

Asif Hussain

Associate Professor

US-Pakistan Center for Advanced Studies in Energy

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About

Dr. Asif Hussain is working as Associate Professor in the US-Pakistan Center for Advanced Studies in Energy. Dr. Asif Hussain has a PhD in Reaction Engineering And Catalysis. Dr. Asif Hussain has published 122 research articles & conference papers having a citation count of 3412, carried out 5 projects and filed 0 intellectual property.

Qualifications

PhD in Reaction Engineering And Catalysis Universiti Teknologi Malaysia , Malaysia	2015 - 2019
MS in Catalysis and fuels NUST, Islamabad , Pakistan	2012 - 2014
BS in Chemical Balochistan University of Information Technology, Engineering & Management Sciences , Pakistan	2007 - 2011

Experience

Associate Professor US-Pakistan Center for Advanced Studies in Energy	2024- Present
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2024 - 2024
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2023 - 2024
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2019 - 2019
Assistant Professor Centre for Energy System	2019 - 2023
Postdoc Fellow University of Cincinnati , Cincinnati Oh, USA	2023 - 2024
Lecturer BUIEMS Quetta , Takatoo Campus Airport road Quetta	2015 - 2015

Awards

Asif Hussain Best Postgraduate Student (PhD Chemical Engineering) from Department of Chemical Engineering on the conjunction of 62nd Convocation Universiti Teknologi Malaysia	2019
Bronze Medal Bronze Medal for PhD research Project in the annual Industrial exhibition INATEX 2018 organized by Universiti Teknologi Malaysia	2018
School / College Best Researcher Award -2022	

Professional Memberships

PEC	Since 2012
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Research Projects

National Projects

Fabrication of Pre-Heating System for Fixed Bed Steam Reforming Reactor for Clean Hydrogen (H2)	2021
Fuel Production	
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Completed	
Reclamation of Industrial Wastewater Using Novel Aeration- Free Oxygenic Photogranulation (OPG)	2022
Technology for bioenergy prospective	
Funding Agency: NUST	
Amount: PKR 990,000.00	
Status: Completed	
The application of machine learning in the chemical recycling of plastic waste	2022
Funding Agency: Royal Society	
Amount: PKR 2,800,000.00	
Status: Approved_inprocess	
Development and operation of lab/pilot scale facilities for co-utilization of indigenous low rank coal, biomass, sewage sludge for cleaner energy production for fertilizer industry	2024
Funding Agency: PSF	
Amount: PKR 6,745,000.00	
Status: Approved_inprocess	

International Projects

Industry Projects

National Projects

Lab scale production of Zeolite 4A from indigenous coal fly-ash obtained from Coal-fired Power plant	2022
Client: Industry	
Amount: PKR 2,500,000.00	
Status: Approved_inprocess	

International Projects

Research Articles

Experimental and numerical techniques for exploring conventional and seasonal biomass combustion optimization: insights into thermokinetics, combustion characteristics, and ash fusion analysis	2025
Asif Hussain Ramza Akram Waqar ul habib Khan Hamad Gohar Syed Sheraz Daood Israf Ud Din Muhammad Arfan Piotr Olczak	
Thermal Science and Engineering Progress , Volume:65, Article Number 103873	
Impact Factor: 5.400 Quartile: 1	
DOI: https://doi.org/10.1016/j.tsep.2025.103873	
In situ fabrication of nitrogen-doped carbon nanotube-modified Fe3C-decorated silicon composites for enhanced electrochemical performance in lithium-ion batteries	2025
Hafiz Muhammad Saleem Asif Hussain Ang Li Huaihe Song	
Diamond and Related Materials , Volume 157, Article Number 112498	
Impact Factor: 5.100 Quartile: 1	
DOI: https://doi.org/10.1016/j.diamond.2025.112498	
Enhancing Cr(VI) remediation efficiency using hemp-derived biochar: insights into RSM optimization and adsorption kinetics using ANN modelling	2025
Mussarat Ul Ain Abdul Rehman Asif Hussain Rabia Naeem Abdul Ahad Khan Jawad Gul Hajirah Kanwal Ajmal Hamid Israf Ud Din Sehar Shakir	
International Journal of Environmental Science and Technology , Pages 1-22	
Impact Factor: 3.400 Quartile: 2	
DOI: https://doi.org/10.1007/s13762-025-06612-0	
Energy, exergy and economic analyses of solid oxide fuel cell based polygeneration system with integrated carbon capture, desalination and liquefied natural gas cold energy utilization	2025
Muhammad Uzair Azhar Mustafa Anwar Ali Bahadar Mohammed Zwawi Asif Hussain	
International Journal of Hydrogen Energy , Volume: 141, Pages:512-522	

