Mohammad Rehan

List of Publications by Year
in descending order

97 papers	6,379 citations	70961 41 h-index	69108 77 g-index
102 all docs	102 docs citations	102 times ranked	5993 citing authors

#	Article	IF	Citations
1	Catalytic pyrolysis of plastic waste: A review. Chemical Engineering Research and Design, 2016, 102, 822-838.	2.7	599
2	Waste biorefineries: Enabling circular economies in developing countries. Bioresource Technology, 2017, 241, 1101-1117.	4.8	369
3	Waste to energy potential: A case study of Saudi Arabia. Renewable and Sustainable Energy Reviews, 2016, 61, 328-340.	8.2	341
4	Effect of plastic waste types on pyrolysis liquid oil. International Biodeterioration and Biodegradation, 2017, 119, 239-252.	1.9	303
5	Catalytic Pyrolysis of Plastic Waste: Moving Toward Pyrolysis Based Biorefineries. Frontiers in Energy Research, 2019, 7, .	1.2	242
6	A magnetically separable SO4/Fe-Al-TiO2 solid acid catalyst for biodiesel production from waste cooking oil. Applied Catalysis B: Environmental, 2018, 234, 268-278.	10.8	222
7	Plastic waste to liquid oil through catalytic pyrolysis using natural and synthetic zeolite catalysts. Waste Management, 2017, 69, 66-78.	3.7	216
8	Development of biochar as fuel and catalyst in energy recovery technologies. Journal of Cleaner Production, 2018, 188, 477-488.	4.6	178
9	Developing waste biorefinery in Makkah: A way forward to convert urban waste into renewable energy. Applied Energy, 2017, 186, 189-196.	5.1	175
10	Biodiesel production from used cooking oil using a novel surface functionalised TiO2 nano-catalyst. Applied Catalysis B: Environmental, 2017, 207, 297-310.	10.8	175
11	Analysis of Physiochemical Parameters to Evaluate the Drinking Water Quality in the State of Perak, Malaysia. Journal of Chemistry, 2015, 2015, 1-10.	0.9	166
12	CO2 capture and storage: A way forward for sustainable environment. Journal of Environmental Management, 2018, 226, 131-144.	3.8	158
13	Influence of temperature and reaction time on the conversion of polystyrene waste to pyrolysis liquid oil. Waste Management, 2016, 58, 250-259.	3.7	148
14	Gasification of municipal solid waste blends with biomass for energy production and resources recovery: Current status, hybrid technologies and innovative prospects. Renewable and Sustainable Energy Reviews, 2021, 136, 110375.	8.2	134
15	Microbial electrolysis cells for hydrogen production and urban wastewater treatment: A case study of Saudi Arabia. Applied Energy, 2017, 185, 410-420.	5.1	130
16	Effect of zeolite catalysts on pyrolysis liquid oil. International Biodeterioration and Biodegradation, 2017, 119, 162-175.	1.9	108
17	Brominated and organophosphate flame retardants in indoor dust of Jeddah, Kingdom of Saudi Arabia: Implications for human exposure. Science of the Total Environment, 2016, 569-570, 269-277.	3.9	107
18	Advances in nano-catalysts based biodiesel production from non-food feedstocks. Journal of Environmental Management, 2019, 249, 109316.	3.8	106

