List of Publications of All Faculty 2018
34 papers

Dr. Sobia Baig

Journal Papers: **5**

1. Zanib Tahira, Hafiz M. Asif , Asim Ali Khan, Sobia Baig , Shahid Mumtaz , and Saba Al-Rubaye, "Optimization of Non-Orthogonal Multiple Access-BasedVisible Light Communication Systems", IEEE COMMUNICATIONS LETTERS, 2018. IF:3.419

2. Saad M.Sheikh, Hamza R.Ali, Hafiz. M. Asif, Sobia Baig, Asim A.Khan, "Design of NS3 VLC Module and Performance Analysis of Adhoc Network under VLC and WiFi layers", International Journal of Communication Systems, 2018. IF: 1.319

3. Qaisar Bashir, Muhammad Naeem Shehzad, Muhammad Naeem Awais, Sobia Baig, Muhammad Ghaffar Dogar, Aamir Rashid, "An online temperature-aware scheduling technique to avoid thermal emergencies in multiprocessor systems", Computers & Electrical Engineering, 2018

4. S. Baig, H. M. Asif, T. Umer, S. Mumtaz, M. Shafiq and J. Choi, "High Data Rate Discrete Wavelet Transform-based PLC-VLC Design for 5G Communication Systems", IEEE ACCESS, 2018

5. SOBIA BAIG , et al. (2018), "Dual PHY Layer for Non-Orthogonal Multiple Access Transceiver in 5G Networks", IEEE ACCESS, pp: 3130-3139, Vol: 6, Issue: 1, Standard: 2169-3536, Impact Factor: 3.244

Dr. Muhammad Farooq-i-Azam

Conference Papers:

1. Muhammad Farooq-i-Azam, Wenjuan Yu, Qiang Ni, Mianxiong Dong, Atta ul Quddus (2018), "Location Assisted Subcarrier and Power Allocation in Underlay Mobile Cognitive Radio Networks", IEEE GLOBECOM 2018, Abu Dhabi

Dr. Ali Nawaz Khan

Journal Papers: **1**

1. Nadeem M, Khan AN, Ali Khan A, Azim T (2018), "Low profile CPW fed slotted planar inverted cone ultra-wide band antenna for WBAN applications", Microw Opt Technol Lett., pp: 870-876, Vol: 60, Issue: 2018, Standard: 1098-2760, Impact Factor: 0.731

2. Ali Nawaz Khan, Tanweer Arshad, Waqas Anwar, Ehsan Ullah Munir, "Intra-Cluster Multihop Routing In Leach Based On Shortest Distance", Journal of Basic and Applied Scientific Research.

3. Khan Afsar, Ali Nawaz Khan, M. Waqas Anwar, Ehsan Ullah Munir, Munal Akhtar, "Weighted Energy Efficient Clustering Hierarchy for Multi-hop Communication in Wireless Sensor Networks", Journal of Basic and Applied Scientific Research.

4. Ali Nawaz Khan, Waqas Anwer, Ehsan Ullah Munir, Uzair Farooqi, Ayesha Khaliq, Aqsa Malik and Maryam Aizaz, "Handover Techniques in Mobile WiMAX Networks: Analysis and Comparison", Middle-East Journal of Scientific Research.

Dr. Naeem Shahzad
Journal Papers: **2 (0)**

1. Qaisar Bashir, M.Naeem Shehzad, M.Naeem Awais, Umer Farooq, Mirza Tariq Hamayun, Irfan Ali (2018), "A scheduling based energy-aware core switching technique to avoid thermal threshold values in multi-core processing systems", Microprocessors and Microsystems, Standard: 0141-9331, Impact Factor: 1.049
2. Qaisar Bashir, Muhammad Naeem Shehzad, Muhammad Naeem Awais, Sobia Baig, Muhammad Ghaffar Dogar, Aamir Rashid (2018), "An online temperature-aware scheduling technique to avoid thermal emergencies in multiprocessor systems", Computers & Electrical Engineering, pp: 83–98, Vol: 70, Standard: 0045-7906, Impact Factor: 1.747

