

# Syed Shoaib Ahmad Shah

Assistant Professor  
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## About

Dr. Syed Shoaib Ahmad Shah is working as Assistant Professor in the School of Natural Sciences. Dr. Syed Shoaib Ahmad Shah has a PhD in Chemistry and Chemical Engineering. Dr. Syed Shoaib Ahmad Shah has published 111 research articles & conference papers having a citation count of 2330, carried out 2 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Chemistry and Chemical Engineering</b> Chongqing University , China	2015 - 2018
<b>MPhil in Inorganic Chemistry</b> Islamia University of Bahawalpur , Pakistan	2010 - 2012
<b>MSc in Inorganic Chemistry</b> Islamia University of Bahawalpur , Pakistan	2006 - 2008
<b>BSc in Chem Phy Math</b> BZU, Multan , Pakistan	2002 - 2004

## Experience

<b>Assistant Professor</b> School of Natural Sciences	2024- Present
<b>Assistant Professor</b> School of Natural Sciences	2024 - 2024
<b>Assistant Professor</b> School of Natural Sciences	2023 - 2024
<b>Research Associate</b> NUST , H-12, Islamabad	2022 - 2023
<b>Postdoc Fellow</b> University of Science and Technology of China , Hefei, China	2020 - 2021
<b>Assistant Professor</b> Islamia University of Bahawalpur , Bahawalpur	2018 - 2019

## Research Projects

<b>National Projects</b>	
<b>Solid-state Zn-air/ion batteries for Green Energy Storage: A reliable / robust replacement of Li-Ion Batteries</b> Funding Agency: NUST Amount: PKR 65,000,000.00 Status: Approved_inprocess	2023
<b>Rational Designed high power and long-life Electrodes for Zn-Br2 flow battery</b> Funding Agency: Pakistan Science Foundation (PSF) Amount: PKR 8,745,000.00 Status: Approved_inprocess	2024

## International Projects

## Research Articles

**Synthesis of MIL-88@activated carbon composite as an efficient adsorbent for the removal of Rhodamine B**

2026

Sami Ullah Aziz ur Rehman Lala Gurbanova Tayyaba Najam Amal M Al-Mohaimed Wedad A. Al-Onazi karim Khan Syed Shoaib Ahmad Shah Muhammad Altaf Nazir

*International Journal of Environmental Analytical Chemistry*

**Impact Factor:** 2.5 | **Quartile:** 3

**DOI:** <https://doi.org/10.1080/03067319.2025.2518301>

**Graphene-supported electrocatalysts for efficient hydrogen evolution: Advances and applications**

2025

Muhammad Altaf Nazir Samreen Afzal Iqra Razzaq Lala Gurbanova Sami Ullah Ibrahim A. Shaaban Awais Ahmad Akbar Mohammad Syed Shoaib Ahmad Shah

*International Journal of Hydrogen Energy*, Volume:161, 150710

**Impact Factor:** 8.300 | **Quartile:** 1

**DOI:** <https://doi.org/10.1016/j.ijhydene.2025.150710>

**Fenton activated and visible light triggered trimetallic FeZnAl-LDH for remediation of Crystal violet dye**

2025

Muhammad Altaf Nazir Ome Parkash Kumar Rashid Ali Muhammad Adnan Saeed Ashfaq Ahmad Aziz ur Rehman P. Rosaiah Wail Al Zoubi Syed Shoaib Ahmad Shah

*Journal of Molecular Structure*, Volume:1335, Article Number 142000

**Impact Factor:** 4.000 | **Quartile:** 2 | **Citations:** 1

**DOI:** <https://doi.org/10.1016/j.molstruc.2025.142000>

**Current Progress of Metal Sulfides/Metal–Organic Frameworks Composite Materials for Photocatalytic H<sub>2</sub> Production**

2025

Misbah Shahid Tayyaba Najam Ibrahim A. Shaaban Sultan Ullah Muhammad Ashfaq Ahmad Lala Gurbanova Awais Ahmad Syed Shoaib Ahmad Shah Muhammad Altaf Nazir

*Energy Technology*, Article Number:2402357, Pages:34

**Impact Factor:** 3.6 | **Quartile:** 3

**DOI:** <https://doi.org/10.1002/ente.202402357>

**Synergistic Effect SnO<sub>2</sub>/g-C<sub>3</sub>N<sub>4</sub> Heterojunction Cocatalyst for Photodegradation of Methyl Orange**