Impact Factor: 8.3 Quartile: 1 DOI: https://doi.org/10.1016/j.ijhydene.2024.10.326	
Recent developments and discourse on catalyst systems for partial oxidation of methane to syngas production <i>Nida Naeem Asif Hussain Mehboob Alam Syed Muhammad Shuja Mustafa Anwar Muhammad Arfan Abdulaziz Al Anazi Mallikarjuna N. Nadagouda Bilal Alam Khan Ahad hussain Javed Umair Yaqub Qazi</i> <i>INTERNATIONAL JOURNAL OF HYDROGEN ENERGY</i> , Volume:139, Pages 646-717 Impact Factor: 8.300 Quartile: 1 DOI: https://doi.org/10.1016/j.ijhydene.2025.05.183	2025
Advanced characterization of hemp biomass pyrolysis: Bioenergy recovery and environmental implications <i>Rashid Minhas Asif Hussain Hajirah Kanwal Muhammad Hassan Arslan Khan Syed Sheraz Daood Israf Ud din Ali Bahadar</i> <i>Sustainable Chemistry and Pharmacy</i> , Volume 45, Article Number 101989 Impact Factor: 5.500 Quartile: 1 Citations: 1 DOI: https://doi.org/10.1016/j.scp.2025.101989	2025
Investigating the impact of oxygenic photo granules (OPGs) structure on wastewater treatment and bioenergy generation <i>Kinza Rizwan Ali Raza Abeera Ayaz Ansari Asif Hussain Ghayoor Abbas Israf Ud Din Bilal Alam Khan Umair Yaqub Qazi</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 13, Issue 3, Article Number 116838 Impact Factor: 7.400 Quartile: 1 DOI: 10.1016/j.jece.2025.116838	2025
Bi-functional V₂O₅ nanorods loaded biomass-derived activated carbon nanocomposites for enhanced photocatalytic dye degradation and hydrogen production <i>Imama Abbas Hajirah Kanwal Asif Hussain Hira Azeem Mustafa Anwar Israf Ud Din Abdulaziz Al-Anazi</i> <i>Diamond and Related Materials</i> , Volume 154, Article Number 112104 Impact Factor: 4.300 Quartile: 2 Citations: 2 DOI: https://doi.org/10.1016/j.diamond.2025.112104	2025
Thermokinetic synergistic evaluation of iron ores as oxygen carriers for TGA simulated pyrolysis, gasification, and chemical looping combustion of municipal solid wastes <i>Syed Sheraz Daood Hafiz Usama Qureshi Waqar ul habib Khan Asif Hussain Hassan Abbas Khurram Shahzad Israf Ud Din William Nimmo</i> <i>Sustainable Chemistry and Pharmacy</i> , Volume 44, Article Number 101917 Impact Factor: 5.500 Quartile: 1 DOI: https://doi.org/10.1016/j.scp.2025.101917	2025
Assessment of textile sludge pyrolysis behaviour through advance predictive models for bioenergy production <i>Arslan Khan Asif Hussain Salman Raza Naqvi Waheed Miran Imtiaz Ali</i> <i>Case Studies in Thermal Engineering</i> , Volume 73, Article Number 106698 Impact Factor: 6.400 Quartile: 1 DOI: https://doi.org/10.1016/j.csite.2025.106698	2025
Photo- and electrocatalytic hydrogen production from dye-degraded wastewater using samarium-doped ceria as a catalyst <i>Hijab Haider Hira Azeem Asif Hussain Muhammad Hassan Rabia Liaquat Ali Bahadar Muhammed Ali S.A. Mustafa Anwar</i> <i>International Journal of Hydrogen Energy</i> , Volume:111, Pages:606-622 Impact Factor: 8.100 Quartile: 1 Citations: 4 DOI: https://doi.org/10.1016/j.ijhydene.2025.02.188	2025
Photocatalytic performance of dual-function selenium-enriched biomass-derived activated carbon as a catalyst for dye degradation and hydrogen production <i>Hajirah Kanwal Asif Hussain Yassine Hajji Sehar Shakir Mustafa Anwar Rabia Liaquat Israf Ud Din Ali Bahadur Manel Hleili</i> <i>International Journal of Hydrogen Energy</i> , Volume 101, Pages 1288-1303 Impact Factor: 8.100 Quartile: 1 Citations: 1 DOI: https://doi.org/10.1016/j.ijhydene.2024.12.509	2025
Dielectric barrier discharge reactor application in biomass gasification tar removal <i>Faisal Saleem Muhammad Raashid Abdul Rehman Asif Hussain Khoja Aumber Abbas Saba Gul Sajjad Ahmad Usman Dahiru Adam Harvey</i> <i>Renewable and Sustainable Energy Reviews</i> , Volume 208, Article Number 114963 Impact Factor: 16.300 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1016/j.rser.2024.114963	2025

