

Nan Zhou

List of Publications by Year in descending order

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108
papers

5,634
citations

70961

41
h-index

85405

71
g-index

109
all docs

109
docs citations

109
times ranked

5840
citing authors

#	ARTICLE	IF	CITATIONS
1	Biochars with excellent Pb(II) adsorption property produced from fresh and dehydrated banana peels via hydrothermal carbonization. <i>Bioresource Technology</i> , 2017, 232, 204-210.	4.8	273
2	Research progress and application prospects of transition metal Mn ⁴⁺ -activated luminescent materials. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9143-9161.	2.7	228
3	Bio-oil from fast pyrolysis of lignin: Effects of process and upgrading parameters. <i>Bioresource Technology</i> , 2017, 241, 1118-1126.	4.8	195
4	Catalytic microwave-assisted pyrolysis of plastic waste over NiO and HY for gasoline-range hydrocarbons production. <i>Energy Conversion and Management</i> , 2019, 196, 1316-1325.	4.4	172
5	Effects of feedstock characteristics on microwave-assisted pyrolysis – A review. <i>Bioresource Technology</i> , 2017, 230, 143-151.	4.8	169
6	A review on the non-thermal plasma-assisted ammonia synthesis technologies. <i>Journal of Cleaner Production</i> , 2018, 177, 597-609.	4.6	150
7	Catalytic pyrolysis of plastic wastes in a continuous microwave assisted pyrolysis system for fuel production. <i>Chemical Engineering Journal</i> , 2021, 418, 129412.	6.6	148
8	Fast microwave-assisted pyrolysis of wastes for biofuels production – A review. <i>Bioresource Technology</i> , 2020, 297, 122480.	4.8	137
9	Tunable dual emission of Ca ₃ Al ₄ ZnO ₁₀ :Bi ³⁺ , Mn ⁴⁺ via energy transfer for indoor plant growth lighting. <i>Journal of Materials Chemistry C</i> , 2018, 6, 8914-8922.	2.7	134
10	A High-Performance Composite Electrode for Vanadium Redox Flow Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700461.	10.2	133
11	Ex-situ catalytic upgrading of vapors from microwave-assisted pyrolysis of low-density polyethylene with MgO. <i>Energy Conversion and Management</i> , 2017, 149, 432-441.	4.4	126
12	Polyol-Mediated Solvothermal Synthesis and Electrochemical Performance of Nanostructured V ₂ O ₅ Hollow Microspheres. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1621-1626.	1.5	121
13	Effect of pyrolysis condition on the adsorption mechanism of lead, cadmium and copper on tobacco stem biochar. <i>Journal of Cleaner Production</i> , 2018, 187, 996-1005.	4.6	118
14	Development of biochar-based nanocatalysts for tar cracking/reforming during biomass pyrolysis and gasification. <i>Bioresource Technology</i> , 2020, 298, 122263.	4.8	116
15	Accelerated polysulfide redox kinetics revealed by ternary sandwich-type S@Co/N-doped carbon nanosheet for high-performance lithium-sulfur batteries. <i>Carbon</i> , 2018, 128, 86-96.	5.4	116
16	Effect of phosphoric acid on the surface properties and Pb(II) adsorption mechanisms of hydrochars prepared from fresh banana peels. <i>Journal of Cleaner Production</i> , 2017, 165, 221-230.	4.6	114
17	Nickel cobalt oxide/carbon nanotubes hybrid as a high-performance electrocatalyst for metal/air battery. <i>Nanoscale</i> , 2014, 6, 10235-10242.	2.8	112
18	Dy ³⁺ @Mn ⁴⁺ co-doped Ca ₁₄ Ga ₁₀ Al _m Zn ₆ O ₃₅ far-red emitting phosphors with high brightness and improved luminescence and energy transfer properties for plant growth LED lights. <i>Journal of Materials Chemistry C</i> , 2017, 5, 8201-8210.	2.7	112

