

# Umar Ghafoor

Assistant Professor  
Military College of Signals

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Contact:



## About

Dr. Umar Ghafoor is working as Assistant Professor in the Military College of Signals. Dr. Umar Ghafoor has a PhD in Wireless Communication . Dr. Umar Ghafoor has published 18 research articles & conference papers having a citation count of 114, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Wireless Communication</b> NUST, Islamabad , Pakistan	2017 - 2023
<b>MS in Telecommunication Engineering</b> NUST, Islamabad , Pakistan	2011 - 2014
<b>BSc in Telecommunication Engineering</b> NUST, Islamabad , Pakistan	2004 - 2008

## Experience

<b>Assistant Professor</b> Military College of Signals	2024- Present
<b>Assistant Professor</b> UMT , Sialkot	2016 - 2017
<b>Lecturer</b> UMT , Sialkot	2014 - 2016
<b>Teaching Assistant</b> MCS NUST , Rawalpindi	2012 - 2012
<b>Lecturer/Lab Engineer</b> GCUF , Faisalabad	2008 - 2011

- Fair association and rate maximization in 6G UAV Aided HS only network and HetNet** 2025  
*Umar Ghafoor*  
*Journal of Network and Computer Applications*, Volume:239, Article Number 104174  
**Impact Factor:** 7.700 | **Quartile:** 1  
**DOI:** <https://doi.org/10.1016/j.jnca.2025.104174>
- Strengthening Data Confidentiality in 6G Cognitive Networks through Secrecy Rate Optimization** 2025  
*Umar Ghafoor*  
*IEEE Communications Letters*, Volume:29, Issue: 4, Page(s):665-668  
**Impact Factor:** 3.700 | **Quartile:** 2 | **Citations:** 1  
**DOI:** 10.1109/LCOMM.2025.3537285
- Dynamic Resource Optimization for Quality of Service-Driven Cost Minimization in Cognitive Radio Networks** 2024  
*Umar Ghafoor Adil Masood Siddiqui*  
*Wireless Personal Communications*, Volume 139, Pages 2161-2201  
**Impact Factor:** 1.900 | **Quartile:** 3 | **Citations:** 1  
**DOI:** 10.1007/s11277-024-11711-1
- 6G cognitive radio: Optimizing resources with cluster-assisted downlink hybrid multiple access** 2024  
*Umar Ghafoor Adil Masood Siddiqui*  
*Physical Communication*, Volume 66, Article Number 102435  
**Impact Factor:** 2.000 | **Quartile:** 2 | **Citations:** 2  
**DOI:** 10.1016/j.phycom.2024.102435
- Maximizing throughput and energy efficiency in 6G based on phone user clustering enabled UAV assisted downlink hybrid multiple access HetNet** 2024  
*Umar Ghafoor Tahreem Ashraf*  
*Telecommunication Systems*, Volume 85, Issue 4, Pages 563-590  
**Impact Factor:** 2.500 | **Quartile:** 3 | **Citations:** 7  
**DOI:** 10.1007/s11235-024-01101-0
- Cluster based resource management using H-NOMA in heterogeneous networks beyond 5G** 2023  
*Umar Ghafoor Humayum Zubair Khan Adil Masood Siddiqui Mudassar Ali Abdul Rauf Arif Wahla Muhammad Naeem*  
*Ad Hoc Networks*, Volume 149, Article Number 103252  
**Impact Factor:** 4.8 | **Quartile:** 2 | **Citations:** 8  
**DOI:** <https://doi.org/10.1016/j.adhoc.2023.103252>
- Energy Efficient Resource Allocation for H-NOMA Assisted B5G HetNets** 2022  
*Umar Ghafoor Humayun Zubair Khan Mudassar Ali Adil Masood Siddiqui Muhammad Naeem Imran Rashid*  
*IEEE Access*, Volume 10, Pages 91699 - 91711  
**Impact Factor:** 3.476 | **Quartile:** 2 | **Citations:** 13  
**DOI:** 10.1109/ACCESS.2022.3201527
- Efficient resource allocation for hybrid nonorthogonal multiple access based heterogeneous networks beyond fifth-generation** 2022  
*Umar Ghafoor Mudassar Ali Humayun Zubair Khan Adil Masood Siddiqui Muhammad Naeem*  
*Transaction on Emerging Telecommunications Technologies*, Pages 1-23  
**Impact Factor:** 3.310 | **Quartile:** 2 | **Citations:** 5  
**DOI:** [doi.org/10.1002/ett.4630](https://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 Siddiqui 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>

