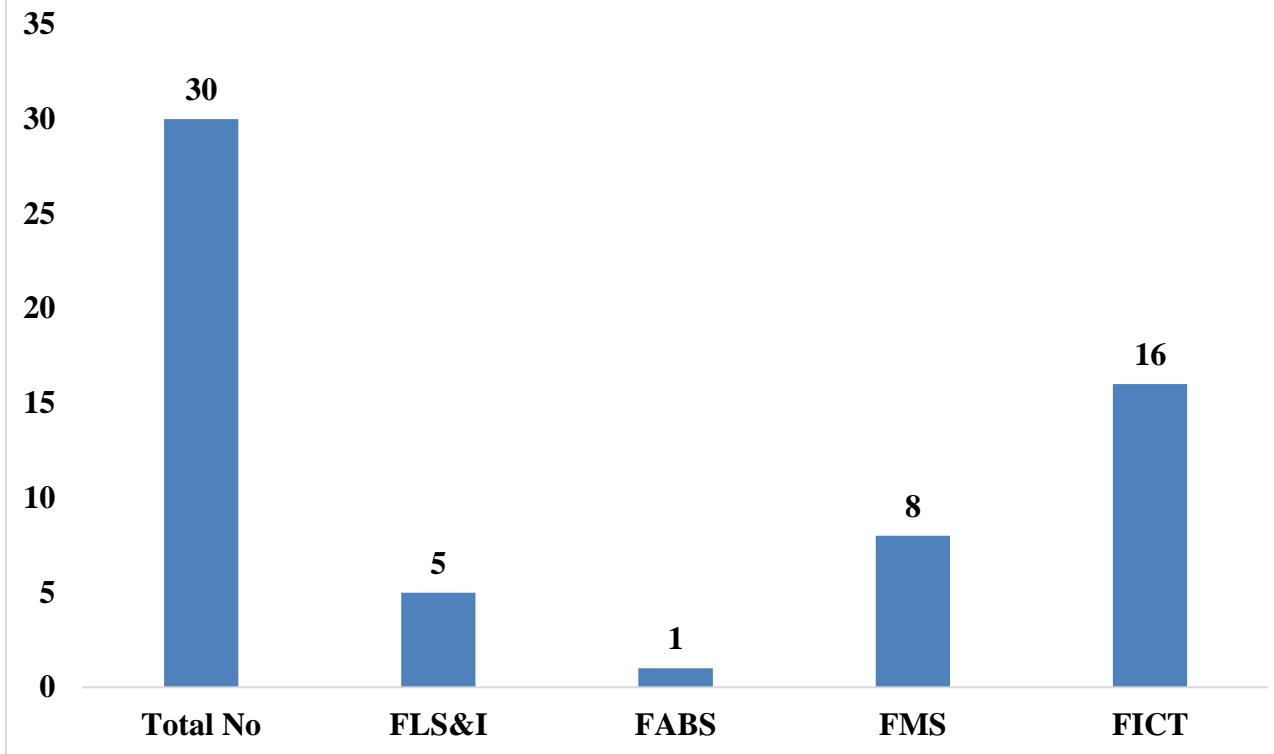
FACULTY OF ENGINEERING AND ARCHITECTURE

46. Ahmed N, Ali N (2012) Reduction of Fibrillation of Lyocell Fabric in Continuous Dyeing. *Journal of Applied and Emerging Sciences* 3 (1):pp30-37. (**HEC Recognized**).
47. Ali N, Ahmed N (2012) Orange peel as an adsorbent for the removal of reactive blue dye from textile waste water. *Journal of Applied and Emerging Sciences* 3 (1):pp47-58. (**HEC Recognized**).

48. Hashim M, Mengal AN (2012) Flow Dynamics of Two Phase (air and water) Stratified Flow by a Simulation Package COMSOL MULTIPHYSICS. *Journal of Applied and Emerging Sciences* 3 (1):pp87-93. (**HEC Recognized**).
49. Kakar E, Elahi F, Khan F, Ali K (2012) Wave Propagation into Buildings. *Journal of Applied and Emerging Sciences* 3 (2):pp136-140. (**HEC Recognized**).
50. Khan F, Chang Y, Park SJ, Copeland J Introducing lane based sectoring for routing in VANETs. In: 2012 IEEE Wireless Communications and Networking Conference (WCNC), 2012a. IEEE, pp 3040-3044. (**HEC Recognized**).
51. Khan F, Elahi F, Ali K, Bugti SA, Kakar E (2012b) Recovering VANET Safety Message in Transmission Holes. *Journal of Applied and Emerging Sciences* 3 (2):pp141-145. (**HEC Recognized**).
52. Qadeer A, Aftab A, Nazir I (2012) Optimization of energy consumption during natural gas dehydration. *Journal of Applied and Emerging Sciences* 3 (1):pp7-11. (**HEC Recognized**).

