Shuang Wang

List of Publications by Year
in descending order

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59 papers	3,502 citations	136950 32 h-index	138484 58 g-index
59 all docs	59 docs citations	59 times ranked	2293 citing authors

#	Article	IF	Citations
1	Co-pyrolysis of biomass and waste plastics as a thermochemical conversion technology for high-grade biofuel production: Recent progress and future directions elsewhere worldwide. Energy Conversion and Management, 2018, 163, 468-492.	9.2	417
2	A state-of-the-art review on dual purpose seaweeds utilization for wastewater treatment and crude bio-oil production. Energy Conversion and Management, 2020, 222, 113253.	9.2	155
3	Adsorption modeling, thermodynamics, and DFT simulation of tetracycline onto mesoporous and high-surface-area NaOH-activated macroalgae carbon. Journal of Hazardous Materials, 2022, 425, 127887.	12.4	155
4	Synergistic effects of catalytic co-pyrolysis of macroalgae with waste plastics. Chemical Engineering Research and Design, 2020, 137, 34-48.	5.6	146
5	Compositional analysis of bio-oil derived from pyrolysis of seaweed. Energy Conversion and Management, 2013, 68, 273-280.	9.2	139
6	Sustainable biomass production under CO2 conditions and effective wet microalgae lipid extraction for biodiesel production. Journal of Cleaner Production, 2020, 247, 119398.	9.3	128
7	Recent progress in genetically modified microalgae for enhanced carbon dioxide sequestration. Biomass and Bioenergy, 2021, 145, 105927.	5.7	116
8	Optimization of hydrothermal co-liquefaction of seaweeds with lignocellulosic biomass: Merging 2nd and 3rd generation feedstocks for enhanced bio-oil production. Energy, 2019, 173, 413-422.	8.8	111
9	Synergistic effects of co-pyrolysis of macroalgae and polyvinyl chloride on bio-oil/bio-char properties and transferring regularity of chlorine. Fuel, 2019, 246, 319-329.	6.4	109
10	Experimental investigation on pumpkin seed oil methyl ester blend in diesel engine with various injection pressure, injection timing and compression ratio. Fuel, 2020, 264, 116868.	6.4	108
11	Seaweed-derived biochar with multiple active sites as a heterogeneous catalyst for converting macroalgae into acid-free biooil containing abundant ester and sugar substances. Fuel, 2021, 285, 119164.	6.4	100
12	Effect of lipid-free microalgal biomass and waste glycerol on growth and lipid production of Scenedesmus obliquus: Innovative waste recycling for extraordinary lipid production. Bioresource Technology, 2018, 249, 992-999.	9.6	98
13	Microalgae harvest influences the energy recovery: A case study on chemical flocculation of Scenedesmus obliquus for biodiesel and crude bio-oil production. Bioresource Technology, 2019, 286, 121371.	9.6	92
14	Study on two-step hydrothermal liquefaction of macroalgae for improving bio-oil. Bioresource Technology, 2021, 319, 124176.	9.6	89
15	Effect of operating conditions on direct liquefaction of low-lipid microalgae in ethanol-water co-solvent for bio-oil production. Energy Conversion and Management, 2017, 141, 155-162.	9.2	86
16	Evaluation of bioethanol and biodiesel production from Scenedesmus obliquus grown in biodiesel waste glycerol: A sequential integrated route for enhanced energy recovery. Energy Conversion and Management, 2019, 197, 111907.	9.2	77
17	Integrated microalgal biorefinery â€“ Routes, energy, economic and environmental perspectives. Journal of Cleaner Production, 2022, 348, 131245.	9.3	77
18	Emerging technologies for biodiesel production: Processes, challenges, and opportunities. Biomass and Bioenergy, 2022, 163, 106521.	5.7	76

