Leilei Dai

List of Publications by Year
in descending order

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71 papers	4,080 citations	87888 38 h-index	118850 62 g-index
71 all docs	71 docs citations	71 times ranked	3426 citing authors

#	Article	IF	Citations
1	Origin of the enhanced open-circuit voltage in polymer solar cells via interfacial modification using conjugated polyelectrolytes. Journal of Materials Chemistry, 2010, 20, 2617.	6.7	222
2	Bio-oil from fast pyrolysis of lignin: Effects of process and upgrading parameters. Bioresource Technology, 2017, 241, 1118-1126.	9.6	195
3	Integrated process of lignocellulosic biomass torrefaction and pyrolysis for upgrading bio-oil production: A state-of-the-art review. Renewable and Sustainable Energy Reviews, 2019, 107, 20-36.	16.4	186
4	Fast microwave-assisted catalytic co-pyrolysis of lignin and low-density polyethylene with HZSM-5 and MgO for improved bio-oil yield and quality. Bioresource Technology, 2017, 225, 199-205.	9.6	169
5	Wet torrefaction of biomass for high quality solid fuel production: A review. Renewable and Sustainable Energy Reviews, 2018, 91, 259-271.	16.4	163
6	A review on selective production of value-added chemicals via catalytic pyrolysis of lignocellulosic biomass. Science of the Total Environment, 2020, 749, 142386.	8.0	145
7	Comparative study on microwave and conventional hydrothermal pretreatment of bamboo sawdust: Hydrochar properties and its pyrolysis behaviors. Energy Conversion and Management, 2017, 146, 1-7.	9.2	133
8	Enhanced open-circuit voltage in polymer solar cells. Applied Physics Letters, 2009, 95, .	3.3	124
9	Synergistic effect of hydrothermal co-carbonization of sewage sludge with fruit and agricultural wastes on hydrochar fuel quality and combustion behavior. Waste Management, 2019, 100, 171-181.	7.4	107
10	Multiscale characteristics dynamics of hydrochar from hydrothermal conversion of sewage sludge under sub- and near-critical water. Bioresource Technology, 2016, 211, 486-493.	9.6	94
11	Ex-situ catalytic co-pyrolysis of lignin and polypropylene to upgrade bio-oil quality by microwave heating. Bioresource Technology, 2017, 241, 207-213.	9.6	94
12	Production of bio-oil from agricultural waste by using a continuous fast microwave pyrolysis system. Bioresource Technology, 2018, 269, 162-168.	9.6	93
13	Catalytic fast pyrolysis of torrefied corn cob to aromatic hydrocarbons over Ni-modified hierarchical ZSM-5 catalyst. Bioresource Technology, 2019, 272, 407-414.	9.6	86
14	Production of bio-oil and biochar from soapstock via microwave-assisted co-catalytic fast pyrolysis. Bioresource Technology, 2017, 225, 1-8.	9.6	83
15	Fast microwave-assisted ex-catalytic co-pyrolysis of bamboo and polypropylene for bio-oil production. Bioresource Technology, 2018, 249, 69-75.	9.6	81
16	Hydrocarbon fuel production from soapstock through fast microwave-assisted pyrolysis using microwave absorbent. Journal of Analytical and Applied Pyrolysis, 2016, 119, 251-258.	5.5	77
17	Products evolution during hydrothermal conversion of dewatered sewage sludge in sub- and near-critical water: Effects of reaction conditions and calcium oxide additive. International Journal of Hydrogen Energy, 2015, 40, 5776-5787.	7.1	76
18	Influence of torrefaction pretreatment on corncobs: A study on fundamental characteristics, thermal behavior, and kinetic. Bioresource Technology, 2020, 297, 122490.	9.6	74