Dr. Asim Ali Khan

Journal Papers: **5 (1)**

1. I. Sultana, Muhammad Idrees, Yasir Rafique, Sameen Ilyas, Shahzada Qamar Hussain, Asim Ali Khan, Aamir Razaq , "Electrodeposition of silver (Ag) nanoparticles on MnO2 nanorods for fabrication of highly conductive and flexible paper electrodes for energy storage application", Journal of Materials Science Materials in Electronics, 2018
2. Zanib Tahira, Hafiz M. Asif , Asim Ali Khan, Sobia Baig , Shahid Mumtaz , and Saba Al-Rubaye, "Optimization of Non-Orthogonal Multiple Access-Based Visible Light Communication Systems", IEEE COMMUNICATIONS LETTERS, 2018
3. Saad M.Sheikh, Hamza R.Ali, Hafiz. M. Asif, Sobia Baig, Asim A.Khan, "Design of NS3 VLC Module and Performance Analysis of Adhoc Network under VLC and WiFi layers", International Journal of Communication Systems, 2018
4. Aamir Razaq, Asim Ali Khan, Unsa Shakir and Asim Arshad, "Review: Next Generation Flexible Antennas for Radio Frequency Applications," Springer Transactions on Electrical and Electronic Materials,
5. Muhammad Nadeem, Ali Nawaz Khan, Asim Ali Khan and Tayyab Azim (2018), "Low Proile CPW Fed Slotted Planar Inverted Cone Ultra-Wide Band Antenna for WBAN Applications", Microwave & Optical Technology Letters, pp: 870=876, Vol: 60, Issue: 4

Dr. Mujtaba Hussain Jaffery

Journal Papers: **4**

1. Sohaib Aslam1*, Salman Khalid1, Mujtaba Jaffery2, Sundas Hannan1, Yasir Saleem3, Sajid Sarwar2 , "Computational efficiency-based comparison between conventional MPC and Laguerre based MPC", Journal of Engineering Technology, 2018
2. Mujtaba Jafferey , Muhammad Umair Safder , Muhammad Yaqoob*, Aasia Malik , Saeed Ur Rehman2 , Ali Ahmad3, "Convolution of Time Series Electrical Load Forecasting Using Recurrent Neural Network Techniques", Journal of Engineering Technology, Volume 7, , PP. 130-144 Oct. 2018
3. Subhan Khan , Yiqun Zhu , Muhammad Jawad , Muhammad Umair Safder , Mujtaba Hussain Jaffery , Salman Javid (2018), "Analysis of the satellite navigational data in the Baseband signal processing of Galileo E5 AltBOC signal", ARCTIC Journal, Standard: 0004-0843, Impact Factor: 1.022

4. M.Umair Safder, Y. Javed, S. Khan, M.H. Jeffery, A. Ashraf, N. Naeem (2018), "Learning Outcome-Based Teaching of Power Electronics and Electric machines hybrid laboratory using ABAL Method", ARCTIC Journal, pp: XX, Vol: 71, Issue: 7, Standard: standard: 0004-0843, Impact Factor: 1.022