2025

Samreen Afzal Muhammad Nadeem Akhtar Lala Gurbanova Mohamed A. El-Sheikh Awais Ahmad Chang-Hyung Choi Md Rezaul Karim Syed Shoaib Ahma Shah Muhammad Altaf Nazir

*ChemistrySelect*, Volume:10, Issue:23, Article Number e02037

**Impact Factor:** 2.000 | **Quartile:** 3

**DOI:** <https://doi.org/10.1002/slct.202502037>

**MOFs-derived metal sulfides and their composite for photocatalysis**

2025

Muhammad Altaf Nazir Sami Ullah Muhammad Arshad Muhammad Sufyan Javed Ibrahim A. Shaaban Rashid Iqbal Awais Ahmad Md Rezaul Karim Syed Shoaib Ahmad Shah

*Solar Energy*, Volume 292, Article Number 113452

**Impact Factor:** 6.000 | **Quartile:** 2 | **Citations:** 9

**DOI:** <https://doi.org/10.1016/j.solener.2025.113452>

**Synthesis of CuFe-LDH/MIL-88 Composite for the Photocatalytic Degradation of Methyl Orange Dye**

2025

Sundas Riaz Rashid Ali Rashid Iqbal Tayyaba Najam Amal M. Al-Mohaimed,[ Mohamed Soliman Elshikh Md Rezaul Karim Syed Shoaib Ahmad Shah Muhammad Altaf Nazir

*ChemistrySelect*, Volume:10, Issue: 17, Article Number:e202500858

**Impact Factor:** 2.0 | **Quartile:** 3 | **Citations:** 3

**DOI:** <https://doi.org/10.1002/slct.202500858>

**Machine learning assisted designing of small molecule acceptors with multiple terminal electron-deficient groups and performance prediction for next-generation photovoltaics**

2025

Zunaira Shafiq Mudassir Hussain Tahir Syed Shoaib Ahmad Shah Khalid M. Elhindi Munaza Shah Din Nadia Akram Muhammad Ramzan Saeed Ashraf Janjua

*Journal of Solid State Chemistry*, Volume 345, Article Number 125240

**Impact Factor:** 3.200 | **Quartile:** 2 | **Citations:** 1

**DOI:** <https://doi.org/10.1016/j.jssc.2025.125240>

**Synthesis and photocatalytic degradation efficiency of MgFe<sub>2</sub>O<sub>4</sub>@CuO nanocomposite for Bromophenol blue dye removal**

2025

Kinza Maqsood Rashid Ali Khalil Ahmad Mohamed A. El-Sheikh Rashid Iqbal Md Rezaul Karim Syed Shoaib Ahmad Shah Muhammad Altaf Nazir

