List of Publications by Year in descending order

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110 papers	4,287 citations	94433 37 h-index	133252 59 g-index
113	113	113	3433
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	A state-of-the-art review on spent coffee ground (SCG) pyrolysis for future biorefinery. Chemosphere, 2022, 286, 131730.	8.2	39
2	A highly efficient A-site deficient perovskite interlaced within two dimensional MXene nanosheets as an active electrocatalyst for hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 37476-37489.	7.1	20
3	Thermodynamic and economic assessment of cyano functionalized anion based ionic liquid for CO2 removal from natural gas integrated with, single mixed refrigerant liquefaction process for clean energy. Energy, 2022, 239, 122425.	8.8	8
4	Monitoring lipids profile, CO2 fixation, and water recyclability for the economic viability of microalgae Chlorella vulgaris cultivation at different initial nitrogen. Journal of Biotechnology, 2022, 345, 30-39.	3.8	20
5	An integrated future approach for the energy security of Pakistan: Replacement of fossil fuels with syngas for better environment and socio-economic development. Renewable and Sustainable Energy Reviews, 2022, 156, 111978.	16.4	68
6	Simultaneous fault diagnosis based on multiple kernel support vector machine in nonlinear dynamic distillation column. Energy Science and Engineering, 2022, 10, 814-839.	4.0	6
7	Investigation of Biomass Integrated Air Gasification Regenerative Gas Turbine Power Plants. Energies, 2022, 15, 741.	3.1	7
8	Valorization of Wet Oily Petrochemical Sludge via Slow Pyrolysis: Thermo-Kinetics Assessment and Artificial Neural Network Modeling. Frontiers in Energy Research, 2022, 9, .	2.3	10
9	<scp>HF</scp> free greener <scp>Cl</scp> â€ŧerminated <scp>MXene</scp> as novel electrocatalyst for overall water splitting in alkaline media. International Journal of Energy Research, 2022, 46, 10942-10954.	4.5	23
10	Sorption enhanced steam reforming of methane over waste-derived CaO promoted MgNiAl hydrotalcite catalyst for sustainable H2 production. Journal of Environmental Chemical Engineering, 2022, 10, 107651.	6.7	15
11	Thermokinetics synergistic effects on co-pyrolysis of coal and rice husk blends for bioenergy production. Fuel, 2022, 318, 123685.	6.4	32
12	Decomposition of benzene as a biomass gasification tar in CH4 carrier gas using non-thermal plasma: Parametric and kinetic study. Journal of the Energy Institute, 2022, 102, 190-195.	5.3	14
13	Air gasification of high-ash sewage sludge for hydrogen production: Experimental, sensitivity and predictive analysis. International Journal of Hydrogen Energy, 2022, 47, 37374-37384.	7.1	14
14	An integrated framework of data-driven, metaheuristic, and mechanistic modeling approach for biomass pyrolysis. Chemical Engineering Research and Design, 2022, 162, 337-345.	5.6	20
15	One-Step Biodiesel Production from Waste Cooking Oil Using CaO Promoted Activated Carbon Catalyst from Prunus persica Seeds. Catalysts, 2022, 12, 592.	3.5	8
16	Investigating the characterisation, kinetic mechanism, and thermodynamic behaviour of coal-biomass blends in co-pyrolysis process. Chemical Engineering Research and Design, 2022, 163, 645-658.	5.6	32
17	Hydrogen production optimization from sewage sludge supercritical gasification process using machine learning methods integrated with genetic algorithm. Chemical Engineering Research and Design, 2022, 184, 614-626.	5.6	29
18	Recent progress in microalgae-derived biochar for the treatment of textile industry wastewater. Chemosphere, 2022, 306, 135565.	8.2	62

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19	Agro-industrial residue gasification feasibility in captive power plants: A South-Asian case study. Energy, 2021, 214, 118952.	8.8	22
20	Biomass ash characterization, fusion analysis and its application in catalytic decomposition of methane. Fuel, 2021, 285, 119107.	6.4	44
