

# Mohaira Ahmad

Assistant Professor

School of Electrical Engineering and Computer Science

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About

Dr. Mohaira Ahmad is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Mohaira Ahmad has a PhD in Computational Electromagnetics. Dr. Mohaira Ahmad has published 15 research articles & conference papers having a citation count of 18, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Computational Electromagnetics	2015 - 2019
Jiangsu University of Science and Technology , China	
MS in Rf & Microwave	2010 - 2014
NUST, Islamabad , Pakistan	
BE in Telecommunication	2006 - 2010
NUST, Islamabad , Pakistan	

Experience

Assistant Professor	2021- Present
School of Electrical Engineering and Computer Science	
Assistant Professor	2020 - 2021
School of Electrical Engineering and Computer Science	
Assistant Professor	2014 - 2015
University of Lahore , Lahore	
Research Engineer	2010 - 2012
NRTC , Haripur, Pakistan	

Awards

Faculty Development Prog
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Research Projects

National Projects	
Computational Modeling of Porous Bones using body matched Antennas	2023
Funding Agency: NUST	
Amount: PKR 982,000.00	
Status: Approved_inprocess	
Graphene Integrated Microwave Photonics and their applications	2022
Funding Agency: NUST	
Amount: PKR 500,000.00	
Status: Completed	
International Projects	

- Modified triple modular redundancy based fault-tolerant three-phase matrix converter design with AI driven diagnostic capabilities** 2025  
*Faizan Ahmad Mohaira Ahmad Muhammad Adnan Arsalan Ahmed Amin Faisal Hayat Sami ud Din*  
*Results in Engineering* , Volume:25, Article Number 104454  
**Impact Factor:** 7.900 | **Quartile:** 1 | **Citations:** 1  
**DOI:** <https://doi.org/10.1016/j.rineng.2025.104454>
- Hybrid Multi-Criteria Decision Framework for Prosumers Energy Storage Systems in Smart Grids** 2024  
*Mohaira Ahmad Marriam Liaqat Muhammad Adnan Muhammad Sajid Iqbal Faizan Ahmad Sami Ud Din*  
*IEEE ACCESS* , Volume 12, Pages 188046-188071  
**Impact Factor:** 3.400 | **Quartile:** 2 | **Citations:** 3  
**DOI:** 10.1109/ACCESS.2024.3514698
- Mathematical modeling development and synthesis of tapered transmission line resonators and filters** 2024  
*Mohaira Ahmad Waqar Ahmad Malik Sajjad Ur Rehman MajeedAS Alkanhal Wazie M Abdulkawi Ahmed Salim Abdel-Fattah A Sheta*  
*PHYSICA SCRIPTA* , Volume:100, Number:01, Article Number:015511  
**Impact Factor:** 2.6 | **Quartile:** 2  
**DOI:** 10.1088/1402-4896/ad96e6
- The predictive machine learning model of a hydrated inverse vulcanized copolymer for effective mercury sequestration from wastewater** 2024  
*Ali Shaan Manzoor Ghumman Rashid Shamsuddin Mohaira Ahmad Yoshiaki Yoshida Abdul Sami Hamad Almohamadi Amin Abbasi*  
*Science of the Total Environment* , Volume 908, Article Number 168034  
**Impact Factor:** 9.8 | **Quartile:** 1 | **Citations:** 7  
**DOI:** <https://doi.org/10.1016/j.scitotenv.2023.168034>
- A simple and modular quasi stepped impedance resonator based reconfigurable bandpass filter for 5G applications** 2023  
*Muhammad Waqas Sajjad Ur Rehman Mohaira Ahmad Waqar Ahmad Malik Hamza Zad Gul Wazie M. Abdulkawi Majeed A. Alkanhal*  
*Physica Scripta* , Volume 99, Issue 1, Article Number 015517  
**Impact Factor:** 2.9 | **Quartile:** 2 | **Citations:** 2  
**DOI:** [doi.org/10.1088/1402-4896/ad155f](https://doi.org/10.1088/1402-4896/ad155f)
- Implementation of the convolutional perfectly matched layer (CPML) in the face-centered cubic (FCC) FDTD method** 2022  
*Mohaira Ahmad Lixia Yang Rukhshanda Anjum*  
*Waves in Random and Complex Media*, Pages 1-12  
**Impact Factor:** 4.853 | **Quartile:** 1 | **Citations:** 1  
**DOI:** <https://doi.org/10.1080/17455030.2022.2065042>
- An Efficient Medium Access Control Mechanism for Flying Ad-hoc Networks** 2021  
*Fazal Noor Shibli Nisar Muhammad Asghar Khan Insaf Ullah Sajjad ur Rehman Mohaira Ahmad*  
*Computer Systems Science & Engineering* , Volume 38, No.1, Pages 47-63  
**Impact Factor:** 4.397 | **Quartile:** 1 | **Citations:** 3  
**DOI:** 10.32604/csse.2021.016430
- Laplace transform current density convolution finite-difference time-domain formulation for the modelling of 1D graphene** 2017  
*Mohaira Ahmad Lixia Yang*  
*IET Microwaves, Antennas & Propagation* , Volume:11, Issue:15, Pages: 2211-2218  
**Impact Factor:** 1.739 | **Quartile:** 3  
**DOI:** DOI:10.1049/iet-map.2016.0899