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19	Waste-to-energy and recycling value for developing integrated solid waste management plan in Lahore. Energy Sources, Part B: Economics, Planning and Policy, 2016, 11, 569-579.	1.8	101
20	CO2 utilization: Turning greenhouse gas into fuels and valuable products. Journal of Environmental Management, 2020, 260, 110059.	3.8	101
21	Waste to biodiesel: A preliminary assessment for Saudi Arabia. Bioresource Technology, 2018, 250, 17-25.	4.8	95
22	Untapped conversion of plastic waste char into carbon-metal LDOs for the adsorption of Congo red. Journal of Colloid and Interface Science, 2018, 511, 402-410.	5.0	92
23	The potential of Saudi Arabian natural zeolites in energy recovery technologies. Energy, 2016, 108, 162-171.	4.5	90
24	Towards nanotechnology-based biofuel industry. Biofuel Research Journal, 2018, 5, 798-799.	7.2	86
25	Exergetic, exergoeconomic, and exergoenvironmental aspects of an industrial-scale molasses-based ethanol production plant. Energy Conversion and Management, 2021, 227, 113637.	4.4	78
26	Sustainable production of bioenergy from novel non-edible seed oil (Prunus cerasoides) using bimetallic impregnated montmorillonite clay catalyst. Renewable and Sustainable Energy Reviews, 2019, 109, 321-332.	8.2	69
27	Analysing PM2.5 and its Association with PM10 and Meteorology in the Arid Climate of Makkah, Saudi Arabia. Aerosol and Air Quality Research, 2017, 17, 453-464.	0.9	68
28	Emerging challenges of air pollution and particulate matter in China, India, and Pakistan and mitigating solutions. Journal of Hazardous Materials, 2021, 416, 125851.	6.5	64
29	Effect of advanced catalysts on tire waste pyrolysis oil. Chemical Engineering Research and Design, 2018, 116, 542-552.	2.7	63
30	Hydrothermal synthesis of titanium dioxide nanoparticles studied employing in situ energy dispersive X-ray diffraction. CrystEngComm, 2011, 13, 3725.	1.3	59
31	Biodiesel production from novel non-edible caper (Capparis spinosa L.) seeds oil employing Cuâ€“Ni doped ZrO2 catalyst. Renewable and Sustainable Energy Reviews, 2021, 138, 110558.	8.2	57
32	Biodiesel production potential from fat fraction of municipal waste in Makkah. PLoS ONE, 2017, 12, e0171297.	1.1	57
33	Recent updates on the production and upgrading of bio-crude oil from microalgae. Bioresource Technology Reports, 2019, 7, 100216.	1.5	54
34	Untapped renewable energy potential of crop residues in Pakistan: Challenges and future directions. Journal of Environmental Management, 2020, 256, 109924.	3.8	54
35	Evaluation of natural gas hydrates as a future methane source. Petroleum Science and Technology, 2016, 34, 1204-1210.	0.7	52
36	Determination of wax content in crude oil. Petroleum Science and Technology, 2016, 34, 799-804.	0.7	51

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37	Pyrolytic liquid fuel: A source of renewable electricity generation in Makkah. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 2598-2603.	1.2	49
38	Production of high quality biodiesel from novel non-edible Raphnus raphanistrum L. seed oil using copper modified montmorillonite clay catalyst. Environmental Research, 2021, 193, 110398.	3.7	47
39	Human lead (Pb) exposure via dust from different land use settings of Pakistan: A case study from two urban mountainous cities. Chemosphere, 2016, 155, 259-265.	4.2	46
40	Towards the development of a biobased economy in Europe and India. Critical Reviews in Biotechnology, 2019, 39, 779-799.	5.1	46
41	Assessment of personal protective equipment use and occupational exposures in small industries in Jeddah: Health implications for workers. Saudi Journal of Biological Sciences, 2019, 26, 653-659.	1.8	45
42	Key Issues in Microalgae Biofuels: A Short Review. Energy Procedia, 2017, 142, 898-903.	1.8	40
43	Biofuel supply chain management in the circular economy transition: An inclusive knowledge map of the field. Chemosphere, 2022, 296, 133968.	4.2	40
44	The Energy and Value-Added Products from Pyrolysis of Waste Plastics. Environmental Footprints and Eco-design of Products and Processes, 2016, , 333-355.	0.7	35
45	Dual production of hydrogen and biochar from industrial effluent containing phenolic compounds. Fuel, 2021, 301, 121087.	3.4	35
46	Development of novel MnO2 coated carbon felt cathode for microbial electroreduction of CO2 to biofuels. Journal of Environmental Management, 2019, 249, 109376.	3.8	34
47	A Case Study of Sustainable Construction Waste Management in Saudi Arabia. Waste and Biomass Valorization, 2018, 9, 2541-2555.	1.8	33
48	New trends in improving gasoline quality and octane through naphtha isomerization: a short review. Applied Petrochemical Research, 2018, 8, 131-139.	1.3	33
49	Conductive Polymers and Their Nanocomposites as Adsorbents in Environmental Applications. Polymers, 2021, 13, 3810.	2.0	33
50	Investigation of the Effect of Hydroxypropyl Methylcellulose on the Phase Transformation and Release Profiles of Carbamazepine-Nicotinamide Cocrystal. Pharmaceutical Research, 2014, 31, 2312-2325.	1.7	32
51	Effect of co-substrates on biogas production and anaerobic decomposition of pentachlorophenol. Bioresource Technology, 2017, 238, 492-501.	4.8	32
52	Energy generation through bioelectrochemical degradation of pentachlorophenol in microbial fuel cell. RSC Advances, 2018, 8, 20726-20736.	1.7	32
53	Waste-to-Hydrogen Energy in Saudi Arabia: Challenges and Perspectives. , 2017, , 237-252.		29
54	Hydrothermal Synthesis of Zinc Carbonate Hydroxide Nanoparticles. Procedia Engineering, 2015, 102, 356-361.	1.2	24

