

Qasim Umar Khan

Associate Professor

College of Electrical & Mechanical Engineering

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About

Dr. Qasim Umar Khan is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Qasim Umar Khan has a PhD in Microwave/Antenna/ Communication. Dr. Qasim Umar Khan has published 35 research articles & conference papers having a citation count of 338, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Microwave/Antenna/ Communication NUST, Islamabad , Pakistan	2011 - 2016
MS in Electrical Engineering NUST, Islamabad , Pakistan	2009 - 2011
BS in Computer Engineering NUST, Islamabad , Pakistan	2005 - 2009

Experience

Associate Professor College of Electrical & Mechanical Engineering	2021- Present
Assistant Professor College of Electrical & Mechanical Engineering	2014 - 2014
Lecturer College of Electrical & Mechanical Engineering	2011 - 2014
Lab Engineer College of Electrical & Mechanical Engineering	2009 - 2011
AD IT/Engg SG , Cantt Peshawar	2010 - 2011
Lab Engineer NUST , H-12 NUST	2009 - 2010

Awards

Best Research paper international conference Best Research paper in international conference CENICS 2015	2015
Best Teacher Award	
Best Community Service Learning Best Community Service Learning Award	

Research Projects

National Projects

Developing Antenna Design Course Funding Agency: IEEE AP-S Amount: PKR 1,400,000.00 Status: Approved_inprocess	2024
Low-Cost Wide-Angle Beam Scanning Metasurface based Leaky Wave Antenna for Ku-band and Millimeter Wave Applications Funding Agency: Institute of Electrical and Electronics Engineers (IEEE) Antennas and Propagation Society (APS), USA Amount: PKR 1,118,500.00 Status: Approved_inprocess	2022

International Projects

Research Articles

Compact High Gain Wideband Circularly Polarized Non-Uniform Metasurface Antenna Through Improved Mode Coupling <i>Komal Iqbal Zubair Ahmed Qasim Umar Khan</i> <i>IEEE Open Journal of Antennas and Propagation</i> , Volume: 5, Issue: 6, Pages 1432-1439 Impact Factor: 3.5 Quartile: 2 Citations: 2 DOI: 10.1109/OJAP.2024.3361381	2024
Multiband antenna design with enhanced radiations using characteristic mode analysis <i>Dilaawaiz Fazal Qasim Umar Khan Ic-Pyo Hong</i> <i>Scientific Reports</i> , Volume 13, Issue 1, Article Number 17829 Impact Factor: 4.6 Quartile: 2 Citations: 6 DOI: https://doi.org/10.1038/s41598-023-44923-9	2023
Dual-band dual-polarized MIMO design for vehicular applications <i>Aamir Sultan Sidra Jabeen Dilaawaiz Fazal Qasim Umar Khan</i> <i>AEU - International Journal of Electronics and Communications</i> , Volume 170, Article Number 154772 Impact Factor: 3.2 Quartile: 2 Citations: 4 DOI: 10.1016/j.aeue.2023.154772	2023
A Single-Layer S/C/K/Ka Bands Shared Aperture Antenna with Novel Feed Structure For K/Ka Bands <i>Shahzad Amin Sheikh Sidra Jabeen Qasim Umar Khan</i> <i>IEEE Transactions on Antennas and Propagation</i> , Volume 71, Issue 8, Pages 6965-6970 Impact Factor: 5.7 Quartile: 1 Citations: 10 DOI: 10.1109/TAP.2023.3281669	2023
An integrated MIMO antenna design for Sub-6 GHz & millimeter-wave applications with high isolation <i>Sidra Jabeen Qasim Umar Khan</i> <i>AEU - International Journal of Electronics and Communications</i> , Volume 153, Article Number 154247 Impact Factor: 3.169 Quartile: 2 Citations: 26 DOI: https://doi.org/10.1016/j.aeue.2022.154247	2022
Dual-Band Dual-Polarized Patch Antenna Using Characteristic Mode Analysis <i>Dilaawaiz Fazal Qasim Umar Khan</i> <i>IEEE Transactions on Antennas and Propagation</i> , Volume 70, Issue 3, Pages 2271-2276 Impact Factor: 4.824 Quartile: 1 Citations: 30 DOI: 10.1109/TAP.2021.3111341	2022
Joint carrier frequency and phase offset estimation algorithm for CPM-DSSS based secure point-to-point communication <i>Shahzad Amin Sheikh Qasim Umar Khan Saima Shehzadi Farzana Kulsoom Muhammad Zeeshan</i> <i>Turkish Journal of Electrical Engineering and Computer Sciences</i> , Volume 29, Issue 7, Pages 3020-3035 Impact Factor: 0.853 Quartile: 4 Citations: 5 DOI: 10.3906/elk-2105-1	2021
Full-state modeling and nonlinear control of balloon supported unmanned aerial vehicle <i>Naveed Mazhar Fahad Mumtaz Malik Raja Amer Azim Abid Raza Rameez Khan Qasim Umar Khan</i> <i>Assembly Automation</i> , Pages 1-17	2021