Thermokinetic investigation of Polyethylene Terephthalate (PET) plastic over biomass fly ash (BFA) catalyst using pyrolysis process through non-isothermal thermogravimetric analysis <i>Ali Raza Waqar Ul Habib Khan Asif Hussain Khoja Arslan Khan Muhammad Hassan Rabia Liaquat Majid Ali Israf Ud Din Abdulaziz Al-Anazi Sustainable Chemistry and Pharmacy</i> , Volume: 42, Article Number: 101856, Pages:15 Impact Factor: 5.5 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1016/j.scp.2024.101856	2024
Photocatalytic activity of molybdenum-doped LOS- zeolite for efficient dye degradation and hydrogen production <i>Hamza Khawaja Nida Naeem Asif Hussain Khoja Hajirah Kanwal Ali Raza Mustafa Anwar Rabia Liaquat Israf Ud Din Salman Raza Naqvi Abdulaziz Al-Anazi Results in Engineering</i> , Volume 24, Article Number 103122 Impact Factor: 6.000 Quartile: 1 Citations: 5 DOI: https://doi.org/10.1016/j.rineng.2024.103122	2024
Recent advancements in perovskite materials and their DFT exploration for dry reforming of methane to syngas production <i>Mehboob Alam Uneeb Masood Khan Animesh Towfiq Partho Neha Kaushal Jawad Gul Nida Naeem Asif Hussain Khoja Mustafa Anwar Majid Ali Abdulaziz Al-Anazi Dai-Viet N. Vo Syed Muhammad Shuja International Journal of Hydrogen Energy</i> , Volume 87, Pages 1288-1326 Impact Factor: 8.100 Quartile: 1 Citations: 3 DOI: https://doi.org/10.1016/j.ijhydene.2024.09.049	2024
Investigation of Novel Transition Metal Loaded Hydrochar Catalyst Synthesized from Waste Biomass (Rice Husk) and Its Application in Biodiesel Production Using Waste Cooking Oil (WCO) <i>Rabia Liaquat Asif Hussain Khoja Laraib Aamir Khan Mohammed Aman Mohammad Kanan Muhammad Saleem Ali Bahadar Waqar Ul Habib Khan Sustainability</i> , Volume 16, Issue 17, Article Number 7275 Impact Factor: 3.300 Quartile: 2 Citations: 2 DOI: https://doi.org/10.3390/su16177275	2024
Synthesis and Performance Analysis of a Carbon-Doped Titania (C–TiO2) Counter Electrode (CE) for Dye-Sensitized Solar Cells (DSSCs) <i>Faisal Abbas Muhammad Tahir Asif Hussain Nadia Shahzad Mustafa Anwar Muniba ayub Sehar Shakir Journal of Electronic Materials</i> , Volume 53, Issue 8, Pages 4773-4781 Impact Factor: 2.200 Quartile: 3 Citations: 3 DOI: https://doi.org/10.1007/s11664-024-11222-6	2024
Comprehensive Investigation of Almond Shells Pyrolysis Using Advance Predictive Models <i>Arslan Khan Saad Saeed Erum Pervaiz Asif Hussain Khoja Salman Raza Naqvi Sana Saeed Imtiaz Ali Renewable Energy</i> , Volume 227, Article Number 120568 Impact Factor: 8.7 Quartile: 1 Citations: 8 DOI: https://doi.org/10.1016/j.renene.2024.120568	2024
Praseodymium doped nickel oxide as hole-transport layer for efficient planar Perovskite Solar Cells <i>Muhammad Tahir Hafiz Muhammad Abd ur Rehman Asif Hussain Mustafa Anwar Muhammad Adil Mansoor Faisal Abbas Sehar Shakir Optik</i> , Volume:300, Article Number: 171630 Impact Factor: 3.1 Quartile: 2 Citations: 7 DOI: 10.1016/j.ijleo.2024.171630	2024
Synergistic transformation: Kinetic and thermodynamic evaluation of co-pyrolysis for low-rank bituminous coal and polyurethane foam waste <i>Zaid Mohammad Banyhani Waqar Ul Habib Khan Hala H. Abd El-Gawad Dr. Mustafa Anwar Dr. Asif Hussain Khoja Dr. Muhammad Hassan Dr. Rabia Liaquat Zeinhom M. El-Bahy Process Safety and Environmental Protection</i> , Volume 184, Pages 907-921 Impact Factor: 7.8 Quartile: 1 Citations: 12 DOI: 10.1016/j.psep.2024.01.041	2024
Experimental and numerical techniques to evaluate coal/biomass fly ash blend characteristics and potentials <i>Usman Khalid Asif Hussain Khoja Syed Sheraz Daood Waqar Ul Habib Khan Israf Ud Din Abdulaziz Al-Anazi Antonella Petrillo Science of The Total Environment</i> , Volume 912, Article Number 169218 Impact Factor: 9.8 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1016/j.scitotenv.2023.169218	2024
Biomass fly ash as nanofiller to improve the dielectric properties of low-density polyethylene for possible high-voltage applications	2024