RESEARCH PUBLICATIONS 2011

Publications 2011



FACULTY OF LIFE SCIENCES AND INFORMATICS

1. Borck G, Rehman AU, Lee K, Pogoda HM, **Kakar N**, von Ameln S, Grillet N, Hildebrand MS, Ahmed ZM, Nürnberg G, Ansar M, Basit S, Javed Q, Morell RJ, Nasreen N, Shearer AE, Ahmad A, Kahrizi K, Shaikh RS, Ali RA, Khan SN, Goebel I, Meyer NC, Kimberling WJ, Webster JA, Stephan DA, Schiller MR, Bahlo M, Najmabadi H, Gillespie PG, Nürnberg P, Wollnik B, Riazuddin S, Smith RJH, Ahmad W, Müller U, Hammerschmidt M, Friedman TB, Riazuddin S, Leal SM, **Ahmad J**, Kubisch C. (2011). Loss-of-Function Mutations of ILDR1 Cause Autosomal Recessive Hearing Impairment DFNB42. *American Journal of Human Genetics*. 88:127-137. **(IF:11.02)**
2. Ahmad A, Daud S, **Kakar N**, Nurnberg G, Nurnberg P, Babar ME, Thoenes M, Kubisch C, **Ahmad J**, Bolz HJ. (2011). Identification of a novel LCA5 mutation in a Pakistani family with Leber congenital amaurosis and developmental cataracts. *Molecular Vision*. 17:1940-1945. **(IF:2.2)**.
3. Khan S, Habib R, Mir H, Umm-E-Kalsoom, Naz G, Ayub M, Shafique S, Yamin T, Ali N, Basit S, Wasif N, Kamran-Ul-Hassan Naqvi S, Ali G, **Wali A**, Ansar M, Ahmad W. (2011). Mutations in the LPAR6 and LIPH genes underlie autosomal recessive hypotrichosis/woolly hair in 17 consanguineous families from Pakistan. *Clinical Experimental Dermatology*. 36:652-654. **(IF: 1.02)**.
4. Ali Z, Babar ME, **Ahmad J**, Yousaf MZ, Asif M, Shah SA. (2011). Molecular investigation of mental retardation locus gene PRSS12 by linkage analysis. *Indian Journal of Human Genetics*. 17:65-69. **(ISI Indexed)**.
5. **Shahab-ud-din, Sultan IM, Kakar MA, Yousafzai A, Sattar F, Ahmmad F, Ibrahim SM, Hassanullah M, Arif B.** (2011). The Effects of Different Concentrations and

Combinations of Growth Regulators on the Callus Formation of Potato (*Solanum tuberosum*) Explants. Current Research Journal of Biological Sciences; 3: 499-503.

FACULTY OF MANAGEMENT SCIENCES

6. Manzoor MM, **Siddiqui AA, Sattar A**, Fahim M, Rasheed S. (2011). Impact of Inflation on Household Consumption-A Case of Pakistan. International Research Journal of Finance and Economics. 68: 161-167.
7. Zaki AR, **Sattar A**, Manzoor MM. (2011). Risk Mitigation in Islamic Finance through Policies and Regulatory Model- A Way to Long-Term Stability. International Research Journal of Finance and Economics. 68: 168-175.
8. Kakar ZK, Khilji BA, **Khan MJ. (2011)**. Relationship between Education and Economic Growth in Pakistan: A time series analysis. Journal of International Academic Research. 11: 27-32.
9. Kakar MK, **Kakar MA. (2011)**. Factors Affecting the Real Estate Prices in Pakistan. Asian Economic and Financial Review. 1: 57-66.
10. Kakar MK, **Kakar A**, Khan W, Wali-ullah. (2011). The Long-Run Relationship among Money, Income and the Price Level in Pakistan. Journal of Economics and Sustainable Development. 2: 13-28.
11. **Khan MJ**, Kakar ZK, **Ullah Z.** (2011). Obstacle faced by Females in pursuing their Jobs in Pakistan. Journal of International Academic Research; 11:52-60.
12. Kakar ZK, Khilji BA, **Khan MJ. (2011)**. Effect of Female Education on Family Size in Pakistan: A Case Study of Quetta City. Journal of International Academic Research. 11:37-41.

