

List of Publications

Capital University of Science and Technology

- [1] U. Ahmed, M. Ahmed, and Q. Memon, “A modified analytical model for algan/gan finfets i–v characteristics,” *Semiconductor Science and Technology*, vol. 35, no. 3, p. 035002, 2020.
- [2] S. Shafique, K. S. Karimov, M. Abid, M. M. Ahmed, and K. M. Akhmedov, “Carbon nanotubes, orange dye, and graphene powder based multifunctional temperature, pressure, and displacement sensors,” *Journal of Materials Science: Materials in Electronics*, pp. 1–7, 2020.
- [3] R. Saadia and N. M. Khan, “Single carrier-frequency division multiple access radar: Waveform design and analysis,” *IEEE Access*, vol. 8, pp. 35 742–35 751, 2020.
- [4] M. Kamal Mazhar, M. J. Khan, A. I. Bhatti, and N. Naseer, “A novel roll and pitch estimation approach for a ground vehicle stability improvement using a low cost imu,” *Sensors*, vol. 20, no. 2, p. 340, 2020.
- [5] A. Hanif, Q. Ahmed, A. I. Bhatti, and G. Rizzoni, “A unified control framework for traction machine drive using linear parameters varying-based field-oriented control,” *Journal of Dynamic Systems, Measurement, and Control*, vol. 142, no. 10, 2020.
- [6] S. Ullah, Q. Khan, A. Mehmood, and A. I. Bhatti, “Robust backstepping sliding mode control design for a class of underactuated electro–mechanical nonlinear systems,” *JOURNAL OF ELECTRICAL ENGINEERING & TECHNOLOGY*, 2020.
- [7] R. Ara, U. A. Khan, A. I. Bhatti, and B. W. Lee, “A reliable protection scheme for fast dc fault clearance in a vsc-based meshed mtde grid,” *IEEE Access*, vol. 8, pp. 88 188–88 199, 2020.
- [8] M. F. Iqbal, Z. Khalid, M. Zahid, and A. Abdullah, “Accuracy improvement in amplitude comparison-based passive direction finding systems by adaptive squint selection,” *IET Radar, Sonar & Navigation*, vol. 14, no. 5, pp. 662–668, 2020.
- [9] Z. Masood, R. Samar, and M. A. Z. Raja, “Design of fractional order epidemic model for future generation tiny hardware implants,” *Future Generation Computer Systems*, vol. 106, pp. 43–54, 2020.
- [10] M. Shafiq, I. A. Taj, M. Ghafoor, S. A. Tariq, A. Abbas, and A. Y. Zomaya, “Accelerating fingerprint identification using fpga for large-scale applications,” *Journal of Parallel and Distributed Computing*, 2020.
- [11] M. Ghafoor, S. A. Tariq, I. Taj, N. Jafri, and T. Zia, “Robust palmprint identification using efficient enhancement and two-stage matching technique,” *IET Image Processing*, 2020.

- [12] U. RAFIQUE, M. A. WAHLA, S. U. DIN, and H. KHALIL, “Compact cpw-fed super wideband planar elliptical antenna.”
- [13] N. Zahid, J. Jiang, U. Rafique, and D. Eric, “A modified planar square-loop antenna for electronic article surveillance rfid applications,” *Journal of Communications Technology and Electronics*, 2020.
- [14] M. Tahir, I. A. Taj, P. A. Assuncao, and M. Asif, “Low complexity high efficiency coding of light fields using ensemble classifiers,” *Journal of Visual Communication and Image Representation*, vol. 66, p. 102742, 2020.
- [15] M. Hassan and I. Hassan, “Improving ann-based streamflow estimation models for the upper indus basin using satellite-derived snow cover area,” *Acta Geophysica*, pp. 1–11, 2020.
- [16] S. Janjua, I. Hassan, M. Zarghami, and S. Islam, “Addressing supply-demand gap in shared rivers using water diplomacy framework: utility of game theory in the indus river within pakistan,” *Water Policy*, 2020.
- [17] S. Janjua, I. Hassan, and S. Islam, “Role and relevance of three enabling conditions to resolve inter-provincial water conflicts in the indus basin within pakistan,” *Water Policy*, 2020.
- [18] S. Janjua and I. Hassan, “Fuzzy ahp-topsis multi-criteria decision analysis applied to the indus reservoir system in pakistan,” *Water Supply*, 2020.
- [19] S. Janjua and I. Hassan, “Transboundary water allocation in critical scarcity conditions: a stochastic bankruptcy approach,” *Journal of Water Supply: Research and Technology—AQUA*, vol. 69, no. 3, pp. 224–237, 2020.
- [20] S. Janjua and I. Hassan, “Use of bankruptcy methods for resolving interprovincial water conflicts over transboundary river: Case study of indus river in pakistan,” *River Research and Applications*, 2020.
- [21] M. Khan and M. Ali, “Optimization of concrete stiffeners for confined brick masonry structures,” *Journal of Building Engineering*, p. 101689, 2020.
- [22] S. Ahmed and M. Ali, “Use of agriculture waste as short discrete fibers and glass-fiber-reinforced-polymer rebars in concrete walls for enhancing impact resistance,” *Journal of Cleaner Production*, p. 122211, 2020.
- [23] M. Khan, M. Cao, and M. Ali, “Cracking behaviour and constitutive modelling of hybrid fibre reinforced concrete,” *Journal of Building Engineering*, vol. 30, p. 101272, 2020.
- [24] M. Khan, A. Rehman, and M. Ali, “Efficiency of silica-fume content in plain and natural fiber reinforced concrete for concrete road,” *Construction and Building Materials*, vol. 244, p. 118382, 2020.

- [25] R. Sabir, M. M. Khan, N. A. Sheikh, I. U. Ahad, and D. Brabazon, “Assessment of thermo-hydraulic performance of inward dimpled tubes with variation in angular orientations,” *Applied Thermal Engineering*, vol. 170, p. 115040, 2020.
- [26] L. A. Khan and M. M. Khan, “Role of orientation of fins in performance enhancement of a latent thermal energy storage unit,” *Applied Thermal Engineering*, p. 115408, 2020.
- [27] M. A. Khan, S. H. I. Jaffery, M. Khan, M. Younas, S. I. Butt, R. Ahmad, and S. S. Warsi, “Multi-objective optimization of turning titanium-based alloy ti-6al-4v under dry, wet, and cryogenic conditions using gray relational analysis (gra),” *The International Journal of Advanced Manufacturing Technology*, vol. 106, no. 9-10, pp. 3897–3911, 2020.
- [28] M. W. Ahmed and M. T. Afzal, “Flag-pdf: Features oriented metadata extraction framework for scientific publications,” *IEEE Access*, 2020.
- [29] S. Maqsood, M. A. Islam, M. T. Afzal, and N. Masood, “A comprehensive author ranking evaluation of network and bibliographic indices,” *Malaysian Journal of Library & Information Science*, vol. 25, no. 1, pp. 31–45, 2020.
- [30] S. Nazir, M. Asif, S. Ahmad, F. Bukhari, M. T. Afzal, and H. Aljuaid, “Important citation identification by exploiting content and section-wise in-text citation count,” *PloS one*, vol. 15, no. 3, p. e0228885, 2020.
- [31] U. A. Chauhan, M. T. Afzal, A. Shahid, M. Abdar, M. E. Basiri, and X. Zhou, “A comprehensive analysis of adverb types for mining user sentiments on amazon product reviews,” *World Wide Web*, pp. 1–19, 2020.
- [32] N. Ikram, M. Abdul Qadir, and M. T. Afzal, “SimExact – Anefficient method to compute function similarity between proteins using gene ontology,” *Current Bioinformatics*, vol. 15, no. 4, pp. 318–327, 2020.
- [33] Q. u. Zaman, A. Nadeem, and M. A. Sindhu, “Formalizing the use case model: A model-based approach,” *Plos one*, vol. 15, no. 4, p. e0231534, 2020.
- [34] A. A. Toor, M. Usman, F. Younas, A. C. M Fong, S. A. Khan, and S. Fong, “Mining massive e-health data streams for iomt enabled healthcare systems,” *Sensors*, vol. 20, no. 7, p. 2131, 2020.
- [35] M. S. I. Malik, “Predicting users’ review helpfulness: the role of significant review and reviewer characteristics,” *Soft Computing*, pp. 1–16, 2020.
- [36] S. Hussain, Y.-J. Xie, D. Li, S. I. Malik, J.-c. Hou, E. L.-H. Leung, and X.-X. Fan, “Current strategies against covid-19,” *Chinese medicine*, vol. 15, no. 1, pp. 1–12, 2020.
- [37] M. T. Khan, M. T. Zeb, H. Ahsan, A. Ahmed, A. Ali, K. Akhtar, S. I. Malik, Z. Cui, S. Ali, A. S. Khan *et al.*, “Sars-cov-2 nucleocapsid and nsp3 binding: an in silico study,” *Archives of Microbiology*, pp. 1–8, 2020.

- [38] M. T. Khan, A. C. Kaushik, Q. ul ain Rana, S. I. Malik, A. S. Khan, D.-Q. Wei, W. Sajjad, S. Ahmad, S. Ali, M. Irfan *et al.*, “Characterization and synthetic biology of lipase from bacillus amyloliquefaciens strain,” *Archives of Microbiology*, pp. 1–10, 2020.
- [39] M. T. Khan, S. Ali, M. T. Zeb, A. C. Kaushik, S. I. Malik, and D.-Q. Wei, “Gibbs free energy calculation of mutation in pnca and rpsa associated with pyrazinamide resistance,” *Frontiers in Molecular Biosciences*, vol. 7, 2020.
- [40] A. Amin, I. Ahmed, N. Khalid, I. U. Khan, A. Ali, S. M. Dahlawi, and W.-J. Li, “Insights on comparative bacterial diversity between different arid zones of cholistan desert, pakistan,” *3 BIOTECH*, vol. 10, no. 5, 2020.
- [41] H. Mehfooz, A. Saeed, M. Faisal, F. A. Larik, U. Muqadar, S. Khatoon, P. A. Channar, H. Ismail, S. Bilquees, S. Rashid *et al.*, “Facile one-pot synthesis, butyrylcholinesterase and α -glucosidase inhibitory activities, structure–activity relationship, molecular docking and dna–drug binding analysis of meldrum’s acid derivatives,” *Research on Chemical Intermediates*, pp. 1–20, 2020.
- [42] S. Latif, H. Ismail, M. R. Khan, A. A. Rahim, R. Mehboob, E. Dilshad, M. Sajid, S. I. Haider, S. Anwaar, and M. N. Majeed, “Pharmacological evaluation of acacia modesta bark for antipyretic, anti-inflammatory, analgesic, antidepressant and anticoagulant activities in sprague dawley rats.” *Pakistan Journal of Pharmaceutical Sciences*, vol. 33, no. 3, 2020.
- [43] E. Dilshad, H. Ismail, M. A. Khan, R. M. Cusido, and B. Mirza, “Metabolite profiling of artemisia carvifolia buch transgenic plants and estimation of their anticancer and antidiabetic potential,” *Biocatalysis and Agricultural Biotechnology*, vol. 24, p. 101539, 2020.
- [44] T. Zaheer, M. Waseem, W. Waqar, H. A. Dar, M. Shehroz, K. Naz, Z. Ishaq, T. Ahmad, N. Ullah, S. M. Bakhtiar *et al.*, “Anti-covid-19 multi-epitope vaccine designs employing global viral genome sequences,” *PeerJ*, vol. 8, p. e9541, 2020.
- [45] S. Hussain, T. Armaghani, and M. Jamal, “Magnetoconvection and entropy analysis in t-shaped porous enclosure using finite element method,” *Journal of Thermophysics and Heat Transfer*, vol. 34, no. 1, pp. 203–214, 2020.
- [46] M. Zia and R. Ali, “A multi recipient aggregate signcryption scheme based on elliptic curve,” *Wireless Personal Communications*, pp. 1–16, 2020.
- [47] M. S. Ashraf, R. Ali, and N. Hussain, “New fuzzy fixed point results in generalized fuzzy metric spaces with application to integral equations,” *IEEE Access*, vol. 8, pp. 91 653–91 660, 2020.
- [48] M. Zia and R. Ali, “Cryptanalysis and improvement of a blind multi-document signcryption scheme,” *Cryptologia*, pp. 1–15, 2020.

- [49] T. S. Ali and R. Ali, “A new chaos based color image encryption algorithm using permutation substitution and boolean operation,” *Multimedia Tools and Applications; Springer: Berlin/Heidelberg, Germany*, pp. 1–21, 2020.
- [50] T. S. Ali and R. Ali, “A novel medical image signcryption scheme using tlts and henon chaotic map,” *IEEE Access*, vol. 8, pp. 71 974–71 992, 2020.
- [51] M. Afzal, J. U. Satti, and R. Nawaz, “Scattering characteristics of non-planar trifurcated waveguides,” *Meccanica*, pp. 1–12, 2020.
- [52] S. Shafique, M. Afzal, and R. Nawaz, “On the attenuation of fluid–structure coupled modes in a non-planar waveguide,” *Mathematics and Mechanics of Solids*, p. 1081286520911443, 2020.
- [53] M. Afzal and S. Shafique, “Attenuation analysis of flexural modes with absorbent lined flanges and different edge conditions,” *The Journal of the Acoustical Society of America*, vol. 148, no. 1, pp. 85–99, 2020.
- [54] M. Anwar, R. A. Dur-e Shehwar Sagheer, and N. Hussain, “Wardowski type α -f-contractive approach for nonself multivalued mappings,” *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS*, vol. 82, no. 1, pp. 69–78, 2020.
- [55] M. H. Khan, A. Fraz, A. Hassan, and P. Abedifar, “Female board representation, risk-taking and performance: Evidence from dual banking systems,” *Finance Research Letters*, p. 101541, 2020.
- [56] S. Saeed and I. Hassan, “Liquidity commonality risk and asset pricing in emerging and developed stock,” *NUML International Journal of Business & Management*, vol. 19, no. 2, pp. 92–110, 2020.
- [57] H. Raza, “The impact of downside risk on expected return: Evidence from emerging economies hassan raza, arshad hasan and abdul rashid.”
- [58] S. Ijaz, A. Hassan, A. Tarazi, and A. Fraz, “Linking bank competition, financial stability, and economic growth,” *Journal of Business Economics and Management*, vol. 21, no. 1, pp. 200–221, 2020.
- [59] H. Raza, A. Hassan, and F. Gul, “Does pakistan stock exchange pay to bet against the beta?” *CITY UNIVERSITY RESEARCH JOURNAL*, vol. 10, no. 1, 2020.
- [60] R. M. Yasin, S. Bashir, M. V. Abeele, and J. Bartels, “Supervisor phubbing phenomenon in organizations: Determinants and impacts,” *International Journal of Business Communication*, p. 2329488420907120, 2020.
- [61] S. Azeem, M. A. Zafar, and A. K. Khan, “The grapes are sour: An envier’s attributional perspective of coworker impression management,” *Journal of Management & Organization*, pp. 1–17, 2020.

- [62] A. Zahra, A. Zulzar, and S. Aziz, “The effect of atmospheric harmony on re patronage intentions among small consumers: the mediating role of hedonic value and the moderating role of past experience,” *Journal of Consumer Marketing*, 2020.
- [63] A. Hashmi, S. Ahmed, and I. Hassan, “Optimizing pakistan’s water economy using hydro-economic modeling,” *Journal of Business & Economics*, vol. 11, no. 2, pp. 111–124, 2020.
- [64] S. Ahmed, K. Munir, and H. Nadeem, “Relationship between foreign direct investment & financial market development-evidence from south asian markets.”
- [65] S. Aziz, Z. Afaq, L. Muhammad, and B. Khan, “The role of media, word of mouth, and subjective norms in determining attitude and intentions to purchase family takaful schemes,” *Journal of Islamic Business and Management*, vol. 10, no. 1, pp. 111–131, 2020.
- [66] U. Farooq, J. Ahmed, and S. Khan, “Do the macroeconomic factors influence the firm’s investment decisions? a generalized method of moments (gmm) approach,” *International Journal of Finance & Economics*.
- [67] R. Anwar and J. A. Malik, “When does corporate social responsibility disclosure affect investment efficiency? a new answer to an old question,” *SAGE Open*, vol. 10, no. 2, p. 2158244020931121, 2020.
- [68] R. Anwar and J. Ahmed, “Evaluating the moderating impact of family on the relationship between board independence and corporate social responsibility using propensity score matching,” *South African Journal of Business Management*, vol. 51, no. 1, p. 10, 2020.
- [69] J. Khan, M. Jaafar, B. Javed, N. Mubarak, and T. Saudagar, “Does inclusive leadership affect project success? the mediating role of perceived psychological empowerment and psychological safety,” *International Journal of Managing Projects in Business*, 2020.
- [70] M. Khan and N. Aslam, “Perception of god’s attributes for mental comfort in stressful life events,” *Foundation University Journal of Psychology*, vol. 4, no. 2, pp. 37–45, 2020.
- [71] M. Khan and S. Zeb, “An adaptive approach towards covid-19: Managing psychosocial crisis,” *Foundation University Journal of Psychology*, vol. 4, no. 2, pp. 11–15, 2020.
- [72] M. Khan and N. Aslam, “Prevalence of caffeine intake among cigarette smokers: Directing caffeine use disorder among pakistani population,” *Pakistan Journal of Medical Research*, vol. 59, no. 1, pp. 15–21, 2020.
- [73] U. Ullah, H. Badshah, Z. Malik, Z. Uddin, M. Alam, S. Sarwar, A. Aman, A.-u. Khan, and F. A. Shah, “Hepatoprotective effects of melatonin and celecoxib against ethanol-induced hepatotoxicity in rats,” *Immunopharmacology and Immunotoxicology*, vol. 42, no. 3, pp. 1–9, 2020.

- [74] A. Khan, Z. Iqbal, S. Nazir, M. Alam, and A. Naz, "Evaluation of emesis control with orally disintegrating tablets and conventional tablets of domperidone: a randomized trial," *LATIN AMERICAN JOURNAL OF PHARMACY*, vol. 39, no. 1, pp. 29–37, 2020.
- [75] M. T. Khan, H. Nadeem, A.-u. Khan, M. Abbas, M. Arif, N. S. Malik, Z. Malik, and I. Javed, "Amino acid conjugates of 2-mercaptobenzimidazole provide better anti-inflammatory pharmacology and improved toxicity profile," *Drug Development Research*, 2020.
- [76] A. Mohsin Alvi, L. Tariq Al Kury, M. Umar Ijaz, F. Ali Shah, M. Tariq Khan, A. Sadiq Sheikh, H. Nadeem, A.-u. Khan, A. Zeb, and S. Li, "Post-treatment of synthetic polyphenolic 1, 3, 4 oxadiazole compound a3, attenuated ischemic stroke-induced neuroinflammation and neurodegeneration," *Biomolecules*, vol. 10, no. 6, p. 816, 2020.
- [77] S. Iqbal, F. A. Shah, K. Naeem, H. Nadeem, S. Sarwar, Z. Ashraf, M. Imran, T. Khan, T. Anwar, and S. Li, "Succinamide derivatives ameliorate neuroinflammation and oxidative stress in scopolamine-induced neurodegeneration," *Biomolecules*, vol. 10, no. 3, p. 443, 2020.
- [78] Q. Khalid, M. Ahmad, M. U. Minhas, F. Batool, N. S. Malik, and M. Rehman, "Novel β -cyclodextrin nanosponges by chain growth condensation for solubility enhancement of dexibuprofen: characterization and acute oral toxicity studies," *Journal of Drug Delivery Science and Technology*, p. 102089, 2020.
- [79] Y. Mehmood, U. Farooq, H. Yousaf, H. Riaz, R. K. Mahmood, A. Nawaz, Z. Abid, M. Gondal, N. S. Malik, K. Barkat *et al.*, "Antiviral activity of green silver nanoparticles produced using aqueous buds extract of syzygium aromaticum," *Pak. J. Pharm. Sci*, vol. 33, no. 2, pp. 839–845, 2020.
- [80] N. S. Malik, M. Ahmad, M. U. Minhas, R. Tulain, I. Khalid, K. Barkat, and A. Rashid, "Toxicological evaluation of xanthan gum based hydrogel formulation in wistar rats using single dose study," *ACTA POLONIAE PHARMACEUTICA*, vol. 77, no. 2, pp. 353–360, 2020.
- [81] N. S. Malik, M. Ahmad, M. U. Minhas, R. Tulain, K. Barkat, I. Khalid, and Q. Khalid, "Chitosan/xanthan gum based hydrogels as potential carrier for an antiviral drug: Fabrication, characterization, and safety evaluation," *Frontiers in Chemistry*, vol. 8, p. 50, 2020.
- [82] N. A. Salam, M. A. Naeem, N. S. Malik, M. Riaz, F. Aslam *et al.*, "Exploring the potential of tianeptine matrix tablets: Synthesis, physico-chemical characterization and acute toxicity studies." *Pakistan Journal of Pharmaceutical Sciences*, vol. 33, no. 1 (Supplementary), pp. 269–279, 2020.
- [83] N. U. Rehman, M. Abbas, M. Al-Rashida, A. Tokhi, M. A. Arshid, M. S. Khan, I. Ahmad, and K. Rauf, "Effects of 4-fluoro-n-(4-sulfamoylbenzyl) benzene sulfonamide

on acquisition and expression of nicotine-induced behavioral sensitization and striatal adenosine levels,” *Drug Design, Development and Therapy*, vol. 14, p. 3777, 2020.

- [84] N. U. Rehman, K. Esmaeilpour, S. Joushi, M. Abbas, M. al Rashida, K. Rauf, and Y. Masoumi-Ardakani, “Effect of 4-fluoro-n-(4-sulfamoylbenzyl) benzene sulfonamide on cognitive deficits and hippocampal plasticity during nicotine withdrawal in rats,” *Biomedicine & Pharmacotherapy*, vol. 131, p. 110783, 2020.
- [85] S. Akhtar, M. Abbas, K. Naeem, M. Faheem, H. Nadeem, and A. Mehmood, “Benzimidazole derivative ameliorates opioid-mediated tolerance during anticancer-induced neuropathic pain in mice,” *Anti-cancer agents in medicinal chemistry*.
- [86] M. Sona Khan, W. Ternet, N. Xing, B. Sibley, M. Abbas, M. al Rashida, K. Rauf, and C. D. Mandyam, “A novel sulfonamide, 4-fs, reduces ethanol drinking and physical withdrawal associated with ethanol dependence,” *International Journal of Molecular Sciences*, vol. 21, no. 12, p. 4411, 2020.
- [87] M. Imran, L. T. Al Kury, H. Nadeem, F. A. Shah, M. Abbas, S. Naz, A.-u. Khan, and S. Li, “Benzimidazole containing acetamide derivatives attenuate neuroinflammation and oxidative stress in ethanol-induced neurodegeneration,” *Biomolecules*, vol. 10, no. 1, p. 108, 2020.
- [88] S. Bashir, A.-u. Khan, M. Mahmood, M. Abbas, S. Akhtar, A. W. Khan, M. T. Aqeel, M. Akhlaq, and H. Ahmad, “Students’ perception of the learning environment in private-sector pharmacy institutes of pakistan,” *Pharmacy Education*, vol. 20, pp. 191–197, 2020.
- [89] A. H. Palla, A.-u.-H. Gilani, S. Bashir, and N. Ur Rehman, “Multiple mechanisms of flaxseed: Effectiveness in inflammatory bowel disease,” *Evidence-Based Complementary and Alternative Medicine*, vol. 2020, 2020.
- [90] F. Khurshid, S. Bashir, and B. Noushad, “Prescription writing through the lens of the threshold concept framework: a narrative review,” *Res Dev*, vol. 9, no. 11, p. 11, 2020.
- [91] B. Nasir, M. W. Baig, M. Majid, S. M. Ali, M. Z. I. Khan, S. T. B. Kazmi, and I.-u. Haq, “Preclinical anticancer studies on the ethyl acetate leaf extracts of datura stramonium and datura inoxia,” *BMC Complementary Medicine and Therapies*, vol. 20, no. 1, pp. 1–23, 2020.
- [92] S. U. Rehman, U. F. Ahmed, M. M. Ahmed, and U. Rafique, “An improved space charge distribution analytical model to assess field-effect transistor’s intrinsic capacitors,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 27, no. 6, pp. 4502–4517, 2019.
- [93] U. F. Ahmed, M. M. Ahmed, and Q. D. Memon, “A non-linear compact model for finfets output characteristics,” *IET Circuits, Devices & Systems*, vol. 13, no. 8, pp. 1249–1254, 2019.