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19	Co-pyrolysis and co-hydrothermal liquefaction of seaweeds and rice husk: Comparative study towards enhanced biofuel production. Journal of Analytical and Applied Pyrolysis, 2018, 129, 162-170.	5.5	67
20	Pyrolysis mechanisms of typical seaweed polysaccharides. Journal of Analytical and Applied Pyrolysis, 2017, 124, 373-383.	5.5	66
21	Experimental investigation on the application of preheated fish oil ethyl ester as a fuel in diesel engine. Fuel, 2021, 285, 119244.	6.4	62
22	Co-pyrolysis mechanism of seaweed polysaccharides and cellulose based on macroscopic experiments and molecular simulations. Bioresource Technology, 2017, 228, 305-314.	9.6	51
23	A comparative study on the quality of bio-oil derived from green macroalga Enteromorpha clathrata over metal modified ZSM-5 catalysts. Bioresource Technology, 2018, 256, 446-455.	9.6	49
24	Study on the co-operative effect of kitchen wastewater for harvest and enhanced pyrolysis of microalgae. Bioresource Technology, 2020, 317, 123983.	9.6	45
25	Cross-linked FeCl3-activated seaweed carbon/MCM-41/alginate hydrogel composite for effective biosorption of bisphenol A plasticizer and basic dye from aqueous solution. Bioresource Technology, 2021, 331, 125046.	9.6	45
26	Study on the interaction effect of seaweed bio-coke and rice husk volatiles during co-pyrolysis. Journal of Analytical and Applied Pyrolysis, 2018, 132, 111-122.	5.5	44
27	Effect of different pretreatments on the thermal degradation of seaweed biomass. Proceedings of the Combustion Institute, 2017, 36, 2271-2281.	3.9	43
28	Characterization and pyrolysis behavior of the green microalga Micractinium conductrix grown in lab-scale tubular photobioreactor using Py-GC/MS and TGA/MS. Journal of Analytical and Applied Pyrolysis, 2018, 135, 340-349.	5.5	43
29	Co-pyrolysis of macroalgae and lignocellulosic biomass. Journal of Thermal Analysis and Calorimetry, 2019, 136, 2001-2016.	3.6	43
30	TGâ€“FTIRâ€“MS analysis of the pyrolysis of blended seaweed and rice husk. Journal of Thermal Analysis and Calorimetry, 2016, 126, 1689-1702.	3.6	39
31	A study on catalytic co-pyrolysis of cellulose with seaweeds polysaccharides over ZSM-5: Towards high-quality biofuel production. Journal of Analytical and Applied Pyrolysis, 2018, 134, 526-535.	5.5	38
32	One-step conversion of microalgae to alcohols and esters through co-pyrolysis with biodiesel-derived glycerol. Energy Conversion and Management, 2019, 198, 111792.	9.2	36
33	Mechanism research on the pyrolysis of seaweed polysaccharides by Py-GC/MS and subsequent density functional theory studies. Journal of Analytical and Applied Pyrolysis, 2017, 126, 118-131.	5.5	35
34	Application of p-coumaric acid for extraordinary lipid production in Tetradesmus obliquus: A sustainable approach towards enhanced biodiesel production. Renewable Energy, 2020, 157, 368-376.	8.9	34
35	Bio-char and bio-oil characteristics produced from the interaction of Enteromorpha clathrate volatiles and rice husk bio-char during co-pyrolysis in a sectional pyrolysis furnace: A complementary study. Journal of Analytical and Applied Pyrolysis, 2018, 135, 219-230.	5.5	33
36	Investigation on the co-pyrolysis mechanism of seaweed and rice husk with multi-method comprehensive study. Renewable Energy, 2019, 132, 266-277.	8.9	33

