

Rabia Liaquat

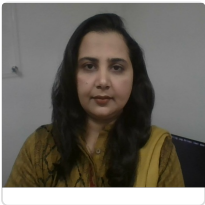
Associate Professor

US-Pakistan Center for Advanced Studies in Energy

Email: rabia@uspcase.nust.edu.pk

Contact: 5190855293

LinkedIn:



About

Dr. Rabia Liaquat is working as Associate Professor in the US-Pakistan Center for Advanced Studies in Energy. Dr. Rabia Liaquat has a PhD in Bioenergy. Dr. Rabia Liaquat has published 72 research articles & conference papers having a citation count of 1738, carried out 6 projects and filed 0 intellectual property.

Qualifications

PhD in Bioenergy Quaid-i-Azam University , Pakistan	2012 - 2016
MPhil in Biotechnology Quaid-i-Azam University , Pakistan	2008 - 2010
MSc in Microbiology Quaid-i-Azam University , Pakistan	2006 - 2008
BSc in (Botany, Zoology, Chemistry) University of the Punjab , Pakistan	2004 - 2006

Experience

Associate Professor US-Pakistan Center for Advanced Studies in Energy	2024- Present
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2022 - 2021
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2022
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2019 - 2022
Assistant Professor Centre for Energy System	2016 - 2019
Lecturer Centre for Energy System	2015 - 2016

Awards

Applied research Grant USAID and FFCL funded Applied research Project Valorization of biomass for biomethne production through anaerobic digestion technology: Green energy recovery from waste	
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Research Projects

National Projects

Developing Climate Resilience Environment through Energy Transition and Knowledge Development	2024
Funding Agency: TARA Climate Foundation	
Amount: PKR 22,401,960.00	
Status: Approved_inprocess	
Designing and fabrication of an upscale continuous flow stirred tank (CSTR) bioreactor for biogas generation and its application in IC engines as biofuel	
Funding Agency: NUST	
Amount: PKR 500,000.00	
Status: Approved_inprocess	
Creating Climate Resilience through Energy Transition: Fostering Innovation and Awareness in Pakistan	2023
Funding Agency: Tara Climate Ltd	
Amount: PKR 18,900,120.00	
Status: Approved_inprocess	
To combat climate calamity by promoting energy transition In Pakistan through Knowledge creation, networking, and advocacy for enabling society.	2022
Funding Agency: Tara Climate Ltd	
Amount: PKR 11,312,840.00	
Status: Completed	
Demonstration of Technical Feasibility, Cluster Development and Commercial Viability of Modern Biomass Energy Conversion Technologies in Pakistan.	2019
Funding Agency: UNIDO	
Amount: PKR 11,200,000.00	
Status: Completed	
Methane enhancement by treatment of rice husk co-digested with cow manure	2017
Funding Agency: HEC	
Amount: PKR 500,000.00	
Status: Completed	

International Projects

Research Articles

Photo- and electrocatalytic hydrogen production from dye-degraded wastewater using samarium-doped ceria as a catalyst	2025
Hijab Haider Hira Azeem Asif Hussain Muhammad Hassan Rabia Liaquat Ali Bahadar Muhammed Ali S.A. Mustafa Anwar	
International Journal of Hydrogen Energy, Volume:111, Pages:606-622	
Impact Factor: 8.100 Quartile: 1 Citations: 4	
DOI: https://doi.org/10.1016/j.ijhydene.2025.02.188	
Synthesis of cellulose-based hydrogel electrolyte from sawdust waste for enhanced ionic conductivity in ssZIBs	2025
00000403115-Nawal Saeed Rabia Liaquat Naseem Iqbal Tahreem Assad Khan	
Materials Science and Engineering: B, Volume 313, Article Number 117951	
Impact Factor: 3.900 Quartile: 1 Citations: 1	
DOI: doi.org/10.1016/j.mseb.2024.117951	
Effect of lanthanum doped SnO2 on the performance of mixed-cation mixed-halide perovskite layer	2025
Sana Mehmood Nadia Shahzad Saad Nadeem Muhammad Salik Qureshi Abdul Sattar Hina Pervaiz Naseem Iqbal Rabia Liaquat Muhammad Imran Shahzad	
Journal of Molecular Structure, Volume 1321, Part 2, Article Number 139864	
Impact Factor: 4.000 Quartile: 2 Citations: 1	
DOI: https://doi.org/10.1016/j.molstruc.2024.139864	
Photocatalytic performance of dual-function selenium-enriched biomass-derived activated carbon as a catalyst for dye degradation and hydrogen production	2025
Hajirah Kanwal Asif Hussain Yassine Hajji Sehar Shakir Mustafa Anwar Rabia Liaquat Israf Ud Din Ali Bahadur Manel Hleili	
International Journal of Hydrogen Energy, Volume 101, Pages 1288-1303	