- [94] M. N. Khan, U. F. Ahmed, M. M. Ahmed, and S. Rehman, “An improved temperature dependent analytical model to predict algan/gan high electron mobility transistors ac characteristics,” *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol. 32, no. 6, p. e2648, 2019.
- [95] M. N. Khan, U. F. Ahmed, M. M. Ahmed, and S. Rehman, “Simulation and comparative analysis of the DC characteristics of submicron GaN HEMTs for use in CAD software,” *Journal of Computational Electronics*, vol. 18, no. 2, pp. 482–491, 2019.
- [96] U. F. Ahmed and M. M. Ahmed, “An analytical model to assess dc characteristics of independent gate si finfets,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 27, no. 4, pp. 2456–2465, 2019.
- [97] Z. Ahmed and M. M. Ahmed, “Sidelobe reduction and gain enhancement in higher order TM₃₀ and tm₇₀ mode rectangular patch antennas via partial notch loading,” *IET Microwaves, Antennas & Propagation*, vol. 13, no. 12, pp. 1955–1962, 2019.
- [98] U. Ahmed and M. Ahmed, “A 3-d potential model to assess dc characteristics of Si FinFETs,” *Journal of Computational Electronics*, vol. 18, no. 3, pp. 893–905, 2019.
- [99] Z. Ahmed, M. M. Ahmed, M. B. Ihsan, A. A. Chaudhary, and J. K. Arif, “Novel dual band patch antenna with gap coupled composite right/left-handed transmission line,” *International Journal of Microwave and Wireless Technologies*, vol. 11, no. 1, pp. 87–93, 2019.
- [100] S. Fatima, U. Rafique, U. F. Ahmed, and M. M. Ahmed, “A global parameters extraction technique to model organic field effect transistors output characteristics,” *Solid-State Electronics*, vol. 152, pp. 81–92, 2019.
- [101] S. U. Rehman, U. F. Ahmed, M. M. Ahmed, and M. N. Khan, “Temperature dependent analytical DC Model for Wide Bandgap MESFETs,” *IEEE Access*, vol. 7, pp. 49 702–49 711, 2019.
- [102] H. Khalil, M. M. Ahmed, and U. Rafique, “Nose-cone conformal substrate-integrated waveguide slot array antenna for x-band radar applications,” *International Journal of Antennas and Propagation*, vol. 2019, 2019.
- [103] I. Ullah and M. Ashraf, “Comparison of synchronization techniques under distorted grid conditions,” *IEEE Access*, vol. 7, pp. 101 345–101 354, 2019.
- [104] I. Ullah and M. Ashraf, “A novel filter extracted equivalent control based fixed frequency sliding mode approach for power electronic converters conditions,” *Energies*, vol. 12, no. 5, pp. 853–866, 2019.
- [105] R. Irfan, H. ur Rasheed, W. A. Toor, and M. Ashraf, “Performance analysis of adaptive algorithms for space-time adaptive processor (STAP) in phased array radar,” *The Journal of Engineering*, vol. 2019, no. 19, pp. 6313–6317, 2019.
- [106] I. Ullah and M. Ashraf, “Sliding mode control for performance improvement of shunt active power filter,” *SN Applied Sciences*, vol. 1, no. 6, p. 531, 2019.

- [107] A. R. Yasin, M. Ashraf, and A. I. Bhatti, “A novel Filter Extracted Equivalent Control based Fixed Frequency Sliding Mode Approach for power electronic converters,” *Energies*, vol. 12, no. 5, p. 853, 2019.
- [108] A. R. Yasin, M. Ashraf, A. I. Bhatti, and A. A. Uppal, “Fixed frequency sliding mode control of renewable energy resources in DC micro grid,” *Asian Journal of Control*, vol. 21, no. 4, pp. 2074–2086, 2019.
- [109] S. B. Javed, A. A. Uppal, A. I. Bhatti, and R. Samar, “Prediction and parametric analysis of cavity growth for the underground coal gasification project thar,” *Energy*, vol. 172, pp. 1277–1290, 2019.
- [110] G. Murtaza, A. I. Bhatti, and Y. A. Butt, “Unified FDI and FTC scheme for air path actuators of a diesel engine using ISM extended with adaptive part,” *Asian Journal of Control*, vol. 22, no. 1, pp. 117–129, 2019.
- [111] R. Anjum, A. I. Bhatti, A. Yar, and Q. Ahmed, “Cyclic torque imbalance detection in gasoline engines using a uniform second-order sliding mode observer,” *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, vol. 233, no. 13, pp. 3515–3527, 2019.
- [112] M. Tahir, I. A. Taj, P. A. Assuncao, and M. Asif, “Fast video encoding based on random forests,” *Journal of Real-Time Image Processing*, pp. 1–21, 2019.
- [113] H. Raza and N. M. Khan, “Tracking performance of robust RLS algorithm for MIMO channel estimation,” *Wireless Personal Communications*, pp. 1–15, 2019.
- [114] K. Shehzad, N. M. Khan, and J. Ahmed, “Impact of frequency reuse and flexible cell association on the performance of dense heterogeneous cellular networks using dual-slope path loss model,” *IEEE Access*, vol. 7, pp. 166 214–166 234, 2019.
- [115] S. M. Gulfam, S. Junaid Nawaz, A. Baltzis, A. Ahmed, and N. M. Khan, “Characterization of angular spread and fading statistics of mmWave range (28 GHz and 38 GHz) outdoor and indoor radio propagation channels,” *Technologies (MDPI)*, vol. 7, pp. 1–9, 2019.
- [116] M. Muzzammil, T. Ahmad, N. M. Khan, and L. Wan, “Low cost, faster detection of cognitive radio through filter banks with bandpass sampling,” *Physical Communication*, vol. 33, pp. 1–8, 2019.
- [117] M. Ghafoor, S. A. Tariq, T. Zia, I. A. Taj, A. Abbas, A. Hassan, and A. Y. Zomaya, “Fingerprint identification with shallow multifeature view classifier,” *IEEE Transactions on Cybernetics*, 2019.
- [118] M. Tahir, I. A. Taj, P. A. Assuncao, and M. Asif, “Low complexity high efficiency coding of light fields using ensemble classifiers,” *Journal of Visual Communication and Image Representation*, vol. 66, p. 102742, 2019.

- [119] N. I. Ratyal, I. A. Taj, M. Sajid, N. Ali, A. Mahmood, and S. Razzaq, “Three-dimensional face recognition using variance-based registration and subject-specific descriptors,” *International Journal of Advanced Robotic Systems*, vol. 16, no. 3, p. 1729881419851716, 2019.
- [120] N. Ratyal, I. A. Taj, M. Sajid, A. Mahmood, S. Razzaq, S. H. Dar, N. Ali, M. Usman, M. J. A. Baig, and U. Mussadiq, “Deeply learned pose invariant image analysis with applications in 3d face recognition,” *Mathematical Problems in Engineering*, vol. 2019, 2019.
- [121] T. Zia, M. Ghafoor, S. A. Tariq, and I. A. Taj, “Robust fingerprint classification with bayesian convolutional networks,” *IET Image Processing*, vol. 13, no. 8, pp. 1280–1288, 2019.
- [122] M. F. Iqbal, M. Zahid, D. Habib, and L. K. John, “Efficient prediction of network traffic for real-time applications,” *Journal of Computer Networks and Communications*, vol. 2019, 2019.
- [123] Z. Masood, R. Samar, and M. A. Z. Raja, “Design of a mathematical model for the stuxnet virus in a network of critical control infrastructure,” *Computers & Security*, vol. 87, p. 101565, 2019.
- [124] Z. Masood, K. Majeed, R. Samar, and M. A. Z. Raja, “Design of epidemic computer virus model with effect of quarantine in the presence of immunity,” *Fundamenta Informaticae*, vol. 161, no. 3, pp. 249–273, 2019.
- [125] S. M. Shah, R. Samar, and M. A. Z. Raja, “Fractional-order algorithms for tracking rayleigh fading channels,” *Nonlinear Dynamics*, vol. 92, no. 3, pp. 12493–1259, 2019.
- [126] M. R. Mufti, H. Afzal, F. Ur-Rehman, W. Aslam, and M. I. Qureshi, “Transmission projective synchronization of multiple non-identical coupled chaotic systems using sliding mode control,” *IEEE Access*, vol. 7, pp. 17847–17861, 2019.
- [127] S. Ud Din, F. Ur Rehman, and Q. Khan, “Smooth super-twisting sliding mode control for the class of underactuated systems,” *PLoS one*, vol. 13, no. 10, p. e0203667, 2018.
- [128] F. Ur Rahman, Q. Khan, and R. Akmeliawati, “Synchronization and antisynchronization protocol design of chaotic nonlinear gyros: an adaptive integral sliding mode approach,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 27, no. 1, pp. 675–684, 2019.
- [129] W. Abbasi, F. Ur Rehman, I. Shah, and A. Rauf, “Stablizing control algorithm for non-holonomic wheeled mobile robots using adaptive integral sliding mode,” *International Journal of Robotics and Automation*, vol. 34, no. 2, 2019.
- [130] T. Irshad, “Comparative analysis of conventional VSC and MMC on the basis of output power quality and control performance,” Ph.D. dissertation, Department of Electrical Engineering, Capital University of Science and ..., 2019.

- [131] M. S. Iqbal, “Real-time fault detection system for large scale grid-integrated solar photovoltaic power plants,” Ph.D. dissertation, Department of Electrical Engineering, Capital University of Science and ..., 2019.
- [132] I. Hassan and I. Waqar, “Reducing water demands by adopting harvesting and recycling techniques in pakistan,” *Journal of Biodiversity and Environmental Sciences (JBES)*, vol. 14, no. 4, pp. 79–88, 2019.
- [133] S. S. S. Gardezi and N. Shafiq, “Operational carbon footprint prediction model for conventional tropical housing: a malaysian prospective,” *International Journal of Environmental Science and Technology*, vol. 16, no. 12, pp. 7817–7826, 2019.
- [134] A. Gopinath, M. S. Kumar, and A. Elayaperumal, “Experimental investigations on mechanical properties of jute fiber reinforced composites with polyester and epoxy resin matrices,” *Procedia Engineering*, vol. 97, pp. 2052–2063, 2019.
- [135] M. Zahid and M. Ali, “Efficiency of jute fibers in stabilized-earth-brick masonry work,” 2019.
- [136] A. Wahab and M. Ali, “Effect of loading rates on behavior of concrete girders having GFRP rebars and jute fibers,” 2019.
- [137] S. M. H. Sabri, “Behavior of jute fiber reinforced concrete having glass fiber reinforced polymer rebars for possible application in bridge pier,” Ph.D. dissertation, Capital University, 2019.
- [138] F. Khan and M. Ali, “Dynamic response of interlocking plastic-block structure,” 2019.
- [139] F. Qamar, T. Thomas, and M. Ali, “Improvement in lateral resistance of mortar-free interlocking wall with plaster having natural fibres,” *Construction and Building Materials*, vol. 234, p. 117387, 2019.
- [140] U. Khan, D. Shams, F. Khalid, and M. Ali, “Use of local bagasse-ash and recycled-concrete-aggregates as partial replacement of sand and coarse-aggregates in concrete for non-structural applications,” 2019.
- [141] N. Ajaz, A. Rashid, and M. Ali, “Effect of column uplift on dynamic response of 3D structure,” 2019.
- [142] F. Qamar, T. Thomas, and M. Ali, “Assessment of mechanical properties of fibrous mortar and interlocking soil stabilised block (ISSB) for low-cost masonry housing,” *Materiales de Construcción*, vol. 69, no. 336, p. 201, 2019.
- [143] F. Qamar, T. Thomas, and M. Ali, “Assessment of mechanical properties of fibrous mortar and interlocking soil stabilised block (ISSB) for low-cost masonry housing,” *Materials de Construction*, vol. 69.
- [144] M. Khan and M. Ali, “Improvement in concrete behavior with fly ash, silica-fume and coconut fibres,” *Construction and Building Materials*, vol. 203, pp. 174–187, 2019.

- [145] T. Hussain and M. Ali, “Improving the impact resistance and dynamic properties of jute fiber reinforced concrete for rebars design by considering tension zone of FRC,” *Construction and Building Materials*, vol. 213, pp. 592–607, 2019.
- [146] M. U. Farooqi and M. Ali, “Effect of pre-treatment and content of wheat straw on energy absorption capability of concrete,” *Construction and Building Materials*, vol. 224, pp. 572–583, 2019.
- [147] G. A. Anwar, F. Dinu, and M. Ahmed, “Numerical study on ultimate deformation and resistance capacity of bolted T-Stub connection,” *International Journal of Steel Structures*, vol. 19, no. 3, pp. 970–977, 2019.
- [148] T. Ahmed, K. Arooj, H. S. Ranja, F. M. U, and M. Ali, “Prospects of NFRC for pavements in developing countries,” 2019.
- [149] K. M. Mehdi, U. Tahir, Q. Salar, S. Gul, and M. Ali, “Influence of bio-based admixture on the behavior of concrete,” 2019.
- [150] L. Hussain and M. M. Khan, “Passive control of vortex shedding and drag reduction in laminar flow across circular cylinder using wavy wall channel,” 2019.
- [151] L. A. Khan, M. M. Khan, A. Jan, and S. A. kazmi, “Acceleration of charging process of a horizontal latent thermal energy storage unit with longitudinal fins,” 2019.
- [152] R. Sabir, M. M. Khan, and N. Sheikh, “Assessment of thermo-hydraulic performance of inward dimpled tubes with variation in angular orientations,” *Applied Thermal Engineering*, vol. 170, p. 115040, 2019.
- [153] S. O. B. Islam, W. A. Lughmani, W. S. Qureshi, A. Khalid, M. A. Mariscal, and S. Garcia-Herrero, “Exploiting visual cues for safe and flexible cyber-physical production systems,” *Advances in Mechanical Engineering*, vol. 11, no. 12, p. 1687814019897228, 2019.
- [154] M. Khan, A. Khalid, W. A. Lughmani, and M. M. Khan, “Wave power potential estimation in the exclusive economic zone: A case study,” 2019.
- [155] S. Rasheed, W. A. Lughmani, A. Khalid, and M. M. Khan, “Modelling of human robot accident interaction to assess impact and damage in a smart factory context,” 2019.
- [156] I. S O, L. A. Khan, A. Khalid, and W. A. Lughmani, “Book chapter ”a smart micro factory design: An integrated approach,” *Computers & Industrial Engineering*, vol. 129, pp. 220–227, 2019.
- [157] S. S. Warsi, M. H. Agha, R. Ahmad, S. H. I. Jaffery, and M. Khan, “Sustainable turning using multi-objective optimization: a study of al 6061 t6 at high cutting speeds,” *The International Journal of Advanced Manufacturing Technology*, vol. 100, no. 1-4, pp. 843–855, 2019.

- [158] S. S. Warsi, S. R. Ahmad, H. I. Jaffery, M. H. Agha, and M. Khan, “Sustainable machining: a comprehensive analysis of energy consumption during turning of Al 6061 T6 alloy,” 2019.
- [159] S. S. Warsi, R. Ahmad, S. H. I. Jaffery, M. H. Agha, and M. Khan, “Development of specific cutting energy map for sustainable turning: a study of Al 6061 T6 from conventional to high cutting speeds,” *The International Journal of Advanced Manufacturing Technology*, vol. 106, no. 7, pp. 2949–2960, 2020.
- [160] T. Zahid, A. Baqai, and T. Schmidt, “meta-heuristics approach for the development of alternative process plans in reconfigurable systems,” 2019.
- [161] T. Zahid, M. H. Agha, and T. Schmidt, “Investigation of surrogate measures of robustness for project scheduling problems,” *Computers & Industrial Engineering*, vol. 129, pp. 220–227, 2019.
- [162] Q. Mahmood and M. A. Qadir, “A comprehensive analysis of content based similarity techniques for finding the redundancies and missing gaps in research papers features utilization,” 2019.
- [163] I. Ihsan and M. A. Qadir, “CCRO: Citation’s Context & Reasons Ontology,” *IEEE Access*, vol. 7, pp. 30 423–30 436, 2019.
- [164] M. U. Sadiq, M. M. Yousaf, L. Aslam, M. Aleem, S. Sarwar, and S. W. Jaffry, “NvPD: novel parallel edit distance algorithm, correctness, and performance evaluation,” *Cluster Computing*, pp. 1–16, 2019.
- [165] M. Ullah, M. A. Islam, R. Khan, M. Aleem, and M. A. Iqbal, “Obsecure logging (OSLo): A framework to protect and evaluate the web search privacy in health care domain,” *Journal of Medical Imaging and Health Informatics*, vol. 9, no. 6, pp. 1181–1190, 2019.
- [166] M. A. Iqbal, M. Aleem, M. Ibrahim, S. Anwar, and M. A. Islam, “Amazon cloud computing platform EC2 and VANET simulations,” *International Journal of Ad Hoc and Ubiquitous Computing*, vol. 30, no. 3, pp. 127–136, 2019.
- [167] R. Khan, M. A. Islam, M. Ullah, M. Aleem, and M. A. Iqbal, “Privacy exposure measure: A privacy-preserving technique for health-related web search,” *Journal of Medical Imaging and Health Informatics*, vol. 9, no. 6, pp. 1196–1204, 2019.
- [168] F. Shahid, M. Aleem, M. A. Islam, M. A. Iqbal, M. M. Yousaf *et al.*, “A review of technological tools in teaching and learning computer science,” *Eurasia Journal of Mathematics, Science and Technology Education*, vol. 15, no. 11, 2019.
- [169] A. Hussain, M. Aleem, M. A. Iqbal, and M. A. Islam, “Investigation of cloud scheduling algorithms for resource utilization using cloudsimsim.” *Computing & Informatics*, vol. 38, no. 3, 2019.
- [170] Y. N. Khalid, M. Aleem, U. Ahmed, M. A. Islam, and M. A. Iqbal, “Troodon: a machine-learning based load-balancing application scheduler for CPU–GPU system,” *Journal of Parallel and Distributed Computing*, vol. 132, pp. 79–94, 2019.

- [171] M. Aleem, R. Prodan, M. A. Islam, and M. A. Iqbal, "On the parallel programmability of java symphony for multi-cores and clusters," *International Journal of Ad Hoc and Ubiquitous Computing*, vol. 30, no. 4, pp. 247–264, 2019.
- [172] A. Hussain, M. Aleem, M. A. Iqbal, and M. A. Islam, "SLA-RALBA: cost-efficient and resource-aware load balancing algorithm for cloud computing," *The Journal of Supercomputing*, pp. 1–27, 2019.
- [173] A. Shahid, M. T. Afzal, M. Abdar, M. E. Basiri, X. Zhou, N. Y. Yen, and J.-W. Chang, "Insights into relevant knowledge extraction techniques: a comprehensive review," *The Journal of Supercomputing*, pp. 1–39, 2019.
- [174] U. Ahmed, H. Waqas, and M. T. Afzal, "Pre-production box-office success quotient forecasting," *Soft Computing*, pp. 1–19, 2019.
- [175] M. Ameer and M. T. Afzal, "Evaluation of h-index and its qualitative and quantitative variants in neuroscience," *Scientometrics*, vol. 121, no. 2, pp. 653–673, 2019.
- [176] A. M. Khan, A. Shahid, M. T. Afzal, F. Nazar, F. S. Alotaibi, and K. H. Alyoubi, "SwICS: Section-wise in-text citation score," *IEEE Access*, vol. 7, pp. 137 090–137 102, 2019.
- [177] R. Ghani, F. Qayyum, M. T. Afzal, and H. Maurer, "Comprehensive evaluation of h-index and its extensions in the domain of mathematics," *Scientometrics*, vol. 118, no. 3, pp. 809–822, 2019.
- [178] Q.-u. Ain, H. Riaz, and M. T. Afzal, "Evaluation of h-index and its citation intensity based variants in the field of mathematics," *Scientometrics*, vol. 111, no. 1, pp. 187–211, 2019.
- [179] M. T. Ikram and M. T. Afzal, "Aspect based citation sentiment analysis using linguistic patterns for better comprehension of scientific knowledge," *Scientometrics*, vol. 119, no. 1, pp. 73–95, 2019.
- [180] R. Habib and M. T. Afzal, "Sections-based bibliographic coupling for research paper recommendation," *Scientometrics*, vol. 119, no. 2, pp. 643–656, 2019.
- [181] S. Ur Rehman, A. Nadeem, and M. A. Sindhu, "Towards automated testing of multi-agent systems using prometheus design models," in *The International Arab Journal of Information Technology*, 2019, vol. 16, no. 1, pp. 54–65.
- [182] M. Rizwan, A. Nadeem, and M. A. Sindhu, "Analyses of classifier's performance measures used in software fault prediction studies," *IEEE Access*, vol. 7, pp. 82 764–82 775, 2019.
- [183] N. M. Minhas, S. Masood, K. Petersen, and A. Nadeem, "A systematic mapping of test case generation techniques using uml interaction diagram," *Journal of Software: Evolution and Process*, 2019.

- [184] S. R. Aziz, T. Khan, and A. Nadeem, “Experimental validation of inheritance metrics’ impact on software fault prediction,” *IEEE Access*, vol. 7, pp. 85 262–85 275, 2019.
- [185] F. Nazir, M. N. Majeed, M. A. Ghazanfar, and M. Maqsood, “An arabic mispronunciation detection system based on frequency of mistakes for asian speakers,” 2019.
- [186] S. Afzal, M. Maqsood, F. Nazir, U. Khan, F. Aadil, K. M. Awan, I. Mehmood, and O.-Y. Song, “A data augmentation-based framework to handle class imbalance problem for Alzheimer’s stage detection,” *IEEE Access*, vol. 7, pp. 115 528–115 539, 2019.
- [187] M. Maqsood, F. Nazir, U. Khan, F. Aadil, H. Jamal, I. Mehmood, and O.-y. Song, “Transfer learning assisted classification and detection of alzheimer’s disease stages using 3D MRI scans,” *Sensors*, vol. 19, no. 11, p. 2645, 2019.
- [188] F. Nazir, M. N. Majeed, M. A. Ghazanfar, and M. Maqsood, “Mispronunciation detection using deep convolutional neural network features and transfer learning-based model for arabic phonemes,” *IEEE Access*, vol. 7, pp. 52 589–52 608, 2019.
- [189] F. Nazir, M. A. Ghazanfar, M. Maqsood, F. Aadil, S. Rho, and I. Mehmood, “Social media signal detection using tweets volume, hashtag, and sentiment analysis,” *Multimedia Tools and Applications*, vol. 78, no. 3, pp. 3553–3586, 2019.
- [190] M. Ubaid Ur Rehman, M. Aleem, M. A. Islam, and S. Ahmed, “Smart applications for diabetes management: A comprehensive survey and ranking,” *Health Informatics Journal*, p. 1460458219869159, 2019.
- [191] I. Qasim, M. W. Anwar, F. Azam, H. Tufail, W. H. Butt, and M. N. Zafar, “An introduction to model-driven mobile HMI Framework (MMHF) for industrial control systems,” 2019.
- [192] I. Qasim, M. W. Anwar, F. Azam, H. Tufail, W. H. Butt, and M. N. Zafar, “A model-driven mobile HMI Framework (MMHF) for industrial control systems,” *IEEE Access*, vol. 8, pp. 10 827–10 846, 2019.
- [193] M. Zahid, I. Inayat, M. Daneva, and Z. Mehmood, “A security risk mitigation framework for cyber physical systems,” *Journal of software: Evolution and Process*, p. e2219, 2019.
- [194] M. T. Khan and S. I. Malik, “Structural dynamics behind variants in pyrazinamidase and pyrazinamide resistance,” *Journal of Biomolecular Structure and Dynamics*, pp. 1–15, 2019.
- [195] M. T. Khan, A. C. Kaushik, A. I. Bhatti, Y.-J. Zhang, S. Zhang, A. J. Wei, S. I. Malik, and D. Q. Wei, “Marine natural products and drug resistance in latent tuberculosis,” *Marine Drugs*, vol. 17, no. 10, p. 549, 2019.
- [196] A. U. Rehman, M. T. Khan, H. Liu, A. Wadood, S. I. Malik, and H.-F. Chen, “Exploring the pyrazinamide drug resistance mechanism of clinical mutants T370P and W403G in Ribosomal Protein S1 of mycobacterium tuberculosis,” *Journal of chemical information and modeling*, vol. 59, no. 4, pp. 1584–1597, 2019.