Atizaz Hussain Akram Nida Naeem Asif Hussain Khoja Faisal Shahzad Abraiz Khattak Muhammad Iftikhar Kashif Imran Abdulaziz Al-Anazi Israf Ud Din Syed Sheraz Daood

Heliyon , Volume 10, Issue 1, Article Number e23350

Impact Factor: 4.0 | **Quartile:** 2 | **Citations:** 7

DOI: <https://doi.org/10.1016/j.heliyon.2023.e23350>

Underground geological sequestration of carbon dioxide (CO₂) and its effect on possible enhanced gas and oil recovery in a fractured reservoir of Eastern Potwar Basin, Pakistan

2023

Anaiz Gul Fareed Asif Hussain Khoja Fabio De Felice Antonella Petrillo Muhammad Arsalan Sultan Zafar Khan Jalalzai Syed Sheraz Daood
Science of the Total Environment , Volume 905, Article Number 167124

Impact Factor: 9.8 | **Quartile:** 1 | **Citations:** 24

DOI: <https://doi.org/10.1016/j.scitotenv.2023.167124>

Corrosion behavior of SiC coated HX with MoSi₂ interlayer to be utilized in iodine–sulfur cycle for hydrogen production

2023

Zain Hussain Zuhair S Khan Asif Hussain Khoja Altamash Shabbir Abdulaziz Al-Anazi Israf Ud Din
Heliyon , Volume 9, Issue 11, Article Number 21640

Impact Factor: 4.0 | **Quartile:** 2 | **Citations:** 3

DOI: <https://doi.org/10.1016/j.heliyon.2023.e21640>

Exploring copyrolysis characteristics and thermokinetics of peach stone and bituminous coal blends

2023

Asif Hussain Khoja Hamad Gohar Waqar Ul Habib Khan Umair Yaqub Qazi Israf Ud Din Abdulaziz Al-Anazi Waqar Muhammad Ashraf M.A Mujtaba Fahid Riaz Syed Sheraz Daood
Energy Science & Engineering , Volume11, Issue11, Pages 4302-4323

Impact Factor: 3.8 | **Quartile:** 3 | **Citations:** 3

DOI: <https://doi.org/10.1002/ese3.1583>

Facile Synthesis of FeP-Decorated Heteroatomic-Doped Onion-like Carbon Nanospheres for Pseudocapacitance Enhanced Sodium Storage

2023

Hafiz Muhammad Saleem Mahmood Jamil Mohammad Tabish Asif Hussain Khoja Ang Li Dengke Wang Huaihe Song
ACS Applied Energy Materials , Volume 6(19), Pages 9885-9896

Impact Factor: 6.4 | **Quartile:** 2 | **Citations:** 12

DOI: <https://doi.org/10.1021/acsaem.3c01376>

Biomass derived activated carbon by chemical surface modification as a source of clean energy for supercapacitor application

2023

Rifat Mehdi Salman Raza Naqvi Asif Hussain Khoja Rajab Hussain
Fuel , Volume 348, Article Number 128529

Impact Factor: 8.035 | **Quartile:** 1 | **Citations:** 69

DOI: <https://doi.org/10.1016/j.fuel.2023.128529>

Thermocatalytic partial oxidation of methane to syngas (H₂, CO) production using Ni/La₂O₃ modified biomass fly ash supported catalyst

2023

Amin Ul Hasanat Asif Hussain Khoja Nida Naeem Abdulaziz Al-Anazi Rabia Liaquat Bilal Alam Khan Israf Ud Din
Results in Engineering , Volume 19, Article Number 10133

Impact Factor: 6.000 | **Quartile:** 1 | **Citations:** 17

DOI: <https://doi.org/10.1016/j.rineng.2023.101333>

Coaxial microbial electrolysis cell for cost-effective bioenergy production and wastewater treatment of potato industry effluent

