

Muhammad Mujahid

Professor

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About

Dr. Muhammad Mujahid is working as Professor in the School of Chemical & Materials Engineering. Dr. Muhammad Mujahid has published 37 research articles & conference papers having a citation count of 1273, carried out 2 projects and filed 0 intellectual property.

Qualifications

Experience

Professor	2020- Present
School of Chemical & Materials Engineering	
Professor	2014 - 2014
School of Chemical & Materials Engineering	

Research Projects

National Projects

Plasmons Effects in Nano-Structures of inorganic polycrystalline materials (ZnS, CdTe, CdS) by embedding different metallic nano particles (Ag, Au, Cu), for improving Photovoltaic Efficiency in Photovoltaic Industry	2015
Funding Agency: PSF	
Amount: PKR 1,998,000.00	
Status: Completed	
Preparation Characterization and Product Development of Poly 1-Lactic Acid / HA Nano Composites	2015
Funding Agency: Higher Education Commission	
Amount: PKR 12,000,000.00	
Status: Completed	

International Projects

Research Articles

Tailored morphology of indium-doped titania via sol-gel method for enhanced photocatalysis	2025
Junaid Ur Rehman Yilan Zeng Sofia Javed Osama Gohar Awais Ahmad Melany Bouyer Muhammad Mujahid Martin Motola	
Ceramics International , Volume:51, Issue:16, Page:21590-21599	
Impact Factor: 5.600 Quartile: 1	
DOI: https://doi.org/10.1016/j.ceramint.2025.02.320	
Boosted Hydrogen evolution reaction based on synergistic effect of graphene, MoS2 and RuO2 ternary electrocatalyst	2024
Zeeshan mehmood Khan Muhammad Aftab Akram Muhammad Abdul Basit Muhammad Mujahid Sofia Javed	
International Journal of Hydrogen Energy, Volume 92, Pages 1423-1438	
Impact Factor: 8.100 Quartile: 1 Citations: 2	
DOI: https://doi.org/10.1016/j.ijhydene.2024.10.312	
Enhanced photocatalytic activity of Sn-doped TiO2 nanoparticles: Microstructural-photoelectrochemical synergy	2024
Junaid ur Rehman Sofia Javed Muhammad Mujahid Osama Gohar Shuvo Brahma Awais Ahmed Muhammad Bilal Hanif Martin Motola	
Physica B : Condensed Matter, Volume 690, Article Number 416260	
Impact Factor: 2.800 Quartile: 2 Citations: 10	
DOI: https://doi.org/10.1016/j.physb.2024.416260	

