

Erum Pervaiz

Professor

School of Chemical & Materials Engineering

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About

Dr. Erum Pervaiz is working as Professor in the School of Chemical & Materials Engineering. Dr. Erum Pervaiz has a PhD in Nanotechnology. Dr. Erum Pervaiz has published 100 research articles & conference papers having a citation count of 2659, carried out 6 projects and filed 0 intellectual property.

Qualifications

PhD in Nanotechnology NUST, Islamabad , Pakistan	2009 - 2013
MSc in Process Engineering UET Lahore , Pakistan	2006 - 2008
B.Sc (Hon) in Chemical Engineering UET Lahore , Pakistan	2002 - 2006
F.Sc in science Board of Intermediate and Secondary Education, Gujranwala , Pakistan	1998 - 2001
Matric (SSC) in science Board of Intermediate and Secondary Education, Gujranwala , Pakistan	1996 - 1998

Experience

Professor School of Chemical & Materials Engineering	2024- Present
Professor School of Chemical & Materials Engineering	2024 - 2024
Associate Professor School of Chemical & Materials Engineering	2019 - 2024
Assistant Professor School of Chemical & Materials Engineering	2014 - 2019
Temporary Visiting Faculty SCME NUST , SCME	2010 - 2014
Research assistant National University of Sciences and Technology (NUST) , Sector H-12, Islamabad	2010 - 2013
Lab engineer University of Engineering and Technology Lahore , U.E.T. Lahore, G. T road baghban Pura Lahore	2006 - 2008

Awards

Talented Young Scientist I have awarded Talented Young Scientist for one year programme by Ministry of Science & Technology China recommended by NUST and MoST Pakistan.	2016
Overall best performance Four gold medals for best performance and first position in all four yyeas of BE Chemical Engineering in U.E.T. Lahore	2006

Research Projects

National Projects

Multi-wall CNTs Composites for High Strength composites (Vessels)	2023
Funding Agency: NESCOM	
Amount: PKR 580,000.00	
Status: Approved_inprocess	
Development of bioelectrochemical system platform for rapid metabolic monitoring of bacteria for industrial applications	
Funding Agency: Pakistan Science Foundation	
Amount: PKR 6,950,000.00	
Status: Approved_inprocess	
Development of Testing rig for Hydrogen production by Sorption Enhanced Steam Reforming	2022
Funding Agency: NUST	
Amount: PKR 990,000.00	
Status: Approved_inprocess	
Hydrophobic (Waterproof) Membrane Lining for Shoes	2018
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Completed	
Breathable Shoe Soles	2018
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Approved_inprocess	
Synthesis and characterization of highly stable and efficient non precious metal catalyst for photo-electrochemical water splitting: A step towards clean energy	2019
Funding Agency: HEC	
Amount: PKR 7,690,000.00	
Status: Completed	

International Projects

Research Articles

Experimental validation and optimization of bendable linear shaped charges with degressive explosive thickness for aerospace and defense applications	2025
Muhammad Soulam Khan Muhammad Ahsan Sarah Farrukh Ittikhar Ahmad Erum Pervaiz Abdul Qadeer Malik	
Journal of Energetic Materials , 1-33	
Impact Factor: 1.700 Quartile: 3	
DOI: https://doi.org/10.1080/07370652.2025.2495558	
Surface engineering of Ti3C2Tx MXenes for high-performance adsorption of toxic Cr(VI) contaminant vis-a-vis pristine MXenes	2025
Saleem Shah Iqra Mubeen Erum Pervaiz Habib Nasir Shoaib Ahsan Ahmad Saeed Mushtaq Ahmad	
MATERIALS CHEMISTRY AND PHYSICS , Volume 334, Article Number 130442	
Impact Factor: 4.300 Quartile: 2 Citations: 1	
DOI: https://doi.org/10.1016/j.matchemphys.2025.130442	
Electrocatalytic activity of tungsten carbide hybrids with two different MOFs for water splitting: a comparative analysis	2024
Umair Sohail Erum Pervaiz Rafiq Khosa Maryum Ali	
Nanoscale Advances , Pages 1-14	
Impact Factor: 4.600 Quartile: 2 Citations: 2	
DOI: 10.1039/D4NA00289J	
Electrochemical pathway to enhanced water splitting efficiency through cobalt Phosphide-MOFs hybrid	2024
Nimra Khalid Ayesha Rehman Erum Pervaiz	
International Journal of Hydrogen Energy , Elsevier	
Impact Factor: 8.100 Quartile: 1 Citations: 12	
DOI: https://doi.org/10.1016/j.ijhydene.2024.05.370	

