

Dongdong Feng

List of Publications by Year in descending order

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66
papers

2,382
citations

218677

26
h-index

214800

47
g-index

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all docs

66
docs citations

66
times ranked

1284
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of pyrolysis temperature on char structure and chemical speciation of alkali and alkaline earth metallic species in biochar. <i>Fuel Processing Technology</i> , 2016, 141, 54-60.	7.2	248
2	Effects of K and Ca on reforming of model tar compounds with pyrolysis biochars under H ₂ O or CO ₂ . <i>Chemical Engineering Journal</i> , 2016, 306, 422-432.	12.7	169
3	Catalytic mechanism of ion-exchanging alkali and alkaline earth metallic species on biochar reactivity during CO ₂ /H ₂ O gasification. <i>Fuel</i> , 2018, 212, 523-532.	6.4	168
4	Functionalized construction of biochar with hierarchical pore structures and surface O-/N-containing groups for phenol adsorption. <i>Chemical Engineering Journal</i> , 2021, 410, 127707.	12.7	163
5	Mechanism of in-situ dynamic catalysis and selective deactivation of H ₂ O-activated biochar for biomass tar reforming. <i>Fuel</i> , 2020, 279, 118450.	6.4	113
6	Effects of H ₂ O and CO ₂ on the homogeneous conversion and heterogeneous reforming of biomass tar over biochar. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 13070-13084.	7.1	103
7	Improvement and maintenance of biochar catalytic activity for in-situ biomass tar reforming during pyrolysis and H ₂ O/CO ₂ gasification. <i>Fuel Processing Technology</i> , 2018, 172, 106-114.	7.2	77
8	Catalytic effects of ion-exchangeable K ⁺ and Ca ²⁺ on rice husk pyrolysis behavior and its gas-liquid-solid product properties. <i>Energy</i> , 2018, 152, 166-177.	8.8	61
9	Roles and fates of K and Ca species on biochar structure during in-situ tar H ₂ O reforming over nascent biochar. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 21686-21696.	7.1	60
10	Changes of biochar physiochemical structures during tar H ₂ O and CO ₂ heterogeneous reforming with biochar. <i>Fuel Processing Technology</i> , 2017, 165, 72-79.	7.2	58
11	Adsorption-enrichment characterization of CO ₂ and dynamic retention of free NH ₃ in functionalized biochar with H ₂ O/NH ₃ -H ₂ O activation for promotion of new ammonia-based carbon capture. <i>Chemical Engineering Journal</i> , 2021, 409, 128193.	12.7	58
12	Catalytic mechanism of Na on coal pyrolysis-derived carbon black formation: Experiment and DFT simulation. <i>Fuel Processing Technology</i> , 2021, 224, 107011.	7.2	51
13	Functional Biochar Synergistic Solid/Liquid-Phase CO ₂ Capture: A Review. <i>Energy & Fuels</i> , 2022, 36, 2945-2970.	5.1	49
14	Mechanism of catalytic tar reforming over biochar: Description of volatile-H ₂ O-char interaction. <i>Fuel</i> , 2020, 275, 117954.	6.4	45
15	Experimental comparison of biochar species on in-situ biomass tar H ₂ O reforming over biochar. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 24035-24046.	7.1	43
16	Development of a Multistage in Situ Reaction Analyzer Based on a Micro Fluidized Bed and Its Suitability for Rapid Gas-Solid Reactions. <i>Energy & Fuels</i> , 2016, 30, 6021-6033.	5.1	40
17	In-situ steam reforming of biomass tar over sawdust biochar in mild catalytic temperature. <i>Biomass and Bioenergy</i> , 2017, 107, 261-270.	5.7	40
18	Review of Carbon Fixation Evaluation and Emission Reduction Effectiveness for Biochar in China. <i>Energy & Fuels</i> , 2020, 34, 10583-10606.	5.1	39