21	Hydrogeochemical and health risk evaluation of arsenic in shallow and deep aquifers along the different floodplains of Punjab, Pakistan. Journal of Hazardous Materials, 2021, 402, 124074.	12.4	46
22	3D hierarchical heterostructured LSTN@NiMn-layered double hydroxide as a bifunctional water splitting electrocatalyst for hydrogen production. Fuel, 2021, 285, 119174.	6.4	55
23	Current challenges and innovative developments in pretreatment of lignocellulosic residues for biofuel production: A review. Fuel, 2021, 287, 119670.	6.4	114
24	Advance strategies for tar elimination from biomass gasification techniques. , 2021, , 61-88.		0
25	Catalytic pyrolysis of biomass using shape-selective zeolites for bio-oil enhancement. , 2021, , 39-60.		2
26	Kinetic and thermodynamic analyses of dried oily sludge pyrolysis. Journal of the Energy Institute, 2021, 95, 30-40.	5.3	59
27	Recent developments in catalyst synthesis using DBD plasma for reforming applications. International Journal of Hydrogen Energy, 2021, 46, 15367-15388.	7.1	17
28	Torrefaction Thermogravimetric Analysis and Kinetics of Sorghum Distilled Residue for Sustainable Fuel Production. Sustainability, 2021, 13, 4246.	3.2	9
29	Development of Reaction Kinetics Model for the Production of Synthesis Gas from Dry Methane Reforming. Bulletin of Chemical Reaction Engineering and Catalysis, 2021, 16, 440-445.	1.1	1
30	A mathematical modelâ€based approach for DC multiâ€microgrid performance evaluations considering intermittent distributed energy resources, energy storage, multiple load classes, and system components variations. Energy Science and Engineering, 2021, 9, 1919-1934.	4.0	8
31	Synthesis of Ash Derived Co/Zeolite Catalyst for Hydrogen Rich Syngas Production via Partial Oxidation of Methane. Bulletin of Chemical Reaction Engineering and Catalysis, 2021, 16, 507-516.	1.1	3
32	Impact of layered and delaminated zeolites on catalytic fast pyrolysis of microalgae using fixed-bed reactor and Py-GC/MS. Journal of Analytical and Applied Pyrolysis, 2021, 155, 105025.	5.5	16
33	Multistage carbon dioxide compressor efficiency enhancement using waste heat powered absorption chillers. Energy Science and Engineering, 2021, 9, 1373-1384.	4.0	6
34	Enhanced Methane Production from Anaerobic Co-Digestion of Wheat Straw Rice Straw and Sugarcane Bagasse: A Kinetic Analysis. Applied Sciences (Switzerland), 2021, 11, 6069.	2.5	10
35	Performance Analysis of TiO2-Modified Co/MgAl2O4 Catalyst for Dry Reforming of Methane in a Fixed Bed Reactor for Syngas (H2, CO) Production. Energies, 2021, 14, 3347.	3.1	19
36	Process system analysis on oil processing facility and economic viability from oil well-to-tank. SN Applied Sciences, 2021, 3, 1.	2.9	4

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37	A comparative assessment of solid fuel pellets production from torrefied agro-residues and their blends. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105125.	5.5	18
38	Current status of biohydrogen production from lignocellulosic biomass, technical challenges and commercial potential through pyrolysis process. Energy, 2021, 226, 120433.	8.8	67
39	Production and characterization of bio-oils from fast pyrolysis of tobacco processing wastes in an ablative reactor under vacuum. PLoS ONE, 2021, 16, e0254485.	2.5	30
40	Recent developments on sewage sludge pyrolysis and its kinetics: Resources recovery, thermogravimetric platforms, and innovative prospects. Computers and Chemical Engineering, 2021, 150, 107325.	3.8	74
41	Reutilizing Methane Reforming Spent Catalysts as Efficient Overall Water-Splitting Electrocatalysts. ACS Omega, 2021, 6, 21316-21326.	3.5	16
42	Microplastic degradation as a sustainable concurrent approach for producing biofuel and obliterating hazardous environmental effects: A state-of-the-art review. Journal of Hazardous Materials, 2021, 418, 126381.	12.4	63