Development and characterization of boride-reinforced CoCrFeNi composites <i>M. Adil Mehmood Muhammad Mujahid Andy Godfrey Muhammad Farooq Zafar KHURRAM YAQOOB</i> <i>Journal of Alloys and Compounds</i> , Volume 947, Article Number 169535 Impact Factor: 6.371 Quartile: 1 Citations: 12 DOI: https://doi.org/10.1016/j.jallcom.2023.169535	2023
Ceramic-reinforced HEA matrix composites exhibiting an excellent combination of mechanical properties <i>M. Adil Mehmood Khurram Shehzad Muhammad Mujahid Talha bin Yaqub Andy Godfrey Filipe Fernandes F. Z. Muhammad KHURRAM YAQOOB</i> <i>Scientific Reports</i> , Volume 12, Article Number 21486 Impact Factor: 4.996 Quartile: 2 Citations: 15 DOI: https://doi.org/10.1038/s41598-022-25734-w	2022
Systematic Development of Eutectic High Entropy Alloys by Thermodynamic Modeling and Experimentation: An Example of the CoCrFeNi-Mo System <i>Muhammad Mukarram M. Awais Munir Muhammad Mujahid KHURRAM YAQOOB</i> <i>Metals</i> , Volume 11, Issue 9, Article Number 1484 Impact Factor: 2.695 Quartile: 2 Citations: 16 DOI: doi.org/10.3390/met11091484	2021
Design and development of CoCrFeNiTa eutectic high entropy alloys <i>Muhammad Mukarram Mohammad Mujahid KHURRAM YAQOOB</i> <i>Journal of Materials Research and Technology</i> , Volume 10, Pages 1243-1249 Impact Factor: 5.039 Quartile: 2 Citations: 64 DOI: https://doi.org/10.1016/j.jmrt.2020.12.042	2021
Fretting fatigue crack initiation and propagation in Ti6Al4V sheets under tribocorrosive conditions of artificial seawater and physiological solutions <i>Zeeshan Anjum Masood Shah Hassan Elahi Mushtaq Khan Muhammad Mujahid Shahab Khushnood Faisal Qayyum</i> <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , Volume 234, Issue 12, Pages 1526-1534 Impact Factor: 2.311 Quartile: 3 Citations: 9 DOI: 10.1177/1464420720946431	2020
Fretting fatigue crack initiation and propagation in Ti6Al4V sheets under tribocorrosive conditions of artificial seawater and physiological solutions <i>Zeeshan Anjum Masood Shah Hassan Elahi Mushtaq Khan Muhammad Mujahid Shahab Khushnood Faisal Qayyum</i> <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , Volume 234, Issue 12, Pages 1526-1534 Impact Factor: 2.311 Quartile: 2 Citations: 9 DOI: https://doi.org/10.1177/1464420720946431	2020
Influence of carbonization on structural and mechanical properties of PAN/phenolic-based carbon/carbon composites <i>SHA Jian-jun Asghari Maqsood Muhammad Mujahid Khurram Iqbal</i> <i>Journal of Dalian University of Technology</i> , Volume 55(3), Pages 261-265 Impact Factor: - DOI: -	2020
Nanophotonics based label free detection mechanism for real-time monitoring of interleukin-6 <i>Munezza Ata Khan Muhammad Mujahid Say Chye Joachim Loo Vidya N. Chamundeswari</i> <i>Nanoscale</i> , Volume 12, Issue 16, Pages 9194-9207 Impact Factor: 7.790 Quartile: 1 Citations: 10 DOI: 10.1039/D0NR01151G	2020
Highly ordered combined structure of anodic TiO₂ nanotubes and TiO₂ nanoparticles prepared by a novel route for dye-sensitized solar cells <i>Tayyaba Ghani Muhammad Mujahid Mazhar Mehmood Gengmin Zhang Sumaira Naz</i> <i>Journal of Saudi Chemical Society</i> , Volume: 23, Issue: 8, Pages 1231-1240 Impact Factor: 3.517 Quartile: 2 Citations: 10 DOI: 10.1016/j.jscs.2019.08.003	2019
Surface degradation study of magnesium tested in simulated body fluid <i>Muhammad Mujahid Aftab Akram Malik Adeel Umer Anum Sana Iqra Malik</i> <i>Bio-Medical Materials and Engineering</i> , Volume 30, Issue 3, Pages 341-348 Impact Factor: 1.243 Quartile: 4 Citations: 4 DOI: 10.3233/BME-191057	2019