<p>Synthesis of Mn loaded FeCo-MOF and its composites with reduced graphene oxide as highly efficient electrocatalysts for oxygen evolution and reduction reactions in metal-air batteries</p> <p><i>Muhammad Mudassar Aslam Dr. Tayyaba Noor Dr Erum Pervaiz Dr Naseem Iqbal Neelam Zaman</i> <i>International Journal of Hydrogen Energy</i>, Volume:70, Page:614-628</p> <p>Impact Factor: 7.2 Quartile: 1 Citations: 9 DOI: 10.1016/j.ijhydene.2024.05.228</p>	2024
<p>Comprehensive Investigation of Almond Shells Pyrolysis Using Advance Predictive Models</p> <p><i>Arslan Khan Saad Saeed Erum Pervaiz Asif Hussain Khoja Salman Raza Naqvi Sana Saeed Imtiaz Ali</i> <i>Renewable Energy</i>, Volume 227, Article Number 120568</p> <p>Impact Factor: 8.7 Quartile: 1 Citations: 8 DOI: https://doi.org/10.1016/j.renene.2024.120568</p>	2024
<p>Fabrication of Fe 3 O 4 based cellulose acetate mixed matrix membranes for As(III) removal from wastewater</p> <p><i>Sidra Liaqat Sarag Farrukh Nasir Mahmood Ahmed Syed Shujaat Karim Erum Pervaiz Ayesha Sultan Subhan Ali</i> <i>Environmental Science: Water Research & Technology</i>, Vol:10, Issue:07, Pages:1637-1652</p> <p>Impact Factor: 3.500 Quartile: 2 Citations: 1 DOI: 10.1039/D4EW00080C</p>	2024
<p>Fabrication of MoS2/rGO hybrids as electrocatalyst for water splitting applications</p> <p><i>M. Shahzaib Khan Tayyaba Noor Erum Pervaiz Naseem Iqbal Neelam Zaman</i> <i>RSC Advances</i>, Volume 14(18), Pages 12742-12753</p> <p>Impact Factor: 3.9 Quartile: 2 Citations: 15 DOI: 10.1039/D4RA00697F</p>	2024
<p>Optimization of Water Based Drilling Fluid Properties with the SiO2/g-C3N4 Hybrid</p> <p><i>Anwar Ahmed Erum Pervaiz Uzair Abdullah Tayyaba Noor</i> <i>ACS Omega</i>, Vol:9, Issue: 13, Pages: 15052-15064, Article Number: 3c08766</p> <p>Impact Factor: 4.1 Quartile: 2 Citations: 7 DOI: 10.1021/acsomega.3c08766</p>	2024
<p>Free-Flowing Polymer-Bonded Powder Composition of Hexahydro-1,3,5-trinitro-1,3,5-triazine using Solvent-Slurry Coating</p> <p><i>Muhammad Soulam Khan Muhammad Ahsan Sarah Farrukh Erum Pervaiz Abdul Qadeer Malik</i> <i>Polymers</i>, Volume 16(6), 841</p> <p>Impact Factor: 5.0 Quartile: 1 Citations: 1 DOI: doi.org/10.3390/polym16060841</p>	2024
<p>2D bifunctional Tungsten disulfide embedded UiO-66 (WS 2 @UiO- 66) as highly active electrocatalyst for water splitting</p> <p><i>Muhabbat Shah Uzair Abdullah Erum Pervaiz Maryum Ali</i> <i>Energy Advances</i>, Volume 3, Issue 2, Pages 459-470</p> <p>Impact Factor: 3.200 Quartile: 2 Citations: 4 DOI: 10.1039/D3YA00348E</p>	2024
<p>In Situ Grown Cu-Metal–Organic Frameworks on Graphitic Carbon Nitride (g-C3N4) as an Efficient Bifunctional Electrocatalyst for Water Splitting</p> <p><i>Abdul Shakoor Sabir Erum Pervaiz Umair Sohail</i> <i>Energy Technology</i>, Pages 1-12</p> <p>Impact Factor: 3.8 Quartile: 3 Citations: 2 DOI: https://doi.org/10.1002/ente.202300834</p>	2023
<p>Designing of Fe- ZIF67 derived Fe-Co/NC with its reduced graphene oxide-based composites for hydrogen and oxygen evolution reaction</p> <p><i>Sadia Khan Tayyaba Noor Naseem Iqbal Erum Pervaiz</i> <i>Journal of Electroanalytical Chemistry</i>, Volume 948, Article Number 117811</p> <p>Impact Factor: 4.5 Quartile: 1 Citations: 8 DOI: https://doi.org/10.1016/j.jelechem.2023.117811</p>	2023
<p>Fabrication of MIL-101(Fe) on UiO-66 as an Electrocatalyst for Enhanced Overall Water Splitting</p> <p><i>Maryum Ali Erum Pervaiz</i> <i>ChemistrySelect</i>, Volume 8, Issue 37, Article Number e202301980</p> <p>Impact Factor: 2.1 Quartile: 3 Citations: 4 DOI: https://doi.org/10.1002/slct.202301980</p>	2023