43	Investigation of slow pyrolysis mechanism and kinetic modeling of Scenedesmus quadricauda biomass. Journal of Analytical and Applied Pyrolysis, 2021, 158, 105149.	5.5	20
44	Challenges and opportunities in biomass ash management and its utilization in novel applications. Renewable and Sustainable Energy Reviews, 2021, 150, 111451.	16.4	51
45	Methane decomposition for hydrogen production over biomass fly ash-based CeO2 nanowires promoted cobalt catalyst. Journal of Environmental Chemical Engineering, 2021, 9, 105816.	6.7	24
46	Machine learning prediction of pyrolytic gas yield and compositions with feature reduction methods: Effects of pyrolysis conditions and biomass characteristics. Bioresource Technology, 2021, 339, 125581.	9.6	81
47	Applications of artificial intelligence in COVID-19 pandemic: A comprehensive review. Expert Systems With Applications, 2021, 185, 115695.	7.6	119
48	A performance evaluation study of nano-biochar as a potential slow-release nano-fertilizer from wheat straw residue for sustainable agriculture. Chemosphere, 2021, 285, 131382.	8.2	46
49	Landfill site selection by integrating fuzzy logic, AHP, and WLC method based on multi-criteria decision analysis. Environmental Science and Pollution Research, 2021, 28, 19726-19741.	5.3	32
50	Progress of the Pyrolyzer Reactors and Advanced Technologies for Biomass Pyrolysis Processing. Sustainability, 2021, 13, 11061.	3.2	44
51	PVA/starch/propolis/anthocyanins rosemary extract composite films as active and intelligent food packaging materials. Journal of Food Safety, 2020, 40, e12725.	2.3	81
52	Optimal integration of a biomassâ€based polygeneration system in an iron production plant for negative carbon emissions. International Journal of Energy Research, 2020, 44, 9350-9366.	4.5	22
53	Impact Analysis of Large-Scale Wind Farms Integration in Weak Transmission Grid from Technical Perspectives. Energies, 2020, 13, 5513.	3.1	11
54	Hydrogen Production from Methane Cracking in Dielectric Barrier Discharge Catalytic Plasma Reactor Using a Nanocatalyst. Energies, 2020, 13, 5921.	3.1	14

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55	A new design of catalytic tube reactor for hydrogen production from ethanol steam reforming. Fuel, 2020, 281, 118746.	6.4	24
56	A Comprehensive Review on Thermal Coconversion of Biomass, Sludge, Coal, and Their Blends Using Thermogravimetric Analysis. Journal of Chemistry, 2020, 2020, 1-23.	1.9	41
57	Prediction of Bio-oil Yield and Hydrogen Contents Based on Machine Learning Method: Effect of Biomass Compositions and Pyrolysis Conditions. Energy & Fuels, 2020, 34, 11050-11060.	5.1	86
58	Synthesis, characterization and catalytic testing of MCM-22 derived catalysts for n-hexane cracking. Scientific Reports, 2020, 10, 21786.	3.3	10
59	A state of the art review on biomass processing and conversion technologies to produce hydrogen and its recovery via membrane separation. International Journal of Hydrogen Energy, 2020, 45, 15166-15195.	7.1	102
60	Performance Comparison of Industrially Produced Formaldehyde Using Two Different Catalysts. Processes, 2020, 8, 571.	2.8	8
61	Assessment of agro-industrial residues for bioenergy potential by investigating thermo-kinetic behavior in a slow pyrolysis process. Fuel, 2020, 278, 118259.	6.4	65
62	Impact of Varying Load Conditions and Cooling Energy Comparison of a Double-Inlet Pulse Tube Refrigerator. Processes, 2020, 8, 352.	2.8	4
63	Thermodynamic Performance Analysis of Hydrofluoroolefins (HFO) Refrigerants in Commercial Air-Conditioning Systems for Sustainable Environment. Processes, 2020, 8, 187.	2.8	9
64	Performance, Emission and Combustion Characteristics of a Diesel Engine Powered by Macadamia and Grapeseed Biodiesels. Energies, 2020, 13, 2748.	3.1	20
65	Modeling and simulation of coupled pyrolysis and gasification of oily sludge in a rotary kiln. Fuel, 2020, 279, 118152.	6.4	51