Impact Factor: 1.256 Quartile: 4 Citations: 1 DOI: 10.1108/AA-03-2021-0031	
A Robust Timing and Phase Offset Estimation Technique for CPM-DSSS-Based Secured Communication Link <i>Saima Shehzadi Shahzad Amin Sheikh Farzana Kulsoom Muhammad Zeeshan Qasim Umar Khan</i> <i>IEEE Access</i> , Volume 9, Pages 111143 - 111151 Impact Factor: 3.367 Quartile: 2 Citations: 9 DOI: 10.1109/ACCESS.2021.3102308	2021
High Gain Backward Scanning Substrate Integrated Waveguide Leaky Wave Antenna <i>Qasim Umar Khan Muhammad Zaka Ali</i> <i>IEEE Transactions on Antennas and Propagation</i> , Volume 69, Issue 1, Pages 562-565 Impact Factor: 4.824 Quartile: 1 Citations: 42 DOI: 10.1109/TAP.2020.3006389	2021
Comparative analysis of quaternion modulation system with OFDM systems <i>Anum Zehra Qasim Umar Khan Shahzad Amin Sheikh</i> <i>International Journal of Electronics Letters</i> , Pages 1-10 Impact Factor: 0 Citations: 1 DOI: 10.1080/21681724.2020.1725985	2020
Design and analysis of triple band circular patch antenna <i>Tahira Parveen Qasim Umar Khan Dilaawaiz Fazal Usman Ali Nuaman Akhtar</i> <i>International Journal of Electronics and Communications (AEU)</i> , Volume: 112, Article Number: UNSP 152960 Impact Factor: 2.924 Quartile: 2 Citations: 14 DOI: DOI: 10.1016/j.aeue.2019.152960	2019
Symbol Error Probability Performance of Rectangular QAM with MRC Reception over Generalized α-μ Fading Channels <i>Furqan Haider Qureshi Shahzad Amin Sheikh Qasim Umar Khan Muhammad Zeeshan</i> <i>IEICE Transactions on Fundamentals of Electronics Communications And Computer Sciences</i> , Vol.E101-A, No.3, Pages 577-584, 01 March 2018 Impact Factor: 0.368 Quartile: 4 Citations: 3 DOI: 10.1587/transfun.E101.A.577	2018
Higher Order Modes: A Solution for High Gain, Wide Band Patch Antennas for Different Vehicular Applications <i>Qasim Umar Khan Mojeeb Bin Ihsan Dilaawaiz Fazal Fahad Mumtaz Malik Shahzad Amin Sheikh Muhammad Salman</i> <i>IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY</i> , Volume: 66 Issue: 5 Pages: 3548-3554 Impact Factor: 4.432 Quartile: 1 Citations: 33 DOI: 10.1109/TVT.2016.2604004	2017
Improving performance of FxRLS algorithm for active noise control of impulsive noise <i>Qasim Umar Khan Ayesha Zeb Alina Mirza Shahzad Amin Sheikh</i> <i>Applied Acoustics</i> , Volume: 116 Pages: 364-374 Impact Factor: 1.721 Quartile: 2 Citations: 40 DOI: 10.1016/j.apacoust.2016.10.011	2017
Two Novel Blind Equalization Algorithms for Rectangular Quadrature Amplitude Modulation Constellations <i>QASIM UMAR KHAN SARA VIQAR SHAHZAD AMIN SHEIKH</i> <i>IEEE Access</i> , Volume 4, Pages 9512-9519 Impact Factor: 3.244 Quartile: 1 Citations: 6 DOI: 10.1109/ACCESS.2016.2639538	2016
SEP performance of triangular QAM with MRC Spatial diversity over fading channels <i>Furqan Haider Qureshi Qasim Umar Khan Shahzad Amin Sheikh Fahad Mumtaz Malik</i> <i>EURASIP Journal of Wireless Communications and Networking</i> , Volume 2016, Article Number: 5 Impact Factor: 1.529 Quartile: 3 Citations: 19 DOI: https://doi.org/10.1186/s13638-015-0511-2	2016
Use of Slots to Improve Performance of Patch in Terms of Gain and Sidelobes Reduction <i>Dilaawaiz Fazal Qasim Umar Khan Dilaawaiz Fazal Mojeeb bin Ihsan</i> <i>IEEE Antennas and Wireless Propagation Letters</i> , Volume 14, Pages 422-425 Impact Factor: 1.751 Quartile: 2 Citations: 21 DOI: 10.1109/LAWP.2014.2365588	2015

