

Muhammad Sajid

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About

Dr. Muhammad Sajid is working as Assistant Professor in the School of Chemical & Materials Engineering. Dr. Muhammad Sajid has a PhD in Chemical Engineering. Dr. Muhammad Sajid has published 43 research articles & conference papers having a citation count of 1336, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Chemical Engineering Tsinghua University , China	2017 - 2020
MSc in Chemical Engineering University of the Punjab , Pakistan	2008 - 2010

Experience

Assistant Professor School of Chemical & Materials Engineering	2025- Present
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Research Articles

Tailoring polyaniline with dual dopant engineering as a high efficiency cathode material for aqueous zinc ion batteries <i>Sami Ur Rahman Xie Dan Shehna Farooq Muhammad Sajid Fang-Yu Tao Narasimharao Kitchamsetti Chang Liu Wen-Juan Xu Jing-ping Zhang</i> <i>Journal of Colloid and Interface Science</i> , Volume 700, Part 3, Article Number 138600 Impact Factor: 9.700 Quartile: 1 DOI: https://doi.org/10.1016/j.jcis.2025.138600	2025
Dynamic iron migration triggers single-to-dual electron redox conversion in hexacyanoferrates for stable aqueous potassium ion batteries <i>Usman Ali Maoyu Sun Muhammad Sajid Zeeshan Ali Talal Ahmad Yuehan Hao Fuping Min Lu Li Chungang Wang Bingqiu Liu</i> <i>Energy Storage Materials</i> , Volume:79, Article Number:104296, Pages:12 Impact Factor: 20.200 Quartile: 1 DOI: https://doi.org/10.1016/j.ensm.2025.104296	2025
Highly Stable Cyclic Performance of Benzoquinone-Based Organic Cathode in Aqueous Zinc Ion Batteries <i>Muhammad Sajid Sami Ur Rahman Fang-Yu Tao Dan Xie Muhammad Saif Ur Rehman Abdulwahab Salah Jing-Ping Zhang</i> <i>Batteries and Supercaps</i> , Volume:8, Issue:6, Article Number e202400675 Impact Factor: 4.700 Quartile: 2 DOI: https://doi.org/10.1002/batt.202400675	2025
Carbonyl-enriched sulfide linked conjugated polymer as a cathode for aqueous zinc ion batteries <i>Muhammad Sajid Sami Ur Rahman Sajida Munsif Fang-Yu Tao Usman Ali Nisar Ali Jing-Ping Zhang</i> <i>Journal of Energy Storage</i> , Volume:112, Article Number 115512 Impact Factor: 9.800 Quartile: 1 DOI: https://doi.org/10.1016/j.est.2025.115512	2025
Coupled numerical model for the nonlinear dynamics of deepwater single barge installation system <i>Naeem Ullah Mac Darlington Uche Onuoha Menglan Duan Muhammad Sajid</i> <i>Ships and Offshore Structures</i> , Volume:19, Issue:5, Page:557-568 Impact Factor: 1.800 Quartile: 2 DOI: https://doi.org/10.1080/17445302.2023.2191472	2024