- [197] S. I. Malik, S. Ali, N. Masood, T. Nadeem, A. S. Khan, M. T. Afzal *et al.*, “Pyrazinamide resistance and mutations in *pncA* among isolates of *Mycobacterium tuberculosis* from Khyber Pakhtunkhwa, Pakistan,” *BMC infectious diseases*, vol. 19, no. 1, p. 116, 2019.
- [198] M. T. Khan, A. C. Kaushik, S. I. Malik, S. Ali, and D. Wei, “Artificial neural networks for prediction of tuberculosis disease,” *Frontiers in microbiology*, vol. 10, no. 1, p. 395, 2019.
- [199] H. Raja, E. Dilshad, S. Tayyaba, and A. Amin, “Isolation and screening of bacteria for their role in oil recovery and metal tolerance from petroleum reservoirs,” 2019.
- [200] S. Rehman, K. Keefover-Ring, I. ul Haq, E. Dilshad, M. I. Khan, N. Akhtar, and B. Mirza, “Drier climatic conditions increase withanolide content of *withania coagulans* enhancing its inhibitory potential against human prostate cancer cells,” *Applied biochemistry and biotechnology*, vol. 188, no. 2, pp. 460–480, 2019.
- [201] I. Younus, H. Ismail, E. D. Chahat Batool Rizvi, K. Saba, B. Mirza, and M. Tahir, “Antioxidant, analgesic and anti-inflammatory activities of in vitro and field-grown iceberg lettuce extracts,” *Journal of Pharmacy & Pharmacognosy Research*, vol. 7, no. 5, pp. 343–355, 2019.
- [202] E. Dilshad, S. S. Tazeem, Z. Bashir, A. H. Iqbal, A. S. Khokhar, N. Zahra, M. A. Khan, H. Ismail, and M. Shabbir, “Silver nanoparticles of aloe vera gel as strong therapeutic candidates.”
- [203] A. Kazmi, M. A. Khan, and H. Ali, “Biotechnological approaches for production of bioactive secondary metabolites in *Nigella sativa*: an up-to-date review,” *International Journal of Secondary Metabolite*, vol. 6, no. 2, pp. 172–195, 2019.
- [204] H. Ali, M. A. Khan, W. K. Kayani, E. Dilshad, R. Rani, and R. S. Khan, “Production of biomass and medicinal metabolites through adventitious roots in *Ajuga bracteosa* under different spectral lights,” *Journal of Photochemistry and Photobiology B: Biology*, vol. 193, pp. 109–117, 2019.
- [205] S. Zafar, E. Dilshad, H. Ismail, C. B. Rizvi, and B. Mirza, “*Rol* genes enhance content of artemisinin and other secondary metabolites in shennong hybrid of *Artemisia annua*,” *Chinese Herbal Medicines*, vol. 11, no. 2, pp. 209–215, 2019.
- [206] A. Kanwal, S. Fazal, A. I. Bhatti, M. Ullah, and M. A. Khalid, “PubMedInfo Crawler: An innovative extraction process that leads towards biological information mining,” *Meta Gene*, vol. 20, p. 100550, 2019.
- [207] A. Amin, I. Ahmed, N. K. Khalid, P. Schumann, and H. Jurgen, “*Arthrobacter zafarii* sp. nov., a moderately thermotolerant and halotolerant actinobacterium isolated from Cholistan desert soil of Pakistan,” *International Journal of Systematic and Evolutionary Microbiology*, 2019.

- [208] A. Amin, I. Ahmed, N. Khalid, I. U. Khan, and A. Ali, “Bacterial diversity of cholistan desert, pakistan:insights on the comparative analysis between different arid zones,” *Microorganisms*, 2019.
- [209] E. Dilshad, N. Zahra, Z. Nooruddin, A. A. Butt, and S. M. Bakhtiar, “Single-cell editing: The CRISPR/Cas9 and applications,” in *Single-Cell Omics*. Elsevier, 2019, pp. 397–415.
- [210] F. Nawaz, M. N. Khan, A. Javed, I. Ahmed, N. Ali, M. I. Ali, S. M. Bakhtiar, and M. Imran, “Genomic and functional characterization of enterococcus mundtii QAUEM2808, isolated from artisanal fermented milk product dahi,” *Frontiers in Microbiology*, vol. 10, 2019.
- [211] H. Qayyum and S. M. Bakhtiar, “Single Cell Omics in cardiovascular disease,” 2019.
- [212] M. Nadeem, U. Naz, and S. M. Bakhtiar, “TNF: common culprit of inflammatory diseases,” *International Journal of Bioautomation*, 2019.
- [213] S. A and S. M. Bakhtiar, “Etiology, prevalence, treatment of cushing syndrome and its involvement with other diseases,” *Precision Medicine*, vol. 3, 2019.
- [214] F. M and S. M. Bakhtiar, “Homochromatosis- the trigger of type ii diabetes,” *Precision Medicine*, vol. 3, 2019.
- [215] H. A. Butt, S. Gul, A. Azam, A. Aftab, and S. M. Bakhtiar, “Nutrigenetics and pharmacogenetics approaches in management of obesity,” *Precision Medicine*, vol. 3, 2019.
- [216] I. S. Naveed, N. Afzal, M. Fiyaz, M. Nadeem, and S. M. Bakhtiar, “Precision medicine for multifactorial disorders,” *Precision Medicine*, vol. 3, 2019.
- [217] H. Saira, A. Noor, I. Riasat, M. Qasim, and S. M. Bakhtiar, “Etiology, genetics, clinical manifestations and possible treatments of acromegaly,” *Precision Medicine*, vol. 3, 2019.
- [218] M. N. Abrar, M. Sagheer, and S. Hussain, “Entropy formation analysis for the peristaltic motion of ferrofluids in the presence of joule heating and fluid friction phenomena in a plumb duct,” *Journal of Nanofluids*, vol. 8, no. 6, pp. 1305–1313, 2019.
- [219] M. Sagheer, S. Shah, S. Hussain, and M. Akhtar, “Impact of non-uniform heat source/sink on magnetohydrodynamic maxwell nanofluid flow over a convectively heated stretching surface with chemical reaction,” *Journal of Nanofluids*, vol. 8, no. 4, pp. 795–805, 2019.
- [220] F. Shahzad, M. Sagheer, and S. Hussain, “Numerical solution of rotating flow of a nanofluid over a stretching surface in the presence of magnetic field,” *Journal of Nanofluids*, vol. 8, no. 2, pp. 359–370, 2019.

- [221] I. Rashid, M. Sagheer, and S. Hussain, “Exact solution of stagnation point flow of MHD Cu-H₂O nanofluid induced by an exponential stretching sheet with thermal conductivity,” *Physica Scripta*, vol. 95, no. 2, p. 025207, 2019.
- [222] I. Rashid, M. Sagheer, and S. Hussain, “Entropy formation analysis of MHD boundary layer flow of nanofluid over a porous shrinking wall,” *Physica A: Statistical Mechanics and its Applications*, vol. 536, p. 122608, 2019.
- [223] N. Akmal, M. Sagheer, S. Hussain, and A. Kamran, “Investigation of free convection in micropolar nanofluid with induced magnetic field,” *The European Physical Journal Plus*, vol. 134, no. 5, p. 235, 2019.
- [224] F. Shahzad, M. Sagheer, and S. Hussain, “Mhd tangent hyperbolic nanofluid with chemical reaction, viscous dissipation and joule heating effects,” *AIP Advances*, vol. 9, no. 2, p. 025007, 2019.
- [225] N. Akmal, M. Sagheer, S. Hussain, and A. Kamran, “Study of micropolar nanofluids with power-law spin gradient viscosity model by the keller box method,” *Canadian Journal of Physics*, vol. 98, no. 1, pp. 16–27, 2019.
- [226] S. Batul, R. Ali, D. Shehwar, and N. Husain, “Nadler’s fixed point theorem in C^* -algebra valued metric spaces with applications,” 2019.
- [227] S. Inam, S. Kanwal, and R. Ali, “Cryptosystem based on polynomials over circulant matrices,” 2019.
- [228] M. Zia and R. Ali, “Cryptanalysis of an encryption scheme that uses elliptic curve over finite field,” 2019.
- [229] F. Mehmood, R. Ali, and N. Hussain, “Fixed point results for multivalued mappings in extended fuzzy b-metric space,” 2019.
- [230] M. Sohail Ashraf, R. Ali, and N. Hussain, “New fixed point results in generalised fuzzy metric spaces with applications,” 2019.
- [231] R. Ali, M. Mubashar, and S. Batul, “A groebner basis attack on a multivariate polynomial public key cryptosystem,” 2019.
- [232] F. Mehmood, R. Ali, and N. Hussain, “Contractions in fuzzy rectangular b-metric spaces with application,” *Journal of Intelligent & Fuzzy Systems*, no. Preprint, pp. 1–11, 2019.
- [233] M. Zia and R. Ali, “Cryptanalysis and improvement of blind signcryption scheme based on elliptic curve,” *Electronics Letters*, vol. 55, no. 8, pp. 457–459, 2019.
- [234] S. Atif, S. Hussain, and M. Sagheer, “Effect of viscous dissipation and joule heating on MHD radiative tangent hyperbolic nanofluid with convective and slip conditions,” *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, vol. 41, no. 4, p. 189, 2019.

- [235] A. Kamran, S. Hussain, and M. Sagheer, “Transport phenomena in marangoni driven Micropolar Alumina-Dihydrogen Oxide Nanofluid with thermal inertia,” *Journal of Nanofluids*, vol. 8, no. 5, pp. 1123–1132, 2019.
- [236] M. Atlas, S. Hussain, and M. Sagheer, “Squeezing flow of upper convected maxwell nanofluid subject to entropy generation and cattaneo-christove double diffusion,” *Journal of Nanofluids*, vol. 8, no. 2, pp. 420–429, 2019.
- [237] S. Shah, S. Hussain, M. Sagheer, and M. Bilal, “Numerical study of three dimensional mixed convective maxwell nanofluid flow over a stretching surface with non-linear thermal radiation and convective boundary conditions,” *Journal of Nanofluids*, vol. 8, no. 1, pp. 160–170, 2019.
- [238] S. Hussain, T. Armaghani, and M. Jamal, “Magnetoconvection and entropy analysis in T-Shaped porous enclosure using finite element method,” *Journal of Thermophysics and Heat Transfer*, pp. 1–12, 2019.
- [239] S. Hussain, H. F. Öztop, M. A. Qureshi, and N. Abu-Hamdeh, “Magnetohydrodynamic flow and heat transfer of ferrofluid in a channel with non-symmetric cavities,” *Journal of Thermal Analysis and Calorimetry*, pp. 1–13, 2019.
- [240] S. Hussain, M. Jamal, and S. E. Ahmed, “Hydrodynamic forces and heat transfer of nanofluid forced convection flow around a rotating cylinder using finite element method: The impact of nanoparticles,” *International Communications in Heat and Mass Transfer*, vol. 108, p. 104310, 2019.
- [241] S. Hussain, K. Mehmood, M. Sagheer, and A. Ashraf, “Mixed convective magneto-nanofluid flow over a backward facing step and entropy generation using extended Darcy–Brinkman–Forchheimer model,” *Journal of Thermal Analysis and Calorimetry*, pp. 1–21, 2019.
- [242] S. Hussain and S. E. Ahmed, “Steady natural convection in open cavities filled with a porous medium utilizing buongiorno’s nanofluid model,” *International Journal of Mechanical Sciences*, vol. 157, pp. 692–702, 2019.
- [243] S. Hussain and S. E. Ahmed, “Unsteady mhd forced convection over a backward facing step including a rotating cylinder utilizing fe₃o₄-water ferrofluid,” *Journal of Magnetism and Magnetic Materials*, vol. 484, pp. 356–366, 2019.
- [244] S. M. Atif, S. Hussain, and M. Sagheer, “Magnetohydrodynamic stratified bioconvective flow of micropolar nanofluid due to gyrotactic microorganisms,” *AIP Advances*, vol. 9, no. 2, p. 025208, 2019.
- [245] S. M. Atif, S. Hussain, and M. Sagheer, “Heat and mass transfer analysis of time-dependent tangent hyperbolic nanofluid flow past a wedge,” *Physics Letters A*, vol. 383, no. 11, pp. 1187–1198, 2019.

- [246] M. Atlas, S. Hussain, and M. Sagheer, “Entropy generation and unsteady Casson fluid flow squeezing between two parallel plates subject to Cattaneo-Christov heat and mass flux,” *The European Physical Journal Plus*, vol. 134, no. 1, p. 33, 2019.
- [247] J. U. Satti, M. Afzal, and R. Nawaz, “Scattering analysis of a partitioned wave-bearing cavity containing different material properties,” *Physica Scripta*, vol. 94, no. 11, p. 115223, 2019.
- [248] T. Nawaz, M. Afzal, and R. Nawaz, “The scattering analysis of trifurcated waveguide involving structural discontinuities,” *Advances in Mechanical Engineering*, vol. 11, no. 7, p. 1687814019829282, 2019.
- [249] D. Shehwar, R. Ali, and S. Batool, “The C*-ALGEBRA valued caristi’s fixed point theorem: A graphic version,” *Journal of Mathematical Analysis*, vol. 10, 2019.
- [250] M. Anwar, D. Shehwar, R. Ali, and S. Batool, “Fixed point and common fixed point theorems on wardowski type mappings in sb-metric spaces,” 2019.
- [251] M. Anwar, D. Shehwar, R. Ali, and N. Hussain, “Wardowski type ϕ -F-contractive approach for nonself multivalued mappings,” *University Politehnica of Bucharest Scientific Bulletin Series A-Applied Mathematics and Physics*, 2019.
- [252] I. Yousaf and A. Hassan, “Linkages between crude oil and emerging asian stock markets: New evidence from the chinese stock market crash,” *Finance Research Letters*, vol. 31, no. 4, pp. 207–217, 2019.
- [253] E. Ishaq, S. Bashir, and A. K. Khan, “Paradoxical leader behaviors: Leader personality and follower outcomes,” *Applied Psychology*, 2019.
- [254] E. Ishaq, S. Bashir, A. K. Khan, M. M. Hassan, and R. Zakarira, “Epistemic curiosity and perceived workload: a moderated mediation model of achievement striving and overwork climate,” *The International Journal of Human Resource Management*, pp. 1–24, 2019.
- [255] A. Sarwar, S. Bashir, and A. Karim Khan, “Spillover of Workplace Bullying Into Family Incivility: Testing a Mediated Moderation Model in a Time-Lagged Study,” *Journal of Interpersonal Violence*, p. 0886260519847778, 2019.
- [256] A. Sarwar and L. Muhammad, “Impact of employee perceptions of mistreatment on organizational performance in the hotel industry,” *International Journal of Contemporary Hospitality Management*, 2019.
- [257] L. Muhammad *et al.*, “Mediating role of customer forgiveness between perceived justice and satisfaction,” *Journal of Retailing and Consumer Services*, vol. 52, p. 101886, 2019.
- [258] L. Muhammad, “Do service firm employee and customer relations matter for customer forgiveness in service recovery?” *Asia Pacific Journal of Marketing and Logistics*, vol. 29, pp. 1036–1054, 2019.

- [259] N. T. Bhutta, B. Simonetti, and V. Ventre, “Does islamic capital asset pricing model outperform conventional capital asset pricing model?” in *Decision Making in Social Sciences: Between Traditions and Innovations*. Springer, 2019, pp. 471–482.
- [260] A. Mahmood Ahmed and S. Anwar, “Taxicab app usage: Cues inquiry and classification,” 2019.
- [261] M. Zulkifal, M. Abbas, K. Arif-ullah, N. Humaira, and A. S. Fawad, “Thiazolidine derivatives attenuate carrageenan-induced inflammatory pain in mice,” 2019.
- [262] M. Abbas, S. Alzarea, R. L. Papke, and S. Rahman, “The $\alpha 7$ nicotinic acetylcholine receptor positive allosteric modulator prevents lipopolysaccharide-induced allodynia, hyperalgesia and $\text{tnf-}\alpha$ in the hippocampus in mice,” *Pharmacological Reports*, vol. 71, no. 6, pp. 1168–1176, 2019.
- [263] F. A. Shah, G.-P. Liu, A. Kury, L. Tareq, A. Zeb, M. Abbas, T. Li, X. Yang, F. Liu, Y. Jiang *et al.*, “Melatonin protects MCAO-induced neuronal loss via NR2A mediated prosurvival pathways,” *Frontiers in pharmacology*, vol. 10, p. 297, 2019.
- [264] Z. Idris, M. Abbas, H. Nadeem, and A.-u. Khan, “The benzimidazole derivatives, b1 (n-[(1h-benzimidazol-2-yl) methyl]-4-methoxyaniline) and b8 (n-{4-[(1H-Benzimidazol-2-yl) Methoxy] Phenyl} acetamide) attenuate morphine-induced paradoxical pain in mice,” *Frontiers in neuroscience*, vol. 13, 2019.
- [265] H. Bibi, H. Nadeem, M. Abbas, and M. Arif, “Synthesis and anti-nociceptive potential of isoxazole carboxamide derivatives,” *BMC Chemistry*, vol. 13, no. 1, p. 6, 2019.
- [266] N. S. Malik, M. Ahmads, M. U. Minhas, and Q. Khalid, “Determination of acyclovir in rabbit plasma by high performance liquid Chromatographic (hplc) Technique,” *Acta Polpniae Pharmaceutica*, vol. 76, no. 3, pp. 421–429, 2019.
- [267] S. Bashir, A. Khan, and M. Mahmood, “Evaluation of the learning environment in pharmacy institutes of pakistan,” 2019.
- [268] S. Bashir, “Pharmacological importance of manilkara zapota and its bioactive constituents,” *Boletín Latinoamericano Y Del Caribe de Plantas Medicinales Y Aromaticas*, vol. 18, no. 4, pp. 347–358, 2019.
- [269] S. Rehman, M. M. Ahmed, U. Rafique, and M. N. Khan, “A nonlinear model to assess DC/AC performance reliability of submicron SiC MESFETs,” *Journal of Computational Electronics*, pp. 1–11, 2018.
- [270] Z. Ahmed, M. M. Ahmed, and M. B. Ihsan, “A novel differential fed high gain patch antenna using resonant slot loading,” *Radioengineering*, vol. 27, no. 3, pp. 662–670, 2018.
- [271] Z. Ahmed, M. M. Ahmed, M. B. Ihsan, A. A. Chaudhary, and J. K. Arif, “Novel dual band patch antenna with gap coupled composite right/left-handed transmission line,” *International Journal of Microwave and Wireless Technologies*, pp. 1–7, 2018.

- [272] M. N. Khan, U. F. Ahmed, M. M. Ahmed, and S. Rehman, “An improved model to assess temperature-dependent DC characteristics of submicron GaN HEMTs,” *Journal of Computational Electronics*, vol. 17, no. 2, pp. 653–662, 2018.
- [273] M. Riaz, M. M. Ahmed, U. Rafique, and U. F. Ahmed, “Assessment of intrinsic small signal parameters of submicron SiC MESFETs,” *Solid-State Electronics*, vol. 139, pp. 80–87, 2018.
- [274] U. Qazi, M. R. Ali, and A. Moqueet, “An estimation of the impact of uninterpretable power supply systems on electricity distribution utility of Pakistan,” *Journal of Basic and Applied Sciences*, vol. 14, pp. 92–97, 2018.
- [275] S. M. Shah, R. Samar, and M. A. Z. Raja, “Fractional-order algorithms for tracking rayleigh fading channels,” *Nonlinear Dynamics*, vol. 92, no. 3, pp. 1243–1259, 2018.
- [276] Z. Masood, K. Majeed, R. Samar, and M. A. Z. Raja, “Design of epidemic computer virus model with effect of quarantine in the presence of immunity,” *Fundamenta Informaticae*, vol. 161, no. 3, pp. 249–273, 2018.
- [277] A. Yar, A. I. Bhatti, and Q. Ahmed, “First principle based control oriented model of a gasoline engine including multi-cylinder dynamics,” *Control Engineering Practice*, vol. 70, pp. 63–76, 2018.
- [278] M. R. Azam, S. Fazal, M. Ullah, and A. I. Bhatti, “System-based strategies for p53 recovery,” *IET Systems Biology*, vol. 12, no. 3, pp. 101–107, 2018.
- [279] A. Yar, A. I. Bhatti, and Q. Ahmed, “First principle based control oriented gasoline engine model including lumped cylinder dynamics,” *Journal of Dynamic Systems, Measurement, and Control*, vol. 140, no. 8, pp. 1–9, 2018.
- [280] A. Jafar, A. I. Bhatti, A. S. M, and N. Ahmed, “Robust gain scheduled control algorithm for lab helicopter: An LMI based approach,” *IMECH Journal of Systems and Control Engineering*, pp. 1–14, 2018.
- [281] M. T. Khan, S. I. Malik, A. I. Bhatti, S. Ali, A. S. Khan, M. T. Zeb, T. Nadeem, and S. Fazal, “Pyrazinamide-resistant mycobacterium tuberculosis isolates from Khyber Pakhtunkhwa and rpsA mutations,” *Journal of Biological Regulators and Homeostatic Agents*, vol. 32, no. 3, pp. 705–709, 2018.
- [282] A. Munir, S. Azam, S. Fazal, and A. I. Bhatti, “Evaluation of the whole body physiologically based pharmacokinetic (wb-pbpc) modeling of drugs,” *Journal of Theoretical Biology*, vol. 451, pp. 1–9, 2018.
- [283] A. Jafar, A. I. Bhatti, S. M. Ahmad, and N. Ahmed, “ H_∞ optimization-based robust decoupling control algorithm in linear parameter varying systems using hadamard weighting,” *Transactions of the Institute of Measurement and Control*, pp. 1–16, 2018.
- [284] A. M. Chaudhry, A. Arshad Uppal, Y. M. Alsmadi, A. I. Bhatti, and V. I. Utkin, “Robust multi-objective control design for underground coal gasification energy conversion process,” *International Journal of Control*, pp. 1–17, 2018.

- [285] U. Rafique and S. U. Din, “Beveled-shaped super-wideband planar antenna,” *Turkish Journal of Electrical Engineering and Computer Sciences*, pp. 1–9, 2018.
- [286] S. Naz, R. N. B. Rais, P. A. Shah, S. Yasmin, A. Qayyum, S. Rho, and Y. Nam, “A dynamic caching strategy for CCN-based MANETs,” *Computer Networks*, vol. 142, pp. 93–107.
- [287] K. A. Khaliq, S. M. Raza, O. Chughtai, A. Qayyum, and J. Pannek, “Experimental validation of an accident detection and management application in vehicular environment,” *Computers & Electrical Engineering*, vol. 71, pp. 137–150, 2018.
- [288] M. Raza, N. Aslam, H. Le-Minh, S. Hussain, Y. Cao, and N. M. Khan, “A critical analysis of research potential, challenges, and future directives in industrial wireless sensor networks,” *IEEE Communications Surveys & Tutorials*, vol. 20, no. 1, pp. 39–95, 2018.
- [289] M. Y. M. Mirza, N. M. Khan, A. Jamal, and R. Ramer, “Characterization of spatial reflection co-efficient for ground-to-aircraft and satellite-to-aircraft communication.” *Applied Computational Electromagnetics Society Journal*, vol. 33, no. 1, 2018.
- [290] M. Y. Wani, M. Riaz, and N. M. Khan, “Geometrical modeling of scattering environment for highways in umbrella cell based MIMO communication systems,” *Wireless Personal Communications*, vol. 101, no. 1, pp. 59–74, 2018.
- [291] A. Yasin, M. Ashraf, and A. Bhatti, “Fixed frequency sliding mode control of power converters for improved dynamic response in dc micro-grids,” *Energies*, vol. 11, no. 10, p. 2799, 2018.
- [292] M. Rashad, M. Ashraf, A. I. Bhatti, D. M. Minhas, and B. A. Ahmed, “Mathematical modeling and stability analysis of DC microgrid using SM hysteresis controller,” *International Journal of Electrical Power & Energy Systems*, vol. 95, pp. 507–522, 2018.
- [293] M. Rashad, U. Raof, M. Ashraf, and B. Ashfaq Ahmed, “Proportional load sharing and stability of dc microgrid with distributed architecture using SM controller,” *Mathematical Problems in Engineering*, vol. 2018, 2018.
- [294] M. Sajid, I. A. Taj, U. I. Bajwa, and N. I. Ratyal, “Facial asymmetry-based age group estimation: Role in recognizing age-separated face images,” *Journal of forensic sciences*, 2018.
- [295] M. Asif, I. A. Taj, S. M. Ziauddin, M. B. Ahmad, and M. Tahir, “An efficient framework for prediction parameters selection in advanced video coding,” *IEEE Access*, 2018.
- [296] M. Ghafoor, S. Iqbal, S. A. Tariq, and N. M. Taj, Imtiaz A Jafri, “Efficient fingerprint matching using graphical processing unit,” *IET Image Processing*, vol. 12, no. 2, p. 274, 2018.

- [297] N. Ratyal, I. Taj, U. Bajwa, and M. Sajid, “Pose and expression invariant alignment based multi-view 3D face recognition.” *KSII Transactions on Internet & Information Systems*, vol. 12, no. 10, 2018.
- [298] M. R. Mufti, H. Afzal, F. U. Rehman, Q. R. Butt, and M. I. Qureshi, “Synchronization and antisynchronization between two non-identical chua oscillators via sliding mode control,” *IEEE Access*, vol. 6, pp. 45 270–45 280, 2018.
- [299] M. R. Mufti, H. Afzal, F.-u. Rehman, and N. Ahmed, “Stabilization and synchronization of 5-d memristor oscillator using sliding mode control,” *Journal of the Chinese Institute of Engineers*, vol. 41, no. 8, pp. 667–677, 2018.
- [300] N. Siddique *et al.*, “Parameter identification and hybrid synchronization in an array of coupled chaotic systems with ring connection: An adaptive integral sliding mode approach,” *Mathematical Problems in Engineering*, vol. 2018, 2018.
- [301] F. ur Rehman, A. B. Satti, and A. A. Saleem, “Continuous stabilizing control for a class of non-holonomic systems: Brockett System Example,” *Journal of Vibration Testing and System Dynamics*, vol. 2, pp. 167–172, 2018.
- [302] W. Abbasi, I. Shah *et al.*, “Smooth super twisting sliding mode based steering control for nonholonomic systems transformable into chained form,” *Kybernetika*, vol. 54, no. 3, pp. 476–495, 2018.
- [303] S. ud Din and F. ur Rehman, “Synchronization of a novel 4-D hyperchaotic rikitake dynamo system along with unknown parameters via adaptive integral sliding mode,” *Journal of Control Engineering and Applied Informatics*, vol. 20, no. 1, pp. 108–118, 2018.
- [304] I. Shah and F. U. Rehman, “Smooth second order sliding mode control of a class of underactuated mechanical systems,” *IEEE Access*, vol. 6, pp. 7759–7771, 2018.
- [305] M. Asif, H.-Y. Lee, U. A. Khan, K.-H. Park, and B. W. Lee, “Analysis of transient behavior of mixed high voltage dc transmission line under lightning strikes,” *IEEE Access*, vol. 7, pp. 7194–7205, 2018.
- [306] R. Ara, U. A. Khan, and B. W. Bhatti, Aamer Iqbal Lee, “A highly selective protection scheme for fast fault discrimination in a meshed multi-terminal high voltage dc (mtdc) grid,” 2018.
- [307] M. Khan, M. Cao, and M. Ali, “Effect of basalt fibers on mechanical properties of calcium carbonate whisker-steel fiber reinforced concrete,” *Construction and Building Materials*, vol. 192, pp. 742–753, 2018.
- [308] M. Khan and M. Ali, “Effect of super plasticizer on the properties of medium strength concrete prepared with coconut fiber,” *Construction and Building Materials*, vol. 182, pp. 703–715, 2018.