<p>Highly porous interconnected MoP decorated graphene oxide as remarkably efficient electrocatalyst</p> <p><i>Rafiq Khosa Erum Pervaiz Uzair Abdullah Umair Sohail</i></p> <p><i>Heliyon</i> , Volume 9, Issue 9, Article Number: e19313</p> <p>Impact Factor: 4.0 Quartile: 2 Citations: 2</p> <p>DOI: 10.1016/j.heliyon.2023.e19313</p>	2023
<p>Facile and Efficient Synthesis of Carboxylic Terminated Ti3C2Tx Nanosheets Using Citric Acid</p> <p><i>Saleem Shah Iqra Mubeen Erum Pervaiz Habib Nasir</i></p> <p><i>FlatChem</i> , Volume 41, Article Number: 100544</p> <p>Impact Factor: 6.2 Quartile: 2 Citations: 13</p> <p>DOI: 10.1016/j.flatc.2023.100544</p>	2023
<p>A zeolitic imidazolate framework (ZIF-67) and graphitic carbon nitride (g-C3N4) composite based efficient electrocatalyst for overall water-splitting reaction</p> <p><i>Sadia Khan Tayyaba Noor Naseem Iqbal Erum Pervaiz Lubna Yaqoob</i></p> <p><i>RSC Advances</i> , Volume 13, Issue 36, Pages 24973-24987</p> <p>Impact Factor: 3.9 Quartile: 2 Citations: 19</p> <p>DOI: https://doi.org/10.1039/D3RA04783K</p>	2023
<p>Enhanced removal of toxic Cr(vi) and Pb(ii) from water using carboxylic terminated Ti3C2Tx nanosheets</p> <p><i>Saleem Shah Iqra Mubeen Erum Pervaiz Habib Nasir</i></p> <p><i>RSC Advances</i> , Volume 13, Pages 23320-23333</p> <p>Impact Factor: 3.9 Quartile: 2 Citations: 8</p> <p>DOI: https://doi.org/10.1039/D3RA03456A</p>	2023
<p>Catalytic Reduction of Carbon dioxide to Methanol as a Fuel, A Mini Review</p> <p><i>Osama Rabi Erum Pervaiz Tasmia Azam</i></p> <p><i>NUST Journal of Engineering Sciences</i> , Volume 16, No. 1, Pages 37-53</p> <p>Impact Factor: 0</p> <p>DOI: https://doi.org/10.24949/njes.v16i1.766</p>	2023
<p>Rational Design of the CdS/Fe-MOF Hybrid for Enhanced Hydrogen Evolution Reaction Catalysis</p> <p><i>Maryum Ali Erum Pervaiz Umair Sohail</i></p> <p><i>Energy Fuels</i> , Volume 37, Issue 11, Pages 7919-7926</p> <p>Impact Factor: 5.3 Quartile: 1 Citations: 13</p> <p>DOI: https://doi.org/10.1021/acs.energyfuels.3c00373</p>	2023
<p>LSTN (La0.4Sr0.4Ti0.9Ni0.1O3-&) perovskite and graphitic carbon nitride (gC3N4) hybrids as a bifunctional electrocatalyst for water-splitting applications</p> <p><i>Umair Ali Asif Tayyaba Noor Erum Pervaiz Naseem Iqbal Neelam Zaman</i></p> <p><i>Journal of Alloys and Compounds</i> , Volume 939, Article Number 168668</p> <p>Impact Factor: 6.371 Quartile: 1 Citations: 33</p> <p>DOI: https://doi.org/10.1016/j.jallcom.2022.168668</p>	2023
<p>WS2 nanosheets rooted in polyethylene terephthalate membrane for gas barrier properties improvement</p> <p><i>Muhammad Salman Shah Sarah Farrukh Inamullah Douna Zarrar Salahuddin Arshad Hussain Abubakar Sudais Erum Pervaiz Maxime Pontie Mubashir Ahmed</i></p> <p><i>Journal of Materials Science</i> , Volume 58, Issue 11, Pages 4753-4765</p> <p>Impact Factor: 4.682 Quartile: 2 Citations: 4</p> <p>DOI: doi.org/10.1007/s10853-023-08165-4</p>	2023
<p>Blending of ZnO Nanorods in Cellulose Acetate Mixed Matrix Membrane for Enhancement of CO2 Permeability</p> <p><i>Inamullah Douna Sarah farrukh Erum Pervaiz Arshad Hussain Xian Feng Fan Zarrar Salahuddin</i></p> <p><i>Journal of Polymers and the Environment</i> , Pages 1-17</p> <p>Impact Factor: 4.705 Quartile: 1 Citations: 8</p> <p>DOI: doi.org/10.1007/s10924-022-02594-z</p>	2023
<p>Three-dimensional hierarchical flowers-like cobalt-nickel sulfide constructed on graphitic carbon nitride: Bifunctional non-noble electrocatalyst for overall water splitting</p> <p><i>Rubab Zahra Erum Pervaiz Mutawara Mahmood Baig Osama Rabi</i></p> <p><i>Electrochimica Acta</i> , Volume 418, Article Number 140346</p>	2022

Impact Factor: 7.336 | **Quartile:** 1 | **Citations:** 37
DOI: <https://doi.org/10.1016/j.electacta.2022.140346>

Catalytic adsorptive removal of toxic compounds from water using motifs of Ce doped Co₃O₄/RGO nanohybrids

2022

Erum Pervaiz Sarah Farrukh Minghui Yang
Cleaner Engineering and Technology, Volume 7, Article Number 100417

Impact Factor: 0 | **Citations:** 10
DOI: <https://doi.org/10.1016/j.clet.2022.100417>

Effect of synthesis route on electrocatalytic water-splitting activity of MoS₂/UiO-66 hybrid