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55	Waste to Energy: A Case Study of Madinah City. Energy Procedia, 2017, 142, 688-693.	1.8	24
56	Editorial: Waste Biorefineries: Future Energy, Green Products and Waste Treatment. Frontiers in Energy Research, 2019, 7, .	1.2	24
57	Novel Poly Deep Eutectic Solvents Based Supported Liquid Membranes for CO2 Capture. Frontiers in Energy Research, 2020, 8, .	1.2	23
58	Development of biomass-derived biochar for agronomic and environmental remediation applications. Biomass Conversion and Biorefinery, 2021, 11, 339-361.	2.9	23
59	Synthesis of Uniform Mesoporous Zeolite ZSM-5 Catalyst for Friedel-Crafts Acylation. ChemEngineering, 2019, 3, 35.	1.0	22
60	Energy and resource recovery through integrated sustainable waste management. Applied Energy, 2020, 261, 114372.	5.1	20
61	Potential of electronic waste recycling in Gulf Cooperation Council states: an environmental and economic analysis. Environmental Science and Pollution Research, 2019, 26, 35610-35619.	2.7	18
62	Sustainable microalgal biomass valorization to bioenergy: Key challenges and future perspectives. Chemosphere, 2022, 296, 133812.	4.2	18
63	Synthesis of Zinc Carbonate Hydroxide Nanoparticles Using Microemulsion Process. Procedia Engineering, 2015, 102, 346-355.	1.2	16
64	Potential of Saudi natural clay as an effective adsorbent in heavy metals removal from wastewater. , 0, 158, 140-151.		15
65	Fruit Waste to Energy through Open Fermentation. Energy Procedia, 2017, 142, 904-909.	1.8	13
66	Tribological evaluation of date seed oil and castor oil blends with halloysite nanotube additives as environment friendly bio-lubricants. Biomass Conversion and Biorefinery, 0, , 1.	2.9	13
67	Microorganism-mediated algal biomass processing for clean products manufacturing: Current status, challenges and future outlook. Fuel, 2022, 311, 122612.	3.4	13
68	Conversion of Food Waste to Fermentation Products. , 2019, , 501-509.		12
69	New developments in sustainable waste-to-energy systems. Renewable and Sustainable Energy Reviews, 2021, 151, 111581.	8.2	12
70	Recent Trends in Gasification Based Waste-to-Energy. , 0, , .		11
71	Occupational Musculoskeletal Disorders among Taxi Industry Workers in Jeddah, Saudi Arabia. Biosciences, Biotechnology Research Asia, 2017, 14, 593-606.	0.2	11
72	Gasification Integrated with Small Chemical Pulp Mills for Fuel and Energy Production. Energy Procedia, 2017, 142, 977-983.	1.8	10