*Journal of the Chinese Chemical Society*, Volume:72, Issue: 4, Pages:390-400

**Impact Factor:** 1.5 | **Quartile:** 3 | **Citations:** 5

**DOI:** <https://doi.org/10.1002/jccs.70000>

- Introducing atomistic dynamics at van der Waals surfaces for enhancing the thermoelectric performance of layered Bi<sub>0.4</sub>Sb<sub>1.6</sub>Te<sub>3</sub>** 2025  
*Adil Mansoor Bushra JAbbar Syed Shoaib Ahmad Shah Muhammad Sufyan Javed Tayyaba Najam Shuo Chen Fu Li Xiao-Lei Shi Yui-Xing Chen Guang-Xing Liang Zhi-Gang Chen Zhuang- Hao Zheng Muhammad Ishaq*  
*Energy and Environmental Sciences*, Volume 18, Issue 5, Pages 2485-2498  
**Impact Factor:** 32.400 | **Quartile:** 1 | **Citations:** 5  
**DOI:** <https://doi.org/10.1039/D4EE04930F>
- Biomass Derived Hybrid Activated Carbon/Iron Oxide Composite for Photodegradation of Methylene Blue Upon Visible Light** 2025  
*Sami Ullah Ome Parkash Kumar Rashid Ali Nagina Naveed Riaz Ashfaq Ahmad Muhammad Khurram Tufail Niaz Muhammad Aziz ur Rehman Syed Shoaib Ahmad Shah Muhammad Altaf Nazir*  
*ChemistrySelect*, Volume 10, Issue 7, Article Number e202405028  
**Impact Factor:** 1.900 | **Quartile:** 3 | **Citations:** 6  
**DOI:** <https://doi.org/10.1002/slct.202405028>
- Data-mining and machine learning based search for optimal materials for perovskite and organic solar cells** 2025  
*Nafees Ahmad Mahmoud A.A. Ibrahim Shaban R.M. Sayed Syed Shoaib Ahmad Shah Mudassir Hussain Tahir Yingping Zou*  
*Solar Energy*, Volume 287, Article Number 113223  
**Impact Factor:** 6.000 | **Quartile:** 2 | **Citations:** 3  
**DOI:** <https://doi.org/10.1016/j.solener.2024.113223>
- Efficient photocatalytic degradation of bisphenol A on 2D-3D spherically hierarchical structure Zn<sub>5</sub>In<sub>2</sub>S<sub>8</sub>** 2025  
*Zongwen Zhang Yi Zhang Huili Han Riyadh Ikreedeegh Syed Shoaib Ahmad Shah Muhammad Tayyab*  
*Frontiers in Chemistry*, Volume: 12, Pages: 11  
**Impact Factor:** 3.8 | **Quartile:** 2 | **Citations:** 1  
**DOI:** <https://doi.org/10.3389/fchem.2024.1519370>
- Polyoxometalates based transition metal sulfide composites for hydrodesulfurization and hydrogen evolution reaction** 2025  
*Ghulam Murtaza Tayyaba Najam Naseem Ahmad Khan Muhammad Sher Muhammad Kashif Aslam Ibrahim A. Shaaban Muhammad Altaf Nazir Manzar Sohail Syed Shoaib Ahmad Shah*  
*International Journal of Hydrogen Energy*, Volume 98, Pages 527-541  
**Impact Factor:** 8.100 | **Quartile:** 1 | **Citations:** 4  
**DOI:** <https://doi.org/10.1016/j.ijhydene.2024.12.048>
- Enhanced Photocatalytic Performance of ZIF-67@ZIF-11 in Binary MOF Systems for Rapid Removal of Persistent Organic Pollutants** 2024  
*Muhammad Altaf Nazir Ome Parkash Kumar Rashid Ali Muhammad Dilawar Hussain Sultan Ullah Abdul Rauf Ahmed M. El-Sherbeeney Aziz ur Rehman Syed Shoaib Ahmad Shah*  
*Korean Journal of Chemical Engineering*, Pages 1-15  
**Impact Factor:** 3 | **Quartile:** 2 | **Citations:** 6  
**DOI:** <https://doi.org/10.1007/s11814-024-00363-3>
- Synergistic photodegradation of moxifloxacin with BiFeO<sub>3</sub>@ZIF-67 heterojunction co-catalyst** 2024  
*Muhammad Jamshaid Shazia Jabeen Mohamed Mohany Salim S. Al-Rejaie Saltanat Aghayeva Sadia Atta Aqeela Shaheen Syed Shoaib Ahmad Shah Aziz Ur Rehman*  
*Journal of Molecular Structure*, Volume 1318, Part 1, Article Number 139332  
**Impact Factor:** 4.000 | **Quartile:** 2 | **Citations:** 5  
**DOI:** <https://doi.org/10.1016/j.molstruc.2024.139332>
- Light harvesting S-scheme g-C<sub>3</sub>N<sub>4</sub>/TiO<sub>2</sub>/M photocatalysts for efficient removal of hazardous moxifloxacin** 2024  
*Misbah Malik Muhammad Altaf Nazir Hasan M. Khan Syed Shoaib Ahmad Shah Aqsa Anum Aziz Ur Rehman Abeer Hashem Graciela Dolores Avila-Quezada Elsayed Fathi Abd\_Allah*  
*Diamond and Related Materials*, Volume:150, ID:111673  
**Impact Factor:** 4.3 | **Quartile:** 2 | **Citations:** 5  
**DOI:** <https://doi.org/10.1016/j.diamond.2024.111673>
- Machine Learning-Assisted Designing and Screening of Polymers with a High Melting Point: Database Visualization and Synthetic Feasibility Assessment** 2024  
*Zaheer Ahmed Dayo Jiang Guosong Mohamed A. El-Tayeb Syed Shoaib Ahmad Shah Sumaira Naeem*