- [309] M. U. Farooqi and M. Ali, “Contribution of plant fibers in improving the behavior and capacity of reinforced concrete for structural applications,” *Construction and Building Materials*, vol. 182, pp. 94–107, 2018.
- [310] F. Qamar, T. Thomas, and M. Ali, “Use of natural fibrous plaster for improving the out of plane lateral resistance of mortarless interlocked masonry walling,” *Construction and Building Materials*, vol. 174, pp. 320–329, 2018.
- [311] M. Khan and M. Ali, “Effectiveness of hair and wave polypropylene fibers for concrete roads,” *Construction and Building Materials*, vol. 166, pp. 581–591, 2018.
- [312] M. Ali, “Role of post-tensioned coconut-fibre ropes in mortar-free interlocking concrete construction during seismic loadings,” *KSCE Journal of Civil Engineering*, vol. 22, no. 4, pp. 1336–1343, 2018.
- [313] M. Ahmed and T. Mahmood, “Elastic-displacement-based multi-modal pushover analysis in high-rise core wall buildings,” *Proceedings of the Institution of Civil Engineers-Structures and Buildings*, pp. 1–22, 2018.
- [314] S. Naseer, M. S. Faiz, and S. Gul, “Use of acrylic polymer for stabilization of clayey soil,” *International Journal of Scientific & Engineering Research*, vol. 9, no. 11, pp. 433–438, 2018.
- [315] S. A. Rizwan, S. Gul, and T. A. Bier, “Self-consolidating paste systems containing acacia nilotica gum powder,” *ACI Materials Journal*, vol. 116, no. 1, pp. 5–14, 2019.
- [316] M. M. Khan, J. Hélie, and M. Gorokhovski, “Computational methodology for non-evaporating spray in quiescent chamber using large eddy simulation,” *International Journal of Multiphase Flow*, vol. 102, pp. 102–118, 2018.
- [317] M. Ebrahim, S. Manzoor, N. A. Sheikh, M. Ali, and M. M. Khan, “Numerical investigation of transient response of a coupled two-degrees-of-freedom symmetric airfoil before flutter,” *International Journal of Aeroacoustics*, vol. 17, no. 3, pp. 275–294, 2018.
- [318] S. S. Warsi, S. H. I. Jaffery, R. Ahmad, M. Khan, M. H. Agha, and L. Ali, “Development and analysis of energy consumption map for high-speed machining of Al 6061-T6 alloy,” *The International Journal of Advanced Manufacturing Technology*, pp. 1–12, 2018.
- [319] A. Ayub, N. A. Sheikh, R. Tariq, M. M. Khan, and C. M. Invernizzi, “Exergetic optimization and comparison of combined gas turbine supercritical CO₂ power cycles,” *Journal of Renewable and Sustainable Energy*, vol. 10, no. 4, pp. 1–23, 2018.
- [320] M. Irfan and M. Muradoglu, “A front tracking method for particle-resolved simulation of evaporation and combustion of a fuel droplet,” *Computers & Fluids*, 2018.
- [321] M. M. Khan, N. A. Sheikh, A. Khalid, and W. A. Lughmani, “Experimental characterization of gasoline sprays under highly evaporating conditions,” *Heat and Mass Transfer*, vol. 54, no. 5, pp. 1531–1543, 2018.

- [322] H. Rafiq, M. Aleem, and M. A. Islam, “On the evaluation of android malware detectors,” *Sukkur IBA Journal of Computing and Mathematical Sciences*, vol. 2, no. 1, pp. 20–28, 2018.
- [323] H. Murtaza, M. A. Iqbal, M. A. Islam, and M. Aleem, “Content-aware reliable and energy-efficient MAC (CARE-MAC) protocol for wireless body area networks,” *Ad Hoc & Sensor Wireless Networks*, 2018.
- [324] M. A. Iqbal, B. Dai, M. A. Islam, M. Aleem, and N.-S. Vo, “Topology-based flow-oriented adaptive network coding-aware routing scheme for VANETs,” *KSII Transactions on Internet & Information Systems*, vol. 12, no. 5, pp. 2044–2062, 2018.
- [325] M. Ibrahim, M. A. Iqbal, M. Aleem, and M. A. Islam, “SIM-cumulus: An academic cloud for the provisioning of Network-Simulation-as-a-Service (NSaaS),” *IEEE Access*, vol. 6, pp. 27 313–27 323, 2018.
- [326] A. Hussain, M. Aleem, A. Khan, M. A. Iqbal, and M. A. Islam, “RALBA: A computation-aware load balancing scheduler for cloud computing,” *Cluster Computing*, pp. 1–14, 2018.
- [327] Y. N. Khalid, M. Aleem, R. Prodan, M. A. Iqbal, and M. A. Islam, “E-OSched: A load balancing scheduler for heterogeneous multicores,” *The Journal of Supercomputing*, pp. 1–33, 2018.
- [328] M. A. Jaffar, M. S. Zia, M. Hussain, A. B. Siddiqui, S. Akram, and U. Jamil, “An ensemble shape gradient features descriptor based nodule detection paradigm: A novel model to augment complex diagnostic decisions assistance,” *Multimedia Tools and Applications*, pp. 1–27, 2018.
- [329] S. U. R. Khan, M. A. Islam, M. Aleem, and M. A. Iqbal, “Temporal specificity based text classification for information retrieval,” *Turkish Journal of Electrical Engineering & Computer Science*, 2018.
- [330] M. Raheel, S. Ayaz, and M. T. Afzal, “Evaluation of h-index, its variants and extensions based on publication age & citation intensity in civil engineering,” *Scientometrics*, vol. 114, no. 3, pp. 1107–1127, 2018.
- [331] M. T. Ikram, M. T. Afzal, and N. A. Butt, “Automated citation sentiment analysis using high order n-grams: A preliminary investigation,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 26, no. 4, pp. 1922–1932, 2018.
- [332] M. T. Khan, S. I. Malik, S. Ali, A. Sheed Khan, T. Nadeem, M. T. Zeb, N. Masood, and M. T. Afzal, “Prevalence of pyrazinamide resistance in Khyber Pakhtunkhwa, Pakistan,” *Microbial Drug Resistance*, 2018.
- [333] M. Glatz, H. Maurer, and M. Tanvir Afzal, “Finding reliable information on the web should and can still be improved,” *Journal of computing and information technology*, vol. 26, no. 1, pp. 1–6, 2018.

- [334] S. Haider, M. Tanvir Afzal, M. Asif, H. Maurer, A. Ahmad, and A. Abuarqoub, “Impact analysis of adverbs for sentiment classification on twitter product reviews,” *Concurrency and Computation: Practice and Experience*, p. e4956, 2018.
- [335] F. Qayyum and M. T. Afzal, “Identification of important citations by exploiting research articles metadata and cue-terms from content,” *Scientometrics*, pp. 1–23, 2018.
- [336] A. Y. Khan, A. S. Khattak, and M. T. Afzal, “Extending co-citation using sections of research articles,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 26, no. 6, pp. 3345–3355, 2018.
- [337] R. Ahmad and M. T. Afzal, “CAD: an algorithm for citation anchors detection in research papers,” *Scientometrics*, vol. 117, no. 3, pp. 1405–1423, 2018.
- [338] A. Hussain, M. Aleem, M. A. Islam, and M. A. Iqbal, “A rigorous evaluation of state-of-the-art scheduling algorithms for cloud computing,” *IEEE Access*, 2018.
- [339] S. U. R. Khan, M. A. Islam, M. Aleem, M. A. Iqbal, and U. Ahmed, “Section-based focus time estimation of news articles,” *IEEE Access*, vol. 6, pp. 75 452–75 460, 2018.
- [340] A. Kanwal and S. Fazal, “Construction and analysis of protein-protein interaction network correlated with ankylosing spondylitis,” *Gene*, vol. 638, pp. 41–51, 2018.
- [341] A. Munir, S. Azam, S. Aslam, A. Mehmood, G. M. Shah, S. Amjad, M. Younis, and S. Fazal, “Computational design of small interfering rnas and small hairpin rnas to silence mutated p53 gene expressions,” *Informatics in Medicine Unlocked*, vol. 12, pp. 1–5, 2018.
- [342] N. Noureen, S. Fazal, A. M. Qaider, and A. Tanvir, “Hcvs: Pinpointing chromatin states through hierarchical clustering and visualization scheme,” *Current Bioinformatics*, 2018.
- [343] F. A. Larik, A. Saeed, M. Faisal, P. A. Channar, S. S. Azam, H. Ismail, E. Dilshad, and B. Mirza, “Synthesis, molecular docking and comparative efficacy of various alkyl/aryl thioureas as antibacterial, antifungal and α -amylase inhibitors,” *Computational biology and chemistry*, vol. 77, pp. 193–198, 2018.
- [344] W. K. Kayani, B. H. Kiani, E. Dilshad, and B. Mirza, “Biotechnological approaches for artemisinin production in artemisia,” *World Journal of Microbiology and Biotechnology*, vol. 34, no. 4, p. 54, 2018.
- [345] A. Munir, S. Hussain, and E. Dilshad, “Silver nanoparticles conjugated with neurotrophin 3 upregulate myelin gene transcription pathway,” *Journal of theoretical biology*, vol. 459, pp. 111–118, 2018.
- [346] S. Hussain, J. Z. K. Khattak, M. Ismail, Q. Mansoor, and M. H. Khan, “Molecular characterization of deafness in autosomal recessive pedigrees of Khyber Pakhtunkhwa Pakistan,” *Pakistan Journal of Pharmaceutical Sciences*, vol. 31, no. 1, pp. 51–56, 2018.

- [347] M. T. Khan, A. U. Rehaman, M. Junaid, S. I. Malik, and D.-Q. Wei, “Insight into novel clinical mutants of RpsA-S324F, E325K, and G341R of mycobacterium tuberculosis associated with pyrazinamide resistance,” *Computational and structural biotechnology journal*, vol. 16, pp. 379–387, 2018.
- [348] M. Anum, S. I. Malik, and K. A. Malik, “Proteome mining for the identification of putative drug targets for human pathogen clostridium tetani,” *Current Bioinformatics*, 2018.
- [349] A. Munir, S. I. Malik, and K. A. Malik, “De-novo ligand design against mutated huntington gene by ligand-based pharmacophore modeling approach.” *Current computer-aided drug design*, 2018.
- [350] M. Bilal, M. Sagheer, and S. Hussain, “Numerical study of magnetohydrodynamics and thermal radiation on williamson nanofluid flow over a stretching cylinder with variable thermal conductivity,” *Alexandria engineering journal*, vol. 57, no. 4, pp. 3281–3289, 2018.
- [351] D.-C. Lu, M. Ramzan, M. Bilal, J. D. Chung, and U. Farooq, “A numerical investigation of 3D MHD rotating flow with binary chemical reaction, activation energy and non-fourier heat flux,” *Communications in Theoretical Physics*, vol. 70, pp. 89–96, 2018.
- [352] D.-C. Lu, M. Ramzan, M. Bilal, J. D. Chung, and U. Farooq, “Upshot of chemical species and nonlinear thermal radiation on oldroyd-B nanofluid flow past a bi-directional stretched surface with heat generation/absorption in a porous media,” *Communications in Theoretical Physics*, vol. 70, pp. 71–80, 2018.
- [353] T. Sajid, M. Sagheer, S. Hussain, and M. Bilal, “Darcy-forchheimer flow of Maxwell nanofluid flow with nonlinear thermal radiation and activation energy,” *AIP Advances*, vol. 8, no. 3, p. 035102, 2018.
- [354] M. Sagheer, M. Bilal, S. Hussain, and R. N. Ahmed, “Thermally radiative rotating magneto-nanofluid flow over an exponential sheet with heat generation and viscous dissipation: A comparative study,” *Communications in Theoretical Physics*, vol. 69, no. 3, p. 317, 2018.
- [355] S. Atif, S. Hussain, and M. Sagheer, “Numerical study of mhd micropolar carreau nanofluid in the presence of induced magnetic field,” *AIP Advances*, vol. 8, no. 3, p. 035219, 2018.
- [356] M. Atlas, S. Hussain, and M. Sagheer, “Entropy generation and squeezing flow past a riga plate with cattaneo-christov heat flux,” *Bulletin of the Polish Academy of Sciences: Technical Sciences*, 2018.
- [357] S. Shah, S. Hussain, and M. Sagheer, “Thermal stratification effects on mixed convective maxwell fluid flow with variable thermal conductivity and homogeneous/heterogeneous reactions,” *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, vol. 40, no. 9, p. 452, 2018.

- [358] S. Hussain, H. F. Öztop, K. Mehmood, and M. E. Ali, “Control of combined convection in a nanofluid-filled lid-driven closed space via rectangular bar in the presence of magnetic field,” *Journal of Thermal Analysis and Calorimetry*, pp. 1–18, 2018.
- [359] A. Kamran, S. Hussain, and M. Sagheer, “Impact of induced magnetic field on free convective flow of kerosene/water based single and multiwalled carbon nanotubes,” *AIP Advances*, vol. 8, no. 10, p. 105130, 2018.
- [360] S. Hussain, S. E. Ahmed, and F. Saleem, “Impact of periodic magnetic field on entropy generation and mixed convection,” *Journal of Thermophysics and Heat Transfer*, pp. 1–14, 2018.
- [361] T. Sajjad and R. Ali, “A new chaos based color image encryption algorithm using permutation substitution and boolean operation,” 2018.
- [362] T. Sajjad and R. Ali, “An image encryption scheme based on s-box and chaotic logistic map,” 2018.
- [363] M. Sohail Ashraf, R. Ali, and N. Hussain, “Geraghty type contractions in fuzzy bmetric spaces with application to integral equations,” 2018.
- [364] M. Zia and R. Ali, “Cryptanalysis and improvement of an elliptic curve based sign-cryption scheme for firewalls,” *PloS one*, vol. 13, no. 12, p. e0208857, 2018.
- [365] D. Shehwar, S. Batul, and R. Ali, “The c^* -algebra valued caristi’s fixed point theorem: A graphic version,” *Journal of Mathematical Analysis*, vol. 9, pp. 1–9, 2018.
- [366] M. Afzal and H. Bilal, “Acoustic wave scattering from a wave-bearing cavity in a rectangular waveguide,” *The Journal of the Acoustical Society of America*, vol. 144, no. 3, pp. 1681–1681, 2018.
- [367] B. Javed, A. K. Khan, S. Arjoon, M. Mashkoo, and A. u. Haque, “Openness to experience, ethical leadership, and innovative work behavior,” *The Journal of Creative Behavior*, 2018.
- [368] M. B. Saeed, M. M. Iqbal, and K. S. Syed, “Corporate governance mechanisms and conservatism; evidence from Pakistan,” *NICE Research Journal of Social Sciences*, vol. 11, pp. 18–38, 2018.
- [369] A. Khan and S. M. M. R. Naqvi, “The impact of internalized stigma at workplace through interlinking mechanism of self-esteem of tuberculosis patients in Pakistan,” *Journal of Managerial Sciences*, vol. 9, pp. 323–342, 2018.
- [370] Q. Hayat and S. M. M. R. Naqvi, “Job strain, employee greed, and employee envy: Moderating role of self-monitoring in the banking sector of Pakistan,” *Journal of Managerial Sciences*, vol. 9, pp. 221–224, 2018.
- [371] B. Javed, M. Y. A. Rawwas, S. Khandai, K. Shahid, and H. H. Tayyeb, “Ethical leadership, trust in leader and creativity: The mediated mechanism and an interacting effect,” *Journal of Management & Organization*, pp. 1–18, 2018.

- [372] J. Ahmed and M. Mughal, “They earn and send; we spend: Consumption patterns of Pakistani migrant households,” *International Journal of Social Economics*, vol. 45, no. 7, pp. 1092–1108, 2018.
- [373] S. Rizwan, J. Ahmed, and R. Rasiah, “The devil made me do it: Environmental factors leading to corporate financial fraud,” *Journal of Managerial Sciences*, vol. 11, no. 03, pp. 321–353, 2018.
- [374] S. Fatima and M. A. Zafar, “Servant leadership and meaningfulness at work: The contingency effect of leader ethical sensitivity,” *Pakistan Journal of Social Sciences*, vol. 38, no. 1, 2018.
- [375] M. Khalid, S. Bashir, A. K. Khan, and N. Abbas, “When and how abusive supervision leads to knowledge hiding behaviors: An islamic work ethics perspective,” *Leadership & Organization Development Journal*, vol. 39, no. 6, pp. 794–806, 2018.
- [376] S. A. Khattak and S. Bashir, “Evaluation of union commitment in public sector organizations of pakistan: A time lagged study,” *Abasyn University Journal of Social Sciences*, vol. 11, no. 1, 2018.
- [377] A. Majeed and S. Ahmed, “Do board audit and cultural dynamics affect firm performance? evidence from karachi meezan index,” *Journal of Islamic Business and Management*, vol. 8, no. 2, 2018.
- [378] T. Ahmed, A.-u. Khan, M. Abbass, E. Rodrigues Filho, Z. U. Din, and A. Khan, “Synthesis, characterization, molecular docking, analgesic, antiplatelet and anticoagulant effects of dibenzylidene ketone derivatives,” *Chemistry Central Journal*, vol. 12, no. 1, p. 134, 2018.
- [379] S. Bashir, S. Abbas, and A. Khan, “Pharmacological studies on prokinetic and laxative effects of trianthea portulacastrum linn,” *International Journal of Complementary & Alternative Medicine*, vol. 11, 2018.
- [380] S. Bashir, S. Abbas, S. R. Mandukhail, and A. H. Gilani, “The airway relaxant effect of horse purslane, trianthea portulacastrum, linn.(aizoaceae), is mediated through dual blockade of muscarinic receptors and ca²⁺ influx,” *Journal of Pharmaceutical Research International*, pp. 1–9, 2018.
- [381] M. T. Khan, M. T. Razi, S. U. Jan, M. Mukhtiar, R. Gul, A. Hussain, A. M. Hashmi, M. T. Ahmad, N. A. Shahwani, I. Rabbani *et al.*, “Synthesis, characterization and antihypertensive activity of 2-phenyl substituted benzimidazoles,” *Pakistan journal of pharmaceutical sciences*, vol. 31, no. 3 (Supplementary), pp. 1067–1074, 2018.
- [382] A. Khan, Z. Iqbal, A. Ullah, M. Alam, M. Akhlaq, A. Naz, and M. Sherazi, “Sintering technique: A novel approach for enhancing mechanical strength of tablets; formulation development and optimization of process variables,” *Lat. Am. J. Pharm*, vol. 38, no. 3, pp. 617–28, 2019.

- [383] N. Fatima, F. Aziz, Z. Ahmad, M. A. Najeeb, M. I. Azmeer, K. S. Karimov, M. M. Ahmed, S. Basheer, R. A. Shakoor, and K. Sulaiman, “Compositional engineering of the pi-conjugated small molecular VOPcPhO: Alq₃ complex to boost humidity sensing,” *RSC Advances*, vol. 7, no. 32, pp. 19 780–19 786, 2017.
- [384] Q. Zafar, N. Fatima, K. S. Karimov, M. M. Ahmed, and K. Sulaiman, “Realizing broadband visible wavelength photodiode based on solution-processed ZnPc/PC₇₁BM dyad,” *Optical Materials*, vol. 64, pp. 131–136, 2017.
- [385] K. S. Karimov, Z. Ahmad, N. Fatima, M. M. Ahmed, and M. Abid, “Effect of humidity on copper phthalocyanine films deposited at different gravity conditions,” *Pigment & Resin Technology*, vol. 46, no. 1, pp. 64–70, 2017.
- [386] K. S. Karimov, M. H. Sayyad, M. M. Ahmed, M. N. Khan, Z. M. Karieva, S. A. Moiz, M. Shah, K. h. Zakaullah, and M. A. Turaeva, “Effect of temperature and humidity on electrical properties of organic orange dye complex films,” *Eurasian Chemico-Technological Journal*, vol. 6, no. 2, pp. 145–149, 2017.
- [387] S. U. Rahman, Q. CAO, M. M. Ahmed, and H. Khalil, “Analysis of linear antenna array for minimum side lobe level, half power beamwidth, and nulls control using PSO,” *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, vol. 16, no. 2, pp. 577–591, 2017.
- [388] N. Fatima, M. M. Ahmed, K. S. Karimov, Z. Ahmad, and F. F. Muhammad, “Optical sensors based on the NiPc CoPc composite films deposited by drop casting and under the action of centrifugal force,” *Chinese Physics B*, vol. 26, no. 6, 2017.
- [389] M. M. Ahmed, M. Riaz, and U. F. Ahmed, “An improved model for the $I - V$ characteristics of submicron SiC MESFETs by evaluating the potential distribution inside the channel,” *Journal of Computational Electronics*, vol. 16, no. 3, pp. 1–12, 2017.
- [390] N. Fatima, M. M. Ahmed, and K. S. Karimov, “Effects of humidity and temperature on orange dye-based organic field effect transistors fabricated at different gravity,” *Journal of Electronic Materials*, vol. 46, no. 11, pp. 6588–6594, 2017.
- [391] J. S. Malik, U. Rafique, S. A. Ali, and M. A. Khan, “Novel patch antenna for multiband cellular, WiMAX, and WLAN applications,” *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 25, no. 3, pp. 2005–2014, 2017.
- [392] K. Majeed, Z. Masood, R. Samar, and M. A. Z. Raja, “A genetic algorithm optimized Morlet wavelet artificial neural network to study the dynamics of nonlinear troesch’s system,” *Applied Soft Computing*, vol. 56, pp. 420–435, 2017.
- [393] S. M. Shah, R. Samar, N. M. Khan, and M. A. Z. Raja, “Design of fractional-order variants of complex LMS and NLMS algorithms for adaptive channel equalization,” *Nonlinear Dynamics*, vol. 88, no. 2, pp. 839–858, 2017.

- [394] Z. Masood, K. Majeed, R. Samar, and M. A. Z. Raja, “Design of Mexican Hat Wavelet neural networks for solving Bratu type nonlinear systems,” *Neurocomputing*, vol. 221, pp. 1–14, 2017.
- [395] M. A. Z. Raja, R. Samar, M. A. Manzar, and S. M. Shah, “Design of unsupervised fractional neural network model optimized with interior point algorithm for solving Bagley–Torvik equation,” *Mathematics and Computers in Simulation*, vol. 132, pp. 139–158, 2017.
- [396] F. Khattak, M. Haseeb, S. Fazal, A. I. Bhatti, and M. Ullah, “Mathematical modeling of E6-p53 interactions in cervical cancer,” *Asian Pacific Journal of Cancer Prevention*, vol. 18, no. 4, pp. 1057–1061, 2017.
- [397] A. A. Uppal, Y. M. Alsmadi, V. I. Utkin, A. I. Bhatti, and S. A. Khan, “Sliding mode control of underground coal gasification energy conversion process,” *IEEE Transactions on Control Systems Technology*, vol. 26, no. 2, pp. 587–598, 2017.
- [398] M. Haseeb, S. Azam, A. I. Bhatti, R. Azam, M. Ullah, and S. Fazal, “On p53 revival using system oriented drug dosage design,” *Journal of Theoretical Biology*, vol. 415, pp. 53–57, 2017.
- [399] A. Yar, A. I. Bhatti, and Q. Ahmed, “First principle-based control oriented model of a gasoline engine,” *Journal of Dynamic Systems, Measurement, and Control*, vol. 139, no. 5, pp. 1–14, 2017.
- [400] Q. Khan, R. Akmeliawati, A. I. Bhatti, and M. A. Khan, “Robust stabilization of underactuated nonlinear systems: A fast terminal sliding mode approach,” *ISA Transactions*, vol. 66, pp. 241–248, 2017.
- [401] S. A. Tariq, S. Iqbal, M. Ghafoor, I. A. Taj, N. M. Jafri, S. Razzaq, and T. Zia, “Massively parallel palmprint identification system using GPU,” *Cluster Computing*, pp. 1–16, 2017.
- [402] Y. A. Butt, Y. L. Sachkov, and A. I. Bhatti, “Cut locus and optimal synthesis in sub-Riemannian problem on the lie group SH(2),” *Journal of Dynamical and Control Systems*, vol. 23, no. 1, pp. 155–195, 2017.
- [403] K. A. Khaliq, A. Qayyum, and J. Pannek, “Performance analysis of proposed congestion avoiding protocol for IEEE 802.11s,” *International Journal of Advanced Computer Science and Applications*, vol. 8, no. 2, pp. 356–369, 2017.
- [404] S. Yasmin, A. Qayyum, and R. N. B. Rais, “Cooperation in opportunistic networks: An overlay approach for destination-dependent utility-based schemes,” *Arabian Journal for Science and Engineering*, vol. 42, no. 2, pp. 467–482, 2017.
- [405] S. Din, Q. Khan, F. Rehman, and R. Akmeliawanti, “A comparative experimental study of robust sliding mode control strategies for underactuated systems,” *IEEE Access*, 2017.