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73	Workplace Safety and Health Conditions and Facilities in Small Industries in Jeddah, Saudi Arabia. Journal of Safety Studies, 2017, 3, 37.	0.2	10
74	Polygeneration system integrated with small non-wood pulp mills for substitute natural gas production. Applied Energy, 2018, 224, 636-646.	5.1	10
75	Waste Biomass Utilization for Value-added Green Products. Current Organic Chemistry, 2019, 23, 1497-1498.	0.9	9
76	Energy, Economic and Environmental Savings by Waste Recycling: A Case Study of Madinah City. Energy Procedia, 2017, 142, 910-915.	1.8	8
77	Environmental and Economic Benefits of Recovered Paper: A Case Study of Saudi Arabia. Energy Procedia, 2017, 142, 3753-3758.	1.8	8
78	Black Hole-Inspired Optimal Design of Biomethane Liquefaction Process for Small-Scale Applications. Frontiers in Energy Research, 2021, 9, .	1.2	8
79	Assessment of Bioenergy Production from Solid Waste. Energy Procedia, 2017, 142, 655-660.	1.8	7
80	Wastewater Biorefinery Based on the Microbial Electrolysis Cell: Opportunities and Challenges. , 2018, , 347-374.		6
81	Determination of Kinetic and Thermodynamic Parameters of Pyrolysis of Coal and Sugarcane Bagasse Blends Pretreated by Ionic Liquid: A Step towards Optimization of Energy Systems. Energies, 2021, 14, 2544.	1.6	6
82	Long-term desalinated water demand and investment requirements: a case study of Riyadh. Journal of Water Reuse and Desalination, 2018, 8, 432-446.	1.2	5
83	Assessment of Occupational Health and Safety in Motor Vehicle Repair Workshops in Jeddah. Biosciences, Biotechnology Research Asia, 2017, 14, 901-913.	0.2	5
84	An in situ EDXRD kinetic and mechanistic study of the hydrothermal crystallization of TiO2 nanoparticles from nitric acid peptized solâ€“gel. CrystEngComm, 2015, 17, 2013-2020.	1.3	4
85	Deciphering the effects of temperature on bio-methane generation through anaerobic digestion. Environmental Science and Pollution Research, 2020, 27, 29766-29777.	2.7	4
86	Evaluation of date seed (Phoenix dactylifera L.) oil as crop base stock for environment friendly industrial lubricants. Biomass Conversion and Biorefinery, 2021, 11, 559-568.	2.9	4
87	Sustainability Evaluation of Polyhydroxyalkanoate Production from Slaughterhouse Residues Utilising Emergy Accounting. Polymers, 2022, 14, 118.	2.0	4
88	Biomass conservation using an optimised drying process for energy Sorghum Bagasse. Renewable Energy Focus, 2017, 19-20, 1-7.	2.2	3
89	Energy Savings in CO 2 Capture System through Intercooling Mechanism. Energy Procedia, 2017, 142, 3683-3688.	1.8	3
90	Pyrolysis of Compact Disc (CD) Case Wastes to Produce Liquid Fuel as a Renewable Source of Electricity Generation. Energy Procedia, 2018, 145, 484-489.	1.8	2

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91	Determining key issues in life-cycle assessment of waste biorefineries. , 2020, , 515-555.		2
92	Process Systems Engineering Evaluation of Prospective Working Fluids for Organic Rankine Cycles Facilitated by Biogas Combustion Flue Gases. Frontiers in Energy Research, 2021, 9, .	1.2	2
93	Analysis and Modeling of Air Pollution in Extreme Meteorological Conditions: A Case Study of Jeddah, the Kingdom of Saudi Arabia. Toxics, 2022, 10, 376.	1.6	2
94	Mechanism and role of seeded native grasses to immobilize nitrogen on harvested blanket peat forests for protection of water courses. Environmental Science and Pollution Research, 2021, 28, 24756-24770.	2.7	0
95	Editorial: Nanocatalysts in Biofuel Process Optimization. Frontiers in Energy Research, 2021, 9, .	1.2	0
96	Microbial and Biotechnological Advancement in Biogas Production. , 2021, , 31-64.		0
97	Analysis of the Reaction Layer Formed during Sapphireâ€“Sapphire Brazing Using a Agâ€“Cuâ€“Ti Filler Metal for Gas-Pressure Sensors. ACS Applied Electronic Materials, 2022, 4, 2405-2412.	2.0	0