66	Role of perovskites as a biâ€functional catalyst for electrochemical water splitting: A review. International Journal of Energy Research, 2020, 44, 9714-9747.	4.5	38
67	Experimental Study of CO2 Conversion into Methanol by Synthesized Photocatalyst (ZnFe2O4/TiO2) Using Visible Light as an Energy Source. Catalysts, 2020, 10, 163.	3.5	16
68	Production and Characterization of Controlled Release Urea Using Biopolymer and Geopolymer as Coating Materials. Polymers, 2020, 12, 400.	4.5	58
69	Use of Gasoline, LPG and LPG-HHO Blend in SI Engine: A Comparative Performance for Emission Control and Sustainable Environment. Processes, 2020, 8, 74.	2.8	33
70	Copper and calcium-based metal organic framework (MOF) catalyst for biodiesel production from waste cooking oil: A process optimization study. Energy Conversion and Management, 2020, 215, 112934.	9.2	112
71	Polyetherimide-Montmorillonite Nano-Hybrid Composite Membranes: CO2 Permeance Study via Theoretical Models. Processes, 2020, 8, 118.	2.8	1
72	Effect of ultra-violet cross-linking on the properties of boric acid and glycerol co-plasticized thermoplastic starch films. Food Packaging and Shelf Life, 2019, 19, 184-192.	7.5	21

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73	Artificial neural network approach for the steam gasification of palm oil waste using bottom ash and CaO. Renewable Energy, 2019, 132, 243-254.	8.9	101
74	Pyrolysis of high ash sewage sludge: Kinetics and thermodynamic analysis using Coats-Redfern method. Renewable Energy, 2019, 131, 854-860.	8.9	260
75	NO and SO2 emissions in palm kernel shell catalytic steam gasification with in-situ CO2 adsorption for hydrogen production in a pilot-scale fluidized bed gasification system. Journal of Cleaner Production, 2019, 236, 117636.	9.3	38
76	Improved project control for sustainable development of construction sector to reduce environment risks. Journal of Cleaner Production, 2019, 240, 118214.	9.3	27
77	Demonstrating the suitability of canola residue biomass to biofuel conversion via pyrolysis through reaction kinetics, thermodynamics and evolved gas analyses. Bioresource Technology, 2019, 279, 67-73.	9.6	100
78	Decomposition of N ₂ O at low temperature over Co ₃ O ₄ prepared by different methods. Environmental Progress and Sustainable Energy, 2019, 38, 13129.	2.3	5
79	Thermo-kinetics and gaseous product analysis of banana peel pyrolysis for its bioenergy potential. Biomass and Bioenergy, 2019, 122, 193-201.	5.7	86
80	Synergistic effect on co-pyrolysis of rice husk and sewage sludge by thermal behavior, kinetics, thermodynamic parameters and artificial neural network. Waste Management, 2019, 85, 131-140.	7.4	157
81	Tailored hydrotalcite-based Mg-Ni-Al catalyst for hydrogen production via methane decomposition: Effect of nickel concentration and spinel-like structures. International Journal of Hydrogen Energy, 2019, 44, 14424-14433.	7.1	48
82	Oxidative reaction interaction and synergistic index of emulsified pyrolysis bio-oil/diesel fuels. Renewable Energy, 2019, 136, 223-234.	8.9	27
83	Inexpensive Sol Gel Synthesis of Highly Active and Environmentally Benign Expanded Graphite/TiO2 Hybrid Photocatalysts. Journal of Nanoelectronics and Optoelectronics, 2019, 14, 1482-1490.	0.5	2
84	Effect of drying parameters on the physical, morphological and thermal properties of spray-dried inulin. Journal of Polymer Engineering, 2018, 38, 775-783.	1.4	7
85	Influence of Plasticizers on Mechanical and Thermal Properties of Methyl Cellulose-Based Edible Films. Journal of Polymers and the Environment, 2018, 26, 291-300.	5.0	7
86	Potential of biomass for bioenergy in Pakistan based on present case and future perspectives. Renewable and Sustainable Energy Reviews, 2018, 81, 1247-1258.	16.4	122
87	Kinetic analysis of Botryococcus braunii pyrolysis using model-free and model fitting methods. Fuel, 2018, 214, 369-380.	6.4	65