**Unlocking the potential: Innovations and strategies for electrolyte optimization in Zn-ion batteries**

2024

Muhammad Kashif Aslam Iftikhar Hussain Abdul Jabbar Khan Shahid Hussain Syed Shoaib Ahmad Shah Ali H. Al-Marzouqi Maowen Xu

*Energy Storage Materials* , Volume: 73, Article Number: 103851

**Impact Factor:** 18.9 | **Quartile:** 1 | **Citations:** 4

**DOI:** <https://doi.org/10.1016/j.ensm.2024.103851>

**Polymer design using machine learning: A quest for high glass transition temperature**

2024

Abrar Ul Hassan Syed Shoaib Ahmad Shah Hala M. Abo-Dief Sumaira Naeem Numan Khan Eman Alzahrani Zeinhom M. El-Bahy

*Synthetic Metals* , Volume 307, Article Number 117659

**Impact Factor:** 4.000 | **Quartile:** 2 | **Citations:** 6

**DOI:** [10.1016/j.synthmet.2024.117659](https://doi.org/10.1016/j.synthmet.2024.117659)

**Synthesis and biological evaluation of  $\beta$ -lactams as potent antidiabetic agents**

2024

Salma Shaheen Jahan Zaib Arshad Mansoor Haider Adnand Ashraf Muhammad Ashfaq Mostafa A. Ismail Tayyaba Najam Muhammad Mahboob Ahmad

Syed Shoaib Ahmad Shah

*New Journal of Chemistry* , VoL:48, Issue: 46, Pages:19427-19440

**Impact Factor:** 2.7 | **Quartile:** 2 | **Citations:** 1

**DOI:** <https://doi.org/10.1039/D4NJ02535K>

**Tailoring the d-Band Center of WS<sub>2</sub> by Metal and Nonmetal Dual-Doping for Enhanced Electrocatalytic**

2024

**Nitrogen Reduction**

Lulu Wen Qingfang Chang Xilin Zhang Xinyang Li Shichuan Zhong Pan Zeng Syed Shoaib Ahmad Shah Xiaoye Hu Weiping Cai Yue Li

*Small* , Pages 1-9

**Impact Factor:** 13.000 | **Quartile:** 1 | **Citations:** 5

**DOI:** <https://doi.org/10.1002/sml.202407594>

**A systematic approach to generate polymer library: A search for polymers with high dipole moment**

2024

Khadijah Mohammedsaleh Katubi Syed Shoaib Ahmad Shah Sumaira Naeem Tayyaba Najam Z.A. Alrowaili M.S. Al-Buriahi

*Chemical Physics Letters* , Volume:850, Article Number:141450

**Impact Factor:** 2.8 | **Quartile:** 1 | **Citations:** 1

**DOI:** [10.1016/j.cplett.2024.141450](https://doi.org/10.1016/j.cplett.2024.141450)

**Optimizing electrochemical power generation: Harnessing synergies and surface innovation in NiTe-modified MOF nanoarchitectures**

2024

Hafiza Komal Zafar Syed Shoaib Ahmad Shah Manzar Sohail Raja Shahid Ashraf Ayman Nafady Geoffrey Will Md A. Wahab

*Journal of Power Sources* , Volume 612, Article Number 234827

**Impact Factor:** 8.100 | **Quartile:** 1 | **Citations:** 3

**DOI:** <https://doi.org/10.1016/j.jpowsour.2024.234827>

**Highly Efficient Mg<sub>0.75</sub>Ce<sub>0.25</sub>Fe<sub>12</sub>O<sub>19</sub> @ZIF-67 Heterojunction Co-catalyst for Photo-reduction of Rhodamine B**

2024

Muhammad Altaf Nazir Muhammad Jamshaid Muhammad Altaf Tayyaba Najam Amal M. Al-Mohaimeed Wedad A. Al-onazi Aziz ur Rehman Syed Shoaib Ahmad Shah

*Korean Journal of Chemical Engineering* , Volume 41, Issue 8, Pages 2307-2319

**Impact Factor:** 3.00 | **Quartile:** 2 | **Citations:** 38

**DOI:** <https://doi.org/10.1007/s11814-024-00162-w>

**Bimetallic Fe/Ni-BTC MOF decorated MXene hybrid for improved oxidation of water**

2024

Maida Murtaza Komal Farooq Aneeqa Areeb Amjad Syed Shoaib Ahmad Shah Amir Waseem

*Diamond and Related Materials* , Volume 147, Article Number 111379

**Impact Factor:** 4.300 | **Quartile:** 2 | **Citations:** 15

**DOI:** <https://doi.org/10.1016/j.diamond.2024.111379>

**Machine learning assisted designing of polymers and refractive index prediction: Easy and fast screening of polymers from chemical space**