Dr. Hafiz Muhammad Asif

Journal Papers: **9 (5)**

1. Zanib Tahira, Hafiz M. Asif , Asim Ali Khan, Sobia Baig , Shahid Mumtaz , and Saba Al-Rubaye, "Optimization of Non-Orthogonal Multiple Access-BasedVisible Light Communication Systems", IEEE COMMUNICATIONS LETTERS, 2018
2. Aaqib Khalid, Tariq Umer, Adnan Sohail, Muhammad Khalil Afzal, Sheraz Anjum, Hafiz M.Asif, "Autonomous Data Driven Surveillance and Rectifcation System using In-Vehicle Sensors for Intelligent and Connected Transportation Systems (CTS)", Computer Networks, 2018
3. Hira Khalid, Feroze Waris, Hafiz M.Asif, "Design of an Integrated Power Line Communication (PLC)-Visible Light Communication (VLC) System for Data Communication", The LASERS in Engineering, 2018
4. Saad M.Sheikh, Hamza R.Ali, Hafiz. M. Asif, Sobia Baig, Asim A.Khan, "Design of NS3 VLC Module and Performance Analysis of Adhoc Network under VLC and WiFi layers", International Journal of Communication Systems, 2018
5. S. Baig, H. M. Asif, T. Umer, S. Mumtaz, M. Shafiq and J. Choi, "High Data Rate Discrete Wavelet Transform-based PLC-VLC Design for 5G Communication Systems", IEEE ACCESS, 2018
6. Aaqib Khalida, Tariq Umer, Muhammad Khalil Afzala, Sheraz Anjuma, Adnan Sohailb, Hafiz Muhammad Asif (2018), "Autonomous data driven surveillance and rectification system using in-vehicle sensors for intelligent transportation systems (ITS)", Computer Networks, Elsevier, pp: 109–118, Vol: 139, Issue: PP, Standard: 1389-1286
7. Hira Khalid, Feroze Waris, Hafiz M.Asif (2018), "Design of an Integrated PLC-VLC System for Data Communication", The LASERS in Engineering, pp: To appear in June 2018, Vol: 41, Issue: 1, Standard: 0898-1507
8. Arslan Khalid, Hafiz M.Asif (2018), "OCDMA and OSTBC Based VLC Transceiver Design using NI cDAQ", Photonic Network Communications (PNC) Springer Journal, pp: 97-108, Vol: 35, Issue: 1, Standard: 1387-974X
9. Ayesha Naz, Hafiz M.Asif et al., (2018), "PDOA Based Indoor Positioning Using Visible Light Communication", IEEE Access, pp: 7557-7564, Vol: 6, Issue: 1, Standard: 2169-3536

Dr. Khurram Ali

Journal Papers: **1**

1. M. Tahir, A. Moazzam, K. Ali, "A Stochastic Optimization Approach to Magnetometer Calibration With Gradient Estimates Using Simultaneous Perturbations", 2018, IEEE Transactions on Instrumentation and Measurement.

Dr. Imran Ghous

Journal Paper: **2**

1. Zhaoxia Duan, Imran Ghous, Shipei Huang, Jinna Fu, "Fault detection observer design for 2-D continuous nonlinear systems with finite frequency specifications", ISA Transactions, 2018.
2. Zhaoxia Duan, Imran Ghous, Bing Wang, Jian Shen (2018), "Necessary and Sufficient Stability Criterion and Stabilization for Positive 2-D Continuous-Time Systems with

Multiple Delays", Asian Journal of Control (Wiley), pp: 1-12, DOI: 10.1002/asjc.1811 , Vol: 21 , Issue: 4

Conference Papers:
1.   Zhaoxia Duan, Jian Shen, Imran Ghous (2018) "Stability and l1-gain Analysis for Positive 2D fuzzy Systems in Roesser Model", Accepted for presentation in 30th Chinese Control and Decision Conference (CCDC)

Dr. Mirza Tariq Hamayun

Journal Papers: **5 (4)**
1.   S. Ijaz ; M. T. Hamayun ; L. Yan ; C. Shi , "Active Fault Tolerant Control Scheme for Aircraft with Dissimilar Redundant Actuation System subject to Hydraulic Failure", Elsevier Journal of the Franklin Institute, 2018
2.   S. Ijaz ; M. T. Hamayun ; L. Yan ; C. Shi, "LPV Modeling and Tracking Control of Dissimilar Redundant Actuation System for Civil Aircraft", International Journal of Control, Automation and Systems, 2018
3.   S. Ijaz, L. Yan, M.T. Hamayun, "An Adaptive LPV Integral Sliding Mode FTC of Dissimilar Redundant Actuation System for Civil Aircraft", 2018, IEEE Access
4.   S. Ijaz, M.T. Hamayun, L. Yan, "Active Fault Tolerant Control for Vertical Tail Damaged Aircraft with Dissimilar Redundant Actuation System using Integral Sliding Mode Control", Part C: Journal of Mechanical Engineering Science, 2018
5.   Qaisar Bashir, M.Naeem Shehzad, M.Naeem Awais, Umer Farooq, Mirza Tariq Hamayun, Irfan Ali (2018), "A scheduling based energy-aware core switching technique to avoid thermal threshold values in multi-core processing systems", Microprocessors and