2022

Maryum Ali Erum Pervaiz
Molecular Catalysis, Volume 519, Article Number 112136

Impact Factor: 5.062 | **Quartile:** 2 | **Citations:** 23
DOI: <https://doi.org/10.1016/j.mcat.2022.112136>

Experimental investigation of polysulfone modified cellulose acetate membrane for CO₂/H₂ gas separation

2022

Inamullah Douna Sarah Farrukh Arshad Hussain Zarrar Salahuddin Tayyaba Noor Erum Pervaiz Mohammad Younas Xian Feng Fan
Korean Journal of Chemical Engineering, Volume 39, Pages 189-197

Impact Factor: 3.309 | **Quartile:** 2 | **Citations:** 19
DOI: 10.1007/s11814-021-0900-7

Enhancing the Overall Electrocatalytic Water-Splitting Efficiency of Mo₂C Nanoparticles by Forming Hybrids with UiO-66 MOF

2021

Maryum Ali Erum Pervaiz Osama Rabi
ACS Omega, Volume 6(50), Pages 34219-34228

Impact Factor: 3.512 | **Quartile:** 2 | **Citations:** 32
DOI: <https://doi.org/10.1021/acsomega.1c03115>

Synthesis, characterization and application of graphene oxide in self consolidating cementitious systems

2021

Majeed Ullah Shahzada Burhan Ahmad Imtiaz Rao Arsalan Khushnood Erum Pervaiz Wisal Ahmed Asad Ullah Zarar Ali Qureshi
Construction and Building Materials, Volume 296, Article Number 123623

Impact Factor: 6.141 | **Quartile:** 1 | **Citations:** 13
DOI: <https://doi.org/10.1016/j.conbuildmat.2021.123623>

Dual-phase metal nitrides as highly efficient co-catalysts for photocatalytic hydrogen evolution

2021

Siqi Liu Wandu Kuang Xiangjian Meng Weiliang Qi Samira Adimi Haichuan Guo Xuyun Guo Erum Pervaiz Ye Zhu Dongfeng Xue Minghui Yang
Chemical Engineering Journal, Volume 416, Article Number 129116

Impact Factor: 16.744 | **Quartile:** 1 | **Citations:** 35
DOI: <https://doi.org/10.1016/j.cej.2021.129116>

Theoretical study on W-Co₃O₄ (111) surface: Acetone adsorption and sensing mechanism

2021

Dongliang Liu Erum Pervaiz Samira Adimi Tiju Thomas Fengdong Qu Chaozhu Huang Rui Wang Heng Jiang Minghui Yang
Applied Surface Science, Volume 566, Article Number 150642

Impact Factor: 7.392 | **Quartile:** 1 | **Citations:** 20
DOI: <https://doi.org/10.1016/j.apsusc.2021.150642>

Bifunctional Molybdenum Carbide based Hybrids for Electrocatalytic Water splitting

2021

osama Rabi Erum Pervaiz Maryum Ali Rubab Zahra
Ceramics International, Volume 47, Issue 17, Pages 24949-24958

Impact Factor: 5.532 | **Quartile:** 1 | **Citations:** 12
DOI: <https://doi.org/10.1016/j.ceramint.2021.05.222>

An Inclusive Review on Recent Advancements of Cadmium Sulfide Nanostructures and its Hybrids for Photocatalytic and Electrocatalytic Applications

2021

Uzair Abdullah Maryum Ali Erum Pervaiz
Molecular Catalysis, Volume 508, Article Number 111575

Impact Factor: 5.089 | **Quartile:** 2 | **Citations:** 62
DOI: <https://doi.org/10.1016/j.mcat.2021.111575>

NiFe₂O₄/SiO₂ nanostructures as a potential electrode material for high rated supercapacitors

2021

Mutawara Mahmood Baig Erum Pervaiz Misbah azad Zaib Jahan Muhammad Bilal Khan Niazi Sherjeel Mahmood Baig
Ceramics International - Please attach published paper, Volume 47, Issue 9, Pages 12557-12566