2023

Rabia Liaquat Muhammad Muddasar Muhammad Zia Ur Rahman Asif Hussain Khoja Ayesha Aslam Abdul Basit
Journal of Chemical Technology and Biotechnology , Volume 98, Issue 9, Pages 2203-2213

Impact Factor: 3.4 | **Quartile:** 2 | **Citations:** 11

DOI: doi.org/10.1002/jctb.7433

Solar-assisted hybrid oil heating system for heavy refinery products storage

2023

Naseer ahmad Khan Asif Hussain Khoja Naveed Ahmed Fahid Riaz Mariam Mahmood Majid Ali M.A Kalam M.A Mujtaba
Case Studies in Thermal Engineering , Volume 49, Article Number 103276

Impact Factor: 6.8 | **Quartile:** 1 | **Citations:** 7

DOI: <https://doi.org/10.1016/j.csite.2023.103276>

Enhancement in the photocatalytic and optoelectronic properties of erbium oxide by adding zinc oxide and molybdenum

2023

Muhammad Talha Shabbir Tayyab Hussain Sehar Shakir Mustafa Anwar Asif Hussain Khoja Syed Nawaz Aamir Naseem Satti
Ceramics International , Volume 49, Issue 12, Pages 19691-19700

Impact Factor: 5.2 Quartile: 1 Citations: 9 DOI: https://doi.org/10.1016/j.ceramint.2023.03.086	
Effect of non-thermal plasma dielectric barrier discharge reactor on the quality of biomass gasification product gas from the gasifier <i>Faisal Saleem Asif Hussain Khoja Atif Khan Abdul Rehman Salman Raza Naqvi Umair Yaqub Qazi Kui Zhang Adam Harvey</i> <i>Journal of the Energy Institute</i> , Volume 108, Article Number 101228 Impact Factor: 6.470 Quartile: 2 Citations: 11 DOI: https://doi.org/10.1016/j.joei.2023.101228	2023
Synergistic effect of plasma power and temperature on the cracking of toluene in the N₂ based product gas <i>Faisal Saleem Asif Hussain Khoja Rabia Sharif Abdul Rehman Salman Raza Naqvi Umair Yaqub Qazi Kui Zhang Adam Harvey</i> <i>Heliyon</i> , Volume 9, Issue 3, Article Number e14237 Impact Factor: 3.776 Quartile: 2 Citations: 4 DOI: https://doi.org/10.1016/j.heliyon.2023.e14237	2023
Recent progress in catalytic deoxygenation of biomass pyrolysis oil using microporous zeolites for green fuels production <i>Salman Raza Naqvi Asif Hussain Khoja Imtiaz Ali Muhammad Naqvi Tayyaba Noor Awais Ahmad Rafael Luque Nor Aishah Saidina Amin</i> <i>Fuel</i> , Volume 333, Part 1, Article Number 126268 Impact Factor: 8.035 Quartile: 1 Citations: 66 DOI: https://doi.org/10.1016/j.fuel.2022.126268	2023
Thermal steam methane reforming over bimetal-loaded hemp-derived activated carbon-based catalyst for hydrogen production <i>Rashid Minhas Asif Hussain Khoja Nida Naeem Mustafa Anwar Sehar Shakir Rabia Liaquat Israf Ud Din</i> <i>Research on Chemical Intermediates</i> , Pages 1-23 Impact Factor: 3.134 Quartile: 3 Citations: 12 DOI: https://doi.org/10.1007/s11164-022-04924-1	2022
A highly efficient A-site deficient perovskite interlaced within two dimensional MXene nanosheets as an active electrocatalyst for hydrogen production <i>Ramsha Khan Muhammad Taqi Mehran Salman Raza Naqvi Asif Hussain Khoja Mutawara Mahmood Baig Muhammad Aftab Akram Faisal Shahzad Sajjad Hussain</i> <i>International Journal of Hydrogen Energy</i> , Volume 47, Issue 88, Pages 37476-37489 Impact Factor: 7.139 Quartile: 2 Citations: 30 DOI: https://doi.org/10.1016/j.ijhydene.2021.09.017	2022
Air gasification of high-ash sewage sludge for hydrogen production: Experimental, sensitivity and predictive analysis <i>Muhammad Abdullah Khan Salman Raza Naqvi Syed Ali Ammar Taqvi Muhammad Shahbaz Imtiaz Ali Muhammad Taqi Mehran Asif Hussain Khoja Dagmar Juchelková</i> <i>International Journal of Hydrogen Energy</i> , Volume 47, Issue 88, Pages 37374-37384 Impact Factor: 7.139 Quartile: 2 Citations: 22 DOI: https://doi.org/10.1016/j.ijhydene.2021.11.192	2022
In depth thermokinetic investigation on Co-pyrolysis of low-rank coal and algae consortium blends over CeO₂loaded hydrotalcite (MgNiAl) catalyst <i>Waqar Ul Habib Khan Asif Hussain Khoja Hamad Gohar Salman Raza Naqvi Israf Ud Din Brock Lumbers Mohamed A. Salem Abdullah Y. Alzahrani</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 10, Issue 5, Article Number 108293 Impact Factor: 7.968 Quartile: 1 Citations: 14 DOI: https://doi.org/10.1016/j.jece.2022.108293	2022
Partial Oxidation of Methane over CaO Decorated TiO₂ Nanocatalyst for Syngas Production in a Fixed Bed Reactor <i>Asif Hussain Khoja Ahad Hussain Javed Salman Raza Naqvi Sehar Shakir Iraf ud Din Zafar Arshad Umer Rashid Umair Yaqub Qazi Nida Naeem</i> <i>Catalysts</i> , Volume 12, Issue 10, Article Number 1089 Impact Factor: 4.501 Quartile: 2 Citations: 10 DOI: https://doi.org/10.3390/catal12101089	2022
The fate and dynamics of iron during the transformation of activated sludge into oxygenic photogranules (OPGs) under hydrodynamic batch conditions for environmental applications <i>Abeera Ayaz Ansari Arfa Ayaz Ansari Asif Hussain Khoja Gitau J. Gikonyo Ahmed S. Abouhend Chul Park</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 10, Issue 4, Article Number 108190	2022

