

Humayun Zubair Khan

Defence Faculty
Military College of Signals

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About

Dr. Humayun Zubair Khan is working as Defence Faculty in the Military College of Signals. Dr. Humayun Zubair Khan has a PhD in Telecommunication. Dr. Humayun Zubair Khan has published 29 research articles & conference papers having a citation count of 335, carried out 0 projects and filed 0 intellectual property.

Qualifications

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| PhD in Telecommunication Military College of Signals , Pakistan | 2016 - 2020 |
| MS in Telecommunication Military College of Signals , Pakistan | 2011 - 2013 |
| MBA in Finance Virtual University of Pakistan , Pakistan | 2008 - 2010 |
| BE in Telecommunication Military College of Signals , Pakistan | 2002 - 2006 |

Experience

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| Defence Faculty Military College of Signals | 2024- Present |
| Defence Faculty Military College of Signals | 2017 - 2024 |
| Assistant Professor MCS, NUST , Military College of Signals, Khadim Hussain Road, Rawalpindi, Pak | 2017 - 2022 |
| GSO-1 (Development) Special Communication Organization , HQ SCO, Rawalpindi | 2015 - 2017 |
| GSO-2 (Development) Special Communication Organization , HQ SCO, Qasim Market, Rawalpindi | 2009 - 2011 |
| Company commander Special Communication Organization , 428 Signal Company, Kotli, AJ&K | 2006 - 2009 |

Professional Memberships

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| PEC | Since 2016 |
| IEEE | Since 2018 |

Research Articles

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|---|------|
| Latency aware computation offloading and throughput maximization in DL/UL for IoT applications in fog networks <i>Mudassar Ali Rabeea Basir Humayun Zubair Khan Naveed Ahmad Chughtai Saad Qaisar</i> <i>The Journal of Supercomputing</i> , Volume:81, Issue:5, Article Number 668 Impact Factor: 2.700 Quartile: 2 DOI: https://doi.org/10.1007/s11227-025-07108-x | 2025 |
| Asymmetric multi-band reflective metasurface for linear and circular polarizations conversion in Ku, K, Ka, and U bands | 2025 |