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19	Effects of flue gases (CO/CO ₂ /SO ₂ /H ₂ O/O ₂) on NO-Char interaction at high temperatures. <i>Energy</i> , 2019, 174, 519-525.	8.8	38
20	Synergetic effects of biochar structure and AAEM species on reactivity of H ₂ O-activated biochar from cyclone air gasification. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 16045-16053.	7.1	37
21	Characteristics of Gas-Liquid-Solid Products in Corn Straw Gasification: Effect of the Char-Tar-H ₂ O Interaction. <i>Energy & Fuels</i> , 2019, 33, 9974-9984.	5.1	37
22	Synergistic mechanism of biochar-nano TiO ₂ adsorption-photocatalytic oxidation of toluene. <i>Fuel Processing Technology</i> , 2022, 229, 107200.	7.2	35
23	The intrinsic kinetics of methane steam reforming over a nickel-based catalyst in a micro fluidized bed reaction system. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 1615-1628.	7.1	34
24	Catalytic Mechanism of K and Ca on the Volatile-Biochar Interaction for Rapid Pyrolysis of Biomass: Experimental and Simulation Studies. <i>Energy & Fuels</i> , 2020, 34, 9741-9753.	5.1	34
25	Mechanism of biochar-gas-tar-soot formation during pyrolysis of different biomass feedstocks: Effect of inherent metal species. <i>Fuel</i> , 2021, 293, 120409.	6.4	34
26	Formation and O ₂ /CO ₂ combustion characteristics of real-environment coal char in high-temperature oxy-fuel conditions. <i>Journal of the Energy Institute</i> , 2019, 92, 1670-1682.	5.3	30
27	Effects of Pressure on the Characteristics of Bituminous Coal Pyrolysis Char Formed in a Pressurized Drop Tube Furnace. <i>Energy & Fuels</i> , 2019, 33, 12219-12226.	5.1	27
28	Effects of total pressure and CO ₂ partial pressure on the physicochemical properties and reactivity of pressurized coal char produced at rapid heating rate. <i>Energy</i> , 2020, 208, 118297.	8.8	27
29	Effects of volatile-char interactions on char during pyrolysis of rice husk at mild temperatures. <i>Bioresource Technology</i> , 2016, 219, 702-709.	9.6	24
30	Mass transfer in ammonia-based CO ₂ absorption in bubbling reactor under static magnetic field. <i>Chemical Engineering Journal</i> , 2018, 338, 450-456.	12.7	24
31	Thermal evolution of gas-liquid-solid products and migration regulation of C/H/O elements during biomass pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 156, 105128.	5.5	24
32	Mechanism of coke formation and corresponding gas fraction characteristics in biochar-catalyzed tar reforming during Corn Straw Pyrolysis. <i>Fuel Processing Technology</i> , 2021, 221, 106903.	7.2	23
33	Interaction mechanism of in-situ catalytic coal H ₂ O-gasification over biochar catalysts for H ₂ O-H ₂ -tar reforming and active sites conversion. <i>Fuel Processing Technology</i> , 2022, 233, 107307.	7.2	23
34	Carbon material-TiO ₂ for photocatalytic reduction of CO ₂ and degradation of VOCs: A critical review. <i>Fuel Processing Technology</i> , 2022, 231, 107261.	7.2	22
35	Impact of Sodium on the Formation Mechanism and Physicochemical Properties of Coal-Derived Soot. <i>Energy & Fuels</i> , 2020, 34, 1453-1466.	5.1	21
36	Evolution of Char Structure During In-Situ Biomass Tar Reforming: Importance of the Coupling Effect Among the Physical-Chemical Structure of Char-Based Catalysts. <i>Catalysts</i> , 2019, 9, 711.	3.5	19