Impact Factor: 7.968 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1016/j.jece.2022.108190	
Investigating the characterisation, kinetic mechanism, and thermodynamic behaviour of coal-biomass blends in co-pyrolysis process <i>Hamad Gohar Asif Hussain Khoja Abeera Ayaz Ansari Salman Raza Naqvi Rabia Liaquat Muhammad Hassan Khalil Hasni Umair Yaqoob Qazi Imtiaz Ali</i> <i>Process Safety and Environmental Protection</i> , Volume 163, Pages 645-658 Impact Factor: 6.158 Quartile: 1 Citations: 52 DOI: 10.1016/j.psep.2022.05.063	2022
Techno-economic assessment of solar water heating systems for sustainable tourism in northern Pakistan <i>Muhammad Naveed Arif Adeel Waqas Faaz Ahmed Butt Mariam Mahmood Asif Hussain Khoja Majid Ali Kafait Ullah M. A Mujtaba M.A Kalam</i> <i>Alexandria Engineering Journal</i> , Volume 61, Issue 7, Pages 5485-5499 Impact Factor: 6.8 Quartile: 1 Citations: 18 DOI: 10.1016/j.aej.2021.11.006	2022
Thermokinetics synergistic effects on co-pyrolysis of coal and rice husk blends for bioenergy production <i>Maham Tauseef Abeera Ayaz Ansari Asif Hussain Khoja Salman Raza Naqvi Rabia Liaquat William Nimmo Syed Sheraz Daood</i> <i>Fuel</i> , Volume 318, Article Number 123685 Impact Factor: 6.609 Quartile: 1 Citations: 47 DOI: https://doi.org/10.1016/j.fuel.2022.123685	2022
Praseodymium-doped Sr₂TiFeO_{6-δ} double perovskite as a bi-functional electrocatalyst for hydrogen production through water splitting <i>Qassam Sarmad Uneeb Masood Khan Mutawara Mahmood Baig Muhammad Hassan Faaz Ahmed Butt Asif Hussain Rabia Liaquat Zuhair Subhani Khan</i> <i>Mustafa Anwar Muhammed Ali S.A.</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 10, Issue 3, Article Number 107609 Impact Factor: 5.909 Quartile: 1 Citations: 38 DOI: 10.1016/j.jece.2022.107609	2022
Improved ethylbenzene suppression and coke-resistance on benzene methylation over metals doped fibrous silica-HZSM-5 zeolite <i>A.F.A. Rahman A.A Jalil M.Y.S. Hamid Ijaz Hussain N.S. Hassan Asif Hussain</i> <i>Molecular Catalysis</i> , Volume 526, Article Number 112370 Impact Factor: 5.062 Quartile: 2 Citations: 8 DOI: https://doi.org/10.1016/j.mcat.2022.112370	2022
Decomposition of Benzene as a biomass gasification Tar in CH₄ carrier gas using Non-thermal Plasma: Parametric and Kinetic Study <i>Faisal Saleem Aumber Abbas Abdul Rehman Asif Hussain Khoja Salman Raza Naqvi Muhammad Yousaf Arshad Kui Zhang Adam Harvey</i> <i>Journal of the Energy Institute</i> , Volume 102, Pages 190-195 Impact Factor: 6.186 Quartile: 2 Citations: 25 DOI: https://doi.org/10.1016/j.joei.2022.03.009	2022
Sorption enhanced steam reforming of methane over waste-derived CaO promoted MgNiAl hydrotalcite catalyst for sustainable H₂ production <i>Mariam Ayesha Asif Hussain Khoja Faaz Ahmed Butt Umair Sikandar Ahad Hussain Javed Salman Raza Naqvi Israfil Ud Din Muhammad Taqi Mehran</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 10, Issue 3, Article Number 107651 Impact Factor: 5.909 Quartile: 1 Citations: 25 DOI: 10.1016/j.jece.2022.107651	2022
Substituted natural gas (SNG) production using an environment-friendly, metal-free modified beta zeolite (@BEA) catalyst with a dandelion flower-like structure <i>Ijaz Hussain A.A Jalil MYS Hamid Asif Hussain Khoja M Farooq H.M.A Sharif N.S Hassan M.A.H Aziz Walid Nabgan</i> <i>Molecular Catalysis</i> , Volume 523, Article Number 112140 Impact Factor: 5.062 Quartile: 2 Citations: 10 DOI: 10.1016/j.mcat.2022.112140	2022
Prospects towards sustainability: A comparative study to evaluate the environmental performance of brick making kilns in Pakistan <i>Affan Rauf Sehar Shakir Amos Ncube Hafiz Muhammad Abdur Rehman Abdul Kashif Janjua Saeeda Khanum Asif Hussain</i> <i>Environmental Impact Assessment Review</i> , Volume 94, Article Number 106746 Impact Factor: 7.9 Quartile: 1 Citations: 18	2022