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| <p><i>Jamal Zafar Humayun Zubair Khan Abdul Jabbar Jalil ur Rehman Kazim Masood Ur Rehman Adil Masood Siddiqui Qammer H. Abbasi Muhammad Ali Imran</i> <i>Scientific Reports</i> , Volume:15, Issue:1, Article Number: 4977</p> <p>Impact Factor: 3.800 Quartile: 1</p> <p>DOI: 10.1038/s41598-024-81388-w</p> | |
| <p>Multi-band Reflective Metasurface for Efficient Linear and Circular Polarization Conversion</p> <p><i>Adil Masood Siddiqui Jamal Zafar Humayun Zubair Khan Abdul Jabbar Jalil ur Rehman Kazim Masood Ur Rehman Qammer H. Abbasi Muhammad Ali Imran</i> <i>Optical and Quantum Electronics</i> , Volume 57, Article Number 149</p> <p>Impact Factor: 3.300 Quartile: 2</p> <p>DOI: 10.1007/s11082-025-08037-y</p> | 2025 |
| <p>Efficient resource allocation for 5G/6G cognitive radio networks using probabilistic interference models</p> <p><i>Osama Zaheer Mudassar Ali Muhammad Imran Humayun Zubair Khan Muhammad Naeem</i> <i>Physical Communication</i> , Volume 64, Article Number: 102335</p> <p>Impact Factor: 2.2 Quartile: 3 Citations: 5</p> <p>DOI: 10.1016/j.phycom.2024.102335</p> | 2024 |
| <p>Cluster based resource management using H-NOMA in heterogeneous networks beyond 5G</p> <p><i>Umar Ghafoor Humayun Zubair Khan Adil Masood Siddiqui Mudassar Ali Abdul Rauf Arif Wahla Muhammad Naeem</i> <i>Ad Hoc Networks</i> , Volume 149, Article Number 103252</p> <p>Impact Factor: 4.8 Quartile: 2 Citations: 8</p> <p>DOI: https://doi.org/10.1016/j.adhoc.2023.103252</p> | 2023 |
| <p>Joint user and throughput maximization in re-configurable intelligent surface assisted beyond 5G/6G networks</p> <p><i>Alishba Azam Muhammad Imran Mudassar Ali Humayun Zubair Khan Abdul Wakeel Muhammad Naeem</i> <i>Transaction on Emerging Telecommunications Technologies</i> , Pages 1-20</p> <p>Impact Factor: 3.310 Quartile: 2 Citations: 2</p> <p>DOI: 10.1002/ett.4807</p> | 2023 |
| <p>Communication capacity maximization in drone swarms</p> <p><i>Farrukh Javed Humayun Zubair Khan Raheel Anjum</i> <i>Drone Systems and Applications</i> , Volume 11, Pages 1-12</p> <p>Impact Factor: N/A Citations: 7</p> <p>DOI: doi.org/10.1139/dsa-2023-0002</p> | 2023 |
| <p>Optimum power allocation for an energy harvesting wireless communication system considering energy storage losses</p> <p><i>Abdul Basit Abdul Wakeel Ayaz Ahmad Mir Yasir Umair Alina Mirza Muhammad Imran Humayun Zubair Khan</i> <i>Ad Hoc Networks</i> , Volume 144, Article Number 103138</p> <p>Impact Factor: 4.816 Quartile: 2 Citations: 2</p> <p>DOI: https://doi.org/10.1016/j.adhoc.2023.103138</p> | 2023 |
| <p>Radio resource allocation for energy efficiency maximization in satellite–terrestrial integrated networks</p> <p><i>Umair Fakhar Humayun Zubair Khan Zarrar Tariq Mudassar Ali Ahmad Naeem Akhtar Muhammad Naeem Abdul Wakeel</i> <i>Ad Hoc Networks</i> , Volume 138, Article Number 103001</p> <p>Impact Factor: 4.816 Quartile: 2 Citations: 5</p> <p>DOI: doi.org/10.1016/j.adhoc.2022.103001</p> | 2023 |
| <p>Fairness-based user association and resource blocks allocation in satellite–terrestrial integrated networks</p> <p><i>Zarrar Tariq Humayun Zubair Khan Umair Fakhar Mudassar Ali Ahmad Naeem Akhtar Muhammad Naeem Abdul Wakeel</i> <i>Physical Communication</i> , Volume 55, Article Number 101934</p> <p>Impact Factor: 2.379 Quartile: 3 Citations: 4</p> <p>DOI: doi.org/10.1016/j.phycom.2022.101934</p> | 2022 |
| <p>Energy Efficient Resource Allocation for H-NOMA Assisted B5G HetNets</p> <p><i>Umar Ghafoor Humayun Zubair Khan Mudassar Ali Adil Masood Siddiqui Muhammad Naeem Imran Rashid</i> <i>IEEE Access</i> , Volume 10, Pages 91699 - 91711</p> <p>Impact Factor: 3.476 Quartile: 2 Citations: 13</p> <p>DOI: 10.1109/ACCESS.2022.3201527</p> | 2022 |
| <p>Efficient resource allocation for hybrid nonorthogonal multiple access based heterogeneous networks beyond fifth-generation</p> <p><i>Umar Ghafoor Mudassar Ali Humayun Zubair Khan Adil Masood Siddiqui Muhammad Naeem</i></p> | 2022 |

Impact Factor: 3.310 | **Quartile:** 2 | **Citations:** 5

DOI: doi.org/10.1002/ett.4630

NOMA and future 5G & B5G wireless networks: A paradigm

2022

Umar Ghafoor Mudassar Ali Humayun Zubair Khan Adil Masood Saddiqui Muhammad Naeem

Journal of Network and Computer Applications, Volume 204, Article Number 103413

Impact Factor: 8.7 | **Quartile:** 1 | **Citations:** 77

DOI: https://doi.org/10.1016/j.jnca.2022.103413

Joint user association and energy efficiency maximization in beyond 5G heterogeneous networks

2022

Faisal Shehzad Mudassar Ali Humayun Zubair Khan Muhammad Naeem Usman Masud Farhan Qamar