Impact Factor: 8.100 | **Quartile:** 1 | **Citations:** 1
DOI: <https://doi.org/10.1016/j.ijhydene.2024.12.509>

Designing an innovative 2D/2D step scheme α -Fe₂O₃/BiOBr/MoS₂ ternary integrated heterojunction with unparalleled visible-light-induced remarkable photocatalytic H₂ evolution

2025

Rabia Nawaz Muhammad Saad Ali Bahadur Shahid Iqbal Ammar Zidan Muhammad Shuaib Khan Rabia Liaquat Manzar Sohail Sajid Mahmood Mohammed T. Alotaibi

International Journal of Hydrogen Energy, Volume:99, Page:112-122

Impact Factor: 8.100 | **Quartile:** 1 | **Citations:** 13

DOI: <https://doi.org/10.1016/j.ijhydene.2024.12.201>

Facile Synthesis of Selenium Nanoparticles for Enhanced Oxygen Evolution Reaction: Insights into Electrochemical and Photoelectrochemical Catalysis

2025

Sumaya Ishtiaq Ghulam Hussain Hafiza komal Zafar Rabia Liaquat Abdullah A. Al-Kahtani Ayman Nafady Manzar Sohail Shahid Rasul

ACS Omega, Volume 10, Issue 1, Pages 520-528

Impact Factor: 3.700 | **Quartile:** 2 | **Citations:** 2

DOI: <https://doi.org/10.1021/acsomega.4c07016>

Thermokinetic investigation of Polyethylene Terephthalate (PET) plastic over biomass fly ash (BFA) catalyst using pyrolysis process through non-isothermal thermogravimetric analysis

2024

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, 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>

Photocatalytic activity of molybdenum-doped LOS- zeolite for efficient dye degradation and hydrogen production

2024

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, Volume 24, Article Number 103122

Impact Factor: 6.000 | **Quartile:** 1 | **Citations:** 5

DOI: <https://doi.org/10.1016/j.rineng.2024.103122>

Solution-Processed Zinc-Tin-Based Ternary Oxide Electron Transport Layers for Planar Perovskite Solar Cells

2024

Saad Nadeem Nadia Shahzad Sana Mehmood Muhammad Salik Qureshi Abdul Sattar Rabia Liaquat Sehar Shakir Muhammad Imran Shahzad Diego Pugliese

Physica Status Solidi A - Applications and Materials Science, Volume: 222, Issue: 4 Article Number; 2400700, Pages:07

Impact Factor: 1.900 | **Quartile:** 3

DOI: <https://doi.org/10.1002/pssa.202400700>

A novel application of Chlorella Sorokiniana for green hydrogen production via microbial electrolysis and Waste Biorefinery

2024

Rabia Liaquat Ayesha Aslam Ali Bahadar Abdul Basit

Process Safety and Environmental Protection, Volume 189, Pages 164-176

Impact Factor: 6.900 | **Quartile:** 1 | **Citations:** 1

DOI: doi.org/10.1016/j.psep.2024.06.093

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)

2024

Rabia Liaquat Asif Hussain Khoja Laraib Aamir Khan Mohammed Aman Mohammad Kanan Muhammad Saleem Ali Bahadar Waqar Ul Habib Khan