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19	Enhancing quantum efficiency and tuning photoluminescence properties in far-red-emitting phosphor Ca ₁₄ Ga ₁₀ Zn ₆ O ₃₅ :Mn ⁴⁺ based on chemical unit engineering. <i>Chemical Engineering Journal</i> , 2019, 374, 381-391.	6.6	112
20	In-situ and ex-situ catalytic upgrading of vapors from microwave-assisted pyrolysis of lignin. <i>Bioresource Technology</i> , 2018, 247, 851-858.	4.8	108
21	Cu ²⁺ -MOF-Derived Cu/Cu ₂ O Nanoparticles and Cu _x C _y Species to Boost Oxygen Reduction Activity of Ketjenblack Carbon in Al ³⁺ Air Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 413-421.	3.2	105
22	Development and application of a continuous fast microwave pyrolysis system for sewage sludge utilization. <i>Bioresource Technology</i> , 2018, 256, 295-301.	4.8	96
23	Ru-based multifunctional mesoporous catalyst for low-pressure and non-thermal plasma synthesis of ammonia. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 19056-19066.	3.8	82
24	Bio-oil production from sequential two-step catalytic fast microwave-assisted biomass pyrolysis. <i>Fuel</i> , 2017, 196, 261-268.	3.4	81
25	Applications of calcium oxide-based catalysts in biomass pyrolysis/gasification – A review. <i>Journal of Cleaner Production</i> , 2021, 291, 125826.	4.6	80
26	Synergistically enhanced oxygen reduction activity of MnO _x -CeO ₂ /Ketjenblack composites. <i>Chemical Communications</i> , 2015, 51, 10123-10126.	2.2	69
27	Syngas production from biomass pyrolysis in a continuous microwave assisted pyrolysis system. <i>Bioresource Technology</i> , 2020, 314, 123756.	4.8	69
28	Facile synthesis of nanostructured vanadium oxide as cathode materials for efficient Li-ion batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 24439.	6.7	63
29	Improved luminescence and energy-transfer properties of Ca ₁₄ Al ₁₀ Zn ₆ O ₃₅ :Ti ⁴⁺ , Mn ⁴⁺ deep-red-emitting phosphors with high brightness for light-emitting diode (LED) plant-growth lighting. <i>Dalton Transactions</i> , 2018, 47, 13713-13721.	1.6	61
30	Recent advances in improving lignocellulosic biomass-based bio-oil production. <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 149, 104845.	2.6	59
31	Three-dimensional porous graphene oxide-maize amylopectin composites with controllable pore-sizes and good adsorption-desorption properties: Facile fabrication and reutilization, and the adsorption mechanism. <i>Ecotoxicology and Environmental Safety</i> , 2019, 176, 11-19.	2.9	58
32	Carbon nanodot-decorated alveolate N, O, S tridoped hierarchical porous carbon as efficient electrocatalysis of polysulfide conversion for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2019, 299, 600-609.	2.6	57
33	Cobalt (0/II) incorporated N-doped porous carbon as effective heterogeneous peroxydisulfate catalyst for quinolone degradation. <i>Journal of Colloid and Interface Science</i> , 2020, 563, 197-206.	5.0	55
34	Silicon carbide foam supported ZSM-5 composite catalyst for microwave-assisted pyrolysis of biomass. <i>Bioresource Technology</i> , 2018, 267, 257-264.	4.8	51
35	Enhanced Intercalation Dynamics and Stability of Engineered Micro/Nano-Structured Electrode Materials: Vanadium Oxide Mesocrystals. <i>Small</i> , 2013, 9, 3880-3886.	5.2	50
36	In situ plasma-assisted atmospheric nitrogen fixation using water and spray-type jet plasma. <i>Chemical Communications</i> , 2018, 54, 2886-2889.	2.2	50