- Fabrication of self-branched TiO₂ nanotubes by anodization method, ordering and crystallinity** 2019
Tayyaba Ghani Muhammad Mujahid Mazhar Mehmood Gengmin Zhang
Journal of Porous Materials, Volume 26, Pages 193–203
Impact Factor: 2.183 | **Quartile:** 2 | **Citations:** 8
DOI: <https://doi.org/10.1007/s10934-018-0637-9>
- Electrochemical study of magnetic nanogel designed for controlled release of chlorhexidine gluconate** 2019
Munezza A. Khan Muhammad Mujahid Iftikhar Hussain Gul Arshad Hussain
Journal of Electrochimica Acta, Volume: 295, Pages: 113-123
Impact Factor: 6.215 | **Quartile:** 1 | **Citations:** 10
DOI: 10.1016/j.electacta.2018.10.098
- Improved Performance of CuFe₂O₄/rGO Nanohybrid as an Anode Material for Lithium-ion Batteries Prepared Via Facile One-step Method** 2019
Sumair Ahmed Soomro Iftikhar Hussain Gul Hashim Naseer Shafiqullah Marwat Muhammad Mujahid
Current Nanoscience, Volume: 15 Issue: 4 Pages: 420-429
Impact Factor: 1.836 | **Quartile:** 3 | **Citations:** 96
DOI: 10.2174/1573413714666181115122016
- Effect of Ethane-1,2-Diamine on Growth of ZnO Nanorods and Cyclohexane Sensing by Current-Voltage Characteristics Investigations** 2018
Sofia Javed Muhammad Aftab Akram Shazrah Shahzad Dawar Ali Jawad Asif Muhammad Zafar Khan Umair Manzoor Muhammad Mujahid
Key Engineering Materials, Volume 778, Pages 126-131
Impact Factor: 0
DOI: 10.4028/www.scientific.net/KEM.778.126
- Fabrication of Cellulose Acetate/Cellulose-HA Composite Films for Bone Fixation** 2018
Sofia Javed Muhammad Aftab Akram Fatima Nisar Usman bin Khalid Muhammad Mujahid
Key Engineering Materials, Volume 778, Pages 325-330
Impact Factor: 0 | **Citations:** 2
DOI: 10.4028/www.scientific.net/KEM.778.325
- Spray pyrolysis synthesized Cu(In,Al)(S,Se)₂ thin films solar cells** 2018
Muhammad Aamir Hassan Muhammad Mujahid Leow Shin Woei Lydia Helena Wong
Materials Research Express, Volume 5, Number 3, Article No.035506
Impact Factor: 1.449 | **Quartile:** 3 | **Citations:** 7
DOI: <https://doi.org/10.1088/2053-1591/aab116>
- Enhanced mechanical properties and biocompatibility of novel hydroxyapatite/TOPAS hybrid composite for bone tissue engineering applications** 2017
Qurat-ul-Ain Ahmad Nawaz Khan Mahboubah Nabavinia Muhammad Mujahid
Materials Science and Engineering C, 0928-4931, Volume 75, Pages 807-815
Impact Factor: 5.080 | **Quartile:** 1 | **Citations:** 21
DOI: 10.1016/j.msec.2017.02.117
- Low resistivity ZnO-GO electron transport layer based CH₃NH₃PbI₃ solar cells** 2016
Syed Saad Javaid Muhammad Imran Ahmad Zakir Hussain Muhammad Mujahid Ahmad Nawaz Khan Amir Habib
AIP Advances, Volume:6, Issue:6, Article Number:065303
Impact Factor: 1.568 | **Quartile:** 3 | **Citations:** 31
DOI: 10.1063/1.4953397
- Characterization and application of roxithromycin loaded cyclodextrin based nanoparticles for treatment of multidrug resistant bacteria** 2016
Farha Masood Tariq Yasin Habib Bukhari Muhammad Mujahid
Materials Science and Engineering C, Volume 61, Pages 1-7
Impact Factor: 4.164 | **Quartile:** 2 | **Citations:** 31
DOI: 10.1016/j.msec.2015.11.076
- Highly Responsive UV Light Sensors Using Mg-Doped ZnO Nanoparticles** 2016
Mirza Shirjeel Alam Umair Manzoor Muhammad Mujahid Arshad S. Bhatti
Journal of Sensors, Volume 2016, Article ID 8296936, 5 Pages
Impact Factor: 1.704 | **Quartile:** 2 | **Citations:** 26
DOI: <http://dx.doi.org/10.1155/2016/8296936>