Sustainability, Volume 16, Issue 17, Article Number 7275

Impact Factor: 3.300 | **Quartile:** 2 | **Citations:** 2

DOI: <https://doi.org/10.3390/su16177275>

Synergistic transformation: Kinetic and thermodynamic evaluation of co-pyrolysis for low-rank bituminous coal and polyurethane foam waste

2024

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, Volume 184, Pages 907-921

Impact Factor: 7.8 | **Quartile:** 1 | **Citations:** 16

DOI: [10.1016/j.psep.2024.01.041](https://doi.org/10.1016/j.psep.2024.01.041)

In-depth understanding of the microscopic mechanism of biochar carbonaceous structures during thermochemical conversion: Pyrolysis, combustion and gasification

2024

Rabia Liaquat Xun Zou Ming Zhai Guannan Liu Tongyao Wang Li Guo Yu Zhang

Fuel, Volume 361, Article Number 130732

Impact Factor: 6.700 | **Quartile:** 1 | **Citations:** 17

DOI: doi.org/10.1016/j.fuel.2023.130732

A stable metal ferrite Construction, physical Characterizations, and investigation magnetic properties in thin polymer films

2024

Rabia Liaquat Sohail Nadeem Nafeesa Allah Ditta Mohsin Javed Abdul Sattar Sajid Mahmood Shahid Iqbal Ayesha Mohyuddin Ali Bahadur Matar Alshalwi Materials Science and Engineering B-Advanced Functional Solid-State Materials, Volume 300, Article Number 117064

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

DOI: doi.org/10.1016/j.mseb.2023.117064

Self-cleaning study of SiO₂ modified TiO₂ nanofibrous thin films prepared via electrospinning for application in solar cells

2024

Izzah Batool Nadia Shahzad Roha Shehzad Aamir Naseem Satti Rabia Liaquat Adeel Waqas Muhammad Imran Shahzad Solar Energy, Volume 268, Article Number 112271

Impact Factor: 6.700 | **Quartile:** 2 | **Citations:** 20

DOI: 10.1016/j.solener.2023.112271

Effect of surfactants on the stability and thermophysical properties of Al₂O₃+TiO₂ hybrid nanofluids

2023

Abdul Rehman Sana Yaqub Majid Ali Hassan Nazir Nadia Shahzad Sehar Shakir Rabia Liaquat Zafar Said Journal of Molecular Liquids, Volume 391, Part B, Article Number 123350

Impact Factor: 6.0 | **Quartile:** 1 | **Citations:** 31

DOI: https://doi.org/10.1016/j.molliq.2023.123350

Recent advances in biological hydrogen production from algal biomass: A comprehensive review

2023

Ayesha Aslam Ali Bahadar Rabia Liaquat Muhammad Muddasar Fuel, Volume 350, Article Number 128816

Impact Factor: 6.7 | **Quartile:** 1 | **Citations:** 17

DOI: doi.org/10.1016/j.fuel.2023.128816

Model-based optimal and robust control of renewable hydrogen gas production in a fed-batch microbial electrolysis cell

2023

Rabia Liaquat Muhammad Zia Ur Rahman Mohsin Rizwan Victor Leiva Muhammad Muddasar International Journal of Hydrogen Energy, Volume 48, Issue 79, Pages 30685-30701

Impact Factor: 7.2 | **Quartile:** 1 | **Citations:** 10

DOI: doi.org/10.1016/j.ijhydene.2023.04.184

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

Synthesis of novel biodegradable starch-PMA and Ag@starch-PMA polymer composite for boosting charge separation ability and superior photocatalytic performance

2023

Muhammad Amjad Ayesha Mohyuddin Mohsin Javed Shahid Iqbal Rabia Liaquat Mohammed T. Alotaibi Wajad Ulfat Randa A. Althobiti Eman Alzahrani Abd-ElAzim Farouk Murefah Mana Al-Anazy Eslam B. Elkaeed Journal of Materials Science: Materials in Electronics, Volume 34, Issue 21, Article Number 1577