Dr. Muhammad Naeem Awais

Journal Papers: **2 (0)**
1.   Qaisar Bashir, Muhammad Naeem Shehzad, Muhammad Naeem Awais, Sobia Baig, Muhammad Ghaffar Dogar, Aamir Rashid, "An online temperature-aware scheduling technique to avoid thermal emergencies in multiprocessor systems", Computers & Electrical Engineering, 2018
2.   Qaisar Bashir, M.Naeem Shehzad, M.Naeem Awais, Umer Farooq, Mirza Tariq Hamayun, Irfan Ali (2018), "A scheduling based energy-aware core switching technique to avoid thermal threshold values in multi-core processing systems", Microprocessors and Microsystems, Standard: 0141-9331, Impact Factor: 1.049

Dr. Abbas Javed

Journal Papers: 2

1.   Abbas Javed, Hadi Larijani, Andrew Wixted, "Improving Energy Consumption of a Commercial Building with IoT and Machine Learning", IEEE IT Professional, 2018
2.   Jawad Ahmad, Hadi Larijani, Rohinton Emmanuel, Mike Mannion, Abbas Javed, "Occupancy Detection in Non-residential Buildings–A Survey and Novel Privacy Preserved Occupancy Monitoring Solution.", Applied Computing and Informatics., 2018

Dr. Muhamamd Jawad

Journal Papers: **6 (5)**
1.   M. Jawad et al. , "Genetic algorithm-based non-linear auto-regressive with exogenous inputs neural network short-term and medium-term uncertainty modelling and prediction for electrical load and wind speed", The Journal of Engineering: IET, vol. 2018, no. 8, pp. 721-729, 8 2018.
2.   M. Jawad, S. M. Ali, S. U. Khan, "A Robust Optimization Technique for Energy Cost Minimization of Cloud Data Centers", IEEE Transaction on Cloud Computing, 2018

3. I.Hussain, S.M.Ali, B.Khan, Z.Ullah, C.A.Mehmood, M. Jawad, U.Farid, A.Haider, "Stochastic Wind Energy Management Model within Smart Grid Framework: A Joint Bi-directional Service Level Agreement (SLA) between Smart Grid and Wind Energy District Prosumers", Renewable Energy Elsevier, 2018

4. Muhammad Jawad, Abubakar Rafique, Ikramullah Khosa, Imran Ghous, Jahanzeb Akhtar, and S. M. Ali, "Improving Disturbance Storm Time (DST) Index Prediction using Linear and Nonlinear Parametric Models: A comprehensive Analysis", IEEE Transactions on Plasma Science, 2018

5. Subhan Khan, Yiqun Zhu, Muhammad Jawad, M. Umair Safder, Mujtaba Hussain Jaffery, Salman Javid, "Analysis of the satellite navigational data in the Baseband signal processing of Galileo E5 AltBOC signal," ARCTIC Journal, Vol: 71, Issue: 5

6. Sahibzada M. Ali, Muhammad Jawad, Feng Guo, Arshad Mehmood, Bilal Khan, Jacob Glower, and Samee U. Khan (2018), "Ancillary Services Model for Data Centers and Power Systems", IEEE Transactions on Cloud Computing, pp: XX, Vol: XX, Issue: XX, Impact Factor: 3.3

Dr. M. Yaqoob Javed
Journal Papers: **4 (3)**

1. Rizvi, Syed Tahir Hussain, Mansoor Karim, Muhammad Majid Gulzar, **Muhammad Yaqoob Javed,** and Muhammad Furqan. "Implementation of electroencephalography controlled prosthetic hand." International Journal of Systems, Control and Communications 9, no. 2 (2018): 136-147.

