

# Dechao Wang

## List of Publications by Year in descending order

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47  
papers

1,027  
citations

430874

18  
h-index

454955

30  
g-index

47  
all docs

47  
docs citations

47  
times ranked

870  
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on aromatics production via the catalytic pyrolysis vapor upgrading of biomass using metal-loaded modified H-ZSM-5. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 126, 169-179.	5.5	180
2	Fast co-pyrolysis of a massive Naomaohu coal and cedar mixture using rapid infrared heating. <i>Energy Conversion and Management</i> , 2020, 205, 112442.	9.2	50
3	Selective Hydrogenation of Furfural over the Co-Based Catalyst: A Subtle Synergy with Ni and Zn Dopants. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 8507-8517.	8.0	49
4	Effect of reducibility of transition metal oxides on in-situ oxidative catalytic cracking of tar. <i>Energy Conversion and Management</i> , 2019, 197, 111871.	9.2	43
5	Chemical-enzymatic fractionation to unlock the potential of biomass-derived carbon materials for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26954-26965.	10.3	41
6	Catalytic upgrading of lignite pyrolysis volatiles over modified HY zeolites. <i>Fuel</i> , 2020, 259, 116234.	6.4	40
7	A Surface Chemistry Approach to Tailoring the Hydrophilicity and Lithiophilicity of Carbon Films for Hosting High-Performance Lithium Metal Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 2000585.	14.9	37
8	Partial oxidation of vacuum residue over Al and Zr-doped $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> catalysts. <i>Fuel</i> , 2017, 210, 803-810.	6.4	32
9	Effect of different acid-leached USY zeolites on in-situ catalytic upgrading of lignite tar. <i>Fuel</i> , 2020, 266, 117089.	6.4	32
10	Catalytic fast pyrolysis of cellulose over Ce <sub>0.8</sub> Zr <sub>0.2-x</sub> Al <sub>x</sub> O <sub>2</sub> catalysts to produce aromatic hydrocarbons: Analytical Py-GC/MS. <i>Fuel Processing Technology</i> , 2020, 205, 106438.	7.2	31
11	Facile Preparation of Low-Cost and Cross-Linked Carbon Nanofibers Derived from PAN/PMMA/Lignin as Supercapacitor Electrodes. <i>Energy &amp; Fuels</i> , 2021, 35, 796-805.	5.1	29
12	Integrated process for partial oxidation of heavy oil and in-situ reduction of red mud. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 117944.	20.2	28
13	Upgrading of vacuum residue with chemical looping partial oxidation over Ce doped Fe <sub>2</sub> O <sub>3</sub> . <i>Energy</i> , 2018, 162, 542-553.	8.8	27
14	Upgrading of vacuum residue with chemical looping partial oxidation over Fe-Mn mixed metal oxides. <i>Fuel</i> , 2019, 239, 764-773.	6.4	24
15	Catalytic copyrolysis of metal impregnated biomass and plastic with Ni-based HZSM-5 catalyst: Synergistic effects, kinetics and product distribution. <i>International Journal of Energy Research</i> , 2020, 44, 5917-5935.	4.5	23
16	One-step hydrotreatment of inedible oil for production the second-generation biofuel over Pt-Sn/SAPO-11 catalyst. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 156, 105121.	5.5	22
17	Efficient ex-situ catalytic upgrading of biomass pyrolysis vapors to produce methylfurans and phenol over bio-based activated carbon. <i>Biomass and Bioenergy</i> , 2020, 142, 105794.	5.7	21
18	Co-pyrolysis of Baiyinhua lignite and pine in an infrared-heated fixed bed to improve tar yield. <i>Fuel</i> , 2020, 272, 117739.	6.4	21

