Hui Zhou

List of Publications by Year
in descending order

62 papers	3,119 citations	172457 29 h-index	161849 54 g-index
66 all docs	66 docs citations	66 times ranked	3108 citing authors

#	Article	IF	Citations
1	Excess Properties of and Simultaneous Effects of Important Parameters on CO₂ Solubility in Binary Mixture of Water-Phosphonium Based-Deep Eutectic Solvents: Response Surface Methodology (RSM) and Taguchi Method. Energy & Fuels, 2022, 36, 1960-1972.	5.1	7
2	From biomass to hydrochar: Evolution on elemental composition, morphology, and chemical structure. Journal of the Energy Institute, 2022, 101, 194-200.	5.3	27
3	Decoupled temperature and pressure hydrothermal synthesis of carbon sub-micron spheres from cellulose. Nature Communications, 2022, 13, .	12.8	69
4	Evolution of kraft lignin during hydrothermal treatment under different reaction conditions. Journal of the Energy Institute, 2022, 103, 147-153.	5.3	21
5	Insight into the relationship between CO2 gasification characteristics and char structure of biomass. Biomass and Bioenergy, 2022, 163, 106537.	5.7	16
6	Formation and evolution of pectin-derived hydrothermal carbon from pectin. Fuel, 2022, 326, 124997.	6.4	16
7	Thermal behaviour and kinetic study of co-pyrolysis of microalgae with different plastics. Waste Management, 2021, 126, 331-339.	7.4	44
8	Comparison of waste plastics pyrolysis under nitrogen and carbon dioxide atmospheres: A thermogravimetric and kinetic study. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105135.	5.5	42
9	Statistical study of the distribution of voidage in a bubbling fluidized bed with a constant section. Chemical Engineering Research and Design, 2021, 171, 305-316.	5.6	3
10	Effects of bed size on the voidage in gas-solid bubbling fluidized beds. Powder Technology, 2021, 387, 197-204.	4.2	8
11	Thermal and Kinetic Behaviors during Co-Pyrolysis of Microcrystalline Cellulose and Styreneâ€"Butadieneâ€"Styrene Triblock Copolymer. Processes, 2021, 9, 1335.	2.8	6
12	Two-dimensional molybdenum carbide 2D-Mo2C as a superior catalyst for CO2 hydrogenation. Nature Communications, 2021, 12, 5510.	12.8	63
13	Bauxite residue as a catalyst for microwave-assisted pyrolysis of switchgrass to high quality bio-oil and biochar. Chemical Engineering Journal, 2021, 426, 131294.	12.7	34
14	Engineering the Cu/Mo2CTx (MXene) interface to drive CO2 hydrogenation to methanol. Nature Catalysis, 2021, 4, 860-871.	34.4	138
15	Alkali metal bifunctional catalyst-sorbents enabled biomass pyrolysis for enhanced hydrogen production. Renewable Energy, 2020, 148, 168-175.	8.9	34
16	Two-Stage Gasification of Sewage Sludge for Enhanced Hydrogen Production: Alkaline Pyrolysis Coupled with Catalytic Reforming Using Waste-Supported Ni Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 13377-13386.	6.7	8
17	Two-step conversion of Kraft lignin to nylon precursors under mild conditions. Green Chemistry, 2020, 22, 4676-4682.	9.0	25
18	Bio-energy with carbon capture and storage via alkaline thermal Treatment: Production of high purity H2 from wet wheat straw grass with CO2 capture. Applied Energy, 2020, 264, 114675.	10.1	12

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19	Steam reforming of polystyrene at a low temperature for high H2/CO gas with bimetallic Ni-Fe/ZrO2 catalyst. Waste Management, 2020, 104, 42-50.	7.4	30
20	Toward hydrogen economy: Selective guaiacol hydrogenolysis under ambient hydrogen pressure. Applied Catalysis B: Environmental, 2020, 270, 118890.	20.2	37
21	Low-temperature alkaline pyrolysis of sewage sludge for enhanced H2 production with in-situ carbon capture. International Journal of Hydrogen Energy, 2019, 44, 8020-8027.	7.1	24
22	Alkaline Thermal Treatment of Cellulosic Biomass for H₂ Production Using Ca-Based Bifunctional Materials. ACS Sustainable Chemistry and Engineering, 2019, 7, 1202-1209.	6.7	12
23	A grey-relation-based method (GRM) for thermogravimetric (TG) data analysis. Journal of Material Cycles and Waste Management, 2018, 20, 1026-1035.	3.0	2
24	Characterization Studies on Waste Plastics as a Feedstock for Energy Recovery in Malaysia. International Journal of Engineering and Technology(UAE), 2018, 7, 534.	0.3	4
25	Combustible Solid Waste Thermochemical Conversion. Springer Theses, 2017, , .	0.1	6
26	Biomass-based chemical looping technologies: the good, the bad and the future. Energy and Environmental Science, 2017, 10, 1885-1910.	30.8	382
27	Pyrolysis and Combustion of Typical Wastes in a Newly Designed Macro Thermogravimetric Analyzer: Characteristics and Simulation by Model Components. Energy & Fuels, 2017, 31, 7582-7590.	5.1	13
28	Prediction of higher heating values of combustible solid wastes by pseudo-components and thermal mass coefficients. Thermochimica Acta, 2017, 658, 93-100.	2.7	7
29	Dry Reforming of Model Biogas on a Ni/SiO₂ Catalyst: Overall Performance and Mechanisms of Sulfur Poisoning and Regeneration. ACS Sustainable Chemistry and Engineering, 2017, 5, 10248-10257.	6.7	45
30	Integrated direct air capture and CO2 utilization of gas fertilizer based on moisture swing adsorption. Journal of Zhejiang University: Science A, 2017, 18, 819-830.	2.4	14
31	Research Method. Springer Theses, 2017, , 33-62.	0.1	2
32	Influence of Interactions on the Pyrolytic Characteristics of Basic Components. Springer Theses, 2017, , 143-167.	0.1	0
33	Pyrolysis Characteristics of Basic Components. Springer Theses, 2017, , 63-97.	0.1	0
34	Influential Factors of Thermochemical Conversion of Basic Components. Springer Theses, 2017, , 99-142.	0.1	0
35	Effects of Ash Deposition and Slagging on Heat Transfer. , 2016, , 173-191.		3
36	Emission and Absorption of Thermal Radiation. , 2016, , 45-74.		0

