Pei-Gao Duan

List of Publications by Year
in descending order

90	4,968	76326 40	91884 69
papers	citations	h-index	g-index

90	90	90	3582
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrothermal Liquefaction and Gasification of Nannochloropsis sp.. Energy & Fuels, 2010, 24, 3639-3646.	5.1	633
2	Hydrothermal Liquefaction of a Microalga with Heterogeneous Catalysts. Industrial & Engineering Chemistry Research, 2011, 50, 52-61.	3.7	492
3	Upgrading of crude algal bio-oil in supercritical water. Bioresource Technology, 2011, 102, 1899-1906.	9.6	255
4	Catalytic hydrotreatment of crude algal bio-oil in supercritical water. Applied Catalysis B: Environmental, 2011, 104, 136-143.	20.2	158
5	Catalytic treatment of crude algal bio-oil in supercritical water: optimization studies. Energy and Environmental Science, 2011, 4, 1447.	30.8	150
6	Tuning the functional substituent group and guest of metalâ€“organic frameworks in hybrid membranes for improved interface compatibility and proton conduction. Journal of Materials Chemistry A, 2017, 5, 3464-3474.	10.3	140
7	Hydrothermal catalytic processing of pretreated algal oil: A catalyst screening study. Fuel, 2014, 120, 141-149.	6.4	125
8	Hydrothermal carbonization of sewage sludge: Effect of aqueous phase recycling. Chemical Engineering Journal, 2020, 387, 123410.	12.7	123
9	Co-liquefaction of micro- and macroalgae in subcritical water. Bioresource Technology, 2013, 149, 103-110.	9.6	102
10	Co-pyrolysis of microalgae and waste rubber tire in supercritical ethanol. Chemical Engineering Journal, 2015, 269, 262-271.	12.7	100
11	Benign-by-design N-doped carbonaceous materials obtained from the hydrothermal carbonization of sewage sludge for supercapacitor applications. Green Chemistry, 2020, 22, 3885-3895.	9.0	96
12	Catalytic upgrading of crude algal oil using platinum/gamma alumina in supercritical water. Fuel, 2013, 109, 225-233.	6.4	95
13	Hydrothermal processing of duckweed: Effect of reaction conditions on product distribution and composition. Bioresource Technology, 2013, 135, 710-719.	9.6	91
14	Pyrolysis of Municipal Sewage Sludge for Biofuel Production: A Review. Industrial & Engineering Chemistry Research, 2020, 59, 16939-16956.	3.7	83
15	Catalytic hydrothermal hydrodenitrogenation of pyridine. Applied Catalysis B: Environmental, 2011, 108-109, 54-60.	20.2	76
16	Thermo-chemical conversion of Chlorella pyrenoidosa to liquid biofuels. Bioresource Technology, 2013, 133, 197-205.	9.6	75
17	Hydrothermal liquefaction of Litsea cubeba seed to produce bio-oils. Bioresource Technology, 2013, 149, 509-515.	9.6	74
18	Composition of the bio-oil from the hydrothermal liquefaction of duckweed and the influence of the extraction solvents. Fuel, 2016, 185, 229-235.	6.4	73