2. Gulzar, Muhammad Majid, Syed Tahir Hussain Rizvi, **Muhammad Yaqoob Javed**, Umer Munir, and Haleema Asif. "Multi-Agent Cooperative Control Consensus: A Comparative Review." Electronics 7, no. 2 (2018): 22.

3. Rahman, Hassan, **Muhammad Yaqoob Javed**, Yasir Saleem, Qiang Ling, and Muhammad Majid Gulzar. "Cascaded Hybrid Multi-level Inverter for Selective Harmonics Elimination." Iranian Journal of Science and Technology, Transactions of Electrical Engineering: 1-14, 2018.

4. Muhammad Majid Gulzar, Ali Faisal Murtaza, K M Hasan, Syed Tahir Hussain Rizvi, **Muhammad Yaqoob Javed,** Sajid Iqbal. "Design and Implementation of FPGA-Based Concurrent Controller", Pakistan Academy of Sciences. Vol. # 55 (1), pp 59–69, March 2018.

5. M Umair Safder, **Muhammad Yaqoob Javed**, Subhan Khan, Mujtaba Hussain Jeffer, Arsalan Ashraf, Noman Naeem. "Learning Outcome-Based Teaching of Power Electronics and Electric machines hybrid laboratory using ABAL Method", Arctic Journal 71 (7), 40-52, 2018.

Dr. Arsla Khan
Journal Papers: 1
1. **A. Khan** and S.Y. Shin, "Wavelet OFDM-Based Non-orthogonal Multiple Access Downlink Transceiver for Future Radio Access," in *IETE Technical Review*, vol. 35, no. 1, pp. 17-27, 2018.

Salman Javid
Journal Paper: 1 (0)
1. Subhan Khan , Yiqun Zhu , Muhammad Jawad , Muhammad Umair Safder , Mujtaba Hussain Jaffery , Salman Javid (2018), "Analysis of the satellite navigational data in the

Baseband signal processing of Galileo E5 AltBOC signal", ARCTIC Journal, Standard: 0004-0843, Impact Factor: 1.022

Mr. Mian Hassan Aslam

Journal Papers: 0

1. Umer Farooq, M. Hassan Aslam, MuhammadUsman, "On the comparison of memristor-transistor hybrid and transistor-only heterogeneous FPGAs", Journal of King Saud University - Computer and Information Sciences, 2018

   Umer Farooq, M. Hassan Aslam and Muhammad Usman (2018), "On the Comparison of Memristor-Transistor Hybrid and Transistor-Only Heterogeneous FPGAs", Journal of King Saud University - Computer and Information Sciences, pp: 1-29

Mr. Muhammad Umair Safdar

Journal Papers: **2 (0)**

1. Subhan Khan , Yiqun Zhu , Muhammad Jawad , Muhammad Umair Safder , Mujtaba Hussain Jaffery , Salman Javid (2018), "Analysis of the satellite navigational data in the Baseband signal processing of Galileo E5 AltBOC signal", ARCTIC Journal, Standard: 0004-0843, Impact Factor: 1.022
2. M.Umair Safder, Y. Javed, S. Khan, M.H. Jeffery, A. Ashraf, N. Naeem (2018), "Learning Outcome-Based Teaching of Power Electronics and Electric machines hybrid laboratory using ABAL Method", ARCTIC Journal, pp: XX, Vol: 71, Issue: 7, Standard: standard: 0004-0843, Impact Factor: 1.022

Mr. Muhammad Usman

Journal Papers:

1. Umer Farooq, M. Hassan Aslam, MuhammadUsman, "On the comparison of memristor-transistor hybrid and transistor-only heterogeneous FPGAs", Journal of King Saud University - Computer and Information Sciences, 2018