

# Mohammad Mutee Ur Rehman

Assistant Professor

School of Mechanical & Manufacturing Engineering

Email: muhammad.mutee@smme.nust.edu.pk

Contact: 0000000000



## About

Dr. Mohammad Mutee Ur Rehman is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Mohammad Mutee Ur Rehman has a PhD in ELECTRONIC ENGINEERING. Dr. Mohammad Mutee Ur Rehman has published 15 research articles & conference papers having a citation count of 526, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in ELECTRONIC ENGINEERING</b> Cheju National University , South Korea	2019 - 2023
<b>MS in MECHATRONICS ENGINEERING</b> Cheju National University , South Korea	2016 - 2018
<b>BE in MECHATRONICS ENGINEERING</b> Air University , Pakistan	2010 - 2014

## Experience

<b>Assistant Professor</b> School of Mechanical & Manufacturing Engineering	2023- Present
--	---------------

## Research Articles

<b>A Sustainable and Flexible Carbon Paper-Based Multifunctional Human–Machine Interface (HMI) Sensor</b> <i>Maryam Khan Muhammad Muqeet Rehman Mohammad Mutee Ur Rehman Muhammad Saqib Shahzad Iqbal Sang Seop Lim Kun Hyun Park Woo Young Kim</i> <i>Polymers</i> , Volume 17(1), Article Number 98 <b>Impact Factor:</b> 4.700   <b>Quartile:</b> 1   <b>Citations:</b> 8 <b>DOI:</b> <a href="https://doi.org/10.3390/polym17010098">https://doi.org/10.3390/polym17010098</a>	2025
<b>Edible rice paper-based multifunctional humidity sensor powered by triboelectricity</b> <i>Hafiz Mohammad Mutee Ur Rehman Asokan Poorani Sathya Prasanna Muhammad Muqeet Rehman Maryam Khan Sang-Jae Kim Woo Young Kim</i> <i>Sustainable Materials and Technologies</i> , Volume 36, Article Number e00596 <b>Impact Factor:</b> 9.6   <b>Quartile:</b> 1   <b>Citations:</b> 63 <b>DOI:</b> <a href="https://doi.org/10.1016/j.susmat.2023.e00596">10.1016/j.susmat.2023.e00596</a>	2023
<b>High-performance humidity sensor for multipurpose applications by recycling of potato peel bio-waste</b> <i>Hafiz Mohammad Mutee Ur Rehman Maryam Khan Muhammad Muqeet Rehman Shenawar Ali Khan Woo Young Kim</i> <i>Sensors and Actuators A: Physical</i> , Volume 343, Article Number 113662 <b>Impact Factor:</b> 4.6   <b>Quartile:</b> 1   <b>Citations:</b> 28 <b>DOI:</b> <a href="https://doi.org/10.1016/j.sna.2022.113662">10.1016/j.sna.2022.113662</a>	2022
<b>All-Printed Flexible Memristor with Metal–Non-Metal-Doped TiO<sub>2</sub> Nanoparticle Thin Films</b> <i>Maryam Khan Hafiz Mohammad Mutee Ur Rehman Rida Tehreem Muhammad Saqib Muhammad Muqeet Rehman Woo Young Kim</i> <i>Nanomaterials</i> , Volume 12, Issue 13, Article Number 2289 <b>Impact Factor:</b> 5.3   <b>Quartile:</b> 1   <b>Citations:</b> 27 <b>DOI:</b> <a href="https://doi.org/10.3390/nano12132289">10.3390/nano12132289</a>	2022
<b>A full-range flexible and printed humidity sensor based on a solution-processed p(Vdf-trfe)/graphene-flower composite</b> <i>Shenawar Ali Khan Muhammad Saqib Muhammad Muqeet Rehman Hafiz Mohammad Mutee Ur Rehman Sheik Abdur Rahman Yunsook Yang Seongwan Kim Woo Young Kim</i> <i>Nanomaterials</i> , Volume 11, Issue 8, Article Number 1915 <b>Impact Factor:</b> 5.719   <b>Quartile:</b> 1   <b>Citations:</b> 32	2021

DOI: 10.3390/nano11081915

**Highly efficient and wide range humidity response of biocompatible egg white thin film**

2021

Hafiz Mohammad Mutee Ur Rehman Muhammad Muqeet Rehman Muhammad Saqib Shenawar Ali Khan Maryam Khan Yunsook Yang Seongwan Kim  
Sheik Abdur Rahman Woo Young Kim