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19	Modulating the Electrocatalytic Performance of Palladium with the Electronic Metalâ€“Support Interaction: A Case Study on Oxygen Evolution Reaction. ACS Catalysis, 2018, 8, 6617-6626.	11.2	73
20	Hydrothermal liquefaction of crop straws: Effect of feedstock composition. Fuel, 2020, 265, 116946.	6.4	72
21	Waste shrimp shell-derived hydrochar as an emergent material for methyl orange removal in aqueous solutions. Environment International, 2020, 134, 105340.	10.0	69
22	Integration of hydrothermal liquefaction and supercritical water gasification for improvement of energy recovery from algal biomass. Energy, 2018, 155, 734-745.	8.8	67
23	Hydrothermal processing of macroalgae for producing crude bio-oil. Fuel Processing Technology, 2015, 130, 268-274.	7.2	66
24	Progress in Hydrothermal Liquefaction of Algal Biomass and Hydrothermal Upgrading of the Subsequent Crude Bio-Oil: A Mini Review. Energy & Fuels, 2020, 34, 11723-11751.	5.1	64
25	Application of the polyacrylonitrile fiber as a novel support for polymer-supported copper catalysts in terminal alkyne homocoupling reactions. Journal of Catalysis, 2016, 337, 233-239.	6.2	61
26	Hydrothermal conversion of scrap tire to liquid fuel. Chemical Engineering Journal, 2016, 285, 157-163.	12.7	60
27	Non-catalytic liquefaction of microalgae in sub-and supercritical acetone. Chemical Engineering Journal, 2014, 254, 384-392.	12.7	59
28	Catalytic hydropyrolysis of microalgae: Influence of operating variables on the formation and composition of bio-oil. Bioresource Technology, 2015, 184, 349-354.	9.6	58
29	Catalytic upgrading of pretreated algal bio-oil over zeolite catalysts in supercritical water. Biochemical Engineering Journal, 2016, 116, 105-112.	3.6	58
30	Hydrothermal carbonization of sewage sludge: effect of inorganic salts on hydrochar's physicochemical properties. Green Chemistry, 2020, 22, 7010-7022.	9.0	58
31	A new method for removal of nitrogen in sewage sludge-derived hydrochar with hydrotalcite as the catalyst. Journal of Hazardous Materials, 2020, 398, 122833.	12.4	55
32	From wastewater treatment to resources recovery through hydrothermal treatments of municipal sewage sludge: A critical review. Chemical Engineering Research and Design, 2021, 151, 101-127.	5.6	53
33	Catalytic upgrading of duckweed biocrude in subcritical water. Bioresource Technology, 2014, 166, 37-44.	9.6	52
34	Lewis acid-catalyzed in situ transesterification/esterification of microalgae in supercritical ethanol. Bioresource Technology, 2014, 162, 341-349.	9.6	50
35	Catalytic hydrothermal upgrading of crude bio-oils produced from different thermo-chemical conversion routes of microalgae. Bioresource Technology, 2015, 186, 58-66.	9.6	50
36	Non-catalytic hydropyrolysis of microalgae to produce liquid biofuels. Bioresource Technology, 2013, 136, 626-634.	9.6	48

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37	Activated carbons for the hydrothermal upgrading of crude duckweed bio-oil. Catalysis Today, 2016, 274, 73-81.	4.4	46
38	Supercritical water gasification of microalgae over a two-component catalyst mixture. Science of the Total Environment, 2018, 630, 243-253.	8.0	46
39	Thermo-chemical conversion of scrap tire waste to produce gasoline fuel. Waste Management, 2019, 86, 1-12.	7.4	44
40	Nitrogen- and Sulfur-Doped Carbon Obtained from Direct Hydrothermal Carbonization of Cellulose and Ammonium Sulfate for Supercapacitor Applications. ACS Sustainable Chemistry and Engineering, 2020, 8, 15809-15814.	6.7	42
41	Catalytic upgrading of pretreated algal oil with a two-component catalyst mixture in supercritical water. Algal Research, 2015, 9, 186-193.	4.6	40
42	Hydrotreatment of bio-oil distillates produced from pyrolysis and hydrothermal liquefaction of duckweed: A comparison study. Science of the Total Environment, 2018, 636, 953-962.	8.0	38
43	Hierarchically Hollow MnO₂@CeO₂ Heterostructures for NO Oxidation: Remarkably Promoted Activity and SO₂ Tolerance. ACS Catalysis, 2021, 11, 10988-10996.	11.2	36
44	Supercritical water gasification of waste water produced from hydrothermal liquefaction of microalgae over Ru catalyst for production of H2 rich gas fuel. Fuel, 2021, 292, 120288.	6.4	32
45	Upgrading of Crude Duckweed Bio-Oil in Subcritical Water. Energy & Fuels, 2013, 27, 4729-4738.	5.1	31
46	Tuning anion species and chain length of ligands grafted on the fiber for an efficient polymer-supported Ni(II) complex catalyst in one-pot multicomponent A3-coupling. Journal of Catalysis, 2019, 372, 321-329.	6.2	31
47	Hydrothermal gasification of microalgae over nickel catalysts for production of hydrogen-rich fuel gas: Effect of zeolite supports. International Journal of Hydrogen Energy, 2019, 44, 5114-5124.	7.1	31
48	Catalytic hydrothermal gasification of microalgae for producing hydrogen and methane-rich gas. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 851-860.	2.3	30
49	Hydrothermal carbonization of activated sewage sludge over ammonia-treated Fenton sludge to produce hydrochar for clean fuel use. Green Chemistry, 2020, 22, 5077-5083.	9.0	29
50	Progress in thermochemical conversion of duckweed and upgrading of the bio-oil: A critical review. Science of the Total Environment, 2021, 769, 144660.	8.0	25
51	Liquid fuel generation from algal biomass via a two-step process: effect of feedstocks. Biotechnology for Biofuels, 2018, 11, 83.	6.2	23
52	Hydrotreatment of pyrolysis oil from waste tire in tetralin for production of high-quality hydrocarbon rich fuel. Fuel, 2021, 285, 119185.	6.4	22
53	A novel machine learning-based approach for prediction of nitrogen content in hydrochar from hydrothermal carbonization of sewage sludge. Energy, 2021, 232, 121010.	8.8	22
54	Co-hydrotreating of algae and used engine oil for the direct production of gasoline and diesel fuels or blending components. Energy, 2017, 136, 151-162.	8.8	21