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37	Effect of steam on coke deposition during the tar reforming from corn straw pyrolysis over biochar. <i>Fuel Processing Technology</i> , 2021, 224, 107007.	7.2	19
38	Combustion characteristics of char from pyrolysis of Zhundong sub-bituminous coal under O ₂ /steam atmosphere: Effects of mineral matter. <i>International Journal of Greenhouse Gas Control</i> , 2019, 80, 54-60.	4.6	18
39	Synergies and progressive effects of H ₂ O/CO ₂ and nascent tar on biochar structure and reactivity during gasification. <i>Fuel Processing Technology</i> , 2017, 168, 1-10.	7.2	17
40	Effect of different forms of Na and temperature on soot formation during lignite pyrolysis. <i>Fuel</i> , 2020, 280, 118514.	6.4	17
41	In-situ decoupling effect of H ₂ O on the whole process of coal gasification in MFBR and TG-FTIR-MS. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 145, 104744.	5.5	16
42	Behavior Study of Migration and Transformation of Heavy Metals during Oily Sludge Pyrolysis. <i>Energy & Fuels</i> , 2022, 36, 8311-8322.	5.1	16
43	Steam Gasification of Sawdust Biochar Influenced by Chemical Speciation of Alkali and Alkaline Earth Metallic Species. <i>Energies</i> , 2018, 11, 205.	3.1	15
44	Review on thermal conversion characteristics of coal in O ₂ /H ₂ O atmosphere. <i>Fuel Processing Technology</i> , 2022, 232, 107266.	7.2	14
45	Thermal synergistic treatment of municipal solid waste incineration (MSWI) fly ash and fluxing agent in specific situation: Melting characteristics, leaching characteristics of heavy metals. <i>Fuel Processing Technology</i> , 2022, 233, 107311.	7.2	14
46	Study on the effect of H ₂ O on the formation of CO in the counterflow diffusion flame of H ₂ /CO syngas in O ₂ /H ₂ O. <i>Fuel</i> , 2018, 234, 516-525.	6.4	11
47	Influence of preheating and burner geometry on modeling the attachment of laminar coflow CH ₄ /air diffusion flames. <i>Combustion and Flame</i> , 2018, 191, 381-393.	5.2	11
48	Study on the thermal conversion characteristics of demineralized coal char under pressurized O ₂ /H ₂ O atmosphere. <i>Fuel</i> , 2022, 310, 122429.	6.4	11
49	Effects of Water Molecule on CO Oxidation by OH: Reaction Pathways, Kinetic Barriers, and Rate Constants. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4868-4880.	2.5	10
50	Effect of high-temperature and microwave expanding modification on reactivity of coal char for char-NO interaction. <i>Science of the Total Environment</i> , 2021, 760, 144028.	8.0	10
51	System modification and thermal efficiency study on the semi-closed cycle of supercritical carbon dioxide. <i>Energy Conversion and Management</i> , 2021, 241, 114272.	9.2	10
52	Experimental study of nitrogen conversion during char combustion under a pressurized O ₂ /H ₂ O atmosphere. <i>Fuel</i> , 2022, 311, 122529.	6.4	10
53	Roles of Ion-Exchangeable Sodium in the Conversion Process of Tar to Soot during Rapid Pyrolysis of Two Brown Coals in a Drop-Tube Reactor. <i>ACS Omega</i> , 2020, 5, 9078-9092.	3.5	9
54	Migration of Alkali and Alkaline Earth Metallic Species and Structure Analysis of Sawdust Pyrolysis Biochar. <i>Korean Chemical Engineering Research</i> , 2016, 54, 659-664.	0.2	9

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55	Optimization of the process of antisolvent crystallization of carbonized ammonia with a low carbon-to-nitrogen ratio. <i>Fuel Processing Technology</i> , 2017, 155, 59-67.	7.2	8
56	Experimental study of cyclone pyrolysis " Suspended combustion air gasification of biomass. <i>Bioresource Technology</i> , 2017, 243, 1241-1246.	9.6	8
57	Effect of pressure on the structure and reactivity of demineralized coal during O ₂ /H ₂ O thermal conversion process. <i>Energy</i> , 2022, 244, 122632.	8.8	8
58	Characteristics of rice husk gasification in cyclone pyrolysis-suspended combustion system. <i>Thermal Science</i> , 2018, 22, 439-447.	1.1	7
59	Study on regenerative process of the new carbon capture technique based on antisolvent crystallization to strengthen crystallization. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 1979-1984.	1.7	4
60	Effect of microbubbles on preparation of precipitated silica by carbonization: physical-chemical structure, kinetic parameters and mass transfer characteristics. <i>Carbon Capture Science & Technology</i> , 2021, 1, 100002.	10.4	4
61	Effect of magnetic field on the ammonia-based CO ₂ absorption process. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 1462-1467.	1.7	3
62	Experimental study Char-NO reduction characteristics at elevated pressure. <i>Asia-Pacific Journal of Chemical Engineering</i> , 0, , e2730.	1.5	3
63	The Thermal Swelling Properties of Plant Chemical Alcohol Waste Liquid. <i>Energies</i> , 2019, 12, 4184.	3.1	2
64	Combustion Characteristics of Plant Chemical Polyol Waste Liquor in a Pilot Water-Cooled Incinerator. <i>Energies</i> , 2019, 12, 4369.	3.1	0
65	Mechanism of In-Situ Catalytic Cracking of Biomass Tar over Biochar with Multiple Active Sites. , 2020, , .		0
66	Biochar Synergistic New Ammonia Capture of CO ₂ and High-Value Utilization of Intermediate Products. , 0, , .		0