International Journal of Communication Systems, Pages 1-16, Article Number e5122

Impact Factor: 2.047 | **Quartile:** 3 | **Citations:** 4

DOI: 10.1002/dac.5122

Secure resource management in beyond 5G heterogeneous networks with decoupled access

2022

Humayun Zubair Khan Mudassar Ali Muhammad Naeem Imran Rashid Shahid Mumtaz Adnan Ahmad Khan Ahmad Naeem Akhtar

Ad Hoc Networks, Volume 125, Article Number 102737

Impact Factor: 4.111 | **Quartile:** 2 | **Citations:** 20

DOI: 10.1016/j.adhoc.2021.102737

Joint DL/UL Decouple User Association in Microwave and mmWave Enabled Beyond 5G

2021

Heterogeneous Networks

Humayun Zubair Khan Mudassar Ali Muhammad Naeem Imran Rashid Ahmad Naeem Akhtar Faisal Akram

IEEE Access, Volume 9, Pages 134703-134715

Impact Factor: 3.367 | **Quartile:** 2 | **Citations:** 12

DOI: 10.1109/ACCESS.2021.3116939

UAV assisted 5G and beyond wireless networks: A survey

2021

Rizwana Shahzadi Mudassar Ali Humayun Zubair Khan Muhammad Naeem

Journal of Network and Computer Applications, Volume 189, Article Number 103114

Impact Factor: 7.574 | **Quartile:** 1 | **Citations:** 110

DOI: doi.org/10.1016/j.jnca.2021.103114

Resource allocation for energy efficiency optimization in uplink–downlink decoupled 5G

2021

heterogeneous networks

Humayun Zubair Khan Mudassar Ali Imran Rashid Abdul Ghafoor Muhammad Naeem Adnan Ahmed Khan Adil Masood Saddiqui

International Journal of Communication System, Pages 1-23, Article Number e4925

Impact Factor: 1.882 | **Quartile:** 3 | **Citations:** 16

DOI: https://doi.org/10.1002/dac.4925

Joint admission control, cell association, power allocation and throughput maximization in decoupled

2020

5G heterogeneous networks

Humayun Zubair Khan Mudassar Ali Muhammad Naeem Imran Rashid Adil Masood Siddiqui Muhammad Imran Shahid Mumtaz

Telecommunication Systems, Pages 1-14

Impact Factor: 2.314 | **Quartile:** 3 | **Citations:** 16

DOI: https://doi.org/10.1007/s11235-020-00707-4

Resource allocation in 5G heterogeneous networks with downlink-uplink decoupled access

2019

Humayun Zubair Khan Imran Rashid Muhammad Imran Mudassar Ali Muhammad Naeem

Transactions on Emerging Telecommunications Technologies, Pages 1-18 (e3831)