Higher order mode excitation for high gain microstrip patch antenna 2014
Qasim Umar Khan Mojeeb Bin Ihsan
AEU-International Journal of Electronics and Communications, Volume 68, Issue 11, Pages 1073-1077
Impact Factor: 0.601 | **Quartile:** 3 | **Citations:** 24
DOI: 10.1016/j.aeue.2014.05.009

Use of partial Koch boundaries for improved return loss, gain and sidelobe levels of triangular patch antenna 2012
Dilaawaiz Fazal Qasim Umar Khan Mojeeb Bin Ihsan
Electronics Letters , Volume 48, Issue 15, Pages 902-903
Impact Factor: 1.038 | **Quartile:** 3 | **Citations:** 17
DOI: 10.1049/el.2012.1880

Conference Proceedings

A Wideband High-gain Patch Antenna Design for Millimeter Wave Applications 2024
sidra jabeen Qasim Umar Khan
2024 IEEE International Symposium on Phased Array Systems and Technology (ARRAY), res.country(233,)
Citations: N/A
DOI: N10.1109/ARRAY58370.2024.10880388

A Dual-Band Pattern Diversified Microstrip Patch Antenna for Telemedicine Communications 2024
Komal Iqbal Abshar Hassan Qasim Umar Khan Nuaman Akhter
2024 IEEE International Symposium on Antennas and Propagation and ITNC-USNC-URSI Radio Science Meeting, res.country(109,)
Citations: N/A
DOI: Nil

A Compact Highly Isolated MIMO Antenna Design for WiFi-6E & 5G Applications 2022
Sidra Jabeen Shahzad Amin Sheikh Qasim Umar Khan
2022 19th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(282,)
Citations: N/A
DOI: 10.1109/IBCAST54850.2022.9990321

Performance Analysis of XQAM in Log-Normal Turbulence with Pointing Error and Non-zero Boresight 2019
Muhammad Nabeel Shahid Shahzad Amin Sheikh Furqan Haider Qureshi Muhammad Zeeshan Qasim Umar Khan
Proceedings of the 2019 8th International Conference on Networks, Communication and Computing , res.country(48,)
Citations: N/A
DOI: 10.1145/3375998.3376033

Multimode wideband waveform for Software Defined Radio based on hybrid CPM-CDMA concept 2019
Saima Shehzadi Muhammad Zeeshan Shahzad Amin Sheikh Qasim Umar Khan Saima Shehzadi Saima Shehzadi
22nd International Multitopic Conference (INMIC) , res.country(177,)
Citations: N/A
DOI: 10.1109/INMIC48123.2019.9022794