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55	Co-hydrotreating of used engine oil and the low-boiling fraction of bio-oil blends for the production of liquid fuel. Fuel Processing Technology, 2016, 146, 62-69.	7.2	20
56	Mechanochemical Preparation of N,S-Doped Graphene Oxide Using (NH₄)₂SO₄ for Supercapacitor Applications. ACS Sustainable Chemistry and Engineering, 2020, 8, 18810-18815.	6.7	19
57	The study of hydrothermal liquefaction of corn straw with Nano ferriteÂ+Âinorganic base catalyst system at low temperature. Bioresource Technology, 2021, 333, 125185.	9.6	19
58	Catalytic Hydrodenitrogenation of Pyridine under Hydrothermal Conditions: A Comprehensive Study. ACS Sustainable Chemistry and Engineering, 2021, 9, 362-374.	6.7	19
59	Catalytic hydropyrolysis and co-hydropyrolysis of algae and used engine oil for the production of hydrocarbon-rich fuel. Energy, 2017, 133, 1153-1162.	8.8	18
60	Random forest-based modeling for insights on phosphorus content in hydrochar produced from hydrothermal carbonization of sewage sludge. Energy, 2022, 245, 123295.	8.8	18
61	Lewis acid-catalyzed in situ transesterification/esterification of tigernut in sub/supercritical ethanol: An optimization study. Fuel, 2019, 245, 96-104.	6.4	17
62	Hydrotreating the Low-Boiling-Point Fraction of Biocrude in Hydrogen Donor Solvents for Production of Trace-Sulfur Liquid Fuel. Industrial & Engineering Chemistry Research, 2019, 58, 10210-10223.	3.7	16
63	Uniphase rutheniumâ€“iridium alloy-based electronic regulation for electronic structureâ€“function study in methane oxidation to methanol. Journal of Materials Chemistry A, 2020, 8, 24024-24030.	10.3	15
64	Selective Hydrogenolysis and Hydrogenation of Furfuryl Alcohol in the Aqueous Phase Using Ruâ€“Mn-Based Catalysts. Industrial & Engineering Chemistry Research, 2020, 59, 17210-17217.	3.7	14
65	A sequenced batch process for integrated hydropyrolysis and hydrotreatment of a microalgae and used engine oil blend. Fuel Processing Technology, 2019, 190, 47-54.	7.2	13
66	Bifunctionalized polyacrylonitrile fibers as highly efficient and selective heterogeneous catalysts for cycloaddition of CO2 with epichlorohydrin under mild conditions. Catalysis Today, 2020, 355, 162-170.	4.4	13
67	Lewis acid (Ni²⁺, Co^{2+/3+} or Zn²⁺) modified electron-deficient Ir⁴⁺ in IrO₂/CuO for promoting methane oxidation to ethanol and methanol. Journal of Materials Chemistry A, 2021, 9, 7094-7101.	10.3	13
68	Effective transesterification of triglyceride with sulphonated modified SBA-15 (SBA-15-SO3H): Screening, process and mechanism. Inorganica Chimica Acta, 2018, 482, 846-853.	2.4	12
69	Hydro-upgrading of algal bio-oil in tetralin for the production of high-quality liquid fuel: Process intensification. Fuel Processing Technology, 2021, 224, 107034.	7.2	12
70	Slow pyrolysis of biomass: effects of effective hydrogen-to-carbon atomic ratio of biomass and reaction atmospheres. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 2637-2650.	2.3	11
71	Highly Active and Selective Photocatalytic Oxidation of Organosilanes to Silanols. ACS Sustainable Chemistry and Engineering, 2022, 10, 4642-4649.	6.7	11
72	Hydrotreating a waste engine oil and scrap tire oil blend for production of liquid fuel. Fuel, 2019, 249, 418-426.	6.4	9

