

# 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	Study on the pyrolysis mechanism of unsaturated fatty acid: A combined density functional theory and experimental study. <i>International Journal of Energy Research</i> , 2022, 46, 2029-2040.	4.5	10
2	Catalytic co-pyrolysis of macroalgal components with lignocellulosic biomass for enhanced biofuels and high-valued chemicals. <i>International Journal of Energy Research</i> , 2022, 46, 2674-2697.	4.5	12
3	Adsorption modeling, thermodynamics, and DFT simulation of tetracycline onto mesoporous and high-surface-area NaOH-activated macroalgae carbon. <i>Journal of Hazardous Materials</i> , 2022, 425, 127887.	12.4	155
4	Different Waste Management Methods, Applications, and Limitations. , 2022, , 21-58.		2
5	Integrated microalgal biorefinery – Routes, energy, economic and environmental perspectives. <i>Journal of Cleaner Production</i> , 2022, 348, 131245.	9.3	77
6	Study on ZSM-5 catalytic pyrolysis mechanism of cellulose based on the Py-GC/MS and the density functional theory. <i>Combustion and Flame</i> , 2022, 241, 112131.	5.2	18
7	Highly efficient adsorption of Bisphenol A using NaHCO <sub>3</sub> /CO <sub>2</sub> activated carbon composite derived from shrimp shell@cellulose. <i>Environmental Science and Pollution Research</i> , 2022, 29, 68724-68734.	5.3	7
8	Activation of Nitrogen-Doped Carbon Materials on the C–N Bond and C–O Bond: Modeling Study Toward Enhanced Pyrolysis Products. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7473-7484.	6.7	20
9	Effects of CO <sub>2</sub> concentration and light intensity on macromolecules accumulation of <i>Micractinium</i> sp.. <i>Biomass and Bioenergy</i> , 2022, 163, 106522.	5.7	7
10	Adsorption properties of seaweed-based biochar with the greenhouse gases (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O) through density functional theory (DFT). <i>Biomass and Bioenergy</i> , 2022, 163, 106519.	5.7	20
11	Emerging technologies for biodiesel production: Processes, challenges, and opportunities. <i>Biomass and Bioenergy</i> , 2022, 163, 106521.	5.7	76
12	Catalytic co-pyrolysis of seaweeds and cellulose using mixed ZSM-5 and MCM-41 for enhanced crude bio-oil production. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 143, 827-842.	3.6	30
13	Experimental investigation on the application of preheated fish oil ethyl ester as a fuel in diesel engine. <i>Fuel</i> , 2021, 285, 119244.	6.4	62
14	Seaweed-derived biochar with multiple active sites as a heterogeneous catalyst for converting macroalgae into acid-free biooil containing abundant ester and sugar substances. <i>Fuel</i> , 2021, 285, 119164.	6.4	100
15	Recent progress in genetically modified microalgae for enhanced carbon dioxide sequestration. <i>Biomass and Bioenergy</i> , 2021, 145, 105927.	5.7	116
16	Study on two-step hydrothermal liquefaction of macroalgae for improving bio-oil. <i>Bioresource Technology</i> , 2021, 319, 124176.	9.6	89
17	Insight into the Mechanism of Glycerol Dehydration and Subsequent Pyridine Synthesis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3095-3103.	6.7	23
18	Mechanism of solvothermal conversion of xylose to furfural in rich-methanol solution: A study based on density functional theory. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 154, 104996.	5.5	14

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19	Biofuel characteristic of waste clay oil pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 156, 105117.	5.5	17
20	Cross-linked FeCl <sub>3</sub> -activated seaweed carbon/MCM-41/alginate hydrogel composite for effective biosorption of bisphenol A plasticizer and basic dye from aqueous solution. <i>Bioresource Technology</i> , 2021, 331, 125046.	9.6	45
21	High-grade biofuel production from catalytic pyrolysis of waste clay oil using modified activated seaweed carbon-based catalyst. <i>Journal of Cleaner Production</i> , 2021, 313, 127928.	9.3	24
22	Experimental investigation on pumpkin seed oil methyl ester blend in diesel engine with various injection pressure, injection timing and compression ratio. <i>Fuel</i> , 2020, 264, 116868.	6.4	108
23	Sustainable biomass production under CO <sub>2</sub> conditions and effective wet microalgae lipid extraction for biodiesel production. <i>Journal of Cleaner Production</i> , 2020, 247, 119398.	9.3	128
24	Study on the co-operative effect of kitchen wastewater for harvest and enhanced pyrolysis of microalgae. <i>Bioresource Technology</i> , 2020, 317, 123983.	9.6	45
25	A state-of-the-art review on dual purpose seaweeds utilization for wastewater treatment and crude bio-oil production. <i>Energy Conversion and Management</i> , 2020, 222, 113253.	9.2	155
26	Cyclic Compound Formation Mechanisms during Pyrolysis of Typical Aliphatic Acidic Amino Acids. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16968-16978.	6.7	32
27	Study on catalytic pyrolysis mechanism of seaweed polysaccharide monomer. <i>Combustion and Flame</i> , 2020, 218, 1-11.	5.2	30
28	Experimental study and economic feasibility analysis on the production of bio-oil by catalytic cracking of three kinds of microalgae. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 149, 104835.	5.5	24
29	Application of p-coumaric acid for extraordinary lipid production in <i>Tetrademus obliquus</i> : A sustainable approach towards enhanced biodiesel production. <i>Renewable Energy</i> , 2020, 157, 368-376.	8.9	34
30	Synergistic effects of catalytic co-pyrolysis of macroalgae with waste plastics. <i>Chemical Engineering Research and Design</i> , 2020, 137, 34-48.	5.6	146
31	Co-pyrolysis characteristics of polysaccharides-cellulose and the co-pyrolyzed compound distributions over two kinds of zeolite catalysts. <i>International Journal of Energy Research</i> , 2020, 44, 6350-6362.	4.5	6
32	Investigation on the co-pyrolysis mechanism of seaweed and rice husk with multi-method comprehensive study. <i>Renewable Energy</i> , 2019, 132, 266-277.	8.9	33
33	Study on co-pyrolysis synergistic mechanism of seaweed and rice husk by investigation of the characteristics of char/coke. <i>Renewable Energy</i> , 2019, 132, 527-542.	8.9	29
34	Co-pyrolysis and catalytic co-pyrolysis of <i>Enteromorpha clathrata</i> and rice husk. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 2613-2623.	3.6	33
35	Evaluation of bioethanol and biodiesel production from <i>Scenedesmus obliquus</i> grown in biodiesel waste glycerol: A sequential integrated route for enhanced energy recovery. <i>Energy Conversion and Management</i> , 2019, 197, 111907.	9.2	77
36	One-step conversion of microalgae to alcohols and esters through co-pyrolysis with biodiesel-derived glycerol. <i>Energy Conversion and Management</i> , 2019, 198, 111792.	9.2	36