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37	Oil production from microwave-assisted pyrolysis of a low rank American brown coal. <i>Energy Conversion and Management</i> , 2018, 159, 76-84.	4.4	48
38	Improving the electrochemical properties of a SiO@C/graphite composite anode for high-energy lithium-ion batteries by adding lithium fluoride. <i>Applied Surface Science</i> , 2019, 480, 410-418.	3.1	48
39	Atmospheric Plasma-Assisted Ammonia Synthesis Enhanced via Synergistic Catalytic Absorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 100-104.	3.2	48
40	In-situ synthesis of carbon coated Li ₂ MnSiO ₄ nanoparticles with high rate performance. <i>Journal of Power Sources</i> , 2013, 242, 865-871.	4.0	47
41	Pressurized ex-situ catalytic co-pyrolysis of polyethylene and lignin: Efficient BTEX production and process mechanism analysis. <i>Chemical Engineering Journal</i> , 2022, 431, 134122.	6.6	47
42	Additive-free solvothermal synthesis of hierarchical flower-like LiFePO ₄ /C mesocrystal and its electrochemical performance. <i>RSC Advances</i> , 2013, 3, 19366.	1.7	41
43	Microwave-assisted co-pyrolysis of brown coal and corn stover for oil production. <i>Bioresource Technology</i> , 2018, 259, 461-464.	4.8	41
44	Porous nanostructured V ₂ O ₅ film electrode with excellent Li-ion intercalation properties. <i>Electrochemistry Communications</i> , 2011, 13, 1276-1279.	2.3	40
45	Evaluation of <i>Cronobacter sakazakii</i> inactivation and physicochemical property changes of non-fat dry milk powder by cold atmospheric plasma. <i>Food Chemistry</i> , 2019, 290, 270-276.	4.2	38
46	Pyrolysis-catalysis for waste polyolefin conversion into low aromatic naphtha. <i>Energy Conversion and Management</i> , 2021, 245, 114578.	4.4	37
47	Additive-free solvothermal synthesis and Li-ion intercalation properties of dumbbell-shaped LiFePO ₄ /C mesocrystals. <i>Journal of Power Sources</i> , 2013, 239, 103-110.	4.0	36
48	Scalable synthesis SiO@C anode by fluidization thermal chemical vapor deposition in fluidized bed reactor for high-energy lithium-ion battery. <i>Applied Surface Science</i> , 2019, 467-468, 298-308.	3.1	35
49	The mechanism transformation of ramie biochar's cadmium adsorption by aging. <i>Bioresource Technology</i> , 2021, 330, 124947.	4.8	35
50	Catalytic fast pyrolysis of low density polyethylene into naphtha with high selectivity by dual-catalyst tandem catalysis. <i>Science of the Total Environment</i> , 2021, 771, 144995.	3.9	35
51	Novel wet pyrolysis providing simultaneous conversion and activation to produce surface-functionalized biochars for cadmium remediation. <i>Journal of Cleaner Production</i> , 2019, 221, 63-72.	4.6	33
52	Interconnected structure Si@TiO ₂ -B/CNTs composite anode applied for high-energy lithium-ion batteries. <i>Applied Surface Science</i> , 2020, 500, 144026.	3.1	33
53	Engineering cation vacancies to improve the luminescence properties of Ca ₁₄ Al ₁₀ Zn ₆ O ₃₅ : Mn ⁴⁺ phosphors for LED plant lamp. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1798-1808.	1.9	32
54	Synthesis and photoluminescence properties of novel red-emitting phosphor SrAl ₃ BO ₇ :Mn ⁴⁺ with enhanced emission by Mg ²⁺ /Zn ²⁺ /Ca ²⁺ incorporation for plant growth LED lighting. <i>Ceramics International</i> , 2019, 45, 23528-23539.	2.3	31

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55	Novel orange-red emitting phosphor Sr ₈ ZnY(PO ₄) ₇ :Sm ³⁺ with enhanced emission based on Mg ²⁺ and Al ³⁺ incorporation for plant growth LED lighting. Journal of the Taiwan Institute of Chemical Engineers, 2019, 104, 360-368.	2.7	31
56	Highly-sensitive and selective determination of bisphenol A in milk samples based on self-assembled graphene nanoplatelets-multiwalled carbon nanotube-chitosan nanostructure. Materials Science and Engineering C, 2019, 103, 109848.	3.8	31
57	Sustainable Non-Thermal Plasma-Assisted Nitrogen Fixation Synergistic Catalysis. ChemSusChem, 2019, 12, 3702-3712.	3.6	31
58	Effect of lime mud on the reaction kinetics and thermodynamics of biomass pyrolysis. Bioresource Technology, 2020, 310, 123475.	4.8	30
59	A Cost- and Energy Density-Competitive Lithium-Sulfur Battery. Energy Storage Materials, 2021, 41, 588-598.	9.5	30
60	A structured catalyst of ZSM-5/SiC foam for chemical recycling of waste plastics via catalytic pyrolysis. Chemical Engineering Journal, 2022, 440, 135836.	6.6	29
61	Improving the electrochemical properties of SiO@C anode for high-energy lithium ion battery by adding graphite through fluidization thermal chemical vapor deposition method. Ceramics International, 2019, 45, 1950-1959.	2.3	28
62	Synthesis and characterization of high power LiFePO ₄ /C nano-plate thin films. Journal of Power Sources, 2012, 213, 100-105.	4.0	27
63	High colour purity single-phased full colour emitting white LED phosphor Sr ₂ V ₂ O ₇ :Eu ³⁺ . Journal Physics D: Applied Physics, 2013, 46, 035104.	1.3	27
64	Performance improvement by alumina coatings on Y ₃ Al ₅ O ₁₂ :Ce ³⁺ phosphor powder deposited using atomic layer deposition in a fluidized bed reactor. RSC Advances, 2016, 6, 76454-76462.	1.7	27
65	In situ modification provided by a novel wet pyrolysis system to enhance surface properties of biochar for lead immobilization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 570, 39-47.	2.3	27
66	Syngas production from microwave-assisted air gasification of biomass: Part 2 model validation. Renewable Energy, 2019, 140, 625-632.	4.3	27
67	Cu modified ZnO nanoflowers as photoanode material for highly efficient dye sensitized solar cells. Electrochimica Acta, 2019, 294, 28-37.	2.6	27
68	The effect of different particle sizes and HCl-modified kaolin on catalytic pyrolysis characteristics of reworked polypropylene plastics. Energy, 2020, 213, 119080.	4.5	27
69	Enhanced cycling performance and rate capacity of SiO anode material by compositing with monoclinic TiO ₂ (B). Applied Surface Science, 2019, 486, 292-302.	3.1	26
70	pH dependent hydrothermal synthesis of Ca ₁₄ Al ₁₀ Zn ₆ O ₃₅ :0.15Mn ⁴⁺ phosphor with enhanced photoluminescence performance and high thermal resistance for indoor plant growth lighting. Ceramics International, 2018, 44, 19779-19786.	2.3	25
71	Pulse pyrolysis of waste cooking oil over CaO: Exploration of catalyst deactivation pathway based on feedstock characteristics. Applied Catalysis B: Environmental, 2022, 304, 120968.	10.8	25
72	High-performance LiTi ₂ (PO ₄) ₃ @carbon anode using double carbon sources for aqueous lithium ion battery. Ceramics International, 2017, 43, 9327-9333.	2.3	24