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73	Artificial Coal: Facile and Green Production Method via Low-Temperature Hydrothermal Carbonization of Lignocellulose. ACS Sustainable Chemistry and Engineering, 2022, 10, 3335-3345.	6.7	9
74	Chemoenzymatic Hunsdiecker-Type Decarboxylative Bromination of Cinnamic Acids. ACS Catalysis, 2022, 12, 4554-4559.	11.2	8
75	Hydrothermal cocarbonization of cellulose and organic matter of municipal sewage sludge for the preparation of supercapacitor carbon materials. Biomass and Bioenergy, 2022, 163, 106526.	5.7	8
76	Data on characterization of crude bio-oils, gaseous products, and process water produced from hydrothermal liquefaction of eight different algae. Data in Brief, 2018, 19, 1257-1265.	1.0	7
77	Liquid fuel production via catalytic hydropyrolysis and cohydropyrolysis of agricultural residues and used engine oil. Journal of Analytical and Applied Pyrolysis, 2021, 154, 104988.	5.5	7
78	Enhanced catalytic activity of layered double hydroxides via in-situ reconstruction for conversion of glucose/food waste to methyl lactate in biorefinery. Science of the Total Environment, 2022, 829, 154540.	8.0	7
79	Hydrotreating the distillate fraction of algal biocrude with used engine oil over Pt/C for production of liquid fuel. Catalysis Today, 2020, 355, 65-74.	4.4	6
80	Effect of ultrasonic pretreatment on the properties of bio-oil. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 941-945.	2.3	5
81	Synthesis and luminescent properties of a new blue light-emitting phosphor KBa2â^'xTm x P5O15. Journal of the Iranian Chemical Society, 2018, 15, 1069-1074.	2.2	5
82	Structure twinning and photoluminescence properties of sodium dysprosium phosphate Na3Dy(PO4)2. Journal of Materials Science: Materials in Electronics, 2018, 29, 1664-1671.	2.2	5
83	Transformation of the Sulfur Element during Pyrolysis of Sewage Sludge at Low Temperatures. Energy & Fuels, 2021, 35, 501-509.	5.1	5
84	Conversion of CO₂ into cyclic carbonate catalyzed by an N-doped mesoporous carbon catalyst. Reaction Chemistry and Engineering, 2021, 6, 1911-1919.	3.7	5
85	Effect of graphene oxide with different morphological characteristics on properties of immobilized enzyme in the covalent method. Bioprocess and Biosystems Engineering, 2020, 43, 1847-1858.	3.4	4
86	Catalytic hydrotreatment of the high-boiling-point fraction of soybean straw biocrude in a mixed hydrogen donor. Fuel, 2022, 310, 122126.	6.4	4
87	Hydro-upgrading of bio-oils derived from pyrolysis of biomass with different H/Ceff ratios in tetralin over Pt/C and Ru/C. International Journal of Hydrogen Energy, 2023, 48, 6916-6926.	7.1	4
88	From waste tire to high value-added chemicals: an analytical Py-GC/TOFâ€"MS study. Environmental Science and Pollution Research, 2022, , 1.	5.3	3
89	Anion-directed assembly of lanthanide coordination polymers with SMMs properties based on a dihydrazone ligand. Zeitschrift Fur Kristallographie - Crystalline Materials, 2018, 233, 51-59.	0.8	2
90	Catalytic hydropyrolysis of crop straws with different biochemical composition. International Journal of Hydrogen Energy, 2023, 48, 6927-6936.	7.1	2