Impact Factor: 2.8 | **Quartile:** 2 | **Citations:** 6

DOI: 10.1007/s10854-023-10997-4

Thermal steam methane reforming over bimetal-loaded hemp-derived activated carbon-based catalyst for hydrogen production

2022

Rashid Minhas Asif Hussain Khoja Nida Naeem Mustafa Anwar Sehar Shakir Rabia Liaquat Israf Ud Din Research on Chemical Intermediates, Pages 1-23

Impact Factor: 3.134 | **Quartile:** 3 | **Citations:** 12

DOI: https://doi.org/10.1007/s11164-022-04924-1

- A Robust Controller of a Reactor Electromicrobial System Based on a Structured Fractional Transformation for Renewable Energy** 2022
Rabia Liaquat Muhammad Zia Ur Rahman Mohsin Rizwan Carlos Martin-Barreiro Víctor Leiva
Fractal and Fractional, Volume 6, Issue 12, Article Number 736
Impact Factor: 5.4 | **Quartile:** 1 | **Citations:** 7
DOI: doi.org/10.3390/fractalfract6120736
- Investigation of combustion performance of tannery sewage sludge using thermokinetic analysis and prediction by artificial neural network** 2022
Arslan Khan Imtiaz Ali Wasif Farooq Salman Raza Naqvi Muhammad Taqi Mehran Ameen Shahid Rabia Liaquat Muhammad Waqas Anjum Muhammad Naqvi
Case Studies in Thermal Engineering, Volume 40, Article Number 102586
Impact Factor: 6.268 | **Quartile:** 1 | **Citations:** 37
DOI: https://doi.org/10.1016/j.csite.2022.102586
- Recent progress in microalgae-derived biochar for the treatment of textile industry wastewater** 2022
Abdul Ahad Khan Jawad Gul Salman Raza Naqvi Imtiaz Ali Wasif Farooq Rabia Liaquat Hamad AlMohamadi Libor Štěpanec Dagmar Juchelková
Chemosphere, Volume 306, Article Number 135565
Impact Factor: 8.943 | **Quartile:** 1 | **Citations:** 125
DOI: https://doi.org/10.1016/j.chemosphere.2022.135565
- Potential of plant growth promoting rhizobacteria to mitigate chromium contamination** 2022
Zain Mushtaq a Mehwish Liaquat Anum Nazir Rabia Liaquat Hira Iftikhar Waheed Anwar Nizwa Itrat
Environmental Technology and Innovation, Volume 28, Article Number 102826
Impact Factor: 7.1 | **Quartile:** 1 | **Citations:** 30
DOI: https://doi.org/10.1016/j.eti.2022.102826
- Techno-economic and GHG mitigation analyses based on regional and seasonal variations of non-concentrating solar thermal collectors in textile sector of Pakistan** 2022
Rabia Liaquat Elia Nauroz Ali Majid Ali Adeel Waqas Nadia Shahzad
Renewable Energy Focus, Volume:42, Page:165-177
Impact Factor: 4.8 (ESCI) | **Citations:** 10
DOI: 10.1016/j.ref.2022.06.005
- Carbonyl functional group assisted crystallization of mixed tin–lead narrow bandgap perovskite absorber in ambient conditions** 2022
Abdul Sattar Nadia Shahzad Muhammad Ali Tariq Tanzeela Yousaf Muhammad Salik Qureshi Muhammad Imran Shahzad Rabia Liaquat Majid Ali
Applied Physics Letters, Volume 121, Issue 7, Article Number 073901
Impact Factor: 3.971 | **Quartile:** 2
DOI: https://doi.org/10.1063/5.0099988
- Investigating the characterisation, kinetic mechanism, and thermodynamic behaviour of coal-biomass blends in co-pyrolysis process** 2022
Hamad Gohar Asif Hussain Khoja Abeera Ayaz Ansari Salman Raza Naqvi Rabia Liaquat Muhammad Hassan Khalil Hasni Umair Yaqoob Qazi Imtiaz Ali
Process Safety and Environmental Protection, Volume 163, Pages 645-658
Impact Factor: 6.158 | **Quartile:** 1 | **Citations:** 52
DOI: 10.1016/j.psep.2022.05.063
- Thermokinetics synergistic effects on co-pyrolysis of coal and rice husk blends for bioenergy production** 2022
Maham Tauseef Abeera Ayaz Ansari Asif Hussain Khoja Salman Raza Naqvi Rabia Liaquat William Nimmo Syed Sheraz Daood
Fuel, Volume 318, Article Number 123685
Impact Factor: 6.609 | **Quartile:** 1 | **Citations:** 47
DOI: https://doi.org/10.1016/j.fuel.2022.123685
- Praseodymium-doped Sr₂TiFeO_{6-δ} double perovskite as a bi-functional electrocatalyst for hydrogen production through water splitting** 2022
Qassam Sarmad Uneeb Masood Khan Mutawara Mahmood Baig Muhammad Hassan Faaz Ahmed Butt Asif Hussain Rabia Liaquat Zuhair Subhani Khan Mustafa Anwar Muhammed Ali S.A.
Journal of Environmental Chemical Engineering, Volume 10, Issue 3, Article Number 107609
Impact Factor: 5.909 | **Quartile:** 1 | **Citations:** 38
DOI: 10.1016/j.jece.2022.107609
- Mixotrophic cultivation of microalgae for carotenoid production** 2022
Fakhra Liaquat Mahammed Ilyas Khazi Ali Bahadar Lu He Ayesha Aslam Rabia Liaquat Spiros N. Agathos Jian Li