Impact Factor: 1.594 | **Quartile:** 3 | **Citations:** 29

DOI: https://doi.org/10.1002/ett.3831

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| Secrecy Rate Maximization based on User Clustering in Hybrid-NOMA Assisted HetNets for B5G/6G <i>Umar Ghafoor Adil Masood Siddiqui Humayun Zubair Khan Mudassar Ali</i> <i>Proceedings - IEEE Global Communications Conference, GLOBECOM</i> , res.country(157,) Citations: N/A DOI: 10.1109/GLOBECOM54140.2023.10436806 | 2023 |
| Sum Rate Maximization Based on Mobile User Clustering Assisted Downlink H-NOMA in 4-Tier B5G HetNet <i>Umar Ghafoor Adil Masood Siddiqui Humayun Zubair Khan Mudassar Ali</i> <i>2023 International Conference on Communication Technologies (ComTech)</i> , res.country(177,) Citations: N/A DOI: 10.1109/ComTech57708.2023.10165063 | 2023 |
| Energy Efficiency Optimization for Hybrid NOMA based Beyond 5G Heterogeneous Networks <i>Umar Ghafoor Mudassar Ali Humayun Zubair Khan Adil Masood Siddiqui1 Muhammad Naeem Imran Rashid</i> <i>2021 IEEE 94th Vehicular Technology Conference (VTC2021-Fall)</i> , res.country(233,) Citations: N/A DOI: 10.1109/VTC2021-Fall52928.2021.9625334 | 2021 |
| Throughput Maximization in Hybrid NOMA assisted Beyond 5G Heterogeneous Networks <i>Umar Ghafoor Humayun Zubair Khan Adil Masood Saddiqui Muhammad Naeem Mudassar Ali</i> <i>2021 International Wireless Communications and Mobile Computing (IWCMC)</i> , res.country(48,) Citations: N/A DOI: 10.1109/IWCMC51323.2021.9498930 | 2021 |
| Joint Secure User Association, Power and Subcarrier Allocation in Decoupled 5G Heterogeneous Network <i>Humayun Zubair Khan Mudassar Ali Muhammad Naeem Imran Rashid Shahid Mumtaz</i> <i>ICC 2021 - IEEE International Conference on Communications</i> , res.country(38,) Citations: N/A DOI: 10.1109/ICC42927.2021.9500451 | 2021 |
| Cell Association for Energy Efficient Resource Allocation in Decoupled 5G Heterogeneous Networks <i>Humayun Zubair Khan Mudassar Ali Imran Rashid Abdul Ghafoor Muhammad Naeem</i> <i>IEEE 91st Vehicular Technology Conference (VTC2020-Spring)</i> , res.country(20,) Citations: N/A DOI: 10.1109/VTC2020-Spring48590.2020.9129442 | 2020 |
| Resource Allocation and Throughput Maximization in Decoupled 5G <i>Humayun Zubair Khan Mudassar Ali Muhammad Naeem Imran Rashid Adil Masood Siddiqui Shahid Mumtaz Muhammad Imran Humayun Zubair Khan</i> <i>Mudassar Ali Muhammad Naeem Imran Rashid Adil Masood Siddiqui Shahid Mumtaz Muhammad Imran Humayun Zubair Khan Mudassar Ali Muhammad</i> <i>Naeem Imran Rashid Adil Masood Siddiqui Shahid Mumtaz Muhammad Imran</i> <i>IEEE Wireless Communications and Networking Conference (WCNC)</i> , res.country(121,) Citations: N/A DOI: 10.1109/WCNC45663.2020.9120853 | 2020 |
| Modified random pairing for throughput optimization in VMIMO Femtocell environment <i>Imtiaz Ahmed Jamil Sajid Bashir Humayun Zubair Khan Imran Rashid</i> <i>International Conference on Open Source Systems & Technologies (ICOSST)</i> , res.country(177,) Citations: N/A DOI: 10.1109/ICOSST.2015.7396405 | 2015 |
| Enhancing throughput viz-a-viz fairness in uplink diversity based VMIMO femtocell environment <i>Humayun Zubair Khan Imran Rashid</i> <i>2013 International Conference on Open Source Systems and Technologies (ICOSST)</i> , res.country(177,) Citations: N/A DOI: 10.1109/ICOSST.2013.6720612 | 2013 |

Editorial Activities

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|---|------|
| Computer Networks Reviewed Papers for Journals Impact Factor: 5.493 | 2023 |
| Computer Networks Reviewed Papers for Journals Impact Factor: 5.493 | 2023 |
| IEEE Transactions on Vehicular Technology Reviewed Papers for Journals Impact Factor: 6.239 | 2022 |
| Sensors Reviewed Papers for Journals Impact Factor: 3.847 | 2022 |
| Reviewed Papers for Journals Impact Factor: 3.169 | 2022 |
| Reviewed Papers for Journals Impact Factor: 1.194 | 2022 |
| Reviewed Papers for Journals Impact Factor: 6.492 | 2022 |
| Reviewed Papers for Journals Impact Factor: 4.474 | 2022 |
| Reviewed Papers for Journals Impact Factor: 2.047 | 2022 |
| Reviewed Papers for Journals Impact Factor: 10.215 | 2022 |
| Reviewed Papers for Journals Impact Factor: 2.047 | 2022 |
| Reviewed Papers for Journals Impact Factor: 4.474 | 2022 |
| Reviewed Papers for Journals Impact Factor: 10.215 | 2020 |