Periodic Substrate Integrated Waveguide Based Leaky Wave Antenna for Backward Endfire Radiation 2019
Qasim Umar Khan Muhammad Zaka Ali Usman Ali Qasim Umar Khan Muhammad Zaka Ali Usman Ali Qasim Umar Khan Muhammad Zaka Ali
IEEE International Symposium on Phased Array System & Technology (PAST), res.country(233,)
Citations: N/A
DOI: 10.1109/PAST43306.2019.9020961

Performance Comparison of Digitized Quaternion Modulation with other Modulation Schemes 2019
Anam Zahra Qasim Umar Khan
9th International Conference on Digital Information and Communication Technology and its Applications (DICTAP2019), res.country(126,)
Citations: N/A
DOI: 10.1051/itmconf/20192701004

Analysis of Timing Synchronization Techniques in OFD for SDR waveform: Performance Comparison 2018
Muhammad Ali Mumtaz Muhammad Zeeshan Qasim Umar Khan Abdullah Hasan
21st International Symposium on Wireless Personal Multimedia Communications (WPMC), res.country(217,)
Citations: N/A
DOI: 10.1109/WPMC.2018.8712953

Duplex Dual-Ring Radio Over Fiber System with Centralized Light Source and Local Oscillator for millimeter-wave Transmission <i>Anisa Qasim Tayyab Mehmood Usman Ali Qasim Umar Khan Salman Ghafoor</i> <i>2017 International Multi-topic Conference (INMIC 2017)</i> , res.country(177,) Citations: N/A DOI: 10.1109/INMIC.2017.8289469	2017
SEP Performance of Triangular QAM with SC and GSC Spatial Diversity over Rayleigh Channels <i>Furqan Haider Qureshi Qasim Umar Khan Shahzad Amin Sheikh</i> <i>IEEE/ACIS 15th International Conference on Computer and Information Science (ICIS)</i> , res.country(113,) Citations: N/A DOI: 10.1109/ICIS.2016.7550734	2016
Synthesis of linear antenna array using genetic algorithm to reduce peak sidelobe level <i>Amina Khalid Shahzad Amin Sheikh Ijteba Ul Hasnain Shah Qasim Umar Khan Amina Khalid Shahzad Amin Sheikh Ijteba Ul Hasnain Shah Qasim Umar Khan</i> <i>9th International Conference on Electrical and Electronics Engineering (ELECO)</i> , res.country(224,) Citations: N/A DOI: 10.1109/ELECO.2015.7394496	2015
Synthesis of Linear Antenna Array using Genetic Algorithm to Reduce Peak Sidelobe Level <i>Amina Khalid Shahzad Amin Sheikh Ijteba Ul Hasnain Shah Qasim Umar Khan</i> <i>2015 9th International Conference on Electrical and Electronics Engineering (ELECO)</i> , res.country(224,) Citations: N/A DOI: 10.1109/ELECO.2015.7394496	2015
Design Guidelines for Designing High Gain Patch Antenna in the Ku-band <i>Qasim Umar Khan Mojeeb Bin Ihsan</i> <i>8th International Conference on Advances in Circuits, Electronics and Micro-Electronics</i> , res.country(109,) Citations: N/A DOI: https://www.thinkmind.org/index.php?view=instance&instance=CENICS+2015	2015
A New Microstrip Star Shaped Patch Antenna <i>Qasim Umar Khan Mojeeb Bin Ihsan</i> <i>IEEE 2013 Tencon - Spring</i> , res.country(13,) Citations: N/A DOI: 10.1109/TENCONSpring.2013.6584417	2013

Editorial Activities

IEEE Transactions on Vehicular Technology Reviewed Papers for Journals Impact Factor: 6.8	2023
International Journal of Communication Systems Reviewed Papers for Journals Impact Factor: 1.882	2023