13. Kakar ZK, Khilji BA, Khan MJ. (2011). Globalization and Economic Growth: Evidence from Pakistan. *Acta Universitatis Danubius*. 7: 208-217.

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

14. **Hussain W**, Sohaib, O, Ali A. (2011). Improving web page readability by plain language. *International Journal of Computer Science Issues*. 8: 315-319.
15. Naeem B and Nyamapfene A. (2011). Seamless Vertical Handover in WiFi and WiMAX Networks using RSS and Motion Detection: An Investigation. *The Pacific Journal of Science and Technology*. 12: 298-304.
16. Sohaib, O, **Hussain W**, Badini MK. (2011). User experience (UX) and the web accessibility standards. *International Journal of Computer Science Issue*. 8: 584-587.
17. **Ali A, Hussain W, Ahmed A**. (2011). E-Learning: Closing the Digital Gap between Developed and Developing Countries. *Australian Journal of Basic and Applied Sciences*. 5: 903-908.
18. **Hussain W, Sohaib O**, Ahmed A and **Khan MQ**. (2011). Web Readability Factors Affecting Users of All Ages. *Australian Journal of Basic and Applied Sciences*. 5: 972-977.
19. **Ahmed A**, Hassan MM, Sohaib O, Hussain W, Khan MQ. (2011). An Agent Based Architecture for Cognitive Spectrum Management. *Australian Journal of Basic and Applied Sciences*. 5: 682-689.
20. **Ahmed A**, Shaikh AW, Ali M, Bukhari AHS. (2011). Hyper-GA for solving benchmark scheduling problems. *Australian Journal of Basic and Applied Sciences*. 5(6): 1657-1667.

21. **Ahmed A**, Shaikh AW, Ali M, Bukhari AHS. (2011). Hyper-Heuristic approach for solving scheduling problem: A case study. *Australian Journal of Basic and Applied Sciences*. 5(9): 190-199.
22. **Ahmed A, Ali M, Mehmood MA**, Bukhari AHS. (2011). Designing a generic layout for benchmark scheduling problems. *Australian Journal of Basic and Applied Sciences*. 5(10): 1393-1397.
23. **Ahmed A, Ali M, Sajid A, Bukhari AHS**. (2011). Particle swarm based hyper-heuristic for tackling real world examinations scheduling problem. *Australian Journal of Basic and Applied Sciences*. 5(10): 1406-1413
24. **Ahmed A, Bukhari AHS**. (2011). A Comparative Study On Three Hyper-Heuristic Approaches For Solving Benchmark Scheduling Problems. *Sindh University Research Journal*. 43(2): 161-168. (**HEC Recognized Y Category**).
25. **Ahmed A, Bukhari AHS**, et al. (2011). Solving University Scheduling Problem Using Hybrid Approach. *Mehran University Research Journal of Engineering & Technology*. 30(4): 613-624. (**HEC Recognized Y Category**).
26. Ali M, **Ahmed A**, et al. (2011). Impact of Information Technolgy on E-learning System in Pakistan. *Sindh University Research Journal (Science Series)*. 43(1-A): 26-29. (**HEC Recognized Y Category**).
27. **Ahmed O, Sajid A, Mehmood MA**. (2011). Comparison of routing protocols to assess network lifetime of WSN. *International Journal of Computers Science Issues*. 8(6): 220-224.
28. **Mehmood MA, Sajid A, Khokhar AS**. (2011). Framework for Ethernet network functionality testing. *International Journal of Computers Science Issues*. 8(6): 149-155.

29. **Mehmood MA, Khokhar AS, Ali M.** (2011). Incorporating security in embedded system – a critical analysis. International Journal of Computers Science Issues. 8(6): 156-160.

FACULTY OF ARTS AND BASIC SCIENCES

30. **Asghar HMNHK**, Asghar M, Awan MS. (2011). Solid State Synthesis and Characterization of Spintronics Material Cd_{0.55} Hg_{0.45} Te. Applied Mechanics and Materials. 44-47: 2299-2306.