Impact Factor: 5.532 Quartile: 1 Citations: 59 DOI: https://doi.org/10.1016/j.ceramint.2021.01.113	
Investigation of cellulose acetate/gamma-cyclodextrin MOF based mixed matrix membranes for CO₂/CH₄ gas separation <i>Ovaïd Mehmood Sarah Farrukh Arshad Hussain Mohammad Younas Zarrar Salahuddin Erum Pervaiz Muhammad Ayoub</i> <i>Green House Gases - Science and Technology</i> , Volume 11, Issue 2, Pages 313-330 Impact Factor: 2.518 Quartile: 3 Citations: 28 DOI: 10.1002/ghg.2050	2021
MOF Embedded and Cu Doped CeO₂ Nanostructures as Efficient Catalyst for Adipic Acid Production: Green Catalysis <i>Shabahat Bibi Erum Pervaiz Minghui Yang Osama Rabi</i> <i>Catalysts</i> , Volume 11(3), Article Number 304 Impact Factor: 4.501 Quartile: 3 Citations: 33 DOI: https://doi.org/10.3390/catal11030304	2021
Biomimetic highly hydrophobic stearic acid functionalized MOF sponge for efficient oil/water separation <i>Tasmia Azam Erum Pervaiz Sarah Farrukh Tayyaba Noor</i> <i>Materials Research Express</i> , Volume 8, Article Number 015019 Impact Factor: 2.025 Quartile: 4 Citations: 12 DOI: https://doi.org/10.1088/2053-1591/abd822	2021
Facile in situ nitrogen-doped carbon coated iron sulfide as green and efficient adsorbent for stable lithium–sulfur batteries <i>Rongrong Li Hangjia Shen Erum Pervaiz Minghui yang</i> <i>Chemical Engineering Journal</i> , Volume 404, Article Number 126462 Impact Factor: 16.744 Quartile: 1 Citations: 50 DOI: https://doi.org/10.1016/j.cej.2020.126462	2021
Tuning the hydrophobicity of MOF sponge for efficient oil/water separation <i>Tasmia Azam Erum Pervaiz sofia Javed Sundus Jabeen Amina Muhammad Shoaib Khalid</i> <i>Chemical Physics Impact</i> , Volume 1, Article Number 100001 Impact Factor: 0 Citations: 23 DOI: https://doi.org/10.1016/j.chphi.2020.100001	2020
High-Performance Supercapacitor Electrode Obtained by Directly Bonding 2D Materials: Hierarchical MoS₂ on Reduced Graphene Oxide <i>Mutawara Mahmood Baig Erum Pervaiz Minghui Yang Ittikhar Hussain Gul</i> <i>Frontiers in Materials</i> , Volume 7, Article Number 580424 Impact Factor: 3.515 Quartile: 2 Citations: 49 DOI: 10.3389/fmats.2020.580424	2020
Biogas upgrading with novel cellulose nano-crystals and polyvinyl amine nanocomposite membranes <i>Zaib Jahan Muhammad Bilal Khan Niazi Uzair Saeed Erum Pervaiz Farooq Sher</i> <i>Polymer Testing</i> , Volume 91, Article Number 106867 Impact Factor: 4.282 Quartile: 1 Citations: 47 DOI: https://doi.org/10.1016/j.polymertesting.2020.106867	2020
A novel leaves and needles like TiO₂ (LNT) electron transfer layer (ETL) as an alternative to mesoporous TiO₂ electron transfer layer (ETL) in perovskite solar cell <i>Hamid Latif Zuha Azher Syeda Ammara Shabbir Saba Rasheed Erum Pervaiz Abdul Sattar Ayesha Imtiaz</i> <i>Optical Materials</i> , Volume 109, Article Number 110281 Impact Factor: 3.080 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1016/j.optmat.2020.110281	2020
Optimization analysis of polyurethane based mixed matrix gas separation membranes by incorporation of gamma-cyclodextrin metal organic framework <i>Erum Pervaiz Sarah Farrukh Ovaïd Mehmood Arshad Hussain Ayesha Rehman Yangxian Liu Sajid Butt</i> <i>Chemical Papers</i> , Volume 74, Pages 3527–3543 Impact Factor: 2.097 Quartile: 3 Citations: 23 DOI: https://doi.org/10.1007/s11696-020-01179-1	2020