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19	Microwave-assisted acid pretreatment of alkali lignin: Effect on characteristics and pyrolysis behavior. Bioresource Technology, 2018, 251, 57-62.	9.6	71
20	Waste shrimp shell-derived hydrochar as an emergent material for methyl orange removal in aqueous solutions. Environment International, 2020, 134, 105340.	10.0	69
21	Syngas production from biomass pyrolysis in a continuous microwave assisted pyrolysis system. Bioresource Technology, 2020, 314, 123756.	9.6	69
22	Biochar: From by-products of agro-industrial lignocellulosic waste to tailored carbon-based catalysts for biomass thermochemical conversions. Chemical Engineering Journal, 2022, 441, 135972.	12.7	69
23	Quantitative iTRAQâ€based proteomic analysis of rice grains to assess high night temperature stress. Proteomics, 2017, 17, 1600365.	2.2	66
24	Recent advances in improving lignocellulosic biomass-based bio-oil production. Journal of Analytical and Applied Pyrolysis, 2020, 149, 104845.	5.5	59
25	Review on the catalytic pyrolysis of waste oil for the production of renewable hydrocarbon fuels. Fuel, 2021, 283, 119170.	6.4	58
26	Microwave-assisted catalytic pyrolysis of torrefied corn cob for phenol-rich bio-oil production over Fe modified bio-char catalyst. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104691.	5.5	56
27	Microwave-assisted catalytic fast pyrolysis coupled with microwave-absorbent of soapstock for bio-oil in a downdraft reactor. Energy Conversion and Management, 2019, 185, 11-20.	9.2	55
28	Ex-situ catalytic fast pyrolysis of soapstock for aromatic oil over microwave-driven HZSM-5@SiC ceramic foam. Chemical Engineering Journal, 2020, 402, 126239.	12.7	52
29	Microwave-assisted co-pyrolysis of lignin and waste oil catalyzed by hierarchical ZSM-5/MCM-41 catalyst to produce aromatic hydrocarbons. Bioresource Technology, 2019, 289, 121609.	9.6	51
30	Catalytic co-pyrolysis of waste vegetable oil and high density polyethylene for hydrocarbon fuel production. Waste Management, 2017, 61, 276-282.	7.4	49
31	Microwave-assisted pyrolysis of waste cooking oil for hydrocarbon bio-oil over metal oxides and HZSM-5 catalysts. Energy Conversion and Management, 2020, 220, 113124.	9.2	49
32	Hydrothermal pretreatment of bamboo sawdust using microwave irradiation. Bioresource Technology, 2018, 247, 234-241.	9.6	48
33	Microwave-assisted catalytic fast co-pyrolysis of bamboo sawdust and waste tire for bio-oil production. Journal of Analytical and Applied Pyrolysis, 2017, 123, 224-228.	5.5	46
34	Utilization of Sewage-Sludge-Derived Hydrochars toward Efficient Cocombustion with Different-Rank Coals: Effects of Subcritical Water Conversion and Blending Scenarios. Energy & Fuels, 2014, 28, 6140-6150.	5.1	44
35	Co-pyrolysis of sewage sludge and hydrochar with coals: Pyrolytic behaviors and kinetics analysis using TG-FTIR and a discrete distributed activation energy model. Energy Conversion and Management, 2020, 203, 112226.	9.2	43
36	Characteristics of the catalytic fast pyrolysis of vegetable oil soapstock for hydrocarbon-rich fuel. Energy Conversion and Management, 2020, 213, 112860.	9.2	42

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37	Lignocellulosic biomass pyrolysis for aromatic hydrocarbons production: Pre and in-process enhancement methods. Renewable and Sustainable Energy Reviews, 2022, 165, 112607.	16.4	42
38	Fast microwave-assisted catalytic co-pyrolysis of straw stalk and soapstock for bio-oil production. Journal of Analytical and Applied Pyrolysis, 2017, 124, 35-41.	5.5	40
39	Synthesis of iron nanoparticles-based hydrochar catalyst for ex-situ catalytic microwave-assisted pyrolysis of lignocellulosic biomass to renewable phenols. Fuel, 2020, 279, 118532.	6.4	40
40	Microwave-assisted catalytic fast co-pyrolysis of soapstock and waste tire for bio-oil production. Journal of Analytical and Applied Pyrolysis, 2017, 125, 304-309.	5.5	39
41	Bridging the relationship between hydrothermal pretreatment and co-pyrolysis: Effect of hydrothermal pretreatment on aromatic production. Energy Conversion and Management, 2019, 180, 36-43.	9.2	39
42	Production of hydrocarbon-rich bio-oil from soapstock via fast microwave-assisted catalytic pyrolysis. Journal of Analytical and Applied Pyrolysis, 2017, 125, 356-362.	5.5	37
43	Ex-situ catalytic upgrading of vapors from fast microwave-assisted co-pyrolysis of Chromolaena odorata and soybean soapstock. Bioresource Technology, 2018, 261, 306-312.	9.6	37
44	Microwave-assisted pyrolysis of formic acid pretreated bamboo sawdust for bio-oil production. Environmental Research, 2020, 182, 108988.	7.5	36
45	Catalytic fast pyrolysis of low density polyethylene into naphtha with high selectivity by dual-catalyst tandem catalysis. Science of the Total Environment, 2021, 771, 144995.	8.0	35
46	Microwave-assisted catalytic co-pyrolysis of soybean straw and soapstock for bio-oil production using SiC ceramic foam catalyst. Journal of Analytical and Applied Pyrolysis, 2018, 133, 76-81.	5.5	34
47	Catalytic pyrolysis of woody oil over SiC foam-MCM41 catalyst for aromatic-rich bio-oil production in a dual microwave system. Journal of Cleaner Production, 2020, 255, 120179.	9.3	34
48	Research progress on the role of common metal catalysts in biomass pyrolysis: a state-of-the-art review. Green Chemistry, 2022, 24, 3922-3942.	9.0	34
49	Comparative study on characteristics of the bio-oil from microwave-assisted pyrolysis of lignocellulose and triacylglycerol. Science of the Total Environment, 2019, 659, 95-100.	8.0	33
50	Microwave catalytic co-pyrolysis of waste cooking oil and low-density polyethylene to produce monocyclic aromatic hydrocarbons: Effect of different catalysts and pyrolysis parameters. Science of the Total Environment, 2022, 809, 152182.	8.0	31
51	Microwave-assisted catalytic upgrading of co-pyrolysis vapor using HZSM-5 and MCM-41 for bio-oil production: Co-feeding of soapstock and straw in a downdraft reactor. Bioresource Technology, 2020, 299, 122611.	9.6	30
52	Effect of lime mud on the reaction kinetics and thermodynamics of biomass pyrolysis. Bioresource Technology, 2020, 310, 123475.	9.6	30
53	Design, synthesis and structureâ€“activity relationships of novel 4-phenoxyquinoline derivatives containing pyridazinone moiety as potential antitumor agents. European Journal of Medicinal Chemistry, 2014, 83, 581-593.	5.5	28
54	Microwave-assisted co-pyrolysis of pretreated lignin and soapstock for upgrading liquid oil: Effect of pretreatment parameters on pyrolysis behavior. Bioresource Technology, 2018, 258, 98-104.	9.6	28