88	Catalytic fast pyrolysis of rice husk: Influence of commercial and synthesized microporous zeolites on deoxygenation of biomass pyrolysis vapors. International Journal of Energy Research, 2018, 42, 1352-1362.	4.5	45
89	Polygeneration system integrated with small non-wood pulp mills for substitute natural gas production. Applied Energy, 2018, 224, 636-646.	10.1	10
90	New trends in improving gasoline quality and octane through naphtha isomerization: a short review. Applied Petrochemical Research, 2018, 8, 131-139.	1.3	33

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91	Pyrolysis of high-ash sewage sludge: Thermo-kinetic study using TGA and artificial neural networks. Fuel, 2018, 233, 529-538.	6.4	148
92	Kinetic and Thermodynamic Analyses of Sugar Cane Bagasse and Sewage Sludge Co-pyrolysis Process. Energy & Fuels, 2018, 32, 9551-9558.	5.1	52
93	Off-grid electricity generation using mixed biomass compost: A scenario-based study with sensitivity analysis. Applied Energy, 2017, 201, 363-370.	10.1	32
94	Catalytic Consequences of Micropore Topology on Biomass Pyrolysis Vapors over Shape Selective Zeolites. Energy Procedia, 2017, 105, 557-561.	1.8	23
95	Syngas Production from Steam Gasification of Palm Kernel Shell with Subsequent CO ₂ Capture Using CaO Sorbent: An Aspen Plus Modeling. Energy & Fuels, 2017, 31, 12350-12357.	5.1	74
96	Nano-catalysts for upgrading bio-oil: Catalytic decarboxylation and hydrodeoxygenation. AIP Conference Proceedings, 2017, , .	0.4	7
97	Gasification Integrated with Small Chemical Pulp Mills for Fuel and Energy Production. Energy Procedia, 2017, 142, 977-983.	1.8	10
98	Fruit Waste to Energy through Open Fermentation. Energy Procedia, 2017, 142, 904-909.	1.8	13
99	Catalytic Pyrolysis Of Botryococcus Braunii (microalgae) Over Layered and Delaminated Zeolites For Aromatic Hydrocarbon Production. Energy Procedia, 2017, 142, 381-385.	1.8	32
100	Waste Biomass Gasification Based off-grid Electricity Generation: A Case Study in Pakistan. Energy Procedia, 2016, 103, 406-412.	1.8	30
101	Characterization of South Asian Agricultural Residues for Potential Utilization in Future â€~energy mix'. Energy Procedia, 2015, 75, 2974-2980.	1.8	90
102	Production and Evaluation of Physicochemical Characteristics of Paddy Husk Bio-char for its C Sequestration Applications. Bioenergy Research, 2015, 8, 1800-1809.	3.9	18
103	Kinetic study of the catalytic pyrolysis of paddy husk by use of thermogravimetric data and the Coats–Redfern model. Research on Chemical Intermediates, 2015, 41, 9743-9755.	2.7	50
104	In situ catalytic fast pyrolysis of paddy husk pyrolysis vapors over MCM-22 and ITQ-2 zeolites. Journal of Analytical and Applied Pyrolysis, 2015, 114, 32-39.	5.5	38
105	The Role of Zeolite Structure and Acidity in Catalytic Deoxygenation of Biomass Pyrolysis Vapors. Energy Procedia, 2015, 75, 793-800.	1.8	34
106	Catalytic pyrolysis of paddy husk in a drop type pyrolyzer for bio-oil production: The role of temperature and catalyst. Journal of Analytical and Applied Pyrolysis, 2014, 106, 57-62.	5.5	93
107	Physiochemical Properties of Pyrolysis Oil Derived from Fast Pyrolysis of Wet and Dried Rice Husk in a Free Fall Reactor. Applied Mechanics and Materials, 0, 625, 604-607.	0.2	7
108	Evolved Gas Analysis and Kinetics of Catalytic and Non-Catalytic Pyrolysis of Microalgae Chlorella sp. Biomass With Ni/Î, Al2O3 Catalyst via Thermogravimetric Analysis. Frontiers in Energy Research, 0, 9, .	2.3	12

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109	Simulation of steam gasification of halophyte biomass for syngas production using Aspen Plus®. Biomass Conversion and Biorefinery, 0, , 1.	4.6	4
110	Potential application of essential and fat oils of Myristica Argentea Warb for pharmacochemical industry and green energy production: experiment and modeling. Biomass Conversion and Biorefinery, 0, , .	4.6	2