2024

Jawayria Najeeb Syed Shoaib Ahmad Shah Mudassir Hussain Tahir Ahmed I. Hanafy Salah M. El-Bahy Zeinhom M. El-Bahy

*Materials Chemistry and Physics* , Volume 324, Article Number 129685

**Impact Factor:** 4.300 | **Quartile:** 2 | **Citations:** 4

**DOI:** <https://doi.org/10.1016/j.matchemphys.2024.129685>

**Hydrophobic Microenvironment Modulation of Ru Nanoparticles in Metal–Organic Frameworks for Enhanced Electrocatalytic N<sub>2</sub> Reduction**

2024

Lulu Wen Xiaoshuo Liu Xinyang Li Hanlin Zhang Shichuan Zhong Pan Zeng Syed Shoaib Ahmad Shah Xiaoye Hu Weiping Cai Yue Li

*Advanced Science* , Pages 1-9

**Impact Factor:** 14.3 | **Quartile:** 1 | **Citations:** 5

**DOI:** <https://doi.org/10.1002/adv.202405210>

**Copper- and Manganese-Based Bimetallic Layered Double Hydroxides for Catalytic Reduction of Methylene Blue**

2024

Muhammad Altaf Nazir Aziz ur Rehman Tayyaba Najam Mohamed Farouk Elsadek M. Ajmal Ali Ismail Hossain Muhammad Khurram Tufail Syed Shoaib Ahmad Shah

*Catalysts* , Volume 14, Issue 7, Article Number 430

**Impact Factor:** 3.800 | **Quartile:** 2 | **Citations:** 19

**DOI:** <https://doi.org/10.3390/catal14070430>

**Advanced Nix/MoS<sub>x</sub>/MOF-2@g-C<sub>3</sub>N<sub>4</sub> carbon nanostructures for the effective eradication of the Methylene blue dye**

2024

Aqsa Anum Muhammad Altaf Nazir Syed Shoaib Ahmad Shah Ashraf Y. Elnaggar M.H.H. Mahmoud Salah M. El-Bahy Misbah Malik Muhammad Ahmad Wattoo Aziz ur Rehman

*Fullerenes Nanotubes and Carbon Nanostructures*, Volume 32, Issue 8, Pages: 12

**Impact Factor:** 2.1 | **Quartile:** 2 | **Citations:** 19

**DOI:** [10.1080/1536383X.2024.2372407](https://doi.org/10.1080/1536383X.2024.2372407)

**Isothermal and kinetic screening of methyl red and methyl orange dyes adsorption from water by Delonix regia biochar-sulfur oxide (DRB-SO)**

2024

Ahmed Eleryan Mohamed Hassaan Muhammad A. Nazir Syed Shoaib Ahmad Shah Safaa Ragab Ahmed El Nemr

*Scientific Reports* , Volume 14, Article Number: 13585

**Impact Factor:** 3.800 | **Quartile:** 1 | **Citations:** 27

**DOI:** <https://doi.org/10.1038/s41598-024-63510-0>

**Revolutionizing polymer engineering for Photodetectors: A Machine Learning-Assisted paradigm for rapid materials discovery**

2024

Jing Zhou Syed Shoaib Ahmad Shah Sumaira Naeem Bilal Siddique Numan Khan Abrar Ul Hassan Mohamed A. El-Sheikh Hosam O. Elansary

*Chemical Physics* , Volume 582, Article Number 112277

**Impact Factor:** 2.300 | **Quartile:** 3 | **Citations:** 2

**DOI:** <https://doi.org/10.1016/j.chemphys.2024.112277>

**Highly Selective Electroreduction of Nitrobenzene to Aniline by Co-Doped 1T-MoS<sub>2</sub>**

2024

Ibrahim Ul Islam Yuchi Zhang Boxu Dong Asma Iqbal Saghir Abbas Jiantao Zai Syed Shoaib Ahmad Shah Xuefeng Qian

*ACS Applied Materials and Interfaces* , Volume: 16, Issue: 19, Pages:25090-25100