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55	Co-pyrolysis of biomass and soapstock in a downdraft reactor using a novel ZSM-5/SiC composite catalyst. Bioresource Technology, 2019, 279, 202-208.	9.6	25
56	Pulse pyrolysis of waste cooking oil over CaO: Exploration of catalyst deactivation pathway based on feedstock characteristics. Applied Catalysis B: Environmental, 2022, 304, 120968.	20.2	25
57	Co-pyrolysis of wet torrefied bamboo sawdust and soapstock. Journal of Analytical and Applied Pyrolysis, 2018, 132, 211-216.	5.5	23
58	Catalytic co-pyrolysis of Alternanthera philoxeroides and peanut soapstock via a new continuous fast microwave pyrolysis system. Waste Management, 2019, 88, 102-109.	7.4	23
59	Microwave-assisted catalytic pyrolysis of corn cobs with Fe-modified Choerospondias axillaris seed-based biochar catalyst for phenol-rich bio-oil. Journal of Analytical and Applied Pyrolysis, 2021, 159, 105306.	5.5	23
60	Integrating pyrolysis and ex-situ catalytic reforming by microwave heating to produce hydrocarbon-rich bio-oil from soybean soapstock. Bioresource Technology, 2020, 302, 122843.	9.6	21
61	Microwave-assisted catalytic pyrolysis of Chinese tallow kernel oil for aromatic production in a downdraft reactor. Journal of Analytical and Applied Pyrolysis, 2018, 133, 16-21.	5.5	20
62	Study on the mechanism of co-catalyzed pyrolysis of biomass by potassium and calcium. Bioresource Technology, 2021, 320, 124415.	9.6	19
63	Co-pyrolysis of microwave-assisted acid pretreated bamboo sawdust and soapstock. Bioresource Technology, 2018, 265, 33-38.	9.6	18
64	Hydrodynamics- and hydrochemistry-affected microbial selenate reduction in aquifer: Performance and mechanisms. Science of the Total Environment, 2021, 768, 145331.	8.0	16
65	Conversion of woody oil into bio-oil in a downdraft reactor using a novel silicon carbide foam supported MCM41 composite catalyst. RSC Advances, 2019, 9, 19729-19739.	3.6	11
66	Pyrolysis of soybean soapstock for hydrocarbon bio-oil over a microwave-responsive catalyst in a series microwave system. Bioresource Technology, 2021, 341, 125800.	9.6	9
67	Conversion of soybean soapstock into hydrocarbon fuel by microwave-assisted catalytic fast pyrolysis using MCM-41/HZSM-5 in a downdraft reactor. Chemical Engineering and Processing: Process Intensification, 2020, 156, 108109.	3.6	8
68	Influence of the volume content of Î± + Î² colonies on the very high cycle fatigue behavior of a titanium alloy. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 2643-2658.	3.4	8
69	Behavior Rhythm: A New Model for Behavior Visualization and Its Application in System Security Management. IEEE Access, 2018, 6, 73940-73951.	4.2	3
70	Microwave-Assisted Camellia oleifera Abel Shell Biochar Catalyzed Fast Pyrolysis of Waste Vegetable Oil to Produce Aromatic-Rich Bio-Oil. Frontiers in Energy Research, 2022, 10, .	2.3	3
71	Very high cycle fatigue strength and failure mechanisms of welded joints. The Proceedings of Conference of Kyushu Branch, 2017, 2017.70, 812.	0.0	0