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73	LiTi ₂ (PO ₄) ₃ @carbon/graphene hybrid as superior anode materials for aqueous lithium ion batteries. <i>Ceramics International</i> , 2017, 43, 99-105.	2.3	24
74	Plasma <i>in situ</i> gas-liquid nitrogen fixation using concentrated high-intensity electric field. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 494001.	1.3	24
75	Applications of microwave energy in gas production and tar removal during biomass gasification. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5927-5946.	2.5	23
76	Enhancing the electrochemical properties of LiTi ₂ (PO ₄) ₃ /C anode for aqueous rechargeable lithium battery by Li vacancy. <i>Solid State Ionics</i> , 2018, 315, 1-6.	1.3	22
77	Enhance the luminescence properties of Ca ₁₄ Al ₁₀ Zn ₆ O ₃₅ :Ti ⁴⁺ phosphor via cation vacancies engineering of Ca ²⁺ and Zn ²⁺ . <i>Ceramics International</i> , 2019, 45, 9977-9985.	2.3	22
78	Enhancing the electrochemical performance of micron-scale SiO ₂ /C/CNTs anode via adding piezoelectric material BaTiO ₃ for high-power lithium ion battery. <i>Journal of Alloys and Compounds</i> , 2019, 800, 116-124.	2.8	21
79	Co-pyrolysis of different torrefied Chinese herb residues and low-density polyethylene: Kinetic and products distribution. <i>Science of the Total Environment</i> , 2022, 802, 149752.	3.9	21
80	Characterization, bioavailability and protective effects of phenolic-rich extracts from almond hulls against pro-oxidant induced toxicity in Caco-2 cells. <i>Food Chemistry</i> , 2020, 322, 126742.	4.2	20
81	In-situ catalytic pyrolysis of waste tires over clays for high quality pyrolysis products. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 6937-6944.	3.8	20
82	Chemical upcycling of waste polyolefinic plastics to low-carbon synthetic naphtha for closing the plastic use loop. <i>Science of the Total Environment</i> , 2021, 782, 146897.	3.9	19
83	High-efficiency degradation of quinclorac via peroxymonosulfate activated by N-doped CoFe ₂ O ₄ /FeO@CEDTA hybrid catalyst. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 102, 177-185.	2.9	19
84	Three-Dimensional MnCo ₂ O _{4.5} Mesoporous Networks as an Electrocatalyst for Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2015, 162, A2302-A2307.	1.3	18
85	Effect of pyrolysis condition on the adsorption mechanism of heavy metals on tobacco stem biochar in competitive mode. <i>Environmental Science and Pollution Research</i> , 2019, 26, 26947-26962.	2.7	18
86	Advanced LiTi ₂ (PO ₄) ₃ anode with high performance for aqueous rechargeable lithium battery. <i>Ceramics International</i> , 2018, 44, 21599-21606.	2.3	17
87	Enhancing photoluminescence properties of Mn ⁴⁺ -activated Sr ₄ Al ₂ Si ₂ O ₁₄ :Ba ²⁺ phosphors for plant cultivation LEDs. <i>Journal of the American Ceramic Society</i> , 2019, 102, 7386-7396.	1.9	16
88	Electrochemical presodiation promoting lithium storage performance of Mo-based anode materials. <i>Ceramics International</i> , 2017, 43, 11967-11972.	2.3	13
89	High thermal stability and blue-violet emitting phosphor Ca ₃ Al ₂ O ₇ :Ti ⁴⁺ with enhanced emission by Ca ²⁺ vacancies. <i>Journal of Rare Earths</i> , 2020, 38, 227-233.	2.5	11
90	Exploration of bluish violet-emitting phosphor Ca ₃ Al ₂ ZnO ₁₀ :Ti ⁴⁺ with enhanced emission by Ca ²⁺ vacancies. <i>Journal of the American Ceramic Society</i> , 2019, 102, 1843-1851.	1.9	10