- [406] H. Raza and N. M. Khan, “Low complexity linear channel estimation for MIMO communication systems,” *Wireless Personal Communications*, pp. 1–14, 2017.
- [407] N. M. Khan and H. Raza, “Processing-efficient distributed adaptive RLS filtering for computationally constrained platforms,” *Wireless Communications and Mobile Computing*, vol. 2017, 2017.
- [408] G. Ahmed and N. M. Khan, “Adaptive power-control based energy-efficient routing in wireless sensor networks,” *Wireless Personal Communications*, vol. 94, no. 3, pp. 1297–1329, 2017.
- [409] M.-Y. M. Mirza, G. Ahmed, and N. M. Khan, “Model-based adaptive transmission power control (MATPoC) for wireless sensor networks in fading environment,” *Journal of Circuits, Systems and Computers*, vol. 26, no. 09, pp. 1–34, 2017.
- [410] A. A. Awan, H. Ishtiaq, and M. Hassan, “Optimizing lining length of watercourses for increased water saving in Punjab, Pakistan,” *Journal of Biodiversity and Environmental Sciences (JBES)*, vol. 10, no. 2, pp. 173–180, 2017.
- [411] I. Hassan, A. R. Ghumman, Y. Ghazaw, R. H. Abdel-Maguid, and B. Samreen, “Climate change impact on precipitation in arid areas of Pakistan,” *International Journal of Water Resources and Arid Environments*, vol. 6, no. 1, pp. 80–88, 2017.
- [412] M. Ahmed, “No access fluid viscous dampers locations in reinforced-concrete core wall buildings,” *Proceedings of the Institution of Civil Engineers-Structures and Buildings*, vol. 170, no. 1, pp. 33–50, 2017.
- [413] M. Ali, “Role of post-tensioned Coconut-fibre ropes in mortar-free interlocking concrete construction during seismic loadings,” *KSCE Journal of Civil Engineering*, pp. 1–8, 2017.
- [414] T. Mehmood, P. Warnitchai, M. Ahmed, and M. I. Qureshi, “Alternative approach to compute shear amplification in high-rise reinforced concrete core wall buildings using uncoupled modal response history analysis procedure,” *The Structural Design of Tall and Special Buildings*, vol. 26, no. 4, 2017.
- [415] J. Iqbal, Z. H. Khan, and A. Khalid, “Prospects of robotics in food industry,” *Food Science and Technology (Campinas)*, vol. 37, no. 2, pp. 159–165, 2017.
- [416] S. S. Warsi, S. H. I. Jaffery, R. Ahmad, M. Khan, L. Ali, M. H. Agha, and S. Akram, “Development of energy consumption map for orthogonal machining of Al 6061-T6 alloy,” *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, pp. 1–13, 2017.
- [417] A. Ashfaq, Z. H. Kamali, M. H. Agha, and H. Arshid, “Heat coupling of the pan-European vs. regional electrical grid with excess renewable energy,” *Energy*, vol. 122, pp. 363–377, 2017.

- [418] M. M. Khan, J. Hélie, M. Gorokhovski, and N. A. Sheikh, “Experimental and numerical study of flash boiling in gasoline direct injection sprays,” *Applied Thermal Engineering*, vol. 123, pp. 377–389, 2017.
- [419] M. M. Khan, J. Hélie, M. Gorokhovski, and N. A. Sheikh, “Air entrainment in high pressure multihole gasoline direct injection sprays,” *Journal of Applied Fluid Mechanics*, vol. 10, no. 4, pp. 1223–1234, 2017.
- [420] M. R. Bhatti, N. A. Sheikh, S. Manzoor, M. M. Khan, and M. Ali, “Numerical study of hydrogen peroxide thermal decomposition in a shock tube,” *Journal of Thermal Science*, vol. 26, no. 3, pp. 235–244, 2017.
- [421] M. M. Khan and N. A. Sheikh, “Experimental characterization of high pressure gasoline direct injection sprays,” *Journal of Mechanical Science and Technology*, vol. 31, no. 4, pp. 2015–2022, 2017.
- [422] M. Ahmad, M. A. Qadir, and T. Ali, “Indexing for semantic cache to reduce query matching complexity,” *Journal of the National Science Foundation of Sri Lanka*, vol. 45, no. 1, 2017.
- [423] S. Khan and M. A. Qadir, “Deterministic time markov chain modeling of simultaneous multipath transmission schemes,” *IEEE Access*, vol. 5, 2017.
- [424] N. Noureen, H. M. Zohaib, M. A. Qadir, and S. Fazal, “ChromBiSim: Interactive chromatin biclustering using a simple approach,” *Genomics*, 2017.
- [425] R. Ahmad, M. T. Afzal, and M. A. Qadir, “Pattern analysis of citation-anchors in citing documents for accurate identification of in-text citations,” *IEEE Access*, vol. 5, pp. 5819–5828, 2017.
- [426] N. Ikram, M. Qadir, and M. Afzal, “Investigating correlation between protein sequence similarity and semantic similarity using gene ontology annotations,” *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2017.
- [427] A. Shahid and M. T. Afzal, “Section-wise indexing and retrieval of research articles,” *Cluster Computing*, pp. 1–12, 2017.
- [428] S. A. Khan, M. A. Qadir, M. A. Abbas, and M. T. Afzal, “OWL2 benchmarking for the evaluation of knowledge based systems,” *PloS One*, vol. 12, no. 6, p. e0179578, 2017.
- [429] R. Habib and M. T. Afzal, “Paper recommendation using citation proximity in bibliographic coupling,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 25, no. 4, pp. 2708–2718, 2017.
- [430] M. Imran, M. T. Afzal, and M. A. Qadir, “A comparison of feature extraction techniques for malware analysis,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 25, no. 2, pp. 1173–1183, 2017.

- [431] M. A. Iqbal, M. Aleem, M. Ibrahim, A. Saleem, and M. A. Islam, “Amazon cloud computing platform EC2 and VANET simulations,” *accepted in International Journal of Ad hoc and Ubiquitous Computing (Inderscience)*, 2017.
- [432] M. Aleem, P. Radu, M. A. Islam, and M. A. Iqbal, “On the parallel programmability of JavaSymphony for multi-cores and clusters,” *accepted in International Journal of Ad hoc and Ubiquitous Computing*, 2017.
- [433] S. Aurangzeb, M. Aleem, M. A. Iqbal, and M. A. Islam, “Ransomware: A survey and trends.” *Journal of Information Assurance & Security*, vol. 6, no. 2, 2017.
- [434] M. Badri, M. Aleem, M. Arshad Islam, M. A. Iqbal, and M. Waqar, “Fast implementation of minimum spanning tree method and applying it to kruskal’s and prim’s algorithms,” *Sukkur IBA Journal of Computing and Mathematical Sciences*, vol. 1, no. 1, pp. 58–66, 2017.
- [435] M. Aleem, A. Ishtiaq, S. H. Abbasi, and M. A. Islam, “User tracking mechanisms and counter measures,” *International Journal of Applied Mathematics, Electronics and Computers*, vol. 5, no. 2, pp. 33–40, 2017.
- [436] Z. Halim, A. R. Baig, G. Abbas, and M. A. Islam, “Computational intelligence-based search of entertaining rules in the space of predator/prey games,” *Journal of Multiple-Valued Logic & Soft Computing*, vol. 28, no. 6, 2017.
- [437] S. A. Khan and A. Nadeem, “Automated generation and infeasible detection of test paths for data flow testing using genetic algorithm,” *Science International*, vol. 29, no. 2, pp. 311–311, 2017.
- [438] M. N. Shahwani, S. Nisar, A. Aleem, M. Panezai, S. Afridi, and S. I. Malik, “Amplification of mitochondrial DNA for detection of plasmodiumvivax in Balochistan,” *The Journal of the Pakistan Medical Association*, vol. 67, no. 5, p. 677, 2017.
- [439] A. Munir, S. Azam, S. Ali, A. Mehmood, A. H. Shah *et al.*, “Repurposing of modified alpidem and propoxyphene to cure AURKA, BCAS1, GNAS and MLH1 gene mutations in colorectal cancer,” *Drug Designing*, vol. 6, no. 141, pp. 2169–0138, 2017.
- [440] F. Khattak, M. Haseeb, S. Fazal, A. I. Bhatti, and M. Ullah, “Mathematical modeling of E6-p53 interactions in cervical cancer,” *Asian Pacific Journal of Cancer Prevention*, vol. 18, no. 4, p. 1057, 2017.
- [441] A. Saeed, P. A. Channar, F. A. Larik, F. Jabeen, U. Muqadar, S. Saeed, U. Flörke, H. Ismail, E. Dilshad, and B. Mirza, “Design, synthesis, molecular docking studies of organotin-drug derivatives as multi-target agents against antibacterial, antifungal, α -amylase, α -glucosidase and butyrylcholinesterase,” *Inorganica Chimica Acta*, vol. 464, pp. 204–213, 2017.
- [442] S. Azam, A. Munir, M. S. Khan, S. Fazal, A. Mehmood *et al.*, “In-silico identification of novel resistant genes for fungal pathogen fusarium oxysporum f.sp. cubense race 4:

Causative agent of banana vascular wilt disease,” *Journal Of Plant Biochemistry & Physiology*, vol. 5, no. 175, p. 2, 2017.

- [443] S. Hussain, J. Z. K. Khattak, M. Ismail, Q. Mansoor, and M. H. Khan, “Molecular characterization of deafness in autosomal recessive pedigrees of Khyber Pakhtunkhwa,” *Pakistan Journal of Pharmaceutical Sciences*, vol. 31, no. 1, 2017.
- [444] H. Ismail, E. Dilshad, M. T. Waheed, and B. Mirza, “Transformation of Lettuce with rol ABC Genes: Extracts show enhanced antioxidant, analgesic, anti-inflammatory, antidepressant, and anticoagulant activities in aats,” *Applied Biochemistry and Biotechnology*, vol. 181, no. 3, pp. 1179–1198, 2017.
- [445] S. Hussain, “Finite element solution for MHD flow of nanofluids with heat and mass transfer through a porous media with thermal radiation, viscous dissipation and chemical reaction effects,” *Advances in Applied Mathematics and Mechanics*, vol. 9, no. 4, pp. 904–923, 2017.
- [446] Y. Mehmood, M. Sagheer, and S. Hussain, “MHD oblique stagnation point flow of nanofluid over a convective stretching surface,” *Journal of Computational and Theoretical Nanoscience*, vol. 14, no. 4, pp. 1724–1734, 2017.
- [447] S. Hussain, S. Ahmad, K. Mehmood, and M. Sagheer, “Effects of inclination angle on mixed convective nanofluid flow in a double lid-driven cavity with discrete heat sources,” *International Journal of Heat and Mass Transfer*, vol. 106, pp. 847–860, 2017.
- [448] Y. Mehmood, M. Sagheer, S. Hussain, and M. Bilal, “MHD stagnation point flow and heat transfer in viscoelastic fluid with cattaneo–christov heat flux model,” *Neural Computing and Applications*, pp. 1–8, 2017.
- [449] M. Bilal, M. Sagheer, and S. Hussain, “Three dimensional MHD upper-convected maxwell nanofluid flow with nonlinear radiative heat flux,” *Alexandria Engineering Journal*, 2017.
- [450] M. Bilal, M. Sagheer, S. Hussain, and Y. Mehmood, “MHD stagnation point flow of williamson fluid over a stretching cylinder with variable thermal conductivity and homogeneous/heterogeneous reaction,” *Communications in Theoretical Physics*, vol. 67, no. 6, p. 688, 2017.
- [451] M. Bilal, S. Hussain, and M. Sagheer, “Boundary layer flow of magneto-micropolar nanofluid flow with hall and ion-slip effects using variable thermal diffusivity,” *Bulletin of the Polish Academy of Sciences Technical Sciences*, vol. 65, no. 3, pp. 383–390, 2017.
- [452] K. Mehmood, S. Hussain, and M. Sagheer, “Mixed convection in alumina-water nanofluid filled lid-driven square cavity with an isothermally heated square blockage inside with magnetic field effect: Introduction,” *International Journal of Heat and Mass Transfer*, vol. 109, pp. 397–409, 2017.

- [453] K. Mehmood, S. Hussain, and M. Sagheer, “Numerical simulation of MHD mixed convection in alumina–water nanofluid filled square porous cavity using KKL model: Effects of non-linear thermal radiation and inclined magnetic field,” *Journal of Molecular Liquids*, vol. 238, pp. 485–498, 2017.
- [454] M. Bilal, M. Sagheer, and S. Hussain, “On MHD 3D upper convected maxwell fluid flow with thermophoretic effect using non-linear radiative heat flux,” *Canadian Journal of Physics*, 2017.
- [455] S. Hussain, S. E. Ahmed, and T. Akbar, “Entropy generation analysis in MHD mixed convection of hybrid nanofluid in an open cavity with a horizontal channel containing an adiabatic obstacle,” *International Journal of Heat and Mass Transfer*, vol. 114, pp. 1054–1066, 2017.
- [456] S. Hussain, H. F. Öztöp, M. Jamal, and N. A. Hamdeh, “Double diffusive nanofluid flow in a duct with cavity heated from below,” *International Journal of Mechanical Sciences*, vol. 131, pp. 535–545, 2017.
- [457] A. Kamran, S. Hussain, M. Sagheer, and N. Akmal, “A numerical study of magnetohydrodynamics flow in casson nanofluid combined with joule heating and slip boundary conditions,” *Results in Physics*, vol. 7, pp. 3037–3048, 2017.
- [458] J. B. Lawrie and M. Afzal, “Acoustic scattering in a waveguide with a height discontinuity bridged by a membrane: A tailored galerkin approach,” *Journal of Engineering Mathematics*, vol. 105, no. 1, pp. 99–115, 2017.
- [459] J. Ahmed, “Does external debt lead to growth in the presence of quality institutions?” *World Economy Brief*, vol. 7, no. 22, pp. 1–5, 2017.
- [460] N. Kanwal, M. S. Zafar, and S. Bashir, “The combined effects of managerial control, resource commitment, and top management support on the successful delivery of information systems projects,” *International Journal of Project Management*, vol. 35, no. 8, pp. 1459–1465, 2017.
- [461] S. Shaheen, S. Bashir, and A. K. Khan, “Examining organizational cronyism as an antecedent of workplace deviance in public sector organizations,” *Public Personnel Management*, vol. 46, no. 3, pp. 308–323, 2017.
- [462] M. M. Hassan, S. Bashir, and S. M. Abbas, “The impact of project managers personality on project success in NGOs: The mediating role of transformational leadership,” *Project Management Journal*, vol. 48, no. 2, pp. 74–87, 2017.
- [463] B. Javed, A. A. Khan, S. Bashir, and S. Arjoon, “Impact of ethical leadership on creativity: the role of psychological empowerment,” *Current Issues in Tourism*, vol. 20, no. 8, pp. 839–851, 2017.
- [464] B. Javed, S. Bashir, M. Y. A. Rawwas, and S. Arjoon, “Islamic work ethic, innovative work behaviour, and adaptive performance: the mediating mechanism and an interacting effect,” *Current Issues in Tourism*, vol. 20, no. 6, pp. 647–663, 2017.

- [465] I. Rasool, A. Rajput *et al.*, “The impact of perceived internal corporate social responsibility on organizational citizenship behavior: A micro-perspective analysis,” *Business & Economic Review*, vol. 9, no. 1, pp. 181–201, 2017.
- [466] A. U. Shah and M. I. Khan, “The mediating role of overall justice in justice employees attitudes relationship: A test of five factors mode,” *Journal of Managerial Science*, vol. 10, no. 3, pp. 27–48, 2017.
- [467] I. Ahmad and M. A. Zafar, “Impact of psychological contract fulfillment on organizational citizenship behavior: Mediating role of perceived organizational support,” *International Journal of Contemporary Hospitality Management*, vol. 30, no. 2, pp. 1001–1015, 2017.
- [468] L. Saqib and M. A. Zafar, “A critical analysis of shari’ah issues in the contemporary state bank guidelines on islamic agriculture finance (a study from Pakistan),” *Islamic Studies*, vol. 54, no. 1-2, 2017.
- [469] B. Javed, S. M. M. R. Naqvi, A. K. Khan, S. Arjoon, and H. H. Tayyeb, “Impact of inclusive leadership on innovative work behavior: The role of psychological safety,” *Journal of Management & Organization*, pp. 1–20, 2017.
- [470] B. Shabbir and S. M. M. Raza Naqvi, “Impact of workload and job complexity on employee job performance with the moderating role of social support and mediating role of job stress: A study of travel agencies in Rawalpindi, Islamabad and AJK,” *Journal of Accounting and Marketing*, vol. 6, no. 1, 2017.
- [471] Y. A. Butt, Y. L. Sachkov, and A. I. Bhatti, “Maxwell strata and conjugate points in the sub-Riemannian problem on the lie group SH(2),” *Journal of Dynamical and Control Systems*, vol. 22, no. 4, pp. 747–770, 2016.
- [472] M. Ghafoor, I. A. Taj, and M. N. Jafri, “Fingerprint frequency normalisation and enhancement using two-dimensional short-time fourier transform analysis,” *IET Computer Vision*, vol. 10, no. 8, pp. 806–816, 2016.
- [473] G. Murtaza, A. I. Bhatti, and Q. Ahmed, “Control-oriented model of atkinson cycle engine with variable intake valve actuation,” *Journal of Dynamic Systems, Measurement, and Control*, vol. 138, no. 6, pp. 1–9, 2016.
- [474] I. Khan, A. I. Bhatti, A. Arshad, and Q. Khan, “Robustness and performance parameterization of smooth second order sliding mode control,” *International Journal of Control, Automation and Systems*, vol. 14, no. 3, pp. 681–690, 2016.
- [475] S. U. Ali, R. Samar, M. Z. Shah, A. I. Bhatti, K. Munawar, and U. M. Al-Sggaf, “Lateral guidance and control of UAVs using second-order sliding modes,” *Aerospace Science and Technology*, vol. 49, pp. 88–100, 2016.
- [476] M. A. Z. Raja, R. Samar, E. S. Alaidarous, and E. Shivanian, “Bio-inspired computing platform for reliable solution of Bratu-type equations arising in the modeling of

- electrically conducting solids,” *Applied Mathematical Modelling*, vol. 40, no. 11, pp. 5964–5977, 2016.
- [477] S. J. Nawaz, M. I. Tiwana, M. Patwary, N. M. Khan, M. I. Tiwana, and A. H. Haseeb, “GA based sensing of sparse multipath channels with superimposed training sequence,” *Elektronika ir Elektrotechnika*, vol. 22, no. 1, pp. 87–91, 2016.
- [478] S. M. Shah, R. Samar, N. M. Khan, and M. A. Z. Raja, “Fractional-order adaptive signal processing strategies for active noise control systems,” *Nonlinear Dynamics*, vol. 85, no. 3, pp. 1363–1376, 2016.
- [479] M. Y. Wani, M. Riaz, and N. M. Khan, “Modeling and characterization of MIMO mobile-to-mobile communication channels using elliptical scattering geometry,” *Wireless Personal Communications*, vol. 91, no. 2, pp. 509–524, 2016.
- [480] M. S. Khan and N. M. Khan, “Low complexity signed response based sybil attack detection mechanism in wireless sensor networks,” *Journal of Sensors*, vol. 2016, 2016.
- [481] T. Ahmed and N. M. Khan, “Direct radio frequency sampling methodology for multiple signals in an energy-sparse spectrum,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 24, no. 6, pp. 4637–4647, 2016.
- [482] M. Riaz, M. Rehan, and M. Ashraf, “Synchronization of nonlinear master–slave systems under input delay and slope-restricted input nonlinearity,” *Complexity*, vol. 21, no. S1, pp. 220–233, 2016.
- [483] S. J. Nawaz, N. M. Khan, and R. Ramer, “3-D spatial spread quantifiers for multipath fading wireless channels,” *IEEE Wireless Communications Letters*, vol. 5, no. 5, pp. 484–487, 2016.
- [484] M. Sajid, I. A. Taj, U. I. Bajwa, and N. I. Ratyal, “The role of facial asymmetry in recognizing age-separated face images,” *Computers & Electrical Engineering*, vol. 54, pp. 255–270, 2016.
- [485] M. Asif, I. A. Taj, S. M. Ziauddin, M. B. Ahmad, and A. Raza, “An efficient inter prediction mode selection scheme for advanced video coding based on motion homogeneity and residual complexity,” *IEEJ Transactions on Electrical and Electronic Engineering*, vol. 11, no. 6, pp. 760–767, 2016.
- [486] W. Abbasi *et al.*, “Adaptive integral sliding mode stabilization of nonholonomic drift-free systems,” *Mathematical Problems in Engineering*, vol. 2016, 2016.
- [487] Q. Khan, R. Akmeiliawati *et al.*, “Robust control of underactuated systems: Higher order integral sliding mode approach,” *Mathematical Problems in Engineering*, vol. 2016, 2016.
- [488] K. A. Khaliq, A. Qayyum, and J. Pannek, “Synergies of advanced technologies and role of VANET in logistics and transportation,” *International Journal of Advanced Computer Science and Applications*, vol. 7, no. 11, pp. 359–369, 2016.

- [489] S. Yasmin, R. N. Bin Rais, and A. Qayyum, “Resource aware routing in heterogeneous opportunistic networks,” *International Journal of Distributed Sensor Networks*, vol. 12, no. 1, p. 2907980, 2016.
- [490] K. A. Khaliq, A. Qayyum, J. Pannek *et al.*, “Wireless body area networks (WBAN): Architecture, applications and MAC protocols,” *Abstract of Emerging Trends in Scientific Research*, vol. 6, 2016.
- [491] M. Riaz, M. M. Ahmed, and U. Munir, “An improved model for current voltage characteristics of submicron SiC MESFETs,” *Solid-State Electronics*, vol. 121, pp. 54–61, 2016.
- [492] M. Ahmed, “No access multiple plastic hinge concept for high-rise reinforced-concrete core wall buildings,” *Proceedings of the Institution of Civil Engineers-Structures and Buildings*, vol. 169, no. 9, pp. 688–701, 2016.
- [493] R. Farooq, W. Ahmad, H. N. Hashmi, and Z. Saeed, “Computation of momentum transfer coefficient and conveyance capacity in asymmetric compound channel,” *Arabian Journal for Science and Engineering*, vol. 41, no. 10, pp. 4225–4234, 2016.
- [494] M. Khan and M. Ali, “Use of glass and nylon fibers in concrete for controlling early age micro cracking in bridge decks,” *Construction and Building Materials*, vol. 125, pp. 800–808, 2016.
- [495] M. Ali, “Use of coconut fibre reinforced concrete and coconut-fibre ropes for seismic-resistant construction,” *Materiales de Construcción*, vol. 66, no. 321, p. e073, 2016.
- [496] I. Hassan, “Rainwater harvesting-an alternative water supply in the future for Pakistan,” *Journal of Biodiversity and Environmental Sciences (JBES)*, vol. 8, no. 6, pp. 213–222, 2016.
- [497] I. Hassan, A. R. Ghumman, and H. N. Hashmi, “Global warming and temperature changes for Saudi Arabia,” *Journal of Biodiversity and Environmental Sciences (JBES)*, vol. 8, no. 1, pp. 179–191, 2016.
- [498] A. Khalid, P. Kirisci, Z. Ghrairi, K.-D. Thoben, and J. Pannek, “A methodology to develop collaborative robotic cyber physical systems for production environments,” *Logistics Research*, vol. 9, no. 23, pp. 1–15, 2016.
- [499] M. Umar, N. Khan, M. H. Agha, and M. Abbas, “SAP-ERP implementation: Change management model using qualitative approach,” *International Journal of Computer Science and Network Security (IJCSNS)*, vol. 16, no. 6, pp. 9–13, 2016.
- [500] L. A. K. Rayyan Azam Khan, Z. K. Farzan Majeed Noori, and A. Majeed, “Design and simulation of a sine wave inverter with PID control for nonlinear load applications,” *International Journal of Innovation and Scientific Research*, vol. 26, no. 2, pp. 672–683, 2016.