Reviews in Aquaculture, Pages 1-27

Impact Factor: 10.618 | **Quartile:** 1 | **Citations:** 37

DOI: 10.1111/raq.12700

Real-time artificial intelligence based health monitoring, diagnosing and environmental control system for COVID-19 patients

2022

Muhammad Zia Ur Rahman Abeer Abdulaziz AlSanad Ali Hassan Raza Muhammad Azeem Akbar Rabia Liaquat Muhammad Tanveer Riaz Lulwah AlSuwaidan Abdulaziz Al-Alshaikh Hatoun S Alsagri

Mathematical Biosciences and Engineering, Volume 19, Issue 8, Pages 7586-7605

Impact Factor: 2.194 | **Quartile:** 3 | **Citations:** 12

DOI: DOI: 10.3934/mbe.2022357

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

Synthesis of bimetallic Co-Ni/ZnO nanoprisms (ZnO-NPr) for hydrogen-rich syngas production via partial oxidation of methane

2021

Ahad Hussain Javed M. Abdullah Khan Nadia Shahzad Faaz Ahmed Butt Nida Naeem Rabia Liaquat Asif Hussain Khoja

Journal of Environmental Chemical Engineering, Volume 9, Issue 6, Article Number 106887

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

DOI: https://doi.org/10.1016/j.jece.2021.106887

Partial oxidation of methane over CeO₂ loaded hydrotalcite (MgNiAl) catalyst for the production of hydrogen rich syngas (H₂, CO)

2021

Anees ul Hasnain Faaz Ahmed Butt Faisal Saleem Muhammad Taqi Mehran Rabia Liaquat Majid Ali Zaki IsmailZaki Asif Hussain Khoja Mariam Ayesha

International Journal of Hydrogen Energy, Volume 46, Issue 74, Pages 36663-36677

Impact Factor: 5.816 | **Quartile:** 2 | **Citations:** 19

DOI: 10.1016/j.ijhydene.2021.08.169

Methane decomposition for hydrogen production over biomass fly ash-based CeO₂ nanowires promoted cobalt catalyst

2021

Jehangeer Raza Asif Hussain Khoja Salman Raza Naqvi Muhammad Taqi Mehran Sehar Shakir Rabia Liaquat Muhammad Tahir Ghulam Ali

Journal of Environmental Chemical Engineering, Volume 9, Issue 5, Article Number 105816

Impact Factor: 7.968 | **Quartile:** 1 | **Citations:** 39

DOI: https://doi.org/10.1016/j.jece.2021.105816

Designing of homemade soiling station to explore soiling loss effects on PV modules