**Impact Factor:** 9.5 | **Quartile:** 1 | **Citations:** 8

**DOI:** [10.1021/acsami.4c01425](https://doi.org/10.1021/acsami.4c01425)

**Activated carbon derived from biomass for wastewater treatment: Synthesis, application and future challenges**

2024

Sami Ullah Syed Shoaib Ahmad Shah Muhammad Altaf Ismail Hossain Mohamed E. El Sayed Mohamed Kallel Zeinhom M. El-Bahy Aziz ur Rehman Tayyaba Najam Muhammad Altaf Nazir

*Journal of Analytical and Applied Pyrolysis*, Volume 179, Article Number 106480

**Impact Factor:** 5.800 | **Quartile:** 1 | **Citations:** 93

**DOI:** <https://doi.org/10.1016/j.jaap.2024.106480>

**Transition metal chalcogenides and phosphides for photocatalytic H<sub>2</sub> generation via water splitting: a critical review**

2024

Muhammad Umar Shahid Tayyaba Najam Mohamed H. Helal Ismail Hossain Salah M. El-Bahy Zeinhom M. El-Bahy Aziz ur Rehman Syed Shoaib Ahmad Shah Muhammad Altaf Nazir

*International Journal of Hydrogen Energy*, Volume 62, Pages 1113-1138

**Impact Factor:** 7.200 | **Quartile:** 1 | **Citations:** 54

**DOI:** <https://doi.org/10.1016/j.ijhydene.2024.03.139>

**The in situ synthesis of sunlight-driven Chitosan/MnO<sub>2</sub>@MOF-801 nanocomposites for photocatalytic reduction of Rhodamine-B**

2024

Muhammad Ishfaq Safyan Akram Khan Muhammad Altaf Nazir Shahid Ali Muhammad Younas Muhammad Mansha Syed Shoaib Ahmad Shah Muhammad Arshad Aziz ur Rehman

*Journal of Molecular Structure* , Volume:1301, Article Number:137384

**Impact Factor:** 3.8 | **Quartile:** 2 | **Citations:** 50

DOI: 10.1016/j.molstruc.2023.137384

**Integrating 1D/2D nanostructure based on Ni–Co-oxalate for energy storage applications** 2024

Irum Shaheen Ijaz Ali Faiza Bibi Abdul Hanan Muhammad Ahmad Ishtihar Hussain Muhammad Sufyan Javed Syed Shoaib Ahmad Shah Karim Khan Muhammad Bilal Hanif Martin Motola P. Rosaiah Saikh Mohammad Wabaidur Waqas Ul Arifeen Iftikhar Hussain  
*Ceramics International* , Volume 50, Issue 7, Part A

**Impact Factor:** 5.2 | **Quartile:** 1 | **Citations:** 26

DOI: 10.1016/j.ceramint.2023.12.394

**Ternary metal conjugated ZIF-67 coordination with Ag and Ce for the efficient Fenton-like remediation of dyes under visible light** 2024

Ome Parkash Kumar Muhammad Altaf Nazir Syed Shoaib Ahmad Shah Aber Hashem Ajay Kumar Elsayed Fathi Abd\_Allah Aziz ur Rehman  
*Optical Materials* , Volume 150, Article Number 115228

**Impact Factor:** 3.900 | **Quartile:** 2 | **Citations:** 30

DOI: <https://doi.org/10.1016/j.optmat.2024.115228>

**Efficient Adsorption of Methylene Blue Using a Hierarchically Structured Metal–Organic Framework Derived from Layered Double Hydroxide** 2024

Ghulam Murtaza Syed Shoaib Ahmad Shah Ghayoor Abbas Chotana Ayman Nafady Md A. Wahab Manzar Sohail Asad Mumtaz  
*ACS Omega* , Vol:9, Issue:14, Pages:16334-16345

**Impact Factor:** 4.1 | **Quartile:** 2 | **Citations:** 10

DOI: 10.1021/acsomega.3c10524

**Novel and efficient Bi-doped CoTe nano-solar evaporators embedded on leno weave cotton gauze for efficient solar-driven desalination** 2024

Nadeem Baig Manzar Sohail Ayman Nafady Syed Shoaib Ahmad Shah Anwar Ul-Hamid Panagiotis Tsiakaras Javeria Tabassum  
*Journal of Colloid and Interface Science* , Volume 658, Pages 758-771