- [501] R. A. K. Farzan Majeed Noori, Liaquat Ali Khan, “Cost effective recognition and classification of moving objects using simulink,” *Journal of Scientific and Engineering Research*, vol. 3, no. 5, pp. 174–182, 2016.
- [502] M. M. Khan and N. A. Sheikh, “Identification and characterization of coherent structures in gasoline injector nozzle flow using proper orthogonal decomposition,” *Journal of Mechanical Science and Technology*, vol. 30, no. 8, pp. 3673–3680, 2016.
- [503] N. A. Sheikh, S. Manzoor, M. M. Khan, and M. Ali, “Hydrodynamic description of a vibrofluidized granular bed driven at high frequency,” *The European Physical Journal Applied Physics*, vol. 75, no. 3, p. 31101, 2016.
- [504] U. Farooq, A. Nongaillard, Y. Ouzrout, and M. A. Qadir, “A feature-based reputation model for product evaluation,” *International Journal of Information Technology & Decision Making*, vol. 15, no. 06, pp. 1521–1553, 2016.
- [505] U. Farooq, A. Nongaillard, Y. Ouzrout, and M. A. Qadir, “A multi source product reputation model,” *Computers in Industry*, vol. 83, pp. 55–67, 2016.
- [506] K. Shaukat, T. Tariq, A. Junaid, M. A. Ahsan, K. Mehmood, and U. Shaukat, “KSD an efficient algorithm for association rule mining,” *International Journal of Computer Science and Information Security*, vol. 14, no. 5, p. 351, 2016.
- [507] S. Ayaz and M. T. Afzal, “Identification of conversion factor for completing-h index for the field of mathematics,” *Scientometrics*, vol. 109, no. 3, pp. 1511–1524, 2016.
- [508] M. Imran, M. T. Afzal, and M. A. Qadir, “Malware classification using dynamic features and hidden markov model,” *Journal of Intelligent & Fuzzy Systems*, vol. 31, no. 2, pp. 837–847, 2016.
- [509] N. Sajid, M. T. Afzal, and M. Qadir, “Multi-label classification of computer science documents using fuzzy logic,” *Journal of the National Science Foundation of Sri Lanka*, vol. 44, no. 2, 2016.
- [510] M. T. Ikram, N. A. Butt, and M. T. Afzal, “Open source software adoption evaluation through feature level sentiment analysis using Twitter data,” *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 24, no. 5, pp. 4481–4496, 2016.
- [511] M. Aleem, M. A. Islam, and M. A. Iqbal, “A comparative study of heterogeneous processor simulators,” *International Journal of Computer Applications*, vol. 148, no. 12, 2016.
- [512] A. Javed, B. Qamar, M. Jameel, A. Shafi, and B. Carpenter, “Towards scalable Java HPC with hybrid and native communication devices in MPJ express,” *International Journal of Parallel Programming*, vol. 44, no. 6, pp. 1142–1172, 2016.
- [513] R. Ul-Islam, S. A. Haider, T. Abbas, and M. Ikram, “Matter-wave teleportation via cavity-field trans-pads,” *Laser Physics Letters*, vol. 13, no. 10, p. 105204, 2016.

- [514] S. Ahmed and A. Nadeem, “A mobile agent based communication protocol to optimize message delivery cost,” *Journal of Systems and Software*, vol. 121, pp. 40–48, 2016.
- [515] R. Bano, M. Ismail, A. Nadeem, M. H. Khan, and H. Rashid, “Potential risk factors for breast cancer in Pakistani women,” *Asian Pacific Journal of Cancer Prevention*, vol. 17, no. 9, pp. 4307–4312, 2016.
- [516] S. A. Khan and A. Nadeem, “An empirical investigation on test data generation for coupling based integration testing,” *Science International*, vol. 28, no. 1, 2016.
- [517] N. Farah, A. Mehdi, S. I. Soomro, N. I. Soomro, R. Tareb, N. Desmases, J. P. Vernoux, S. M. Bakhtiar, and M. Imran, “Draft genome sequence of enterococcus mundtii QAUEM2808, isolated from dahi, a fermented milk product,” *Genome announcements*, vol. 4, no. 5, pp. e00995–16, 2016.
- [518] R. Tabassum, M. Haseeb, and S. Fazal, “Structure prediction of outer membrane protease protein of salmonella typhimurium using computational techniques,” *International Journal Bioautomation*, vol. 20, no. 1, 2016.
- [519] N. Farah, A. Mehdi, S. I. Soomro, N. I. Soomro, R. Tareb, N. Desmases, J. P. Vernoux, S. M. Bakhtiar, and M. Imran, “Implementation of mathematical models for HCV infection,” *Journal of Applied Environmental and Biological Sciences*, vol. 6, no. 2S, pp. 109–113, 2016.
- [520] H. A. Butt and S. M. Bakhtiar, “Identification and classification of bacterial auto-transporters,” *Jurnal Teknologi*, vol. 78, no. 4-3, pp. 47–51, 2016.
- [521] H. Ismail, E. Dilshad, M. T. Waheed, M. Sajid, W. K. Kayani, and B. Mirza, “Transformation of *Lactuca sativa* L. with rol C gene results in increased antioxidant potential and enhanced analgesic, anti-inflammatory and antidepressant activities in vivo,” *3 Biotech*, vol. 6, no. 2, p. 215, 2016.
- [522] W. K. Kayani, E. Dilshad, T. Ahmed, H. Ismail, and B. Mirza, “Evaluation of *Ajuga bracteosa* for antioxidant, anti-inflammatory, analgesic, antidepressant and anticoagulant activities,” *BMC Complementary and Alternative Medicine*, vol. 16, no. 1, p. 375, 2016.
- [523] S. F. Ahmad, Z. Anwar, S. Hussain, M. Jehangir, I. Jehangir, A. Jamal, J. Z. K. Khattak, and A. Ali Khan, “A detailed report on the specific area based percentage and diagnostic methods of hepatitis C in Khyber Pakhtunkhwa, Pakistan,” *Molecular and Biochemical Diagnosis (Journal)*, vol. 2, no. 1, pp. 51–64, 2016.
- [524] K. M. Haroon, S. Hussain, R. Bano, H. Jamshed-Ul-Hassan, and U. R. M. Aadil, “Associations of most prevalent risk factors with lung cancer and their impact on survival length,” *Asian Pacific Journal of Cancer Prevention*, vol. 17, no. S3, pp. 65–70, 2016.

- [525] A. Shaheen, S. Hussain, and S. Nadeem, “Physiological flow of jeffrey six constant fluid model due to ciliary motion,” *Communications in Theoretical Physics*, vol. 66, no. 6, p. 701, 2016.
- [526] S. Kanwal and R. Ali, “A cryptosystem with noncommutative platform groups,” *Neural Computing and Applications*, pp. 1–6, 2016.
- [527] S. Inam and R. Ali, “A new ElGamal-like cryptosystem based on matrices over groupring,” *Neural Computing and Applications*, pp. 1–5, 2016.
- [528] M. Afzal, R. Nawaz, and A. Ullah, “Attenuation of dissipative device involving coupled wave scattering and change in material properties,” *Applied Mathematics and Computation*, vol. 290, pp. 154–163, 2016.
- [529] A. R. Kashif, M. Shoaib, and M. A. Latif, “Applications and derivation of Ostrowski type inequalities for n-times differentiable functions for some efficient quadrature rules,” *Science International*, vol. 28, no. 3, 2016.
- [530] A. R. Kashif, M. Shoaib, and M. A. Latif, “Improved version of perturbed Ostrowski type inequalities for n-times differentiable mappings with three-step kernel and its application,” *Journal of Nonlinear Sciences and Applications*, vol. 9, 2016.
- [531] E. Karapinar, R. Ali, T. Kamran, and M. U. Ali, “Generalized multivalued rational type contractions,” *Journal of Advanced Mathematical Studies*, vol. 9, no. 6, pp. 26–36, 2016.
- [532] T. Kamran, M. Postolache, A. Ghiura, S. Batul, and R. Ali, “The banach contraction principle in C^* -algebra-valued b-metric spaces with application,” *Fixed Point Theory and Applications*, vol. 2016, no. 1, 2016.
- [533] S. Nadeem, A. Munim, A. Shaheen, and S. Hussain, “Physiological flow of Carreau fluid due to ciliary motion,” *AIP Advances*, vol. 6, no. 3, p. 035125, 2016.
- [534] A. Akgul, S. Hussain, and I. Pehlivan, “A new three-dimensional chaotic system, its dynamical analysis and electronic circuit applications,” *Optik-International Journal for Light and Electron Optics*, vol. 127, no. 18, pp. 7062–7071, 2016.
- [535] T. Hussain, S. Hussain, and T. Hayat, “Impact of double stratification and magnetic field in mixed convective radiative flow of maxwell nanofluid,” *Journal of Molecular Liquids*, vol. 220, pp. 870–878, 2016.
- [536] S. Hussain, K. Mehmood, and M. Sagheer, “MHD mixed convection and entropy generation of water–alumina nanofluid flow in a double lid driven cavity with discrete heating,” *Journal of Magnetism and Magnetic Materials*, vol. 419, pp. 140–155, 2016.
- [537] K. Mehmood, S. Hussain, and M. Sagheer, “Mixed convection flow with non-uniform heat source/sink in a doubly stratified magnetonanofluid,” *AIP Advances*, vol. 6, no. 6, p. 065126, 2016.

- [538] S. Shah, S. Hussain, and M. Sagheer, “MHD effects and heat transfer for the UCM fluid along with joule heating and thermal radiation using cattaneo-christov heat flux model,” *AIP Advances*, vol. 6, no. 8, p. 085103, 2016.
- [539] S. T. Hussain, Z. H. Khan, S. Nadeem *et al.*, “Water driven flow of carbon nanotubes in a rotating channel,” *Journal of Molecular Liquids*, vol. 214, pp. 136–144, 2016.
- [540] A. Noor, S. Bashir, and V. A. Earnshaw, “Bullying, internalized hepatitis (Hepatitis C virus) stigma, and self-esteem: Does spirituality curtail the relationship in the workplace,” *Journal of Health Psychology*, vol. 21, no. 9, pp. 1860–1869, 2016.
- [541] M. H. Khan, A. Fraz, and A. Hassan, “The diversification puzzle: The role of asymmetric information and insider trading in Pakistan,” *The Lahore Journal of Economics*, vol. 21, no. 2, pp. 97–119, 2016.
- [542] A. Fraz and A. Hassan, “Testing information efficiency using random walk model: Empirical evidence from Karachi stock exchange,” *Journal of Managerial Sciences*, vol. 10, no. 2, pp. 249–266, 2016.
- [543] L. Saqib and M. A. Zafar, “A realistic approach to the concept of ijarah (leasing) in islamic finance and its possible role in the development of agricultural sector in Pakistan,” *Hamdard Islamicus*, vol. 2, no. 3, 2016.
- [544] L. S. Behar-Horenstein, N. Isaac, C. N. Southwell, M. E. Hudson-Vassell, L. Niu, M. Pratto, K. W. Roberts, R. J. Wingfield, J. D. Wolfgang, and M. A. Zafar, “Promoting academic socialization through service learning experiences,” *International Journal of Teaching and Learning in Higher Education*, vol. 28, no. 2, pp. 158–167, 2016.
- [545] I. Ahmed, M. A. Zafar, K. Shahzad, and K. Khan, “Understanding the concept of Corporate Social Responsibility (CSR): Attributions from islamic perspective,” *Journal of Islamic Business and Management*, vol. 6, no. 2, pp. 135–152, 2016.
- [546] Z. Riaz and M. I. Khan, “Impact of service failure severity and agreeableness on consumer switchover intention: Mediating role of consumer forgiveness,” *Asia Pacific Journal of Marketing and Logistics*, vol. 28, no. 3, pp. 420–434, 2016.
- [547] J. K. Khattak, M. R. Naqvi, and S. Muhammad, “Impact of consumer beliefs on beef buying intention in Pakistan: An application of the theory of planned behavior,” *Abasyn University Journal of Social Sciences*, vol. 9, no. 2, pp. 495–508, 2016.
- [548] M. A. Z. Raja, R. Samar, T. Haroon, and S. M. Shah, “Unsupervised neural network model optimized with evolutionary computations for solving variants of nonlinear MHD Jeffery-Hamel problem,” *Applied Mathematics and Mechanics*, vol. 36, no. 12, pp. 1611–1638, 2015.
- [549] M. A. Z. Raja, J. A. Khan, A. M. Siddiqui, D. Behloul, T. Haroon, and R. Samar, “Exactly satisfying initial conditions neural network models for numerical treatment of first Painlevé equation,” *Applied Soft Computing*, vol. 26, pp. 244–256, 2015.

- [550] M. A. Z. Raja, J. A. Khan, S. M. Shah, R. Samar, and D. Behloul, “Comparison of three unsupervised neural network models for first Painlevé Transcendent,” *Neural Computing and Applications*, vol. 26, no. 5, pp. 1055–1071, 2015.
- [551] M. A. Z. Raja, M. A. Manzar, and R. Samar, “An efficient computational intelligence approach for solving fractional order riccati equations using ANN and SQP,” *Applied Mathematical Modelling*, vol. 39, no. 10, pp. 3075–3093, 2015.
- [552] M. Asad, A. I. Bhatti, S. Iqbal, and Y. Asfia, “A smooth integral sliding mode controller and disturbance estimator design,” *International Journal of Control, Automation and Systems*, vol. 13, no. 6, pp. 1326–1336, 2015.
- [553] A. A. Uppal, A. I. Bhatti, E. Aamir, R. Samar, and S. A. Khan, “Optimization and control of one dimensional packed bed model of underground coal gasification,” *Journal of Process Control*, vol. 35, pp. 11–20, 2015.
- [554] M. Z. Shah, R. Samar, and A. I. Bhatti, “Guidance of air vehicles: A sliding mode approach,” *IEEE Transactions on Control Systems Technology*, vol. 23, no. 1, pp. 231–244, 2015.
- [555] M. Z. Shah, R. Samar, and A. I. Bhatti, “Lateral track control of UAVs using the sliding mode approach: from design to flight testing,” *Transactions of the Institute of Measurement and Control*, vol. 37, no. 4, pp. 457–474, 2015.
- [556] K. A. Khaliq, S. Hussain, A. Qayyum, and J. Pannek, “Novel data link layer encoding scheme for multi-hop wireless mesh network,” *Procedia Computer Science*, vol. 52, pp. 665–669, 2015.
- [557] I. H. Syed and N. M. Khan, “MIMO–OFDM communication system with opportunistic diversity-order selection and KF-based channel estimation,” *Wireless Personal Communications*, vol. 84, no. 1, pp. 587–603, 2015.
- [558] S. J. Nawaz, M. Riaz, N. M. Khan, and S. Wyne, “Temporal analysis of a 3D ellipsoid channel model for the vehicle-to-vehicle communication environments,” *Wireless Personal Communications*, vol. 82, no. 3, pp. 1337–1350, 2015.
- [559] S. J. Nawaz, N. M. Khan, M. I. Tiwana, N. Hassan, and S. I. Shah, “Airborne internet access through submarine optical fiber cables,” *IEEE Transactions on Aerospace and Electronic Systems*, vol. 51, no. 1, pp. 167–177, 2015.
- [560] M. Riaz, N. M. Khan, and S. J. Nawaz, “A generalized 3-D scattering channel model for spatiotemporal statistics in mobile-to-mobile communication environment,” *IEEE Transactions on Vehicular Technology*, vol. 64, no. 10, pp. 4399–4410, 2015.
- [561] S. A. Moiz, H. Nasir, A. M. Nahhas, K. S. Karimov, and M. M. Ahmed, “Improved electrical response of MIS diode with disperse orange-25 as insulator deposited by centrifugal process,” *Advances in Applied Science Research*, vol. 6, no. 5, pp. 16–25, 2015.

- [562] K. Karimov, M. M. Ahmed, F. Noshin, M. Saleem, M. Mahroof-Tahir, S. A. Moiz, K. M. Akhmedov, M. Zahid, S. Z. Abbas, and A. Rashid, "Nickel phthalocyanine based organic photo transistor: effect of semiconductor film thickness," *The European Physical Journal Applied Physics*, vol. 72, no. 2, p. 20202, 2015.
- [563] N. I. Ratyal, I. A. Taj, U. I. Bajwa, and M. Sajid, "3D face recognition based on pose and expression invariant alignment," *Computers & Electrical Engineering*, vol. 46, pp. 241–255, 2015.
- [564] M. Asif, I. A. Taj, S. M. Ziauddin, M. B. Ahmad, and M. Tahir, "A hybrid scheme based on pipelining and multitasking in mobile application processors for advanced video coding," *Scientific Programming*, vol. 2015, p. 22, 2015.
- [565] I. Hassan and A. R. Ghumman, "Application of civil engineering softwares for down-scaling GCM results," *International Invention Journal of Engineering Science and Technology*, vol. 2, no. 1, pp. 1–9, 2015.
- [566] M. Ahmed, S. Tayyaba, and M. W. Ashraf, "Effect of buckling restrained braces locations on seismic responses of high-rise RC core wall buildings," *Shock and Vibration*, vol. 2016, 2015.
- [567] F. Qamar and M. Ali, "Modification of traditional supporting steelwork system for non-standard structures," *Engineering Structures*, vol. 96, pp. 153–159, 2015.
- [568] R. D. Evans, M. Rafique, M. Agha *et al.*, "Exploring the required success factors for developing absorptive capacity in knowledge intensive organisations," *The International Technology Management Review*, vol. 5, no. 3, pp. 125–134, 2015.
- [569] M. Rafique, R. D. Evans, M. T. Nawaz, and M. H. Agha, "Should organisations compete or collaborate when absorbing new external knowledge?" *International Journal of Advanced Corporate Learning*, vol. 8, no. 3, pp. 4–10, 2015.
- [570] W. Rehmat, I. Aaltio, M. H. Agha, and H. R. Khan, "Is training effective? Evaluating training effectiveness in call centers," *EJBO: Electronic Journal of Business Ethics and Organization Studies*, vol. 20, no. 1, 2015.
- [571] S. Khan and M. A. Qadir, "Inter-path OOS packets differentiation based congestion control for simultaneous multipath transmission," *International Arab Journal of Information Technology*, 2015.
- [572] K. Shaukat, N. Masood, S. Mehreen, and U. Azmeen, "Dengue fever prediction: A data mining problem," *Journal of Data Mining in Genomics & Proteomics*, vol. 2015, 2015.
- [573] A. Shahid, M. T. Afzal, and M. A. Qadir, "Lessons learned: The complexity of accurate identification of in-text citations." *The International Arab Journal of Information Technology (IAJIT)*, vol. 12, no. 5, pp. 481–488, 2015.
- [574] A. Hussain, S. Sattar, and M. T. Afzal, "Literature review on feature identification in sentiment analysis," *International Journal of Computer Applications*, vol. 132, no. 3, pp. 22–27, 2015.

- [575] S. Ur Rehman and A. Nadeem, “An approach to model based testing of multiagent systems,” *The Scientific World Journal*, vol. 2015, 2015.
- [576] A. Munir, S. Azam, and S. Fazal, “Repositioning of methotrexate to cure mutations of DYR, TYMS and PURA Gene, Bleomycin in the treatment of mutant DNA, TOPa, POLa, and RIR genes,” *Merit Research Journal of Medicine and Medical Sciences*, vol. 3, p. 7, 2015.
- [577] M. Nisar, N. Noureen, S. Fazal, and M. A. Qadir, “MCaVoH: A toolkit for mining, classification and visualization of human microbiota,” *Journal of Microbiological Methods*, vol. 117, pp. 28–35, 2015.
- [578] M. S. Khan and S. Fazal, “Advanced modelling and functional characterization of B2 bradykinin receptor,” *International Journal Bioautomation*, vol. 19, no. 2, 2015.
- [579] N. Noureen, M. Touseef, S. Fazal, and M. A. Qadir, “ChromClust: A semi-supervised chromatin clustering toolkit for mining histone modifications interplay,” *Genomics*, vol. 106, no. 6, pp. 355–359, 2015.
- [580] S. M. B. Shifa Tariq Ashraf, “Exploring the protein interaction related to hepatitis C virus,” *NUST Journal of Natural Sciences*, vol. 3, no. 1, pp. 13–18, 2015.
- [581] M. B. Amjad Ali and V. Azevedo, “Autism Spectrum Disorders (ASD): From diagnosis to management,” *Journal of Molecular and Genetic Medicine*, 2015.
- [582] S. M. Bakhtiar, A. Ali, and D. Barh, “Epigenetics in head and neck cancer,” *Cancer Epigenetics: Risk Assessment, Diagnosis, Treatment, and Prognosis*, pp. 751–769, 2015.
- [583] M. Haseeb and S. Hussain, “Pharmacophore development for anti-lung cancer drugs,” *Asian Pacific Journal of Cancer Prevention*, vol. 16, no. 18, pp. 8307–8311, 2015.
- [584] M. T. Muhammad Bilal, H. S. Khan, and H. Tariq Zeb, “Antimicrobial activity of ethanol and ethyl acetate extracts of roots adiantum capillus-veneris,” *Journal of Rashid Latif Medical College*, vol. 4, no. 1, pp. 39–44, 2015.
- [585] S. M. B. Shifa Tariq Ashraf, “Exploring the protein interaction related to hepatitis,” *NUST Journal of Natural Sciences*, vol. 3, no. 1, pp. 13–18, 2015.
- [586] A. U. Tariq, M. H. Khan, S. Hussain, R. Bano, and A. Navid, “In silico characterization of genetic alterations associated with mal de meleda,” *International Journal of Sciences: Basic and Applied Research*, vol. 19, no. 2, pp. 65–76, 2015.
- [587] T. Kamran *et al.*, “ C^* -valued G-contractions and fixed points,” *Journal of Inequalities and Applications*, vol. 2015, no. 1, p. 304, 2015.
- [588] M. Ramzan and M. Bilal, “Time dependent MHD nano-second grade fluid flow induced by permeable vertical sheet with mixed convection and thermal radiation,” *PloS One*, vol. 10, no. 5, p. e0124929, 2015.

- [589] T. Kamran, R. Ali, and S. Sultan, “Generalized multivalued integral type weak contractions,” *Journal of Advanced Mathematical Studies*, vol. 8, no. 1, pp. 115–120, 2015.
- [590] S. Batul and T. Kamran, “ C^* -valued contractive type mapping,” *Journal of Advanced Mathematical Studies*, vol. 2015, no. 142, pp. 1–9, 2015.
- [591] S. Hussain, Z. Abidin, and C. G. Petrov, “Time discretization scheme for the solutions of the chen system,” *Journal of Computational and Nonlinear Dynamics*, vol. 10, no. 6, pp. 1–7, 2015.
- [592] S. Nadeem, A. Shaheen, and S. Hussain, “Physiological breakdown of Jeffrey six constant nanofluid flow in an endoscope with nonuniform wall,” *AIP Advances*, vol. 5, no. 12, pp. 1–16, 2015.
- [593] M. M. Hassan, S. Bashir, and P. Mussel, “Personality, learning, and the mediating role of epistemic curiosity: A case of continuing education in medical physicians,” *Learning and Individual Differences*, vol. 42, pp. 83–89, 2015.
- [594] M. Z. Mirza and S. Bashir, “Workers’9/11 in Pakistan: Neglected sparks causing conflagration,” *International Journal of Occupational Safety and Ergonomics*, vol. 21, no. 3, pp. 405–410, 2015.
- [595] T. Tahir and A. Fraz, “Human capital, capital structure, employee pay: Empirical evidence from Pakistan,” *Global Journal of Management And Business Research*, vol. 15, no. 9, pp. 1–23, 2015.
- [596] S. M. M. R. Naqvi and S. Bashir, “IT-expert retention through organizational commitment: A study of public sector information technology professionals in Pakistan,” *Applied Computing and Informatics*, vol. 11, no. 1, pp. 60–75, 2015.
- [597] A. Rasheed, S. Ajmal, and A. Qayyum, “Adaptive routing update approach for VANET using local neighbourhood change information,” *Malaysian Journal of Computer Science*, vol. 27, no. 4, 2014.
- [598] A. Rasheed, S. Ajmal, and A. Qayyum, “Protocol independent adaptive route update for VANET,” *The Scientific World Journal*, vol. 2014, 2014.
- [599] M. S. Akbar, M. S. Khan, K. A. Khaliq, A. Qayyum, and M. Yousaf, “Evaluation of IEEE 802.11n for multimedia application in VANET,” *Procedia Computer Science*, vol. 32, pp. 953–958, 2014.
- [600] T. Saraj, M. Yousaf, S. Akbar, A. Qayyum, and M. Tufail, “Isp independent architecture (iia) for ipv6 packet traversing and inter-connectivity over hybrid (ipv4/ipv6) internet,” *Procedia Computer Science*, vol. 32, pp. 973–978, 2014.
- [601] K. A. Khaliq, M. S. Akbar, A. Qayyum, E. Elahi, and A. Zaheer, “Congestion avoidance hybrid wireless mesh protocol (CA-HWMP) for IEEE 802.11s,” *Procedia Computer Science*, vol. 32, pp. 229–236, 2014.