2021

Naveed Hussain Nadia Shahzad Tanzeela Yousaf Adeel Waqas Ahad Hussain Javed Sheheryar Khan Majid Ali Rabia Liaquat

Solar Energy, Vol. 225, PP. 624–633

Impact Factor: 7.188 | **Quartile:** 2 | **Citations:** 12

DOI: https://doi.org/10.1016/j.solener.2021.07.036

Evaluating the use of unassimilated bio-anode with different exposed surface areas for bioenergy production using solar-powered microbial electrolysis cell

2021

Muhammad Muddasar Rabia Liaquat Ali Abdullah Asif Hussain Nadia Shahzad Naseem iqbal Muhammad Ishtiaq Ali Azhar Uddin Sami Ullah

International Journal of Energy Research, Page 1-13

Impact Factor: 4.672 | **Quartile:** 1 | **Citations:** 15

DOI: 10.1002/er.7091

A comparison of energy policies of Pakistan and their impact on bioenergy development

2021

Zulfiqar Ali Rabia Liaquat Asif Hussain Khoja Umair Safdar

Sustainable Energy Technologies and Assessments, Volume 46, Article Number 101246

Impact Factor: 7.632 | **Quartile:** 2 | **Citations:** 13

DOI: https://doi.org/10.1016/j.seta.2021.101246

Techno-economic modeling of biomass gasification plants for small industries in Pakistan <i>Muhammad Ali Qamar Adeel Javed Rabia Liaquat Muhammad Hassan</i> <i>Biomass Conversion and Biorefinery</i> , Pages 1-11 Impact Factor: 4.050 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1007/s13399-021-01767-5	2021
Enhanced Methane Production from Anaerobic Co-digestion of wheat straw rice straw and sugarcane bagasse: A Kinetic Analysis <i>Sadia Meraj Rabia Liaquat Salman Raza Naqvi Zeshan Sheikh Atoofa Zainab Asif Hussain Khoja Dagmar Juchelkova Abdulaziz Atabani</i> <i>Applied Sciences</i> , Volume 11(13), Article Number 6069 Impact Factor: 2.838 Quartile: 2 Citations: 30 DOI: https://doi.org/10.3390/app11136069	2021
Algae as an attractive source for cosmetics to counter environmental stress <i>Ayesha Aslam Ali Bahadur Rabia Liaquat Adeel Waqas Muhammad Saleem Mohammed Zwawi</i> <i>Science of the Total Environment</i> , Volume 772, Article Number 144905 Impact Factor: 10.754 Quartile: 1 Citations: 72 DOI: https://doi.org/10.1016/j.scitotenv.2020.144905	2021
Performance Analysis of TiO₂-Modified Co/MgAl₂O₄ Catalyst for Dry Reforming of Methane in a Fixed Bed Reactor for Syngas (H₂, CO) Production <i>Arslan Mazhar Asif Hussain Khoja Abul Kalam Azad Faisal Mushtaq Salman Raza Naqvi Sehar Shakir Muhammad Hassan Rabia Liaquat Mustafa Anwar</i> <i>Energies</i> , Volume 14(11), Article Number 3347 Impact Factor: 3.004 Quartile: 3 Citations: 24 DOI: https://doi.org/10.3390/en14113347	2021
Photo-electrochemical water splitting through graphene-based ZnS composites for H₂ production <i>Ahmed Hassan Rabia Liaquat Naseem Iqbal Ghulam Ali Xue Fan Zelong Hu Mustafa Anwar Awais Ahmad</i> <i>Journal of Electroanalytical chemistry</i> , Volume 889, Article Number 115223 Impact Factor: 4.598 Quartile: 1 Citations: 31 DOI: https://doi.org/10.1016/j.jelechem.2021.115223	2021
Synthesis and characterization of biomass-derived surface-modified activated carbon for enhance CO₂ adsorption <i>Azeem Sarwar Majid Ali Asif Hussain Khoja Azra Nawar Adeel Waqas Rabia Liaquat Salman Raza Naqvi Muhammad Asjid</i> <i>Journal of CO₂ Utilization</i> , Volume 46, Article Number 101476 Impact Factor: 7.132 Quartile: 1 Citations: 153 DOI: https://doi.org/10.1016/j.jcou.2021.101476	2021
Biomass ash characterization, fusion analysis and its application in catalytic decomposition of methane <i>Muhammad Assad Munawar Asif Hussain Khoja Muhammad Hassan Rabia Liaquat Salman Raza Naqvi Muhammad Taqi Mehran Ali Abdullallah Faisal Saleem</i> <i>Fuel</i> , Volume 285, Article Number 119107 Impact Factor: 6.609 Quartile: 1 Citations: 68 DOI: 10.1016/j.fuel.2020.119107	2021
Investigating the potential of locally sourced wastewater as a feedstock of microbial desalination cell (MDC) for bioenergy production <i>Rabia Liaquat Tariq Mehmood Asif Hussain Khoja Naseem Iqbal Haider ejaz Sadia Mumtaz</i> <i>Bioprocess and Biosystems Engineering</i> , Pages 1-12 Impact Factor: 3.210 Quartile: 2 Citations: 12 DOI: 10.1007/s00449-020-02433-2	2020
Effect of alkaline and alkaline-photocatalytic pretreatment on characteristics and biogas production of rice straw <i>Zeshan Rabia Liaquat Mariam Sabeeh Ayesha Maryam</i> <i>Bioresource Technology</i> , Volume 309, Article Number 123449 Impact Factor: 9.642 Quartile: 1 Citations: 59 DOI: 10.1016/j.biortech.2020.123449	2020
Enhanced biogas production at mesophilic and thermophilic temperatures from a slaughterhouse waste with zeolite as ammonia adsorbent <i>Bushra Fatima Rabia Liaquat Uzma Farooq Asif Jamal Ishtiaq Ali F-J Liu H. He M. Urynowicz Z. Huang H. Guo</i> <i>International Journal of Environmental Science and Technology</i> , Pages 1-10	2020