Metal complex as p-type dopant-based organic spiro-OMeTAD hole-transporting material for free-Li-TFSI perovskite solar cells <i>Mohammed Elawad Abdalla A. Elbashir Muhammad Sajid Kingsley Igenepo John Hassan Nimir Li Yang Abobakr K. Ziyada Abdelbagi Osman Fahd Rajab</i> <i>Journal of Chemical Physics</i> , Volume:160, Issue:4, Article Number 044707 Impact Factor: 3.100 Quartile: 2 DOI: https://doi.org/10.1063/5.0176351	2024
Fabrication, Morphological, and Thermal Investigation of Epoxy-Polyamide Nanocomposites Reinforced with Carbon Nanotubes <i>Song Wang Bahar Ali Mehwish Javed Sahid Mehmood Farman Ali Zarshad Ali Siddiq Begum Nisar Ali Naseer Iqbal Muhammad Sajid</i> <i>Russian Journal of Physical Chemistry A</i> , Volume:97, Issue:13, Page:3111-3119 Impact Factor: 0.700 Quartile: 4 DOI: https://doi.org/10.1134/S0036024423130289	2023
TiO₂-Coated MoO₃ Nanorods for Lithium/Sodium-Ion Storage <i>Nabilah Al-Ansi Abdulwahab Salah Zhen-Yi Gu Qasem A. Drmash Guo-Duo Yang Jia-Yu Zhang Muhammad Sajid Xing-Long Wu Jing-Ping Zhang Liang Zhao Hai-Zhu Sun</i> <i>ACS Applied Nano Materials</i> , Volume:6, Issue:21, Page:19876-19886 Impact Factor: 5.300 Quartile: 2 Citations: 12 DOI: https://doi.org/10.1021/acsanm.3c03672	2023
Physical properties of multifunctional TM-doped ZnO nanorods and their photocatalytic and anti-bacterial activities <i>Yasir Zaman Muhammad Zahid Ishaque Yasir Yousaf Muhammad Shahzad Abu Bakar Siddique Muhammad Imran Arshad Muhammad Sajid Nisar Ali Ghulam Nabi</i> <i>Environmental Sciences and Pollution Research</i> , Volume:30, Issue:42, Page:95860-95874 Impact Factor: N/A Citations: 18 DOI: https://doi.org/10.1007/s11356-023-29163-8	2023
Synergetic effect of Au nanoparticles and transition metal phosphides for enhanced hydrogen evolution from ammonia-borane <i>Muhammad Asim Bushra Maryam Shuguang Zhang Muhammad Sajid Alibek Kurbanov Lun Pan Ji-Jun Zou</i> <i>Journal of Colloid and Interface Science</i> , Volume:638, Pages 14-25 Impact Factor: 9.700 Quartile: 1 Citations: 26 DOI: https://doi.org/10.1016/j.jcis.2023.01.122	2023
Planar multibody dynamics of floating Y-method installation system and the lowering of subsea equipment based on finite element modeling <i>Naeem Ullah Menglan Duan Miaozi Zheng Mac Darlington Uche Onuoha Muhammad Sajid</i> <i>Marine Structures</i> , Volume:88, Article Number 103361 Impact Factor: 4.000 Quartile: 1 DOI: https://doi.org/10.1016/j.marstruc.2022.103361	2023
Design strategies, surface functionalization, and environmental remediation potentialities of polymer-functionalized nanocomposites <i>Chun-Hao Yu Uwase Marie Betrethem Nisar Ali Adnan Khan Farman Ali Shahid Nawaz Muhammad Sajid Yong Yang Tiantian Chen Muhammad Bilal</i> <i>Chemosphere</i> , Volume:306, Article Number 135656 Impact Factor: 8.100 Quartile: 1 Citations: 28 DOI: https://doi.org/10.1016/j.chemosphere.2022.135656	2022
Low radiative heat transfer realized by 8YSZ/LaAlO₃ composites for high-temperature applications <i>Hafiz Sartaj Aziz Chunlei Wan Yan Xing Muhammad Sajid Muhammad Shahid Wei Pan</i> <i>Journal of Materials Science</i> , Volume:57, Issue:40, Page:18754-18769 Impact Factor: 4.500 Quartile: 2 Citations: 7 DOI: https://doi.org/10.1007/s10853-022-07840-2	2022
Analytical perspective and environmental remediation potentials of magnetic composite nanosorbents <i>Shizhong Zhang Kunda Umuhoza Ange Nisar Ali Yong Yang Adnan Khan Farman Ali Muhammad Sajid Chen Tian Tian Muhammad Bilal</i> <i>Chemosphere</i> , Volume:304, Article Number 135312 Impact Factor: 8.100 Quartile: 1 Citations: 33 DOI: https://doi.org/10.1016/j.chemosphere.2022.135312	2022
Gasification of municipal solid waste: Progress, challenges, and prospects <i>Muhammad Sajid Abdul Raheem Naeem Ullah Muhammad Asim Muhammad Saif Ur Rehman Nisar Ali</i> <i>RENEWABLE & SUSTAINABLE ENERGY REVIEWS</i> , Volume:168, Article Number 112815	2022