DOI: <https://doi.org/10.1016/j.eiar.2022.106746>

HF free greener Cl-terminated MXene as novel electrocatalyst for overall water splitting in alkaline media

2022

Bilal Sarfraz Muhammad Taqi Mehran Mutawara Mahmood Baig Salman Raza Naqvi Asif Hussain Khoja Faisal Shahzad International Journal of Energy Research, Pages 1-13

Impact Factor: 4.6 | **Quartile:** 1 | **Citations:** 45

DOI: <https://doi.org/10.1002/er.7895>

Partial oxidation of methane over biomass fly ash (BFA)-supported Ni/CaO catalyst for hydrogen-rich syngas production

2022

Nida Naeem Asif Hussain Khoja Faaz Ahmed Butt Muhammad Arfan Rabia Liaquat Amin Ul Hasnat Research on Chemical Intermediates, Pages 1-28

Impact Factor: 2.914 | **Quartile:** 3 | **Citations:** 13

DOI: 10.1007/s11164-022-04685-x

Biological carbon capture, growth kinetics and biomass composition of novel microalgal species

2022

Rabia Liaquat Tahreem Assad Khan Zeshan Asif Hussain Khoja Atia Bano Bioresource Technology Reports, Volume 17, Article Number 100982

Impact Factor: N/A | **Citations:** 7

DOI: doi.org/10.1016/j.biteb.2022.100982

Performance Analysis of Calcium-Doped Titania (TiO₂) as an Effective Electron Transport Layer (ETL) for Perovskite Solar Cells

2022

Zafar Arshad Sehar Shakir Asif Hussain Khoja Ahad Hussain Javed Mustafa Anwar Abdur Rehman Rahat Javaid Umair Yaqoob Qazi Sarah Farrukh Energies, Volume 15(4), Article Number 1408

Impact Factor: 3.004 | **Quartile:** 3 | **Citations:** 20

DOI: <https://doi.org/10.3390/en15041408>

Valorization of Wet Oily Petrochemical Sludge via Slow Pyrolysis: Thermo-Kinetics Assessment and Artificial Neural Network Modeling

2022

Salman Raza Naqvi Syed Ali Ammar Taqvi Asif Hussain Khoja Imtiaz Ali Muhammad Taqi Mehran Wasif Farooq Nakorn Tippayawong Dagmar Juchelková A.E. Atabani Frontiers in Energy Research, Volume 9, Article Number 782139

Impact Factor: 4.008 | **Quartile:** 2 | **Citations:** 17

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Impact Factor: 5.909 | **Quartile:** 1 | **Citations:** 17