**Impact Factor:** 9.4 | **Quartile:** 1 | **Citations:** 11

DOI: 10.1016/j.jcis.2023.12.089

**Recent trends in wastewater treatment by using metal-organic frameworks (MOFs) and their composites: A critical view-point** 2024

Syed Shoaib Ahmad Shah Manzar Sohail Ghulam Murtza Amir Waseem Aziz ur Rehman Iftikhar Hussain Muhammad Sohail Bashir Saleh S. Alarfaji Ahmed M. Hassan Muhammad Altaf Nazir Muhammad Sufyan Javed Tayyaba Najam  
*Chemosphere* , Volume 349, Article Number 140729

**Impact Factor:** 8.8 | **Quartile:** 1 | **Citations:** 71

DOI: <https://doi.org/10.1016/j.chemosphere.2023.140729>

**Band engineering in Ti2N/Ti3C2Tx-MXene interface enhance the performance of aqueous NH4+-ion hybrid supercapacitors** 2024

Xiaofeng Zhang Muhammad Sufyan Javed Salamat Ali Awais Ahmad Syed Shoaib Ahmad Shah Iftikhar Hussain Dongwhi Choi Ammar M. Tighezza Elsayed Tag-Eldin Changlei Xia Shafaqat Ali Weihua Han  
*Nano Energy* , Volume 120, Article Number 109108

**Impact Factor:** 17.6 | **Quartile:** 1 | **Citations:** 47

DOI: <https://doi.org/10.1016/j.nanoen.2023.109108>

**Engineering Mn-Doped CdS Thin Films Through Chemical Bath Deposition for High-Performance Photoelectrochemical Water Splitting** 2024

Nimrah Tahir Amna Altaf Nadeem Baig Ayman Nafady Anwar Ul-Hamid Syed Shoaib Ahmad Shah Panagiotis Tsiakaras Manzar Sohail  
*Chemistry-An Asian Journal* , Article Number: e202301100, Pags: 11

**Impact Factor:** 4.1 | **Quartile:** 2 | **Citations:** 5

DOI: 10.1002/asia.202301100

**Engineering of metal organic framework (MOF) membrane for waste water treatment: Synthesis, applications and future challenges** 2024

Muhammad Umar Shahid Tayyaba Najam Mazharul Islam Ahmed M. Hassan Mohammed A. Assiri Abdul Rauf Aziz ur Rehman Syed Shoaib Ahmad Shah Muhammad Altaf Nazir  
*Journal of Water Process Engineering* , Volume:57, Article Number: 104676

**Impact Factor:** 7.0 | **Quartile:** 1 | **Citations:** 94

DOI: 10.1016/j.jwpe.2023.104676

**Escalating the synergism on CdZnS via Ag2S/Cu2S co-catalysts: Boosts hydrogen evolution from water splitting under sunlight** 2024

Amir Shahzad Khezina Rafiq Muhammad Zeeshan Abid Naseem Ahmad Khan Syed Shoaib Ahmad Shah Raed H. Althomali Abdul Rauf Ejaz Hussain  
*Journal of Catalysis* , Volume 429, Article Number 115210