Reaction Time and Film Thickness Effects on Phase Formation and Optical Properties of Solution Processed Cu₂ZnSnS₄ Thin Films <i>Amna Safdar Mohammad Islam Muhammad Aftab Akram Muhammad Mujahid Yasir Khalid S. Ismat Shah</i> <i>Journal of Materials Engineering and Performance</i> , Volume 25, Issue 2, Pages 457-465 Impact Factor: 1.331 Quartile: 3 Citations: 15 DOI: 10.1007/s11665-015-1874-6	2016
Quantum confinement and size effects in Cu₂ZnSnS₄ thin films produced using solution processed ultrafine nanoparticles <i>Amna Safdar Mohammad Islam Ittikhar Ahmad Muhammad Aftab Akram Muhammad Mujahid Yasir Khalid Yanqiu Zhu</i> <i>Materials Science in Semiconductor Processing</i> , Volume 41, Pages 420-427 Impact Factor: 2.359 Quartile: 2 Citations: 20 DOI: 10.1016/j.mssp.2015.09.027	2016
Synthesis of nano-hydroxyapatite and its rapid mediated surface functionalization by silane coupling agent <i>Sarish Rehman Kishwar Khan Muhammad Mujahid Shaneela Nosheen</i> <i>Materials Science and Engineering C-Materials for Biological Applications</i> , Volume 58, Pages 675-681 Impact Factor: 4.164 Quartile: 2 Citations: 38 DOI: 10.1016/j.msec.2015.09.014	2016
Comparison of silica and novel functionalized silica-based cellulose acetate hybrid membranes in gas permeation study <i>Fozia T. Minhas Sarah Farrukh Arshad Hussain Muhammad Mujahid</i> <i>JOURNAL OF POLYMER RESEARCH</i> , Volume: 22 Issue: 4 Article Number: 63 Impact Factor: 1.969 Quartile: 2 Citations: 21 DOI: 10.1007/s10965-015-0701-y	2015
Effect of Synthesis Temperature, Nucleation Time, and Postsynthesis Heat Treatment of ZnO Nanoparticles and Its Sensing Properties <i>Umair Manzoor Sidra Rafique Muhammad Mujahid Fatima Tuz Zahra Muhammad Tahir Moin</i> <i>Journal of Nanomaterials</i> , Volume 2015 , Article Number: 189058 Impact Factor: 1.758 Quartile: 2 Citations: 50 DOI: DOI:10.1155/2015/189058	2015
Environment friendly template free microwave synthesis of sub-micron sized hierarchical titania nanostructures and their application in photovoltaics <i>Sofia Javed Muhammad Aftab Akram Muhammad Mujahid</i> <i>CrystEngComm</i> , Volume: 16, Issue: 48, Pages: 10937-10942 Impact Factor: 4.034 Quartile: 1 Citations: 12 DOI: 10.1039/c4ce01826e	2014
Band gap reduction of titania thin films using graphene nanosheets <i>Haroon Mahmood Amir Habib Muhammad Mujahid Muhammad Tanveer Sofia Javed Asif Jamil</i> <i>Materials Science in Semiconductor Processing</i> , Volume 24, Pages 193-199 Impact Factor: 1.955 Quartile: 2 Citations: 39 DOI: 10.1016/j.mssp.2014.03.038	2014
Blending of TiO₂ nanoparticles with cellulose acetate polymer: to study the effect on morphology and gas permeation of blended membranes <i>Sarah Farrukh Sofia Javed Arshad Hussain Muhammad Mujahid</i> <i>Asia-Pacific Journal of Chemical Engineering</i> , Volume: 9 Issue: 4 Pages: 543-551 Impact Factor: 0.789 Quartile: 3 Citations: 24 DOI: 10.1002/apj.1783	2014
Synthesis and molecular characterization of chitosan based polyurethane elastomers using aromatic diisocyanate <i>Khalid Mahmood Zia Sohail Anjum Mohammad Zuber Muhammad Mujahid Tahir Jamil</i> <i>International Journal of Biological Macromolecules</i> , Volume 66, Pages 26-32 Impact Factor: 2.858 Quartile: 2 Citations: 116 DOI: https://doi.org/10.1016/j.ijbiomac.2014.01.073	2014
Chitin based polyurethanes using hydroxyl terminated polybutadiene, Part II: Morphological studies <i>Khalid Mahmood Zia Naureen Aziz Qureshi Muhammad Mujahid Kashif Mahmood Mohammad Zuber</i> <i>International Journal of Biological Macromolecules</i> , Volume 59, Pages 313-319	2013

Impact Factor: 3.096 | **Quartile:** 2 | **Citations:** 10
DOI: <https://doi.org/10.1016/j.ijbiomac.2013.04.042>

The effect of processing conditions on the structural morphology and physical properties of ZnO and CdS thin films produced via sol-gel synthesis and chemical bath deposition techniques

2011

Shahzad Salam Mohammad Islam Mahboob Alam Aftab Akram Mujtaba Ikram Asif Mahmood Majid Khan Muhammad Mujahid
Advances in Natural Sciences: Nanoscience and Nanotechnology, Volume 2, Issue 4, 045001

Impact Factor: N/A | **Citations:** 18
DOI: <https://doi.org/10.1088/2043-6262/2/4/045001>