Impact Factor: 2.860 Quartile: 3 Citations: 11 DOI: https://doi.org/10.1007/s13762-020-02822-w	
Copper and calcium based metal organic framework catalyst for biodiesel production from waste cooking oil: process optimization study <i>Unza Jamil Asif Hussain Khoja Rabia Liaquat Salman Raza Naqvi Wan Nor Nadyaini Wan Omar Nor Aishah Saidina Amin</i> <i>Energy Conversion and Management</i> , Volume 215, Article Number 112934 Impact Factor: 9.709 Quartile: 1 Citations: 152 DOI: https://doi.org/10.1016/j.enconman.2020.112934	2020
Techno-spatial assessment of waste cooking oil for biodiesel production in Pakistan <i>Muhammad Ali Qamar Rabia Liaquat Unza Jamil1 Rida Mansoor Sidra Azam</i> <i>SN Applied Sciences</i> , Volume 2, Article Number 901 Impact Factor: - Citations: 7 DOI: https://doi.org/10.1007/s42452-020-2716-1	2020
Catalytic Efficiency of Acidithiobacillus ferrooxidans for Bioleaching Copper from Chalcocite Containing Sulfide Ore from Reko Diq Deposits <i>Muhammad Ali Furqan Uzma Farooq Rabia Liaquat Huda Ahmed Alghamdi Bashir Ahmad Zahid Qureshi Asif Jamal Isfahan Tauseef Syed Kashif Haleem</i> <i>Inayat ullah Muhammad Ishtiaq Ali</i> <i>Polish Journal of Environmental Studies</i> , Volume 29, No. 2, Pages 1593-1600 Impact Factor: 1.699 Quartile: 4 Citations: 3 DOI: DOI: 10.15244/pjoes/96257	2020
Major barriers to the diffusion of bio-digestion technology in Pakistan An innovation system perspective <i>Atoofa Zainab Rabia Liaquat Saadia Meraj</i> <i>International Journal of Energy Sector Management</i> , Pages 1-14 Impact Factor: 0 Citations: 1 DOI: 10.1108/IJESM-07-2019-0001	2019
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