- [602] S. Naz, T. Siraj, M. S. Akbar, M. Yousaf, A. Qayyum, and M. Tufail, “Performance analysis of IPv6 QoS for multimedia applications using real testbed,” *Procedia Computer Science*, vol. 32, pp. 182–189, 2014.
- [603] S. Ajmal, A. Rasheed, A. Qayyum, and A. Hasan, “Classification of VANET MAC, routing and approaches: A detailed survey,” *Journal of Universal Computer Science*, vol. 20, no. 4, pp. 462–487, 2014.
- [604] M. Ghafoor, I. A. Taj, W. Ahmad, and N. M. Jafri, “Efficient 2-fold contextual filtering approach for fingerprint enhancement,” *IET Image Processing*, vol. 8, no. 7, pp. 417–425, 2014.
- [605] M. Raza, G. Ahmed, and N. Khan, “Power control-based GRACE (PC-GRACE) routing protocol for wireless sensor networks,” *Journal of Networking Technology*, vol. 5, no. 4, pp. 137–144, 2014.
- [606] Q. Khan, A. I. Bhatti, and A. Ferrara, “Dynamic sliding mode control design based on an integral manifold for nonlinear uncertain systems,” *Journal of Nonlinear Dynamics*, vol. 2014, pp. 1–10, 2014.
- [607] M. Pervaiz, Q. Khan, A. I. Bhatti, and S. A. Malik, “Dynamical adaptive integral sliding backstepping control of nonlinear nontriangular uncertain systems,” *Mathematical Problems in Engineering*, vol. 2014, pp. 1–14, 2014.
- [608] M. A. Akram, M. A. Rizvi, A. I. Bhatti, and N. Messai, “Mode identification for hybrid model of SI engine to detect misfire fault,” *Journal of Control Engineering and Applied Informatics*, vol. 16, no. 3, pp. 65–74, 2014.
- [609] A. A. Uppal, A. I. Bhatti, E. Aamir, R. Samar, and S. A. Khan, “Control oriented modeling and optimization of one dimensional packed bed model of underground coal gasification,” *Journal of Process Control*, vol. 24, no. 1, pp. 269–277, 2014.
- [610] M. Pervaiz, Q. Khan, A. I. Bhatti, and S. A. Malik, “Output tracking via adaptive backstepping higher order integral sliding mode for uncertain nonlinear systems,” *Discrete Dynamics in Nature and Society*, vol. 2014, pp. 1–10, 2014.
- [611] Q. Khan and A. I. Bhatti, “Robust dynamic integral sliding mode for MIMO nonlinear systems operating under matched and unmatched uncertainties,” *Journal of Control Engineering and Applied Informatics*, vol. 16, no. 4, pp. 107–117, 2014.
- [612] N. Mehdi, M. Rehan, F. M. Malik, A. I. Bhatti, and M. Tufail, “A novel anti-windup framework for cascade control systems: An application to underactuated mechanical systems,” *ISA Transactions*, vol. 53, no. 3, pp. 802–815, 2014.
- [613] Y. A. Butt, Y. L. Sachkov, and A. I. Bhatti, “Extremal trajectories and Maxwell strata in sub-Riemannian problem on group of motions of pseudo-Euclidean plane,” *Journal of Dynamical and Control Systems*, vol. 20, no. 3, pp. 341–364, 2014.
- [614] M. A. R. Anjum and M. M. Ahmed, “A new approach for inversion of large random matrices in massive MIMO systems,” *PloS One*, vol. 9, no. 4, pp. 1–7, 2014.

- [615] M. H. Zaheer, M. Rehan, G. Mustafa, and M. Ashraf, “Delay-range-dependent chaos synchronization approach under varying time-lags and delayed nonlinear coupling,” *ISA Transactions*, vol. 53, no. 6, pp. 1716–1730, 2014.
- [616] M. A. Z. Raja, R. Samar, and M. M. Rashidi, “Application of three unsupervised neural network models to singular nonlinear BVP of transformed 2D Bratu equation,” *Neural Computing and Applications*, vol. 25, no. 7-8, pp. 1585–1601, 2014.
- [617] M. Z. Shah, M. K. Ozgoren, and R. Samar, “3D guidance of unmanned aerial vehicles using sliding mode approach,” *World Academy of Science, Engineering and Technology, International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, vol. 8, no. 10, pp. 1705–1711, 2014.
- [618] S. M. Shah, R. Samar, S. M. R. Naqvi, and J. A. Chambers, “Fractional order constant modulus blind algorithms with application to channel equalisation,” *Electronics Letters*, vol. 50, no. 23, pp. 1702–1704, 2014.
- [619] M. A. Z. Raja, R. Samar *et al.*, “Solution of the 2-dimensional Bratu problem using neural network, swarm intelligence and sequential quadratic programming,” *Neural Computing and Applications*, vol. 25, no. 7-8, pp. 1723–1739, 2014.
- [620] M. A. Z. Raja and R. Samar, “Numerical treatment for nonlinear MHD Jeffery–Hamel problem using neural networks optimized with interior point algorithm,” *Neurocomputing*, vol. 124, pp. 178–193, 2014.
- [621] M. A. Z. Raja and R. Samar, “Numerical treatment of nonlinear MHD Jeffery–Hamel problems using stochastic algorithms,” *Computers & Fluids*, vol. 91, pp. 28–46, 2014.
- [622] M. Riaz, M. Rehan, K.-S. Hong, M. Ashraf, and H. U. Rasheed, “Static and adaptive feedback control for synchronization of different chaotic oscillators with mutually Lipschitz nonlinearities,” *Chinese Physics B*, vol. 23, no. 11, p. 110502, 2014.
- [623] J.-G. Lee, U. A. Khan, J.-S. Hwang, J.-K. Seong, W.-J. Shin, B.-B. Park, and B.-W. Lee, “Assessment on the influence of resistive superconducting fault current limiter in VSC-HVDC system,” *Physica C: Superconductivity and its Applications*, vol. 504, pp. 163–166, 2014.
- [624] U. Rafique and S. A. Ali, “Ultra-wideband patch antenna for K-band applications,” *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 12, no. 12, pp. 8252–8256, 2014.
- [625] Z. Tang, M. Ali, and N. Chouw, “Residual compressive and shear strengths of novel coconut-fibre-reinforced-concrete interlocking blocks,” *Construction and Building Materials*, vol. 66, pp. 533–540, 2014.
- [626] M. Ali, “Seismic performance of coconut-fibre-reinforced-concrete columns with different reinforcement configurations of coconut-fibre ropes,” *Construction and Building Materials*, vol. 70, pp. 226–230, 2014.

- [627] N. Sharif, M. T. Afzal, and D. Helic, “Learning management systems: A need for specialized systems,” *Transaction on Internet Research, Special Issue*, vol. 10, no. 2, pp. 44–47, 2014.
- [628] S. UrRehman, A. F. Haider, M. T. Afzal, and M. Asghar, “Measuring the relevance between tags and citations in social web,” *Research Journal of Applied Sciences, Engineering and Technology*, vol. 7, no. 24, pp. 5172–5178, 2014.
- [629] M. T. Khan *et al.*, “CYP3A5 polymorphism and the risk of cancer: A metaanalysis,” *European Scientific Journal*, vol. 10, no. 30, 2014.
- [630] A. A. Haider, A. Nadeem, and S. Rafiq, “Multiple objective test suite optimization: A fuzzy logic based approach,” *Journal of Intelligent & Fuzzy Systems*, vol. 27, no. 2, pp. 863–875, 2014.
- [631] M. Haseeb, S. Vaqar, S. Fazal, and A. Khalil, “Ligand based pharmacophore development for colorectal cancer drugs,” *Professional Medical Journal*, vol. 21, no. 5, 2014.
- [632] U. Shaukat, M. Toor, B. Ahmad, S. Fazal, and N. Mehmood, “Genetic and computational analysis of Tgfb1 & Fgfr2 polymorphism in correlation to breast cancer susceptibility in Pakistani women,” *Journal of Cancer Science and Therapy*, vol. 6, pp. 433–439, 2014.
- [633] S. M. Bakhtiar, A. Ali, S. M. Baig, D. Barh, A. Miyoshi, and V. Azevedo, “Identifying human disease genes: advances in molecular genetics and computational approaches,” *Genetics and Molecular Research*, vol. 13, no. 3, pp. 5073–5087, 2014.
- [634] F. Usman, B. Ahmad, and S. Hussain, “Institutional based prevalence of ischemic heart disease in Khyber Pakhtunkhwa Pakistan,” *Journal of Rashid Latif Medical College*, vol. 1, pp. 01–05, 2014.
- [635] S. Zeb, S. Rehman, M. S. Khan, and H. S. Fazal, S and, “Parkinson’s disease mechanisms and its treatment,” *Journal of Rashid Latif Medical College*, vol. 3, no. 1, pp. 49–53, 2014.
- [636] S. Hussain, F. K. Bakhtiar, and M. H. Khan, “A bayesian meta-analysis and systematic review on global and local prevalence of hepatitis B,” *International Journal of Scientific Research and Management*, vol. 2, no. 12, pp. 1846–1855, 2014.
- [637] S. Hussain, “Hepatitis B: A global burden,” *International Journal of Novel Research in Life Sciences*, vol. 1, no. 1, pp. 24–30, 2014.
- [638] S. Hussain, “A common genetic disorder “deafness”,” *International Journal of Novel Research in Life Sciences*, vol. 1, no. 1, pp. 31–37, 2014.
- [639] S. Hussain, M. H. Khan, M. T. Khan, S. Zeb, M. Haseeb, and A. U. Tariq, “Association of gjb2 gene mutations with non syndromic autosomal recessive deafness in different populations of the world,” *International Journal of Basic and Applied Sciences*, vol. 3, no. 4, p. 521, 2014.

- [640] M. T. Khan, S. S. B. Khan, and S. Hussain, “Study of antimicrobial activity of garlic extracts against foodborne pathogens and its comparison with garlic oil and different antibiotics,” *Pakistan Journal of Clinical and Biomedical Research*, vol. 2, no. 1, pp. 33–37, 2014.
- [641] M. Fatima, O. Khan, and S. Hussain, “Antimicrobial activity of citrus lemon against food borne pathogens,” *Pakistan Journal of Clinical and Biomedical Research*, vol. 2, no. 1, pp. 27–32, 2014.
- [642] S. Hussain, F. Schieweck, and S. Turek, “Efficient Newton-multigrid solution techniques for higher order space–time Galerkin discretizations of incompressible flow,” *Applied Numerical Mathematics*, vol. 83, pp. 51–71, 2014.
- [643] S. Ahmad, S. Hussain, A. A. Siddiqui, A. Ali, and M. Aqeel, “Application of Fourier transform to MHD flow over an accelerated plate with partial-slippage,” *AIP Advances*, vol. 4, no. 6, pp. 1–10, 2014.
- [644] Z. Hassan, Z. Saleem, A. A. Rajput *et al.*, “The mediating role of employee engagement between the relationship of distributive justice and organizational citizenship behavior: Empirical evidence from aviation sector of Pakistan,” *International Journal of Management Sciences*, vol. 2, no. 11, pp. 494–500, 2014.
- [645] A. A. Rajput and S. H. Kalhor, “The impact of macro factors entrepreneur, innovation and opportunity on entrepreneurial success of SMEs,” *Middle-East Journal of Scientific Research*, vol. 20, no. 2, pp. 149–161, 2014.
- [646] F. Hanif and S. M. M. R. Naqvi, “Analysis of work family conflict in view of nurses,” *Health Sector of Pakistan: International Journal of Gender and Women Studies*, vol. 2, no. 4, pp. 103–116, 2014.
- [647] M. A. Z. Raja, R. Samar *et al.*, “Neural network optimized with evolutionary computing technique for solving the 2-dimensional Bratu problem,” *Neural Computing and Applications*, vol. 23, no. 7-8, pp. 2199–2210, 2013.
- [648] R. Samar, M. Z. Shah, and M. Nzar, “Lateral control implementation for an unmanned aerial vehicle,” *ISRN Aerospace Engineering*, vol. 2013, pp. 1–14.
- [649] S. Naz, M. Naeem, and A. Qayyum, “Performance evaluation of index schemes for semantic cache,” *International Journal of Information Technology and Computer Science*, vol. 5, no. 4, pp. 40–46, 2013.
- [650] S. Gillani, M. Naeem, R. Habibullah, and A. Qayyum, “Semantic schema matching using DBpedia,” *International Journal of Intelligent Systems and Applications*, vol. 5, no. 4, pp. 72–80, 2013.
- [651] U. I. Bajwa, I. A. Taj, M. W. Anwar, and X. Wang, “A multifaceted independent performance analysis of facial subspace recognition algorithms,” *PloS One*, vol. 8, no. 2, pp. 1–12, 2013.

- [652] M. Ajab, I. A. Taj, I. Shafi, and S. Stankovic, "A new form of Gabor Wigner Transform by adaptive thresholding in Gabor Transform and Wigner distribution and the power of signal synthesis techniques to enhance the strengths of GWT," *Metrology and Measurement Systems*, vol. 20, no. 1, pp. 99–106, 2013.
- [653] M. Riaz, S. J. Nawaz, and N. M. Khan, "3D ellipsoidal model for mobile-to-mobile radio propagation environments," *Wireless Personal Communications*, vol. 72, no. 4, pp. 2465–2479, 2013.
- [654] Z. M. Loni and N. M. Khan, "Analysis of fading statistics in cellular mobile communication systems," *The Journal of Supercomputing*, vol. 64, no. 2, pp. 295–309, 2013.
- [655] Q. Ahmed, A. I. Bhatti, M. A. Rizvi, and M. Raza, "Gasoline engine air filter health monitoring by second-order sliding modes," *International Journal of Adaptive Control and Signal Processing*, vol. 27, no. 6, pp. 447–461, 2013.
- [656] S. Hussain, A. Bhatti, A. Samee, and S. H. Qaiser, "Estimation of reactivity and average fuel temperature of a pressurized water reactor using sliding mode differentiator observer," *IEEE Transactions on Nuclear Science*, vol. 60, no. 4, pp. 3025–3032, 2013.
- [657] Q. R. Butt, A. I. Bhatti, M. R. Mufti, M. A. Rizvi, and I. Awan, "Modeling and online parameter estimation of intake manifold in gasoline engines using sliding mode observer," *Simulation Modelling Practice and Theory*, vol. 32, pp. 138–154, 2013.
- [658] S. Hussain, A. I. Bhatti, A. Samee, and S. H. Qaiser, "Estimation of precursor density of a power reactor using uniform second order sliding mode observer," *Annals of Nuclear Energy*, vol. 54, pp. 233–239, 2013.
- [659] Q. Ahmed, A. I. Bhatti, Q. Khan, and M. Raza, "Condition monitoring of gasoline engine air intake system using second order sliding modes," *International Journal of Vehicle Design*, vol. 62, no. 2-4, pp. 312–332, 2013.
- [660] A. Arshad, A. I. Bhatti, E. Aamir, R. Samar, and S. A. Khan, "Optimization of 1-D packed bed model of underground coal gasification," *Optimization*, no. 1/52, 2013.
- [661] M. Naeem, S. Gillani, M. A. Qadir, and S. Asghar, "gSemSim: Semantic similarity measure for intra gene ontology terms," *International Journal of Information Technology and Computer Science (IJITCS)*, pp. 32–40, 2013.
- [662] M. Naeem, M. B. Khan, and M. T. Afzal, "Expertise discovery: A web mining approach," *Journal of AI and Data Mining*, pp. 35–47, 2013.
- [663] N. A. Sajid, M. T. Afzal, M. A. Qadir, and S. A. Khan, "The insights of classification schemes," *Sindh University Research Journal (SURJ)*, vol. 46, 2013.
- [664] N. A. Sajid, S. Asghar, M. Afzal, and T. Ali, "Fuzzy based document classification," *Proceeding of the Pakistan Academy of Sciences*, vol. 51, no. 2, 2013.
- [665] I. A. Qureshi and A. Nadeem, "GUI testing techniques: A survey," *International Journal of Future Computer and Communication*, vol. 2, no. 2, p. 142, 2013.

- [666] A. A. Haider and A. Nadeem, "A survey of safety analysis techniques for safety critical systems," *International Journal of Future Computer and Communication*, vol. 2, no. 2, p. 134, 2013.
- [667] A. A. Haider and A. Nadeem, "Formal modelling languages to specify real-time systems: A survey," *International Journal of Future Computer and Communication*, vol. 2, no. 2, p. 130, 2013.
- [668] S. Bilal, S. B. Ali, S. Fazal, and A. Mir, "Generation of a 3d model for human cereblon using comparative modelling," *Journal of Bioinformatics and Sequence Analysis*, vol. 5, no. 1, pp. 10–15, 2013.
- [669] M. H. Khan, S. Fazal, R. Bano, and H. Rashid, "A miracle if restored, p53," *African Journal of Biotechnology*, vol. 12, no. 24, pp. 3745–3751, 2013.
- [670] A. Kanwal, S. Fazal, S. Asghar, and M. Naeem, "MODY GENES, linkage analysis and subgroup discovery from text documents," *Professional Medical Journal*, vol. 20, no. 4, 2013.
- [671] A. Kanwal, S. Fazal, S. Asghar, and M. Naeem, "Subgroup discovery of the MODY GENES," *Professional Medical Journal*, vol. 20, no. 5, 2013.
- [672] R. Mahmood and S. Hussain, "Galerkin discretizations of 4th order in space and time for the convection-diffusion-reaction (CoDiRe) equation," *International Journal of Basic & Applied Sciences*, vol. 13, no. 4, pp. 1–12, 2013.
- [673] S. Bashir and M. Nasir, "Breach of psychological contract, organizational cynicism and union commitment: A study of hospitality industry in Pakistan," *International Journal of Hospitality Management*, vol. 34, pp. 61–65, 2013.
- [674] M. A. Khattak, N. Iqbal, A. A. Rajut *et al.*, "Impact of culture on the employee performance: A comparison of private and public sector universities," *International Journal of Academic Research in Accounting, Finance and Management Sciences*, vol. 3, no. 1, pp. 210–218, 2013.
- [675] N. Jamal and A. Fraz, "Relationship of single stock futures with the spot price: Evidence from Karachi stock exchange," *Research Journal of the Institute of Business Administration Karachi-Pakistan*, vol. 8, no. 1, pp. 52–76, 2013.
- [676] S. Naqvi, M. Ishtiaq, N. Kanwal, M. U. Butt, and S. Nawaz, "Impact of gender diversity on team performance: The moderating role of organizational culture in telecom sector of Pakistan," *Asian Journal of Social Sciences & Humanities*, vol. 2, no. 4, pp. 228–235, 2013.
- [677] S. M. M. R. Naqvi, N. Kanwal, M. Ishtiaq, and M. U. Butt, "Impact of corporate social responsibility on organizational performance of tobacco industry of Pakistan with moderating role of business ethics," *International Journal of Management Sciences and Business Research*, vol. 2, no. 9, pp. 23–27, 2013.

- [678] S. M. M. R. Naqvi, N. Kanwal, M. Ishtiaq, M. Ali *et al.*, “Impact of job autonomy on organizational commitment: Moderating role of job satisfaction in tobacco industry of Pakistan,” *Far East Journal of Psychology and Business*, vol. 12, no. 5, pp. 57–72, 2013.
- [679] S. R. Naqvi, M. Ishtiaq, N. Kanwal, and M. Ali, “Impact of job autonomy on organizational commitment and job satisfaction: The moderating role of organizational culture in fast food sector of Pakistan,” *International Journal of Business and Management*, vol. 8, no. 17, pp. 92–102, 2013.
- [680] S. M. M. R. Naqvi, M. Ishtiaq, N. Kanwal, M. Ali, and I. S, “Impact of corporate social responsibility on brand image in different FMCGs of Pakistan,” *Interdisciplinary Journal of Contemporary Research In Business*, vol. 5, no. 1, pp. 79–93, 2013.
- [681] S. M. M. R. Naqvi, F. Malik, and Q. Mahmood, “The impact of promotions, recognition, autonomy and pay incentives on job satisfaction: A case of banking sector employees in Pakistan,” *European Journal of Business Management*, vol. 5, no. 5, pp. 187–193, 2013.
- [682] S. Jawaid, A. A. Rajput, and S. M. M. R. Naqvi, “Impact of celebrity endorsement on teenager impulsive buying behavior,” *Interdisciplinary Journal of Contemporary Research in Business*, vol. 4, no. 10, pp. 1071–1080, 2013.
- [683] Q. Khan, A. I. Bhatti, M. Iqbal, and Q. Ahmed, “Dynamic integral sliding mode control for SISO uncertain nonlinear systems,” *International Journal of Innovative Computing, Information and Control*, vol. 8, no. 7, pp. 4621–4633, 2012.
- [684] I. H. Kazmi and A. I. Bhatti, “Parameter estimation of proton exchange membrane fuel cell system using sliding mode observer,” *International Journal of Innovative Computing, Information and Control*, vol. 8, no. 7B, pp. 5137–5148, 2012.
- [685] S. H. Qaiser, M. Iqbal, A. I. Bhatti, R. Samar, and J. Qadir, “Estimation of reactivity in a research reactor by using a second-order sliding mode observer,” *Nuclear Science and Engineering*, vol. 172, no. 3, pp. 327–336, 2012.
- [686] P. A. Shah, M. Yousaf, A. Qayyum, and H. B. Hasbullah, “Performance comparison of end-to-end mobility management protocols for TCP,” *Journal of Network and Computer Applications*, vol. 35, no. 6, pp. 1657–1673, 2012.
- [687] S. Naz, Y. Majeed, and A. Qayyum, “Automatic translation of heterogeneous data models,” *International Journal of Computer and Communication Engineering*, vol. 1, no. 1, pp. 35–38, 2012.
- [688] M. Yousaf, A. Qayyum, and S. A. Malik, “An architecture for exploiting multihoming in mobile devices for vertical handovers & bandwidth aggregation,” *Wireless Personal Communications*, vol. 66, no. 1, pp. 57–79, 2012.

- [689] M. Rafiq, S.-u. Rehman, F.-u. Rehman, Q. R. Butt, and I. Awan, “A second order sliding mode control design of a switched reluctance motor using super twisting algorithm,” *Simulation Modelling Practice and Theory*, vol. 25, pp. 106–117, 2012.
- [690] U. I. Bajwa, I. A. Taj, and M. W. Anwar, “A unified classifier for robust face recognition based on combining multiple subspace algorithms,” *Optics Communications*, vol. 285, no. 21, pp. 4324–4332, 2012.
- [691] M. Ajab, I. A. Taj, and N. A. Khan, “Comparative analysis of variants of Gabor-Wigner transform for cross-term reduction,” *Metrology and Measurement Systems*, vol. 19, no. 3, pp. 499–508, 2012.
- [692] Q. Ahmed, A. Iqbal, I. Taj, and K. Ahmed, “Gasoline engine intake manifold leakage diagnosis/prognosis using hidden Markov model,” *International Journal of Innovative Computing, Information and Control*, vol. 8, no. 7, pp. 4661–4674, 2012.
- [693] M. Touseef, M. Aziz-ul Haq, U. Rafique, M. A. Khan, M. M. Ahmed *et al.*, “Genetic algorithm optimization of log-periodic dipole array,” *International Journal of Electromagnetics and Applications*, vol. 2, no. 6, pp. 169–173, 2012.
- [694] U. Rafique, S. A. Ali, M. T. Afzal, and M. Abdin, “Bandstop filter design for GSM shielding using Frequency Selective Surfaces,” *International Journal of Electrical and Computer Engineering*, vol. 2, no. 6, pp. 846–850, 2012.
- [695] I. A. Sajid, S. G. Ziavras, and M. M. Ahmed, “Efficient face recognition using frequency distribution curve matching,” *IET Image Processing*, vol. 6, no. 8, pp. 1161–1169, 2012.
- [696] I. A. Sajid, M. M. Ahmed, and M. Sagheer, “An optimized face recognition system using stable orthogonalization,” *International Journal of Innovative Computing, Information and Control*, vol. 8, no. 1A, pp. 219–32, 2012.
- [697] M. Abdin, U. Rafique, F. Malik, S. Qasim, M. A. Khan, and M. M. Ahmed, “A novel dual-band frequency selective surface absorber,” *International Journal of Electromagnetics and Applications*, vol. 2, no. 6, pp. 182–185, 2012.
- [698] M. Aziz-ul Haq, M. T. Afzal, U. Rafique, M. A. Khan, M. M. Ahmed *et al.*, “Log periodic dipole antenna design using particle swarm optimization,” *International Journal of Electromagnetics and Applications*, vol. 2, no. 4, pp. 65–68, 2012.
- [699] S. J. Nawaz, K. I. Ahmed, M. N. Patwary, and N. M. Khan, “Superimposed training-based compressed sensing of sparse multipath channels,” *IET Communications*, vol. 6, no. 18, pp. 3150–3156, 2012.
- [700] R. Samar and W. A. Kamal, “Optimal path computation for autonomous aerial vehicles,” *Cognitive Computation*, vol. 4, no. 4, pp. 515–525, 2012.
- [701] I. Ghalib, M. H. Agha, S. Hameed, and M. A. Choudhary, “A survey of lean implementation gap analysis in public sector organizations,” *Life Science Journal*, vol. 9, no. 4, pp. 1261–1269, 2012.