*Nanomaterials* , Volume 11, Issue 7, Article Number 1815

**Impact Factor:** 5.719 | **Quartile:** 1 | **Citations:** 28

**DOI:** <https://doi.org/10.3390/nano11071815>

**High-performance humidity sensor based on the graphene flower/zinc oxide composite**

2021

Muhammad Saqib Shenawar Ali Khan Hafiz Mohammad Mutee Ur Rehman Yunsook Yang Seongwan Kim Muhammad Muqeet Rehman Woo Young Kim

*Nanomaterials* , Volume 11, Issue 1, Article Number 242

**Impact Factor:** 5.719 | **Quartile:** 1 | **Citations:** 41

**DOI:** 10.3390/nano11010242

**Electroforming-free flexible organic resistive random access memory based on a nanocomposite of poly(3-hexylthiophene-2,5-diyl) and orange dye with a low threshold voltage**

2020

Syed Sibtul Hassan Sherazi Muhammad Muqeet Rehman Hafiz Mohammad Mutee Ur Rehman Woo Young Kim Ghayas Uddin Siddiqui Khasan S Karimov

*Semiconductor Science and Technology* , Volume 35, Issue 12, Article Number 125012

**Impact Factor:** 2.352 | **Quartile:** 3 | **Citations:** 12

**DOI:** 10.1088/1361-6641/abbaf0

**Encapsulation of polyvinyl alcohol based flexible temperature sensor through spatial atmospheric atomic layer deposition system to enhance its lifetime**

2019

Soo Wan Kim Muhammad Muqeet Rehman Memoon Sajid Hafiz Mohammad Mutee ur Rehman Jahanzeb Gul Jeong Dai Jo Kyung Hyun Choi

*Thin Solid Films* , Volume 673, Pages 44-51

**Impact Factor:** 2.030 | **Quartile:** 3 | **Citations:** 28

**DOI:** <https://doi.org/10.1016/j.tsf.2019.01.034>

**Significance of encapsulating organic temperature sensors through spatial atmospheric atomic layer deposition for protection against humidity**

2018

Hafiz Mohammad Mutee Ur Rehman Muhammad Muqeet Rehman Memoon Sajid Jae-Wook Lee Kyoung Hoan Na Jeong Beom Ko Kyung Hyun Choi

*Journal of Materials Science: Materials in Electronics* , Volume 29, Issue 17, Pages 14396-14405

**Impact Factor:** 2.195 | **Quartile:** 2 | **Citations:** 18

**DOI:** 10.1007/s10854-018-9572-4

**2D nanocomposite of hexagonal boron nitride nanoflakes and molybdenum disulfide quantum dots applied as the functional layer of all-printed flexible memory device**

2018

Muhammad Muqeet Rehman Ghayas Uddin Siddiqui Hafiz Mohammad Mutee Ur Rehman Hyun Bum Kim Yang Hoi Doh Kyung Hyun Choi

*Materials Research Bulletin* , Volume 105, Pages 28-35

**Impact Factor:** 3.355 | **Quartile:** 2 | **Citations:** 21

**DOI:** <https://doi.org/10.1016/j.materresbull.2018.02.027>

**Atmospheric deposition process for enhanced hybrid organic–inorganic multilayer barrier thin films for surface protection**

2017

Hafiz Mohammad Mutee Ur Rehman Kwang Tae Kim Kyoung Hoan Na Kyung Hyun Choi

*Applied Surface Science* , Volume 422, Pages 273-282

**Impact Factor:** 4.439 | **Quartile:** 1 | **Citations:** 18

**DOI:** 10.1016/j.apsusc.2017.05.261

## Book Chapters

**Chapter 20 - Nanomaterials in humidity sensors**

2024

Muhammad Muqeet Rehman Maryam Khan Mohammad Mutee Ur Rehman Ghayas Uddin Siddiqui Zubair Ahmad Kamran Ali Shenawar Ali Khan

Muhammad Saqib Jahanzeb Gul Woo Young Kim

In: *Handbook of Nanomaterials: Electronics, Information Technology, Energy, Transportation, and Consumer Products: Volume 1*, Chapter 20, Pages Pages 513-566

**Citations:** 15

**DOI:** <https://doi.org/10.1016/B978-0-323-95511-9.00027-5>