Catalytic Activity and Kinetic Studies of Core@Shell Nanostructure NiFe₂O₄@TiO₂ for Photocatalytic Degradation of Methyl Orange Dye <i>Mutawara Mehmood Baig Erum Pervaiz Muhammad Junaid Afzal</i> <i>Journal of the Chemical Society of Pakistan</i> , Volume 42, No. 04, Pages 531-541 Impact Factor: 0.536 Quartile: 4 DOI: https://www.jcsp.org.pk	2020
Nickel-Iron Nitride -Nickel Sulfide Composites for Oxygen Evolution Electrocatalysis <i>Shuqin Liang Meizan Jing Erum Pervaiz Haichuan Guo Tiju Thomas Weiyu Song Jian Xu Ali Saad Jiacheng Wang Hangjia Shen Jian Liu Minghui Yang</i> <i>ACS Applied Materials and Interfaces</i> , Pages 1-7 Impact Factor: 9.229 Quartile: 1 Citations: 55 DOI: DOI: 10.1021/acsami.0c11324	2020
Nanocomposites of NiO/CuO Based MOF with rGO: An Efficient and Robust Electrocatalyst for Methanol Oxidation Reaction in DMFC <i>Tayyaba Noor Sadaf Pervez Naseem Iqbal Habib Nasir Neelam Zaman Muhammad Sharif Erum Pervaiz</i> <i>Nanomaterials</i> , Volume 10(8), Article Number 1601 Impact Factor: 5.076 Quartile: 2 Citations: 80 DOI: doi:10.3390/nano10081601	2020
Catalytic Activity and Kinetic Studies of Core@Shell Nanostructure NiFe₂O₄@TiO₂ for Photocatalytic Degradation of Methyl Orange Dye <i>Mutawara Mahmood Baig Erum Pervaiz Muhammad Junaid Afzal</i> <i>Journal of the Chemical Society of Pakistan</i> , Volume: 42, No:06, Pages:531-541 Impact Factor: 0.536 Quartile: 4 DOI: 10.52568/000669/JCSP/42.04.2020	2020
In-Vitro and In-Vivo Study of Superabsorbent PVA/Starch/g-C₃N₄/Ag@TiO₂ NPs Hydrogel Membranes for Wound Dressing <i>Erum Pervaiz Arooj Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Tahir Ahmad Arshad Hussain Hussnain Ahmed Janjua Zakir Hussain</i> <i>European Polymer Journal</i> , Volume 130, Article Number 109650 Impact Factor: 4.598 Quartile: 1 Citations: 101 DOI: DOI: 10.1016/j.eurpolymj.2020.109650	2020
Synthesis and Catalytic Activity of IM-5 Zeolite as Naphtha Cracking Catalyst for Light Olefins: A Review <i>Rabeeha Taj Erum Pervaiz Arshad Hussain</i> <i>Journal of Chemical Society of Pakistan</i> , Vol. 42, No. 02, Pages 305-316 Impact Factor: 0.536 Quartile: 4 DOI: https://www.jcsp.org.pk	2020
Enhancing the Thermal, Mechanical and Swelling Properties of PVA/Starch Nanocomposite Membranes Incorporating g-C₃N₄ <i>Erum Pervaiz Arooj Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Ghufrana Samin Taqi Mehran Arshad Hussain</i> <i>Journal of Polymers and the Environment</i> , Volume 28, Pages 100-115 Impact Factor: 3.667 Quartile: 2 Citations: 62 DOI: https://doi.org/10.1007/s10924-019-01592-y	2020
Molten Salts–Assisted Fabrication of Fe, S, and N Co-Doped Carbon as Efficient Oxygen Reduction Reaction Catalyst <i>Erum Pervaiz Mengyao Lv Fenghui Fan Longhai Pan Hangjia Shen Jiacheng Wang Minghui Yang Jun Wang</i> <i>Energy Technology</i> , Volume 8, Issue 1, Article Number 1900896 Impact Factor: 3.631 Quartile: 3 Citations: 6 DOI: DOI: 10.1002/ente.201900896	2020
Adsorption of CO₂ on amine-functionalized green metal-organic framework: an interaction between amine and CO₂ molecules <i>Erum Pervaiz Sarah Farrukh Ayesha Rehman Arshad Hussain Xianfeng Fan</i> <i>Environmental Science and Pollution Research</i> , Volume 26, Pages 36214-36225 Impact Factor: 3.056 Quartile: 2 Citations: 26 DOI: https://doi.org/10.1007/s11356-019-06717-3	2019
Tin oxide quantum dots decorated graphitic carbon nitride for enhanced removal of organic components from water: Green process <i>Erum Pervaiz M. Usman Yousaf Sammar Minallah M. Junaid Afzal Liu Honghong Minghui Yang</i>	2019

Results In Physics , Volume: 14 Article Number: 102455	
Impact Factor: 4.019 Quartile: 1 Citations: 47	
DOI: 10.1016/j.rinp.2019.102455	
Ternary adsorbent photocatalyst hybrid (APH) nanomaterials for improved abstraction of tetracycline from water	2019
<i>Erum Pervaiz Sammar Minallah M. Usman Yousaf Muhammad Bilal Khan Niazi Liu Honghong Minghui Yang</i>	
<i>Separation Science & Technology , -</i>	
Impact Factor: 1.718 Quartile: 3 Citations: 11	
DOI: 10.1080/01496395.2019.1640742	
Template synthesis of CoFe2O4 extended surface microspheres for efficient water decontamination and absorption of electromagnetic waves: Twin behavior	2019
<i>Tiju Thomas M Junaid Afzal Minghui Yang Erum Pervaiz</i>	
<i>Materials Research Express , Volume 6, Issue 7, Article Number 075506</i>	
Impact Factor: 1.929 Quartile: 3 Citations: 12	
DOI: 10.1088/2053-1591/ab1289	
Hierarchical Ni3ZnN Hollow Microspheres as Stable Non-Noble Metal Electrocatalysts for Oxygen Reduction Reactions	2018
<i>Erum pervais Bo He Jiacheng Wang Xiangting Dong Zhigang Shao Minghui Yang Yao Yuan</i>	
<i>Electrocatalysis , NULL</i>	
Impact Factor: 2.311 Quartile: 3 Citations: 13	
DOI: https://doi.org/10.1007/s12678-018-0461-7	
Magnetic Micro scavengers: Highly porous Ni1-xCoxFe2O4 microcubes for efficient disintegration of nitrophenol	2018
<i>Erum Pervaiz Muhammad Syam Azhar Virk Ayesha Khan Tareen Bingxue Zhang Qiuyan Zhao Zhenzhen Wang Minghui Yang</i>	
<i>Nanotechnology , Volume 29(21), Article Number 215710</i>	
Impact Factor: 3.399 Quartile: 1 Citations: 11	
DOI: https://doi.org/10.1088/1361-6528/aab4c8	
Computational Fluid Dynamics (CFD) Analysis of Phthalic Anhydride's Yield Using Lab Synthesized and Commercially Available (V2O5/TiO2) Catalyst	2018
<i>Ali Sarosh Arshad Hussain Erum Pervaiz Muhammad Ahsan</i>	
<i>Engineering Technology & Applied Science Research , Volume 8, No. 2, Pages 2821-2826</i>	
Impact Factor: -	
DOI: https://etasr.com/index.php/ETASR/article/view/1954	
Highly integrated nanocomposites of RGO/TiO2 nanotubes for enhanced removal of microbes from water	2018
<i>Muhammad Junaid Afzal Erum pervais Sarah Farrukh Tahir Ahmed Zhang Bingxue Minghui Yang</i>	
<i>Environmental Technology , Volume 40, No. 19, Pages 2567–2576</i>	
Impact Factor: 1.918 Quartile: 3 Citations: 21	
DOI: 10.1080/09593330.2018.1447021	
Nitrogen doped RGO?Co3O4nanograin cookies: highly porous and robust catalyst for removing nitrophenol from waste water	2017
<i>Zhang Bingxue Conglin Yin Minghui Yang Muhammad Syam Azhar Virk Erum Pervaiz</i>	
<i>Nanotechnology , NULL</i>	
Impact Factor: 3.404 Quartile: 1 Citations: 9	
DOI: https://doi.org/10.1088/1361-6528/aa8297	
Cobalt-zinc nitride on nitrogen doped carbon black nanohybrids as a non-noble metal electrocatalyst for oxygen reduction reaction	2017
<i>Y. Yuan L. Yang B. He Z. Shao M. Yang Erum Pervaiz</i>	
<i>Nanoscale , Volume 9, Issue 19, Pages 6259-6263</i>	
Impact Factor: 7.233 Quartile: 1 Citations: 55	
DOI: 10.1039/c7nr02264f	
Facile synthesis and enhanced photocatalytic activity of single-crystalline nanohybrids for the removal of organic pollutants	2017
<i>Erum Pervaiz Honghong Liu Minghui Yang</i>	
<i>Nanotechnology , Volume: 28 Issue: 10</i>	
Impact Factor: 3.404 Quartile: 1 Citations: 6	