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Effective pretreatment of corn straw biomass using hydrothermal carbonization for co-gasification with coal: Response surface Methodology–Box Behnken design <i>Abdul Raheem Lu Ding Qing He Fareed Hussain Mangi Zahid Hussain Khand Muhammad Sajid Alexander Ryzhkov Guangsuo Yu Fuel</i> , Volume 324, Part B, Article Number 124544 Impact Factor: N/A Quartile: 1 Citations: 42 DOI: https://doi.org/10.1016/j.fuel.2022.124544	2022
Adsorption characteristics of paracetamol removal onto activated carbon prepared from Cannabis sativum Hemp <i>Muhammad Sajid Sineen Bari Muhammad Saif Ur Rehman Muhammad Ashfaq Yin Guoliang Ghulam Mustafa Alexandria Engineering Journal</i> , Volume:61, Issue:9, Pages 7203-7212 Impact Factor: 6.800 Quartile: 1 DOI: https://doi.org/10.1016/j.aej.2021.12.060	2022
Self-supporting NiCoP for hydrogen generation via hydrolysis of ammonia borane <i>Muhammad Asim Shuguang Zhang Yutong Wang Bushra Maryam Muhammad Sajid Chengxiang Shi Lun Pan Xiangwen Zhang Ji-Jun Zou Fuel</i> , Volume:318, Article Number 123544 Impact Factor: 7.4 Quartile: 1 Citations: 37 DOI: https://doi.org/10.1016/j.fuel.2022.123544	2022
Conversion of Fructose to 5-Hydroxymethyl Furfural: Mathematical Solution with Experimental Validation <i>Muhammad Sajid Apu Chowdhury Ghulam Bary Yin Guoliang Riaz Ahmad Ilyas Khan Waqar Ahmed Muhammad Farooq Saleem Khan Aisha M. Alqahtani Md. Nur Alam Journal of Mathematics</i> , Volume:2022, Article ID 6989612, 8 pages Impact Factor: 1.400 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1155/2022/6989612	2022
Synoptic view on P ore beneficiation techniques <i>Muhammad Sajid Ghulam Bary Muhammad Asim Riaz Ahmad Muhammad Irfan Ahamad Hammad Alotaibi Adnanul Rehman Ilyas Khan Yin Guoliang Alexandria Engineering Journal</i> , Volume:61, Issue:4, Pages 3069-3092 Impact Factor: 6.800 Quartile: 1 DOI: https://doi.org/10.1016/j.aej.2021.08.039	2022
An efficient analysis of difference equations with coherence fraction under the influence of boson interferometry <i>Ghulam Bary Waqar Ahmed Muhammad Sajid Riaz Ahmad Hammad Alotaibi Ilyas Khan Duohui Huang Futi Liu Fractals-Complex Geometry, Patterns, and Scaling in Nature and Society</i> , Volume:30, Issue:1, Article Number 2240039 (13 pages) Impact Factor: 4.700 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1142/S0218348X22400394	2022
Multi-Hazard Susceptibility Assessment Using the Analytical Hierarchy Process and Frequency Ratio Techniques in the Northwest Himalayas, Pakistan <i>Adnanul Rehman Jinxi Song Fazlul Haq Shakeel Mahmood Muhammad Irfan Ahamad Muhammad Basharat Muhammad Sajid Muhammad Sajid Mehmood Remote Sensing</i> , Volume:14, Issue:3, Article Number 554 Impact Factor: 5.000 Quartile: 1 Citations: 67 DOI: https://doi.org/10.3390/rs14030554	2022
A remarkable chaotic analysis for coherence fraction order with its applications <i>Ghulam Bary Waqar Ahmed Muhammad Sajid Riaz Ahmad Nawa Alshammari Ilyas Khan Chaos, Solitons and Fractals</i> , Volume:154, Article Number 111601 Impact Factor: 7.8 Quartile: 1 Citations: 3 DOI: https://doi.org/10.1016/j.chaos.2021.111601	2022
A new analytical approach to study chaos fraction characterization by using intensity interferometry <i>Ghulam Bary Waqar Ahmed Muhammad Sajid Riaz Ahmad Ilyas Khan Duohui Huang Yue Wang Chaos, Solitons and Fractals</i> , Volume:152, Article Number 111414 Impact Factor: 9.922 Quartile: 1 Citations: 11 DOI: https://doi.org/10.1016/j.chaos.2021.111414	2021
Role of Cysteine in Enhanced Degradation of Trichloroethane under Ferrous Percarbonate System <i>Usman Farooq Muhammad Sajid Ali Shan Xinhai Wang Shuguang Lyu</i>	2021

Impact Factor: 16.744 | **Quartile:** 1

DOI: <https://doi.org/10.1016/j.cej.2021.130221>

Designing small organic non-fullerene acceptor molecules with diflorobenzene or quinoline core and dithiophene donor moiety through density functional theory

2021

Ghulam Bary Lubna Ghani Muhammad Imran Jamil Muhammad Arslan Waqar Ahmed Anees Ahmad Muhammad Sajid Riaz Ahmad Duohui Huang
Scientific Reports, Volume:11, Issue:1, Article Number: 19683

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Geo-physical hazards microzonation and suitable site selection through multicriteria analysis using geographical information system