- [702] S. Hameed, M. H. Agha, and M. A. Choudhary, “The role of data protection technologies: A case study,” *Life Science Journal*, vol. 9, no. 4, pp. 1270–1279, 2012.
- [703] A. Hanif and M. H. Agha, “Utilizing quality tools: A predictive maintenance perspective,” *International Journal of Performability Engineering*, vol. 8, no. 6, pp. 699–704, 2012.
- [704] S. Z. Ahmad, M. A. Qadir, M. S. Akbar, and A. Bouras, “Analysis of multi-server scheduling paradigm for service guarantees during network mobility,” *Wireless Personal Communications*, vol. 63, no. 1, pp. 177–197, 2012.
- [705] T. Hussain, M. A. Qadir, and S. Asghar, “Fuzzification of web objects: a semantic web mining approach,” *International Journal of Computer Science*, vol. 9, no. 2, pp. 61–67, 2012.
- [706] M. Ahmad, S. Gruner, and M. T. Afzal, “Computational analysis of medieval manuscripts: A new tool for analysis and mapping of medieval documents to modern orthography,” *Journal of Universal Computer Science (JUCS)*, vol. 18, no. 20, pp. 2750–2770, 2012.
- [707] A. Latif, M. T. Afzal, and H. A. Maurer, “Weaving scholarly legacy data into web of data,” *Journal of Universal Computer Science (JUCS)*, vol. 18, no. 16, pp. 2301–2318, 2012.
- [708] M. W. Hussain, M. T. Afzal, and M. Waqas, “Finding semantic relationship among associated medical terms,” *International Journal of Emerging Sciences*, vol. 2, no. 2, p. 300, 2012.
- [709] S. A. Khan, M. T. Afzal, and M. A. Qadir, “Metadata based classification of scientific documents,” *International Journal of Information Studies*, vol. 4, no. 4, pp. 184–193, 2012.
- [710] S. Kanwal, S. Nishat, M. I. Khan, S. I. Malik, and K. Akhtar, “Comparative homology modeling of human rhodopsin with several templates of bovine rhodopsin,” *African Journal of Biotechnology*, vol. 11, no. 2, pp. 466–473, 2012.
- [711] Z. Khalid, S. Sameen, S. Malik, and S. Shehzad, “Computational analysis on the role of GPM6A in human thyroid cancer,” *Journal of Data Mining in Genomics and Proteomics*, vol. 3, no. 114, pp. 2153–0602, 2012.
- [712] S. A. Shad, A. H. Sayyed, S. Fazal, M. A. Saleem, S. M. Zaka, and M. Ali, “Field evolved resistance to carbamates, organophosphates, pyrethroids, and new chemistry insecticides in *Spodoptera litura* Fab. (Lepidoptera: Noctuidae),” *Journal of pest science*, vol. 85, no. 1, pp. 153–162, 2012.
- [713] S. F. Attiya K., “Maturity-onset diabetes of the young (MODY) Genes: Literature review,” *Clinical Practice*, vol. 1, no. 1, pp. 4–11, 2012.

- [714] S. Azam, S. Fazal, and I. Muhammad, “Assessment of non-syndromic autosomal recessive intellectual disability (NS-ARID) genes,” *International Journal of Modern Pharmaceutical Research*, vol. 1, pp. 94–105, 2012.
- [715] S. Bashir, M. Nasir, S. Qayyum, and A. Bashir, “Dimensionality of counterproductive work behaviors in public sector organizations of Pakistan,” *Public Organization Review*, vol. 12, no. 4, pp. 357–366, 2012.
- [716] A. A. Rajput, S. H. Kalhoro, and R. Wasif, “Impact of product price and quality on consumer buying behavior: Evidence from Pakistan,” *Interdisciplinary Journal of Contemporary Research in Business*, vol. 4, no. 4, pp. 485–496, 2012.
- [717] S. Rasool, A. A. Kiyani, M. J. Aslam, M. U. Akram, and A. A. Rajput, “Impact of organizational culture on employee’s career salience: An empirical study of banking sector in Islamabad, Pakistan,” *International Journal of Business and Social Science*, vol. 3, no. 7, pp. 299–306, 2012.
- [718] H. Haroon, H. R. Yasir, S. Azeem, and F. Ahmed, “International portfolio diversification in developing equity markets of South Asia,” *Studies in Business & Economics*, vol. 7, no. 1, pp. 80–100, 2012.
- [719] S. M. M. R. Naqvi, M. Ishtiaq, N. Kanwal, and S. Inderyas, “Impact of gender diversity on organizational performance in telecom sector of Pakistan: The moderating role of organizational culture,” *Scottish Journal of Arts, Social Sciences and Scientific Studies*, vol. 7, no. 1, pp. 32–49, 2012.
- [720] S. J. Nawaz, N. M. Khan, M. N. Patwary, and M. Moniri, “Effect of directional antenna on the Doppler spectrum in 3-D mobile radio propagation environment,” *IEEE Transactions on Vehicular Technology*, vol. 60, no. 7, pp. 2895–2903, 2011.
- [721] Q. Ahmed, A. I. Bhatti, and M. Iqbal, “Virtual sensors for automotive engine sensors fault diagnosis in second-order sliding modes,” *IEEE Sensors Journal*, vol. 11, no. 9, pp. 1832–1840, 2011.
- [722] S. Iqbal and A. I. Bhatti, “Load varying polytopic based robust controller design in LMI framework for a 2DOF stabilized platform,” *Arabian Journal for Science and Engineering*, vol. 36, no. 2, pp. 311–327, 2011.
- [723] Q. Ahmed and A. I. Bhatti, “Estimating SI engine efficiencies and parameters in second-order sliding modes,” *IEEE Transactions on Industrial Electronics*, vol. 58, no. 10, pp. 4837–4846, 2011.
- [724] M. A. Rizvi, A. I. Bhatti, and Q. R. Butt, “Hybrid model of the gasoline engine for misfire detection,” *IEEE Transactions on Industrial Electronics*, vol. 58, no. 8, pp. 3680–3692, 2011.
- [725] M. Iqbal, A. I. Bhatti, S. I. Ayubi, and Q. Khan, “Robust parameter estimation of nonlinear systems using sliding-mode differentiator observer,” *IEEE Transactions on Industrial Electronics*, vol. 58, no. 2, pp. 680–689, 2011.

- [726] E. Elahi and A. Qayyum, "Connection oriented bandwidth aggregation system," *International Journal of Multidisciplinary Sciences and Engineering*, vol. 2, no. 7, pp. 64–68, 2011.
- [727] M. Rafiq and Q. Raza, "Time-varying stabilizing feedback control for a sub-class of nonholonomic systems," *European Journal of Scientific Research*, vol. 53, no. 3, pp. 346–358, 2011.
- [728] F. Rehman and Q. Butt, "Feedback stabilization of nonholonomic systems accomplished by tracking to their own extended systems," *European Journal of Scientific Research*, 2011.
- [729] M. Rafiq, S. U. Rehman, F. R. Rehman, and Q. A. Butt, "Performance comparison of PI and sliding mode for speed control applications of SR motor," *European Journal of Scientific Research*, vol. 50, no. 3, pp. 368–384, 2011.
- [730] M. Rafiq, S.-u.-R. , F. Rehman, and Q. Butt, "Power efficient higher order sliding mode control of switched reluctance motor for speed control applications," *International Journal of Computer Science Issues*, vol. 8, no. 1, pp. 378–387, 2011.
- [731] N. A. Khan, I. A. Taj, M. N. Jaffri, and S. Ijaz, "Cross-term elimination in Wigner distribution based on 2D signal processing techniques," *Signal Processing*, vol. 91, no. 3, pp. 590–599, 2011.
- [732] U. I. Bajwa, I. A. Taj, and Z. E. Bhatti, "A comprehensive comparative performance analysis of Laplacianfaces and Eigenfaces for face recognition," *The Imaging Science Journal*, vol. 59, no. 1, pp. 32–40, 2011.
- [733] I. A. Sajid, M. M. Ahmed, and M. Sagheer, "FPGA-based householder implementation for efficient eigenvalues calculation," *International Journal of Innovative Computing, Information and Control*, vol. 7, no. 10, pp. 5939–5946, 2011.
- [734] S. A. Moiz, K. S. Karimov, and M. M. Ahmed, "Effect of gravity condition on charge transport properties of polymer thin film deposited by centrifugal method," *Optoelectronics and Advanced Materials: Rapid Communications*, vol. 5, pp. 577–580, 2011.
- [735] K. H. Karimov, M. M. Ahmed, Z. M. Karieva, M. Saleem, A. Mateen, and S. A. Moiz, "Humidity sensing properties of carbon nano-tube thin films," *Sensor Letters*, vol. 9, no. 5, pp. 1649–1653, 2011.
- [736] M. T. Afzal and H. A. Maurer, "Expertise recommender system for scientific community," *Journal of Universal Computer Science (JUCS)*, vol. 17, no. 11, pp. 1529–1549, 2011.
- [737] M. Fahad, N. Moalla, A. Bouras, M. A. Qadir, and M. Farukh, "Towards classification of web ontologies for the emerging semantic web," *Journal of Universal Computer Science*, vol. 17, no. 7, pp. 1021–1042, 2011.

- [738] N. I. Qazi and M. A. Qadir, “Algorithms for the evaluation of ontologies for extended error taxonomy and their application on large ontologies,” *Journal of Universal Computer Science*, vol. 17, no. 7, pp. 1005–1020, 2011.
- [739] S. A. Khan, M. T. Afzal, A. B. Nawab, M. A. Qadir, and A. Shahid, “Discoveries of contextualized research areas for scientific community,” *Australian Journal of Basic and Applied Science*, vol. 5, no. 6, pp. 1641–1647, 2011.
- [740] A. Shahid, M. T. Afzal, and M. Qadir, “Discovering semantic relatedness between scientific articles through citation frequency,” in *Workshop on Text mining for Scholarly Communications and Repositories*, *Australian Journal of Basic Applied Sciences*, vol. 5, 2011, pp. 1599–1604.
- [741] A. A. A. Jilani, M. Usman, and A. Nadeem, “Comparative study on DFD to UML diagrams transformations,” *World of Computer Science and Information Technology*, vol. 1, no. 1, pp. 10–16, 2011.
- [742] K. Latif, A. Nadeem, and G.-s. Lee, “A UML profile for real time industrial control systems,” *Software Engineering, Business Continuity, and Education*, pp. 97–107, 2011.
- [743] Z. Shaukat Iqbal Malik, S. Khalid, and Sameen, “In silico gene expression based analysis on claudine family members association with human thyroid cancer,” *Journal of Proteomics and Bioinformatics*, 2011.
- [744] S. Sameen, Z. Khalid, and S. I. Malik, “Role of pyruvate dehydrogenase kinases (PDKs) and their respective microRNAs in human ovarian cancer,” *Journal of Medical Genetics and Genomics*, vol. 3, no. 7, pp. 115–121, 2011.
- [745] S. Malik and S. Khan, “Cancer prevention through employ of appropriate diet in daily schedule,” *Journal of Cancer Science & Therapy*, vol. 15, p. 17, 2011.
- [746] K. Attiya, F. Sahar, M. Ismail, M. Qaisar, and J. Amara, “Linkage analysis of first six MODY genes to known LOCI and screening of three most prevalent MODY genes in pakistani population,” *International Journal of Genetics*, vol. 3, no. 1, p. 35, 2011.
- [747] R. Bano, S. Fazal, M. H. Khan, and H. Rashid, “miRNAs: Small but deadly,” *African Journal of Biotechnology*, vol. 10, no. 47, pp. 9542–9548, 2011.
- [748] A. Kanwal, S. Fazal, M. Ismail, and N. Naureen, “A narrative insight to maturity-onset diabetes of the young,” *Clinical Reviews and Opinions*, vol. 3, no. 1, pp. 6–13, 2011.
- [749] S. Bashir, H. R. Khattak, A. Hanif, and S. N. Chohan, “Whistle-blowing in public sector organizations: Evidence from Pakistan,” *The American Review of Public Administration*, vol. 41, no. 3, pp. 285–296, 2011.
- [750] S. Bashir, “HIV/AIDS stigma at the workplace: Exploratory findings from Pakistan,” *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, vol. 8, no. 3, pp. 156–161, 2011.

- [751] A. Rajput, “Impact of innovation and resources in entrepreneurial success: A case study of Pakistani SMEs,” *Interdisciplinary Journal of Contemporary Research in Business*, vol. 2, no. 11, pp. 606–636, 2011.
- [752] M. Rehmani and M. I. Khan, “The impact of e-media on customer purchase intention,” *International Journal of Advanced Computer Science and Applications*, vol. 2, no. 3, pp. 100–103, 2011.
- [753] S. M. M. R. Naqvi and S. Nadeem, “Impact of high performance work practices system on motivation,” *Interdisciplinary Journal of Contemporary Research in Business*, vol. 3, no. 8, pp. 197–210, 2011.
- [754] I. Ahmad and A. I. Bhatti, “A novel technique for spectral processing of a fiber optic gyroscope,” *Kuwait Journal of Science & Engineering*, vol. 37, no. 1B, pp. 49–68, 2010.
- [755] F.-u. Rehman and L. Khan, “Attitude regulating control of a rigid spacecraft model in actuating failure mode,” *International Journal of Modelling and Simulation*, vol. 30, no. 3, pp. 277–288, 2010.
- [756] R. Samar, S. Zahir, and M. A. Khan, “Flight control using pin-protuberances for blunted cones,” *The Aeronautical Journal*, vol. 114, no. 1154, pp. 245–257, 2010.
- [757] R. Samar and I. Postlethwaite, “Design and implementation of a digital multimode H_∞ controller for the Spey turbofan engine,” *Journal of Dynamic Systems, Measurement, and Control*, vol. 132, no. 1, pp. 1–11, 2010.
- [758] M. S. Razzaq and N. M. Khan, “Performance comparison of adaptive beamforming algorithms for smart antenna systems,” *World Applied Sciences Journal*, vol. 11, no. 7, pp. 775–785, 2010.
- [759] S. J. Nawaz, B. H. Qureshi, and N. M. Khan, “A generalized 3-D scattering model for a macrocell environment with a directional antenna at the BS,” *IEEE Transactions on Vehicular Technology*, vol. 59, no. 7, pp. 3193–3204, 2010.
- [760] M. T. Ibrahim, M. A. Khan, K. S. Alimgeer, M. K. Khan, I. A. Taj, and L. Guan, “Velocity and pressure-based partitions of horizontal and vertical trajectories for on-line signature verification,” *Pattern Recognition*, vol. 43, no. 8, pp. 2817–2832, 2010.
- [761] M. T. Afzal, H. Maurer, W.-T. Balke, and N. Kulathuramaiyer, “Rule based autonomous citation mining with TIERL,” *Journal of Digital Information Management*, vol. 8, no. 3, pp. 196–204, 2010.
- [762] A. U. Saeed, M. T. Afzal, A. Latif, and K. Tochtermann, “Disseminating knowledge through tags: Recommending tags for scientific resources,” *Journal of IT in Asia*, vol. 3, 2010.
- [763] A. Latif, A. Us Saeed, P. Hoefler, K. Tochtermann, and M. T. Afzal, “Harvesting pertinent resources from linked open data,” *Journal of Digital Information Management*, vol. 8, no. 3, pp. 205–212, 2010.

- [764] A. D. Kligerman, S. I. Malik, and J. A. Campbell, "Cytogenetic insights into DNA damage and repair of lesions induced by a monomethylated trivalent arsenical," *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, vol. 695, no. 1, pp. 2–8, 2010.
- [765] S. Khan, A. Shahid, S. Fazal, and A. Jilani, "Predoms: A computational toolkit developed to perform prediction of domains from sequence," *World Applied Sciences Journal*, vol. 8, pp. 44–46, 2010.
- [766] S. H. Qaiser, A. I. Bhatti, M. Iqbal, R. Samar, and J. Qadir, "Estimation of precursor concentration in a research reactor by using second order sliding mode observer," *Nuclear Engineering and Design*, vol. 239, no. 10, pp. 2134–2140, 2009.
- [767] S. H. Qaiser, A. I. Bhatti, M. Iqbal, R. Samar, and J. Qadir, "Model validation and higher order sliding mode controller design for a research reactor," *Annals of Nuclear Energy*, vol. 36, no. 1, pp. 37–45, 2009.
- [768] I. Sajid, M. M. Ahmed, and I. Taj, "Time efficient face recognition using stable Gram-Schmidt orthonormalization," *International Journal of Signal Processing, Image Processing and Pattern*, vol. 1, no. 2, pp. 35–48.
- [769] S. A. Moiz, M. M. Ahmed, K. S. Karimov, F. Rehman, and J.-H. Lee, "Space charge limited current–voltage characteristics of organic semiconductor diode fabricated at various gravity conditions," *Synthetic Metals*, vol. 159, no. 13, pp. 1336–1339, 2009.
- [770] N. M. Khan, Z. Khalid, and G. Ahmed, "Gradient cost establishment (GRACE) for an energy-aware routing in wireless sensor networks," *EURASIP Journal on Wireless Communications and Networking*, vol. 2009, p. 7, 2009.
- [771] F. Yousuf, A. Nadeem, Z. Zaman, and M. Ali, "A configurable fault tolerant architecture for component-based systems," *International Journal of Software Engineering and Its Applications*, vol. 3, no. 2, pp. 1738–9984, 2009.
- [772] M. Usman and A. Nadeem, "Automatic generation of java code from UML diagrams using UJECTOR," *International Journal of Software Engineering and Its Applications*, vol. 3, no. 2, pp. 21–37, 2009.
- [773] A. A. Rajput and M. Ali, "A preliminary investigation of entrepreneurial women in potohar region of Pakistan," *Journal of Chinese Entrepreneurship*, vol. 1, no. 3, pp. 193–208, 2009.
- [774] Q. R. Butt and A. I. Bhatti, "Estimation of gasoline-engine parameters using higher order sliding mode," *IEEE Transactions on Industrial Electronics*, vol. 55, no. 11, pp. 3891–3898, 2008.
- [775] S. Gillani, I. Khan, S. Qureshi, and A. Qayyum, "Vehicular ad hoc network (VANET): enabling secure and efficient transportation system," *Technical Journal, University of Engineering and Technology, Taxila*, vol. 13, 2008.

- [776] M. M. Ahmed, K. S. Karimov, and S. A. Moiz, "Photoelectric behavior of n-GaAs/orange dye, vinyl-ethynyl-trimethyl-piperidole/conductive glass sensor," *Thin Solid Films*, vol. 516, no. 21, pp. 7822–7827, 2008.
- [777] N. M. Khan, M. T. Simsim, and P. B. Rapajic, "A generalized model for the spatial characteristics of the cellular mobile channel," *IEEE Transactions on Vehicular Technology*, vol. 57, no. 1, pp. 22–37, 2008.
- [778] M. S. Akbar, S. Z. Ahmed, and M. A. Qadir, "Performance optimization of transmission control protocol in heterogeneous wireless network during mobility," *IJCSNS International Journal of Computer Science and Network Security*, vol. 8, no. 8, pp. 70–80, 2008.
- [779] M. Ahmad, M. A. Qadir, A. Razaque, and M. S. Ullah, "Efficient query processing over semantic cache," *Intelligent Systems and Agents*, p. 61, 2008.
- [780] I. Ihsan, M. Rehman, M. U. Ahmed, and M. A. Qadir, "S-point a semantic based e-learning content development tool," *Journal of Applied Sciences*, vol. 8, no. 1, pp. 127–133, 2008.
- [781] A. Razaque, M. A. Qadir, K. Shahzad, O. B. Nazir, and S. H. Khalid, "Device discovery with qualitative & quantitative analysis of TCP variants under mobility based anchor point node in hybrid network," *Wireless Applications and Computing*, p. 129, 2008.
- [782] M. Fahad and A. Nadeem, "A survey of UML based regression testing," *Intelligent Information Processing IV*, pp. 200–210, 2008.
- [783] S. Bashir and M. I. Ramay, "Determinants of organizational commitment: A study of information technology professionals in Pakistan," *Journal of Behavioral and Applied Management*, vol. 9, no. 2, pp. 226–238, 2008.
- [784] K. Shahzad, S. Bashir, and M. I. Ramay, "Impact of HR practices on perceived performance of university teachers in Pakistan," *International Review of Business Research Papers*, vol. 4, no. 2, pp. 302–315, 2008.
- [785] A. A. Rajput and A. Murad, "A national survey: An examination of entrepreneurship centers in Pakistan," *International Journal of Entrepreneurship*, vol. 12, 2008.
- [786] S. R. Naqvi, Q. Mahmood, A. A. Minhas, J. Khattak, and F. Malik, "Impact of organizational career management activities on organizational commitment: A case of IT companies of Pakistan," *Scholarly Journal of Business Administration*, vol. 3, no. 1, pp. 7–11, 2013.
- [787] A. Rahman, S. M. M. R. Naqvi, and M. I. Ramay, "Measuring turnover intention: A study of it professionals in Pakistan," *International Review of Business Research Papers*, vol. 4, no. 3, pp. 45–55, 2008.
- [788] Z. Khalid, G. Ahmed, and N. M. Khan, "Impact of mobile sink speed on the performance of wireless sensor networks," *Journal of Information & Communication Technology*, vol. 1, no. 2, pp. 49–55, 2007.

- [789] K. S. Karimov, M. M. Ahmed, S. A. Moiz, P. Babadzhanov, R. Marupov, and M. A. Turaeva, "Electrical properties of organic semiconductor orange nitrogen dye thin films deposited from solution at high gravity," *Eurasian Chemico-Technological Journal*, vol. 5, no. 2, pp. 109–113, 2007.
- [790] N. M. Memon, M. M. Ahmed, and F. Rehman, "A comprehensive four parameters $I-V$ model for GaAs MESFET output characteristics," *Solid-State Electronics*, vol. 51, no. 3, pp. 511–516, 2007.
- [791] S. A. Moiz, M. M. Ahmed, K. S. Karimov, and M. Mehmood, "Temperature-dependent current-voltage characteristics of poly-N-epoxypropylcarbazole complex," *Thin Solid Films*, vol. 516, no. 1, pp. 72–77, 2007.
- [792] F. U. Rehman, M. M. Ahmed, and N. Ahmed, "Steering control algorithm for drift-free control systems using model decomposition: a wheeled mobile robot of type (1, 1) example," *International Journal of Robotics & Automation*, vol. 22, no. 4, p. 313, 2007.
- [793] M. M. Ahmed and S. A. Moiz, "Steering algorithm for drift free control systems," *Communications in Applied Analysis*, vol. 11, no. 3-4, pp. 485–514, 2007.
- [794] F. U. Rehman and M. M. Ahmed, "Steering control algorithm for a class of wheeled mobile robots," *IET Control Theory & Applications*, vol. 1, no. 4, pp. 915–924, 2007.
- [795] O. Abdul Hamid, M. Abdul Qadir, N. Iftikhar, M. Ur Rehman, M. Uddin Ahmed, and I. Ihsan, "Generic multimedia database architecture based upon semantic libraries," *Informatica*, vol. 18, no. 4, pp. 483–510, 2007.
- [796] B. Shahzad and M. Afzal, "Enhanced shell sorting algorithm," *Computer Journal of Enformatika*, vol. 21, no. 6, pp. 66–70, 2007.
- [797] S. Ali, L. C. Briand, M. J.-u. Rehman, H. Asghar, M. Z. Z. Iqbal, and A. Nadeem, "A state-based approach to integration testing based on UML models," *Information and Software Technology*, vol. 49, no. 11, pp. 1087–1106, 2007.
- [798] M. A. Qadir and I. Ahmad, "Digital text watermarking: Secure content delivery and data hiding in digital documents," *IEEE Aerospace and Electronic Systems Magazine*, vol. 21, no. 11, 2006.
- [799] S. Hijazi and S. Naqvi, "Factors affecting students performnce: A case of private colleges," *Bangladesh e-Journal of Sociology*, vol. 3, no. 1, pp. 12–17, 2006.
- [800] S. A. Moiz, M. M. Ahmed, and K. S. Karimov, "Effects of temperature and humidity on electrical properties of organic semiconductor orange dye films deposited from solution," *Japanese Journal of Applied Physics*, vol. 44, no. 3, pp. 1199–1203, 2005.
- [801] Y. Zafar and M. M. Ahmed, "A novel FPGA compliant micropipeline," *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 52, no. 9, pp. 611–615, 2005.

- [802] K. S. Karimov, M. M. Ahmed, S. A. Moiz, and M. I. Fedorov, "Temperature-dependent properties of organic-on-inorganic Ag/p-CuPc/n-GaAs/Ag photoelectric cell," *Solar Energy Materials and Solar Cells*, vol. 87, no. 1, pp. 61–75, 2005.
- [803] A. Nadeem and M. J.-U. Rehman, "TESTAF: A test automation framework for class testing using object-oriented formal specifications," *Journal of Universal Computer Science*, vol. 11, no. 6, pp. 962–985, 2005.
- [804] A. Nadeem and M. Y. Javed, "An empirical analysis of secret key encryption algorithms," *Teknologix Journal*, 2005.