DOI: 10.1088/1361-6528/aa5717

Bimetallic Oxide Nanoflowers Decorated Graphene Oxide Nanosheets as Novel Nanohybrids for 4-Nitrophenol Removal at Room Temperature

2017

Erum Pervaiz Ayesha Khan Tareen Minghui Yang
Nanoadvances , Volume 2, Issue 1

Impact Factor: 0

DOI: 10.22180/na188

An Amorphous Mn, N-Codoped TiO₂ Microspheres Photocatalyst Induced by High Defects with Greatly Extended Visible-Light-Responsive Range for Photocatalytic Degradation

2017

Mingming Zou Lu Feng Erum Pervaiz Ayyakannu Sundaram Ganeshraja Tingting Gao Heng Jiang Minghui Yang
Nano Advances , Nano Advances, Volume 2, Issue 3, 2017

Impact Factor: 0

DOI: <http://dx.doi.org/10.22180/na210>

Enhanced Photocatalytic Response of N Doped Niobium Titanates Prepared by Ion Exchange Process

2016

Erum Pervaiz Mingming Zou Lu Feng Ayyakannu Sundaram Ganeshraja Minghui Yang Chuanxi Wang
Synthesis & Catalysis , Vol. 1 No.1: 4, Pages 1-6

Impact Factor: 0

DOI: <http://www.imedpub.com/articles/>

Enhanced photocatalytic degradation of dye under visible light on mesoporous microspheres by defects in manganese- and nitrogen-co-doped TiO₂

2016

Erum Pervaiz Lu Feng Heng Jiang Mingming Zou Fengqiang Xiong Ayyakannu Sundaram Ganeshraja Yinan Liu Shunying Zou Minghui Yang
Journal of Nanoparticle Research , Volume: 18, Issue: 9, Article Number: 278

Impact Factor: 2.02 | **Quartile:** 2 | **Citations:** 9

DOI: 10.1007/s11051-016-3591-y

Hydrothermal Synthesis, Structural and Electrical Properties of Antimony (Sb³⁺) Substituted Nickel Ferrites

2014

Erum Pervaiz Iftikhar Hussain Gul Amir Habib

Journal of Superconductivity and Novel Magnetism , JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM Volume: 27 Issue: 3 Pages: 881-890, March 2014

Impact Factor: 0.909 | **Quartile:** 4 | **Citations:** 20

DOI: 10.1007/s10948-013-2364-4

Magnetic and RF-electromagnetic absorbing study of aluminum doped nickel ferrites prepared by two techniques

2014

Erum Pervaiz I.H. Gul M. Syam Virk

Materials Research Express , Volume 1, Issue 1, Article Number 016104

Impact Factor: 0 | **Citations:** 2

DOI: 10.1088/2053-1591/1/1/016104

High Frequency AC Response, DC Resistivity and Magnetic Studies of Holmium Substituted Ni-Ferrite: A Novel Electromagnetic Material

2014

Erum Pervaiz Iftikhar Hussain Gul

Journal of Magnetism and Magnetic Materials , Volume: 349 Pages: 27-34

Impact Factor: 1.97 | **Quartile:** 2 | **Citations:** 65

DOI: 10.1016/j.jmmm.2013.08.011

Magneto-Dielectric and Electromagnetic Absorbing studies of Antimony Doped Nickel Ferrites