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91	Sulfuric acid-adjutant sulfonated graphene as efficient polysulfides tamer for high-energy-density Li S batteries. <i>Journal of Power Sources</i> , 2019, 412, 134-141.	4.0	10
92	Torrefied herb residues in nitrogen, air and oxygen atmosphere: Thermal decomposition behavior and pyrolytic products characters. <i>Bioresource Technology</i> , 2021, 342, 125991.	4.8	9
93	The preparation of N, S, P self-doped and oxygen functionalized porous carbon via aerophilic interface reaction for high-performance supercapacitors. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 12961-12972.	1.1	8
94	Diiodocarbene Modified Graphene: Preparation, Characterization and Its Application as a Novel Adsorbent for Aqueous Removal of Pb(II). <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 387-392.	0.4	8
95	Efficient removal of sulfamethazine from irrigation water using an ultra-stable magnetic carbon composite catalyst. <i>Chemical Engineering Journal</i> , 2022, 446, 137188.	6.6	8
96	Lithium storage performance improvement of NaTi ₂ (PO ₄) ₃ with nitrogen-doped carbon derived from polyaniline. <i>Journal of Alloys and Compounds</i> , 2018, 767, 745-752.	2.8	7
97	Nano-Fe ¹⁺ xS embedded BCAA/Fe ₃ O ₄ as the stabilized catalyst for simultaneous quinclorac oxidation and Cr(VI) reduction. <i>Separation and Purification Technology</i> , 2022, 297, 121422.	3.9	7
98	Production of catalytic-upgraded pyrolysis products from oiltea camellia shell and polypropylene using NiCe-X/Al ₂ O ₃ and ZrO ₂ catalyst (X=Fe, Co). <i>Fuel</i> , 2022, 325, 124812.	3.4	7
99	Effect of Calcium-Based Catalysts on Pyrolysis Liquid Products from Municipal Sludge. <i>Bioenergy Research</i> , 2020, 13, 887-895.	2.2	6
100	Electrochemical behavior and cyclic fading mechanism of LiNi _{0.5} Mn _{0.5} O ₂ electrode in LiNO ₃ electrolyte. <i>Transactions of Nonferrous Metals Society of China</i> , 2014, 24, 415-422.	1.7	5
101	Self-assembly between photoresponsive azobenzene-based dications and thermally sensitive PNIPAM-b-PAA block copolymers in aqueous solution. <i>Journal of Polymer Research</i> , 2018, 25, 1.	1.2	5
102	Preparation and application of perovskite-type oxides for electrocatalysis in oxygen/air electrodes. <i>Journal of Central South University</i> , 2019, 26, 1387-1401.	1.2	5
103	Study on the difference between in-situ and ex-situ catalytic pyrolysis of oily sludge. <i>Environmental Science and Pollution Research</i> , 2021, 28, 50500-50509.	2.7	5
104	Microwave-Assisted Pyrolysis as an Alternative to Vacuum Distillation for Methyl Ester Recovery from Biodiesel Vacuum Distillation Bottoms. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14348-14355.	3.2	4
105	Adsorption of Cd(II) and Pb(II) on biochars derived from grape vine shoots. , 0, 118, 195-204.		4
106	N, P, O-codoped biochar from phytoremediation residues: a promising cathode material for Li-S batteries. <i>Nanotechnology</i> , 2022, , .	1.3	4
107	Enhanced Electrochemical Properties of Bi Nanowires as Anode Materials in Lithium and Sodium Batteries. <i>Current Nanoscience</i> , 2017, 13, .	0.7	3
108	Products distribution during in situ and ex situ catalytic fast pyrolysis of Chinese herb residues. <i>Environmental Science and Pollution Research</i> , 2022, 29, 89235-89244.	2.7	3