- Impact Factor: 7.3 | Quartile: 1 | Citations: 19**  
**DOI:** 10.1016/j.jcat.2023.115210
- Designing efficient materials for high-performance organic solar cells: Detailed chemical space exploration, machine learning and virtual screening** 2024  
*Muhammad Khurram Tufail Syed Shoaib Ahmad Shah Salahuddin Khan Farooq Ahmad Lucy W. Kiruri Misbah Sehar Abbasi Ali Ahmad*  
*Chemical Physics Letters*, Volume 834, Article Number 140974  
**Impact Factor: 2.8 | Quartile: 1 | Citations: 6**  
**DOI:** <https://doi.org/10.1016/j.cplett.2023.140974>
- Synthesis of oxidized carboxymethyl cellulose-chitosan and its composite films with SiC and SiC@SiO<sub>2</sub> nanoparticles for methylene blue dye adsorption** 2024  
*Aiman Javed Momina Islam Youssef O. Al-Ghamdi Mudassir Iqbal Marwah Aljohani Saima Sohni Syed Shoaib Ahmad Shah Shahid Ali Khan*  
*International Journal of Biological Macromolecules*, Volume 256, Part 1, Article Number 128363  
**Impact Factor: 7.7 | Quartile: 1 | Citations: 13**  
**DOI:** 10.1016/j.ijbiomac.2023.128363
- Anticancer Properties of Ru and Os Half-Sandwich Complexes of N,S Bidentate Schiff Base Ligands Derived from Phenylthiocarbamide** 2023  
*Jahan Zaib Arshad Sana Tabassum Muhammad Shaheer Kiani, Sundas Arshad Muhammad Ali Hashmi Imran Majeed Hassan Ali Syed Shoaib Ahmad Shah*  
*Chemistry - An Asian Journal*, Volume 18, Issue 23, Pages: 13, Article Number: e202300804,  
**Impact Factor: 4.1 | Quartile: 2 | Citations: 6**  
**DOI:** 10.1002/asia.202300804
- Growth of tunable Au-BaO@TiO<sub>2</sub>/CdS heterostructures: Acceleration of hydrogen evolution from water splitting** 2023  
*Mamoona Sabir Khezina Rafiq Muhammad Zeeshan Abid Ujala Quyyum Syed Shoaib Ahmad Shah Muhammad Faizan Abdul Rauf Shahid Iqbal Ejaz Hussai*  
*Fuel*, Volume 353, Article Number 129196  
**Impact Factor: 7.4 | Quartile: 1 | Citations: 35**  
**DOI:** <https://doi.org/10.1016/j.fuel.2023.129196>
- Synthetic accessibility-informed designing of efficient organic semi-conductors for organic solar cells** 2023  
*Beriham Basha Farooq Ahmad Misbah Sehar Abbasi Tayyaba Najam Syed Shoaib Ahmad Shah Z.A. Alrowaili M.S. Al-Buriah*  
*Chemical Physics Letters*, Volume 831, Article Number 140852  
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- Facile Synthesis of PdO.TiO2 Nanocomposite for Photoelectrochemical Oxygen Evolution Reaction** 2023  
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*Molecules* , Volume 28, Issue 2, Article Number 572  
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**DOI:** DOI <https://doi.org/10.1039/D2RA05036F>



## Book Chapters

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### Metal–Organic Framework-based Photocatalysts for Hydrogen Production

2024

*Muhammad Tayyab Summan Aman Hummera Rafique Syed Shoaib Ahmad Shah Laila Noureen Muhammad Nadeem Zafar*

In: *Catalysis Series - Advances in Photocatalysis, Electrocatalysis and Photoelectrocatalysis for Hydrogen Production*, Chapter 5, Pages 119-134

**Citations:** N/A

**DOI:** <https://doi.org/10.1039/9781837674664-00119>

### The Development of Flexible Batteries for Future Electronics

2023

*Muhammad Khurram Tufail Sidra Jamil Muhammad Asif Nawaz Yousra Arshad Syed Shoaib Ahmad Shah*

In: *Handbook of Energy Materials*, Chapter 1, Pages 1-36

**Citations:** N/A

**DOI:** [https://doi.org/10.1007/978-981-16-4480-1\\_51-1](https://doi.org/10.1007/978-981-16-4480-1_51-1)

## Editorial Activities

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<b>Heliyon</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.4	2024
<b>Journal of Colloid and Interface Science</b> Reviewed Papers for Journals <b>Impact Factor:</b> 12.984	2024
<b>Heliyon</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.4	2024
<b>Applied Surface Science Advances</b> Reviewed Papers for Journals <b>Impact Factor:</b> 2666-5239	2023
<b>Journal of Energy Storage</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2023
<b>Applied Surface Science Advances</b> Reviewed Papers for Journals <b>Impact Factor:</b> 7.5	2023
<b>Inorganic Chemistry Communications</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.8	2023
<b>Heliyon</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.4	2023
<b>Inorganic Chemistry Communications</b> Reviewed Papers for Journals <b>Impact Factor:</b> 4.4	2023
<b>Chemical Engineering Journal</b> Reviewed Papers for Journals <b>Impact Factor:</b> 15	2023
<b>Inorganic Chemistry Communications</b> Reviewed Papers for Journals <b>Impact Factor:</b> 4.4	2023
<b>Environmental Pollution</b> Reviewed Papers for Journals <b>Impact Factor:</b> 7.6	2023
<b>Materials Chemistry and Physics</b> Reviewed Papers for Journals <b>Impact Factor:</b> 4.6	2023
<b>Chemical Engineering Journal</b> Reviewed Papers for Journals <b>Impact Factor:</b> 15.1	2023