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37	Co-pyrolysis and catalytic co-pyrolysis of Enteromorpha clathrata and rice husk. Journal of Thermal Analysis and Calorimetry, 2019, 135, 2613-2623.	3.6	33
38	Cyclic Compound Formation Mechanisms during Pyrolysis of Typical Aliphatic Acidic Amino Acids. ACS Sustainable Chemistry and Engineering, 2020, 8, 16968-16978.	6.7	32
39	Study on catalytic pyrolysis mechanism of seaweed polysaccharide monomer. Combustion and Flame, 2020, 218, 1-11.	5.2	30
40	Catalytic co-pyrolysis of seaweeds and cellulose using mixed ZSM-5 and MCM-41 for enhanced crude bio-oil production. Journal of Thermal Analysis and Calorimetry, 2021, 143, 827-842.	3.6	30
41	Study on co-pyrolysis synergistic mechanism of seaweed and rice husk by investigation of the characteristics of char/coke. Renewable Energy, 2019, 132, 527-542.	8.9	29
42	Mechanism research on catalytic pyrolysis of sulfated polysaccharide using ZSM-5 catalysts by Py-GC/MS and density functional theory studies. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104680.	5.5	28
43	Experimental study and economic feasibility analysis on the production of bio-oil by catalytic cracking of three kinds of microalgae. Journal of Analytical and Applied Pyrolysis, 2020, 149, 104835.	5.5	24
44	High-grade biofuel production from catalytic pyrolysis of waste clay oil using modified activated seaweed carbon-based catalyst. Journal of Cleaner Production, 2021, 313, 127928.	9.3	24
45	Insight into the Mechanism of Glycerol Dehydration and Subsequent Pyridine Synthesis. ACS Sustainable Chemistry and Engineering, 2021, 9, 3095-3103.	6.7	23
46	Activation of Nitrogen-Doped Carbon Materials on the Câ€“N Bond and Câ€“O Bond: Modeling Study Toward Enhanced Pyrolysis Products. ACS Sustainable Chemistry and Engineering, 2022, 10, 7473-7484.	6.7	20
47	Adsorption properties of seaweed-based biochar with the greenhouse gases (CO2, CH4, N2O) through density functional theory (DFT). Biomass and Bioenergy, 2022, 163, 106519.	5.7	20
48	Study on ZSM-5 catalytic pyrolysis mechanism of cellulose based on the Py-GC/MS and the density functional theory. Combustion and Flame, 2022, 241, 112131.	5.2	18
49	Biofuel characteristic of waste clay oil pyrolysis. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105117.	5.5	17
50	Study of pyrolytic mechanisms of seaweed based on different components (soluble polysaccharides,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.0	14
51	Mechanism of solvothermal conversion of xylose to furfural in rich-methanol solution: A study based on density functional theory. Journal of Analytical and Applied Pyrolysis, 2021, 154, 104996.	5.5	14
52	Effect of cosolvent and addition of catalyst (HZSMâ€5) on hydrothermal liquefaction of macroalgae. International Journal of Energy Research, 2019, 43, 8841.	4.5	12
53	Catalytic coâ€pyrolysis of macroalgal components with lignocellulosic biomass for enhanced biofuels and highâ€valued chemicals. International Journal of Energy Research, 2022, 46, 2674-2697.	4.5	12
54	Study on the pyrolysis mechanism of unsaturated fatty acid: A combined density functional theory and experimental study. International Journal of Energy Research, 2022, 46, 2029-2040.	4.5	10

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55	Highly efficient adsorption of Bisphenol A using NaHCO3/CO2 activated carbon composite derived from shrimp shell@cellulose. Environmental Science and Pollution Research, 2022, 29, 68724-68734.	5.3	7
56	Effects of CO2 concentration and light intensity on macromolecules accumulation of Micractinium sp.. Biomass and Bioenergy, 2022, 163, 106522.	5.7	7
57	Coâ€pyrolysis characteristics of polysaccharidesâ€cellulose and the coâ€pyrolyzed compound distributions over two kinds of zeolite catalysts. International Journal of Energy Research, 2020, 44, 6350-6362.	4.5	6
58	Combustion mathematical simulation of single seaweed particle in a bench-scale fluidized bed. Journal of Renewable and Sustainable Energy, 2015, 7, 023137.	2.0	5
59	Different Waste Management Methods, Applications, and Limitations. , 2022, , 21-58.		2