2013

Erum Pervaiz Iftikhar H. Gul

International Journal of current engineering & Technology , Volume 3, Number 5

Impact Factor: 0

Low temperature synthesis and enhanced electrical properties by substitution of Al³⁺ and Cr³⁺ in Co-Ni nanoferrites

2013

Erum Pervaiz Iftikhar Hussain Gul

Journal of Magnetism and Magnetic materials , Volume 343, Pages 194-202

Impact Factor: 2.002 | **Quartile:** 2 | **Citations:** 21

DOI: 10.1016/j.jmmm.2013.04.021

Structural, Magnetic, and Dielectric Properties of PEG Assisted Synthesis of Mn_{0.5}Ni_{0.5}Fe₂O₄ Nanoferrites

2013

Humaira Anwar Asghari Maqsood Erum Pervaiz

Impact Factor: 0.93 | **Quartile:** 3 | **Citations:** 3

DOI: 10.1007/s10948-013-2115-6

Hydrothermal Synthesis and Characterization of CoFe₂O₄ Nanoparticles and Nanorods

2013

Humaira Anwar Erum Pervaiz Iftikhar Hussain Gul

Journal of Superconductivity and Novel Magnetism , Volume: 26, Issue: 2, Pages: 415-424

Impact Factor: 0.93 | **Quartile:** 3 | **Citations:** 38

DOI: 10.1007/s10948-012-1749-0

Structural, Electrical and Magnetic Studies of Gd 3+ doped Cobalt Ferrite Nanoparticles

2012

Erum Pervaiz Iftikhar H. Gul

International Journal of current engineering & Technology , Volume 2, No.4

Impact Factor: 0

Enhancement of electrical properties due to Cr³⁺ substitution in Co-ferrite nanoparticles synthesized by two chemical techniques

2012

Erum Pervaiz Iftikhar Hussain Gul

Journal of Magnetism and Magnetic Materials , Volume 324, Issue 22, Pages 3695-3703

Impact Factor: 1.826 | **Quartile:** 2 | **Citations:** 52

DOI: 10.1016/j.jmmm.2012.05.050

Comparative study of NiFe₂-xAlxO₄ ferrite nanoparticles synthesized by chemical co-precipitation and sol-gel combustion techniques

2012

Iftikhar Hussain Gul Erum Pervaiz

MATERIALS RESEARCH BULLETIN , Volume 47, Issue 6, Pages 1353-1361

Impact Factor: 1.913 | **Quartile:** 2 | **Citations:** 82

DOI: 10.1016/j.materresbull.2012.03.005

Conference Proceedings

Catalytic Activity and Kinetic Studies of Core@Shell Nanostructure Cu/Zn Ferrite @Al₂O₃, CuO for Degradation of Para-Nitro Phenol

2022

Sannan Salabat Butt Erum Pervaiz

International Exchange and Innovation Conference on Engineering & Sciences (IEICES), res.country(113,)

Citations: N/A

DOI: Nil

Editorial Activities

Journal of Photochemistry and Photobiology A: Chemistry

2023

Reviewed Papers for Journals

Impact Factor: 4.3

Coordination Chemistry Reviews

2023

Reviewed Papers for Journals

Impact Factor: 20.6

Fuel

2023

Reviewed Papers for Journals

Impact Factor: 7.4

International Journal of Hydrogen Energy

2023

Reviewed Papers for Journals

Impact Factor: 7.2

Personal Page Angelo Bruno BASILE

2023

Reviewed Papers for Journals

Impact Factor: 7.2

International Journal of Hydrogen Energy

2023

Reviewed Papers for Journals

Impact Factor: 7.139

Applied Catalysis B: Environmental

2023

Reviewed Papers for Journals

Impact Factor: 22.1	
Molecular Catalysis Reviewed Papers for Journals Impact Factor: 5.089	2022
Arabian Journal of Chemistry Reviewed Papers for Journals Impact Factor: 6.0	2022
International Journal of Hydrogen Energy Reviewed Papers for Journals Impact Factor: 7.2	2022
Journal of Alloys and Compounds Reviewed Papers for Journals Impact Factor: 6.2	2022
ACS Materials Letters Reviewed Papers for Journals Impact Factor: 11.17	2022
Journal of Applied Physics Reviewed Papers for Journals Impact Factor: 2.877	2022
International Journal of Pharmaceutics Reviewed Papers for Journals Impact Factor: 6.510	2022
Reviewed Papers for Journals Impact Factor: 5.097	2021
Reviewed Papers for Journals Impact Factor: 10.588	2021
Reviewed Papers for Journals Impact Factor: 9.229	2021
Edited Journal Issue / Proceeding / Book Impact Factor: NA	2020
Reviewed Papers for Journals Impact Factor: 3.99	2019
Reviewed Papers for Journals	2019
Edited Journal Issue / Proceeding / Book	2019
Edited Journal Issue / Proceeding / Book	2018

Trainings

3 Weeks workshop on Energetic Materials vis-a-vis their Chemistry, Formulation & Safety Aspects Partner: Defense/Strategic Organization Duration: 22-May-2023 to 09-Jun-2023	2023
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