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37	Theoretical Foundation and Basic Properties of Thermal Radiation. , 2016, , 1-43.		2
38	Radiation Heat Exchange Between Isothermal Surfaces. , 2016, , 75-99.		0
39	Measuring Heat Transfer in the Furnace. , 2016, , 193-203.		3
40	Heat Transfer Calculation inÂFurnaces. , 2016, , 131-172.		5
41	Interactions among biomass components during co-pyrolysis in (macro)thermogravimetric analyzers. Korean Journal of Chemical Engineering, 2016, 33, 2638-2643.	2.7	31
42	Influence of process conditions on the formation of 2â€“4 ring polycyclic aromatic hydrocarbons from the pyrolysis of polyvinyl chloride. Fuel Processing Technology, 2016, 144, 299-304.	7.2	49
43	A novel method for kinetics analysis of pyrolysis of hemicellulose, cellulose, and lignin in TGA and macro-TGA. RSC Advances, 2015, 5, 26509-26516.	3.6	109
44	Pyrolysis and simulation of typical components in wastes with macro-TGA. Fuel, 2015, 157, 1-8.	6.4	33
45	Thermogravimetric characteristics of typical municipal solid waste fractions during co-pyrolysis. Waste Management, 2015, 38, 194-200.	7.4	80
46	Effect of interactions of PVC and biomass components on the formation of polycyclic aromatic hydrocarbons (PAH) during fast co-pyrolysis. RSC Advances, 2015, 5, 11371-11377.	3.6	56
47	A review of dioxin-related substances during municipal solid waste incineration. Waste Management, 2015, 36, 106-118.	7.4	111
48	Classification of municipal solid waste components for thermal conversion in waste-to-energy research. Fuel, 2015, 145, 151-157.	6.4	94
49	Study on the co-pyrolysis of high density polyethylene and potato blends using thermogravimetric analyzer and tubular furnace. Journal of Analytical and Applied Pyrolysis, 2015, 112, 66-73.	5.5	62
50	Pyrolysis and gasification of typical components in wastes with macro-TGA. Waste Management, 2015, 46, 247-256.	7.4	67
51	Polycyclic aromatic hydrocarbons (PAH) formation from the pyrolysis of different municipal solid waste fractions. Waste Management, 2015, 36, 136-146.	7.4	119
52	TGA pyrolysis and gasification of combustible municipal solid waste. Journal of the Energy Institute, 2015, 88, 332-343.	5.3	91
53	Interactions of three municipal solid waste components during co-pyrolysis. Journal of Analytical and Applied Pyrolysis, 2015, 111, 265-271.	5.5	66
54	Investigation of biomass ash thermal decomposition by thermogravimetry using raw and artificial ashes. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 726-736.	1.5	7

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55	Effects of Sorbents on the Partitioning and Speciation of Cu During Municipal Solid Waste Incineration. Chinese Journal of Chemical Engineering, 2014, 22, 1347-1351.	3.5	11
56	Effect of interactions of biomass constituents on polycyclic aromatic hydrocarbons (PAH) formation during fast pyrolysis. Journal of Analytical and Applied Pyrolysis, 2014, 110, 264-269.	5.5	43
57	Classification and comparison of municipal solid waste based on thermochemical characteristics. Journal of the Air and Waste Management Association, 2014, 64, 597-616.	1.9	81
58	Polycyclic Aromatic Hydrocarbon Formation from the Pyrolysis/Gasification of Lignin at Different Reaction Conditions. Energy & Fuels, 2014, 28, 6371-6379.	5.1	100
59	An overview of characteristics of municipal solid waste fuel in China: Physical, chemical composition and heating value. Renewable and Sustainable Energy Reviews, 2014, 36, 107-122.	16.4	402
60	Interactions of municipal solid waste components during pyrolysis: A TG-FTIR study. Journal of Analytical and Applied Pyrolysis, 2014, 108, 19-25.	5.5	68
61	The pyrolysis simulation of five biomass species by hemi-cellulose, cellulose and lignin based on thermogravimetric curves. Thermochimica Acta, 2013, 566, 36-43.	2.7	156
62	Quantitative and kinetic TG-FTIR investigation on three kinds of biomass pyrolysis. Journal of Analytical and Applied Pyrolysis, 2013, 104, 28-37.	5.5	117