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Adnanul Rehman Jinxi Song Fazlul Haq Muhammad Irfan Ahamad Muhammad Sajid Zubda Zahid
Applied Geography, Volume:135, Article Number 102550

Impact Factor: 4.732 | **Quartile:** 1 | **Citations:** 19

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A secondary approach with conventional medicines and supplements to recuperate current COVID-19 status

2021

Apu Chowdhury Muhammad Sajid Nabila Jahan Temitope Isaac Adelusi Pulak Maitra Guolian Yin Xudong Wu Yuan Gao Sicen Wang
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An Analytical Approach to Study the Blood Flow over a Nonlinear Tapering Stenosed Artery in Flow of Carreau Fluid Model

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Riaz Ahmad Asma Farooqi Rashada Farooqi Nawaf N. Hamadneh Md Fayz-Al-Asad Ilyas Khan Muhammad Sajid Ghulam Bary Muhammad Farooq Saleem Khan
Complexity, Volume:2021, Article ID 9921642, 11 pages

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Muhammad Rizwan Dilshad Bilal Haider Muhammad Sajid Aamir Ijaz Rafi Ullah Khan Waheed Gul Khan Atif Islam
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Conversion of Glucose to 5-Hydroxymethylfurfural by Co-catalysis of p-Toluenesulfonic Acid (pTSA) and Chlorides: A Comparison Based on Kinetic Modeling

2021

Muhammad Sajid Yuchen Bai Dehua Liu Xuebing Zhao
Waste and Biomass Valorization, Volume:12, Issue:6, Pages 3271-3286

Impact Factor: 3.449 | **Quartile:** 3 | **Citations:** 22

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Catalytic conversion of xylose to furfural by p-toluenesulfonic acid (Ptsa) and chlorides: Process optimization and kinetic modeling

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Muhammad Sajid Muhammad Rizwan Dilshad Muhammad Saif Ur Rehman Dehua Liu Xuebing Zhao
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Impact Factor: 4.927 | **Quartile:** 2

DOI: <https://doi.org/10.3390/molecules26082208>

De-Colorization of Azo Dyes C.B-10X Blue and C.B.M-10X Blue by Ozonation for Wastewater Treatment

2020

Muhammad Irfan AhAmAd Syed Salman Shafqat Mustafa Kamal Pasha Muhamma Asim Muhammad Sajid
University of Wah Journal of Science and Technology (UWJST), Volume 4, Pages 1-7

Impact Factor: N/A

DOI: <https://uwjst.org.pk/index.php/uwjst/article/view/49/25>

Organic acid catalyzed production of platform chemical 5-hydroxymethylfurfural from fructose: Process comparison and evaluation based on kinetic modeling

2020

Muhammad Sajid Yuchen Bai Dehua Liu Xuebing Zhao
Arabian Journal of Chemistry, Volume:13, Issue:10, Pages 7430-7444

Impact Factor: 5.165 | **Quartile:** 2

DOI: <https://doi.org/10.1016/j.arabjc.2020.08.019>

Contamination level, ecological risk, and source identification of heavy metals in the hyporheic zone of the weihe river, China

2020

Muhammad Irfan Ahamad Jinxi Song Haotian Sun Xinxin Wang Muhammad Sajid Mehmood Muhammad Sajid Ping Su Asif Jamal Khan
International Journal of Environmental Research and Public Health, Volume:17, Issue:3, Article Number 1070

Impact Factor: 3.390 | **Quartile:** 1 | **Citations:** 130

DOI: <https://doi.org/10.3390/ijerph17031070>

Screening of acidic and alkaline pretreatments for walnut shell and corn stover biorefining using two way heterogeneity evaluation

2019

Minghui Tan Liang Ma Muhamamd Saif Ur Rehman Muhammad Ajaz Ahmed Muhammad Sajid Xia Xu Yong Sun Ping Cui Jian Xu
Renewable Energy, Volume:132, Pages 950-958

Impact Factor: 6.274 | **Quartile:** 1

DOI: <https://doi.org/10.1016/j.renene.2018.07.131>

Adsorption of Brilliant Green Dye on Biochar Prepared From Lignocellulosic Bioethanol Plant Waste

2016

Muhammad Saif Ur Rehman Ilgook Kim Naim Rashid Malik Adeel Umer Muhammad Sajid Jong-In Han
Clean - Soil, Air, Water, Volume:44, Issue:1, Pages 55-62

Impact Factor: 1.400 | **Quartile:** 3

DOI: <https://doi.org/10.1002/clen.201300954>