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2021

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Editorial Activities

Energy Conversion and Management Reviewed Papers for Journals Impact Factor: 7.6	2025
Biochar Reviewed Papers for Journals Impact Factor: 13.5	2025
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Catalysts Reviewed Papers for Journals Impact Factor: 3.9	2023
Applied Energy Reviewed Papers for Journals	2023

Impact Factor: 11.2	
Applied Energy Reviewed Papers for Journals Impact Factor: 11.2	2023
Materials Today Chemistry Reviewed Papers for Journals Impact Factor: 7.3	2023
International Journal of Hydrogen Energy Reviewed Papers for Journals Impact Factor: 7.2	2023
Energy Reviewed Papers for Journals Impact Factor: 9.0	2023
Biochar Reviewed Papers for Journals Impact Factor: 12.7	2023
Fuel Reviewed Papers for Journals Impact Factor: 7.4	2023
Applied Energy Reviewed Papers for Journals Impact Factor: 11.446	2023
Applied Energy Reviewed Papers for Journals Impact Factor: 11.446	2023
Asia-Pacific Journal of Science and Technology Reviewed Papers for Journals Impact Factor: N/A	2023
Energy Conversion and Management Reviewed Papers for Journals Impact Factor: 11.533	2023
Results in Engineering Reviewed Papers for Journals Impact Factor: N/A	2023
Renewable & Sustainable Energy Reviews Reviewed Papers for Journals Impact Factor: 16.799	2023
International Journal of Energy Research Reviewed Papers for Journals Impact Factor: N/A	2023
Results in Engineering Reviewed Papers for Journals Impact Factor: N/A	2023
Fuel Reviewed Papers for Journals Impact Factor: 8.03	2023
Results in Engineering Reviewed Papers for Journals Impact Factor: N/A	2023
Results in Engineering Reviewed Papers for Journals Impact Factor: N/A	2023
International Journal of Hydrogen Energy	2023

Reviewed Papers for Journals Impact Factor: 7.139	
Journal of Environmental Chemical Engineering Reviewed Papers for Journals Impact Factor: 7.968	2022
Applied Energy Reviewed Papers for Journals Impact Factor: 11.44	2022
Biomass Conversion and Biorefinery Reviewed Papers for Journals Impact Factor: 4.050	2022
International Journal of Green Energy Reviewed Papers for Journals Impact Factor: 3.206	2022
Wood Science and Technology Reviewed Papers for Journals Impact Factor: 2.898	2022
Applied Energy Reviewed Papers for Journals Impact Factor: 11.446	2022
Renewable & Sustainable Energy Reviews Reviewed Papers for Journals Impact Factor: 16.799	2022
Catalysts Reviewed Papers for Journals Impact Factor: 4.501	2022
Results in Engineering Reviewed Papers for Journals Impact Factor: 00	2022
Biochemical Engineering Journal Reviewed Papers for Journals Impact Factor: 4.44	2022
Journal of Environmental Chemical Engineering Reviewed Papers for Journals Impact Factor: 7.96	2022
Energy Conversion and Management Reviewed Papers for Journals Impact Factor: 11.53	2022
Biomass conversion and biorefinery Reviewed Papers for Journals Impact Factor: 4.05	2022
Frontiers in Nutrition Reviewed Papers for Journals Impact Factor: 6.590	2022
Reviewed Papers for Journals Impact Factor: 00	2022
Reviewed Papers for Journals Impact Factor: 11.446	2022
Reviewed Papers for Journals Impact Factor: 3.252	2022

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2021

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Impact Factor: 0.939	
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Impact Factor: 2.602	
Reviewed Papers for Journals	2020
Impact Factor: 1.257	
Reviewed Papers for Journals	2020
Impact Factor: 0	
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Impact Factor: 7.539	
Reviewed Papers for Journals	2020
Impact Factor: 5.77	
Reviewed Papers for Journals	2020
Impact Factor: 4.008	
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Impact Factor: 0	
Reviewed Papers for Journals	2020
Impact Factor: 0	
Reviewed Papers for Journals	2020
Impact Factor: 3.343	
Reviewed Papers for Journals	2020
Impact Factor: 5.108	
Reviewed Papers for Journals	2019
Impact Factor: 2.358	
Reviewed Papers for Journals	2019
Impact Factor: 1.676	
Reviewed Papers for Journals	2019
Impact Factor: 2.36	
Reviewed Papers for Journals	2019
Impact Factor: 1.676	
Reviewed Papers for Journals	2018

Reviewed Papers for Journals
Impact Factor: 1.676

2018

Reviewed Papers for Journals
Impact Factor: 2.8

2018

Reviewed Papers for Journals
Impact Factor: 2.914