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19	Enhanced production of light tar from integrated process of in-situ catalytic upgrading lignite tar and methane dry reforming over Ni/mesoporous Y. <i>Fuel</i> , 2020, 279, 118533.	6.4	20
20	Catalytic upgrading of lignocellulosic biomass pyrolysis vapors: Insights into physicochemical changes in ZSM-5. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 156, 105123.	5.5	20
21	Selective production of alkanes and fatty alcohol via hydrodeoxygenation of palmitic acid over red mud-supported nickel catalysts. <i>Fuel</i> , 2022, 314, 122780.	6.4	19
22	Integrated process of coal tar upgrading and in-situ reduction of Fe <sub>2</sub> O <sub>3</sub> . <i>Fuel Processing Technology</i> , 2019, 191, 20-28.	7.2	18
23	Production of diesel-like hydrocarbons via hydrodeoxygenation of palmitic acid over Ni/TS-1 catalyst. <i>Biomass and Bioenergy</i> , 2021, 149, 106081.	5.7	17
24	Reagent-assisted hydrothermal synthesis of NiCo <sub>2</sub> O <sub>4</sub> nanomaterials as electrodes for high-performance asymmetric supercapacitors. <i>New Journal of Chemistry</i> , 2021, 45, 9230-9242.	2.8	16
25	Integrated coal pyrolysis with dry reforming of low carbon alkane over Ni/La <sub>2</sub> O <sub>3</sub> to improve tar yield. <i>Fuel</i> , 2020, 266, 117092.	6.4	15
26	Synthesis and Thermal Properties of Resorcinol-Furfural Thermosetting Resin. <i>ACS Omega</i> , 2020, 5, 10011-10020.	3.5	14
27	Co-pyrolysis behaviors of low-rank coal and polystyrene with in-situ pyrolysis time-of-flight mass spectrometry. <i>Fuel</i> , 2021, 286, 119461.	6.4	14
28	Bi-Doped Ceria as a Highly Efficient Catalyst for Soot Combustion: Improved Mobility of Lattice Oxygen in CexBi1-xOy Catalysts. <i>Energy &amp; Fuels</i> , 2020, 34, 9932-9939.	5.1	13
29	Enhancing Lithium-Storage Performance via Graphdiyne/Graphene Interface by Self-Supporting Framework Synthesized. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 34332-34340.	8.0	13
30	A new method for long-chain alkanes under a condition without extra hydrogen source: Catalytic upgrading of cellulose pyrolysis vapors over Au/TS-1 catalyst. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 151, 104906.	5.5	11
31	Oxidative Catalytic Cracking and Reforming of Coal Pyrolysis Volatiles over NiO. <i>Energy &amp; Fuels</i> , 2020, 34, 6928-6937.	5.1	11
32	Improving the thermal and mechanical properties of phenolic fiber over boron modified high-ortho phenolic resin. <i>High Performance Polymers</i> , 2021, 33, 587-597.	1.8	10
33	Optimization of key parameters using RSM for improving the production of the green biodiesel from FAME by hydrotreatment over Pt/SAPO-11. <i>Biomass and Bioenergy</i> , 2022, 158, 106379.	5.7	10
34	Boosting the selectivity of aromatic hydrocarbons via ex-situ catalytic fast pyrolysis of cellulose over Pt-Sn-Ce/Al <sub>2</sub> O <sub>3</sub> catalyst. <i>Journal of the Energy Institute</i> , 2021, 98, 144-152.	5.3	9
35	Preparation of high molecular weight thermoplastic bio-based phenolic resin and fiber based on lignin liquefaction. <i>Materials Research Express</i> , 2021, 8, 015308.	1.6	8
36	Steam catalytic cracking of coal tar over iron-containing mixed metal oxides. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 702-708.	1.7	7

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37	Catalytic pyrolysis of cellulose over solid acidic catalysts: an environment-friendly method for furan production. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 2695-2702.	4.6	7
38	Upgrading of Heavy Oil with Chemical Looping Partial Oxidation over $M^{2+}$ Doped $Fe_2O_3$ . <i>Energy &amp; Fuels</i> , 2019, 33, 257-265.	5.1	6
39	Catalytic Pyrolysis Vapor Upgrading of Corncob into Furans over Pyrolysis-Comprehensive Two-Dimensional Gas Chromatography/Mass Spectrometry: Significance of Catalyst and Temperature. <i>Bioenergy Research</i> , 2020, 13, 1180-1193.	3.9	6
40	In-situ Upgrading of Coal Pyrolysis Tar with Steam Catalytic Cracking over $Ni/Al_2O_3$ Catalysts. <i>ChemistrySelect</i> , 2020, 5, 4905-4912.	1.5	6
41	One-Dimensional Spinel Transition Bimetallic Oxide Composite Carbon Nanofibers ( $CoFe_2O_4@CNFs$ ) for Asymmetric Supercapacitors. <i>ChemElectroChem</i> , 2021, 8, 4116-4123.	3.4	6
42	Direct catalytic conversion cellulose pyrolysis vapors into long chain alkanes (LCAs) over Au/TS-1. <i>Journal of the Energy Institute</i> , 2021, 98, 11-19.	5.3	5
43	Boosting production of useful chemicals and micro-mesopores biochar from in situ catalytic pyrolysis of cellulose with red mud. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 7045-7055.	4.6	5
44	Insights into pyrolysis behavior of polyacrylonitrile precursors using Py-GC/MS. <i>Chemical Papers</i> , 2021, 75, 5297-5311.	2.2	4
45	Development of a New Route for Separating and Purifying 4-Ethyl-2-methoxyphenol Based on the Reaction Mechanism between the Chemical and Calcium Ion. <i>ACS Omega</i> , 2021, 6, 2206-2214.	3.5	3
46	Preparation of $Ce-Mn/Fe_2O_3$ Catalysts for Steam Catalytic Cracking of Coal Tar. <i>ChemistrySelect</i> , 2018, 3, 12537-12543.	1.5	2
47	$Nb_2O_5$ modified $NiAl_2O_4$ catalysts for hydrodeoxygenation of methyl palmitate to long-chain alkane. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 6951-6965.	4.6	2