Conference Proceedings

<b>Enhancing 6G Network Security Through Cognitive Radio and Cluster-Assisted Downlink Hybrid Multiple Access</b> <i>Umar Ghafoor Adil Masood Siddiqui</i> <i>2024 International Conference on Frontiers of Information Technology (FIT), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/FIT63703.2024.10838428	2024
<b>A Novel Approach for Quality of Service Based Cost Minimization in a Cognitive Radio Network</b> <i>Umar Ghafoor Adil Masood Siddiqui Mudassar Ali</i> <i>2024 4th International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICoDT262145.2024.10740207	2024
<b>Novel 6G Network: Maximizing Sum Rate and User Association by Minimizing Cost Ensuring QoS</b> <i>Umar Ghafoor Adil Masood Siddiqui</i> <i>2024 21st International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST61650.2024.10877248	2024
<b>Holistic Optimization of Rate and EE in UAV-Assisted HetNets</b> <i>Umar Ghafoor Mudassar Ali Adil Masood Siddiqui Waleed Ejaz</i> <i>IEEE INFOCOM 2024 - IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/INFOCOMWKSHPS61880.2024.10620714	2024
<b>Secrecy Rate Maximization based on User Clustering in Hybrid-NOMA Assisted HetNets for B5G/6G</b> <i>Umar Ghafoor Adil Masood Siddiqui Humayun Zubair Khan Mudassar Ali</i> <i>Proceedings - IEEE Global Communications Conference, GLOBECOM, res.country(157,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/GLOBECOM54140.2023.10436806	2023
<b>Admission, Association, and Rate Maximization in a UAV Assisted User Clustering Based Downlink Hybrid Multiple Access HetNets</b> <i>Umar Ghafoor Mudassar Ali Adil Masood Siddiqui</i> <i>20th IBCAST--2023 International Bhurban Conference on Applied Sciences &amp; Technology, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST59916.2023.10712800	2023
<b>Sum Rate Maximization Based on Mobile User Clustering Assisted Downlink H-NOMA in 4-Tier B5G HetNet</b> <i>Umar Ghafoor Adil Masood Siddiqui Humayun Zubair Khan Mudassar Ali</i> <i>2023 International Conference on Communication Technologies (ComTech), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ComTech57708.2023.10165063	2023
<b>Energy Efficiency Optimization for Hybrid NOMA based Beyond 5G Heterogeneous Networks</b> <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), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/VTC2021-Fall52928.2021.9625334	2021
<b>Throughput Maximization in Hybrid NOMA assisted Beyond 5G Heterogeneous Networks</b> <i>Umar Ghafoor Humayun Zubair Khan Adil Masood Saddiqui Muhammad Naeem Mudassar Ali</i> <i>2021 International Wireless Communications and Mobile Computing (IWCMC) , res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IWCMC51323.2021.9498930	2021

Editorial Activities

<b>Computers, Materials &amp; Continua</b> Reviewed Papers for Journals <b>Impact Factor:</b> 2.0	2025
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<b>Computers, Materials &amp; Continua</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 2.0</b>	
<b>Telecommunications systems</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 1.7</b>	
<b>Physical communication</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 2.0</b>	
<b>Scientific Reports</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 3.8</b>	
<b>Scientific Reports</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 3.8</b>	
<b>Wireless Personal Communications</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 1.9</b>	
<b>Journal of Electronics and Electrical Engineering</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: N/A</b>	
<b>Wireless Personal Communications</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 1.9</b>	
<b>Scientific Reports</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 3.8</b>	
<b>Scientific Reports</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 3.8</b>	
<b>Telecommunication Systems</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 1.7</b>	
<b>Pervasive and Mobile Computing</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 3</b>	
<b>Wireless Networks</b>	2025
Reviewed Papers for Journals	
<b>Impact Factor: 2.1</b>	
<b>Wireless Personal Communications</b>	2024
Reviewed Papers for Journals	
<b>Impact Factor: 1.9</b>	
<b>Wireless Personal Communications</b>	2024
Reviewed Papers for Journals	
<b>Impact Factor: 1.9</b>	
<b>Wireless Personal Communications</b>	2024
Reviewed Papers for Journals	
<b>Impact Factor: 1.9</b>	
<b>Peer J Computer Science</b>	2024
Reviewed Papers for Journals	
<b>Impact Factor: 3.8</b>	
<b>IEEE Access</b>	2021
Reviewed Papers for Journals	