Conference Proceedings

<b>Design and Development of non-invasive RF-Based Prototype for Bone Health Evaluation</b> <i>Zartasha Mustansar Hafiz M. Yasir Bhatti Khujasta Khalid Waqar Ahmad Malik Mohaira Ahmad Ayesha Inam Tarar</i> <i>14th International Conference on Software and Computer Applications (ICSCA 2025), res.country(157,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://doi.org/10.1145/3731806.3731853">https://doi.org/10.1145/3731806.3731853</a> A	2025
<b>Design of a Graphene-Based Hexagonal Circular Patch Yagi-Uda MIMO Antenna</b> <i>Asif Gulzar Mohaira Ahmad Lixia Yang</i> <i>ISAPE 2024 - 14th International Symposium on Antennas, Propagation and EM Theory, res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISAPE62431.2024.10840420	2024
<b>Graphene based Ris for thz Wireless Communication</b> <i>Mohaira Ahmad Azib Ahmed Sajjad ur Rehman Lixia Yang</i> <i>ISAPE 2024 - 14th International Symposium on Antennas, Propagation and EM Theory, res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISAPE62431.2024.10840762	2024
<b>Multifunctional Linear Dichroism and Polarization Transforming Metasurface for mm-Wave Application</b> <i>Ahsaan Gul Hassan Anum Zulqarnain Muhammad Danial Shafi Adnan Nadeem Sultan Shoaib Imran Shoaib Mohaira Ahmad Noshewan Shoaib</i> <i>18th European Conference on Antennas and Propagation, 17-22 March 2024, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> Nil	2024
<b>Lumped Element Circuit Model of Resonant Antennas Using Singularity Expansion Method</b> <i>Mohaira Ahmad Sajjad ur Rehman Waqar A. Malik Afaq Adil Rabbia Sulaiman</i> <i>2021 1st International Conference on Microwave, Antennas &amp; Circuits (ICMAC), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICMAC54080.2021	2021
<b>CPML Implementation for FCC-FDTD Method</b> <i>Kangbing Liu Mohaira Ahmad Lijuan Shi Lixia Yang</i> <i>2018 12th International Symposium on Antennas, Propagation and EM Theory, ISAPE 2018 - Proceedings, res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISAPE.2018.8634099	2018

Editorial Activities

<b>Results in Engineering</b> Reviewed Papers for Journals <b>Impact Factor:</b> 7.9	2025
<b>Results in Engineering</b> Reviewed Papers for Journals <b>Impact Factor:</b> 7.9	2024
<b>Waves in Random and Complex Media</b> Reviewed Papers for Journals <b>Impact Factor:</b> 4.051	2022
<b>UW Journal of science and technology</b> Reviewed Papers for Journals <b>Impact Factor:</b> Nil	2022
<b>UW Journal of science and technology</b> Reviewed Papers for Journals <b>Impact Factor:</b> Nil	2021
<b>UW Journal of science and technology</b> Reviewed Papers for Journals <b>Impact Factor:</b> Nil	2021