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37	Effect of cosolvent and addition of catalyst (HZSM-5) on hydrothermal liquefaction of macroalgae. <i>International Journal of Energy Research</i> , 2019, 43, 8841.	4.5	12
38	Mechanism research on catalytic pyrolysis of sulfated polysaccharide using ZSM-5 catalysts by Py-GC/MS and density functional theory studies. <i>Journal of Analytical and Applied Pyrolysis</i> , 2019, 143, 104680.	5.5	28
39	Microalgae harvest influences the energy recovery: A case study on chemical flocculation of <i>Scenedesmus obliquus</i> for biodiesel and crude bio-oil production. <i>Bioresource Technology</i> , 2019, 286, 121371.	9.6	92
40	Synergistic effects of co-pyrolysis of macroalgae and polyvinyl chloride on bio-oil/bio-char properties and transferring regularity of chlorine. <i>Fuel</i> , 2019, 246, 319-329.	6.4	109
41	Optimization of hydrothermal co-liquefaction of seaweeds with lignocellulosic biomass: Merging 2nd and 3rd generation feedstocks for enhanced bio-oil production. <i>Energy</i> , 2019, 173, 413-422.	8.8	111
42	Co-pyrolysis of macroalgae and lignocellulosic biomass. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 136, 2001-2016.	3.6	43
43	A comparative study on the quality of bio-oil derived from green macroalga <i>Enteromorpha clathrata</i> over metal modified ZSM-5 catalysts. <i>Bioresource Technology</i> , 2018, 256, 446-455.	9.6	49
44	Co-pyrolysis of biomass and waste plastics as a thermochemical conversion technology for high-grade biofuel production: Recent progress and future directions elsewhere worldwide. <i>Energy Conversion and Management</i> , 2018, 163, 468-492.	9.2	417
45	Study on the interaction effect of seaweed bio-coke and rice husk volatiles during co-pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 132, 111-122.	5.5	44
46	Effect of lipid-free microalgal biomass and waste glycerol on growth and lipid production of <i>Scenedesmus obliquus</i> : Innovative waste recycling for extraordinary lipid production. <i>Bioresource Technology</i> , 2018, 249, 992-999.	9.6	98
47	Co-pyrolysis and co-hydrothermal liquefaction of seaweeds and rice husk: Comparative study towards enhanced biofuel production. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 129, 162-170.	5.5	67
48	Bio-char and bio-oil characteristics produced from the interaction of <i>Enteromorpha clathrate</i> volatiles and rice husk bio-char during co-pyrolysis in a sectional pyrolysis furnace: A complementary study. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 135, 219-230.	5.5	33
49	Characterization and pyrolysis behavior of the green microalga <i>Micractinium conductrix</i> grown in lab-scale tubular photobioreactor using Py-GC/MS and TGA/MS. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 135, 340-349.	5.5	43
50	A study on catalytic co-pyrolysis of cellulose with seaweeds polysaccharides over ZSM-5: Towards high-quality biofuel production. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 134, 526-535.	5.5	38
51	Co-pyrolysis mechanism of seaweed polysaccharides and cellulose based on macroscopic experiments and molecular simulations. <i>Bioresource Technology</i> , 2017, 228, 305-314.	9.6	51
52	Study of pyrolytic mechanisms of seaweed based on different components (soluble polysaccharides,) <i>Tj ETQq0 0 0 ggBT /Overlock 10 Tf</i>	2.50	14
53	Pyrolysis mechanisms of typical seaweed polysaccharides. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 124, 373-383.	5.5	66
54	Mechanism research on the pyrolysis of seaweed polysaccharides by Py-GC/MS and subsequent density functional theory studies. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 126, 118-131.	5.5	35

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55	Effect of different pretreatments on the thermal degradation of seaweed biomass. Proceedings of the Combustion Institute, 2017, 36, 2271-2281.	3.9	43
56	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
57	TG-FTIR-MS analysis of the pyrolysis of blended seaweed and rice husk. Journal of Thermal Analysis and Calorimetry, 2016, 126, 1689-1702.	3.6	39
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	Compositional analysis of bio-oil derived from pyrolysis of seaweed. Energy Conversion and Management, 2013, 68, 273-280.	9.2	139