

Fei Sun

List of Publications by Year in descending order

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73
papers

3,281
citations

109137

35
h-index

155451

55
g-index

74
all docs

74
docs citations

74
times ranked

3532
citing authors

#	ARTICLE	IF	CITATIONS
1	Characteristics and applications of micro fluidized beds (MFBs). <i>Chemical Engineering Journal</i> , 2022, 428, 131330.	6.6	15
2	Microcrystalline regulation of bituminous coal derived hard carbon by pre-oxidation strategy for improved sodium-ion storage. <i>Fuel</i> , 2022, 310, 122072.	3.4	16
3	Understanding the activity origin of oxygen-doped carbon materials in catalyzing the two-electron oxygen reduction reaction towards hydrogen peroxide generation. <i>Journal of Colloid and Interface Science</i> , 2022, 610, 934-943.	5.0	15
4	Activity origin of boron doped carbon cluster for thermal catalytic oxidation: Coupling effects of dopants and edges. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 47-56.	5.0	11
5	One-step synergistic optimization of hierarchical pore topology and nitrogen dopants in activated coke for efficient catalytic oxidation of nitric oxide. <i>Journal of Cleaner Production</i> , 2022, 335, 130360.	4.6	8
6	Experimental and numerical studies on the heating mechanism of millimeter multi-particle system under microwave irradiation. <i>Journal of the Energy Institute</i> , 2022, 102, 216-228.	2.7	16
7	High-Performance Battery Separator Made by Thermally Activated Metal-Organic Frameworks. <i>ACS Applied Energy Materials</i> , 2022, 5, 5519-5524.	2.5	6
8	Tuning porosity of coal-derived activated carbons for CO ₂ adsorption. <i>Frontiers of Chemical Science and Engineering</i> , 2022, 16, 1345-1354.	2.3	9
9	Pulsed electrocatalysis enables the stabilization and activation of carbon-based catalysts towards H ₂ O ₂ production. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121688.	10.8	32
10	Carboxyl-Dominant Oxygen Rich Carbon for Improved Sodium Ion Storage: Synergistic Enhancement of Adsorption and Intercalation Mechanisms. <i>Advanced Energy Materials</i> , 2021, 11, .	10.2	133
11	Vapor deposition of aluminium oxide into N-rich mesoporous carbon framework as a reversible sulfur host for lithium-sulfur battery cathode. <i>Nano Research</i> , 2021, 14, 131-138.	5.8	24
12	Pulsed electrocatalysis enables an efficient 2-electron oxygen reduction reaction for H ₂ O ₂ production. <i>Journal of Materials Chemistry A</i> , 2021, 9, 15948-15954.	5.2	25
13	Electrolyte Interphase Built from Anionic Covalent Organic Frameworks for Lithium Dendrite Suppression. <i>Advanced Functional Materials</i> , 2021, 31, 2009718.	7.8	43
14	H ₂ O ₂ Electrogeneration from O ₂ Electroreduction by N-Doped Carbon Materials: A Mini-Review on Preparation Methods, Selectivity of N Sites, and Prospects. <i>Advanced Materials Interfaces</i> , 2021, 8, 2002091.	1.9	54
15	Selective H ₂ O ₂ electrosynthesis by O-doped and transition-metal-O-doped carbon cathodes via O ₂ electroreduction: A critical review. <i>Chemical Engineering Journal</i> , 2021, 410, 128368.	6.6	110
16	Inexpensive activated coke electrocatalyst for high-efficiency hydrogen peroxide production: Coupling effects of amorphous carbon cluster and oxygen dopant. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119860.	10.8	55
17	Catalytic activation preparation of nitrogen-doped hierarchical porous bio-char for efficient adsorption of dichloromethane and toluene. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 156, 105150.	2.6	28
18	Hierarchical pore configuration in activated coke boosting direct desorption of desulfurization product H ₂ SO ₄ : A combined experimental and computational investigation. <i>Fuel</i> , 2021, 298, 120697.	3.4	5

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19	Janus graphite felt cathode dramatically enhance the H ₂ O ₂ yield from O ₂ electroreduction by the hydrophilicity-hydrophobicity regulation. <i>Chemosphere</i> , 2021, 278, 130382.	4.2	28
20	Synthesis and application in oxygen reduction reaction of N-doping porous graphitic carbon from biomass waste. <i>Fuel Processing Technology</i> , 2021, 224, 107028.	3.7	15
21	Natural template derived porous carbon nanoplate architectures with tunable pore configuration for a full-carbon sodium-ion capacitor. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23607-23618.	5.2	19
22	A green trace K ₂ CO ₃ induced catalytic activation strategy for developing coal-converted activated carbon as advanced candidate for CO ₂ adsorption and supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 383, 123205.	6.6	92
23	Enhanced SO ₂ fluidized adsorption dynamic by hierarchically porous activated coke. <i>Journal of the Energy Institute</i> , 2020, 93, 802-810.	2.7	16
24	Development of dense Ca-based, Al-stabilized composites with high volumetric energy density for thermochemical energy storage of concentrated solar power. <i>Energy Conversion and Management</i> , 2020, 221, 113201.	4.4	34
25	In-situ catalytic conversion of coal pyrolysis gas to nanoporous carbon rods and superior sodium ion storage performance. <i>Fuel</i> , 2020, 281, 118782.	3.4	13
26	Graphitic porous carbon with multiple structural merits for high-performance organic supercapacitor. <i>Journal of Power Sources</i> , 2020, 477, 228759.	4.0	39
27	A facile trace potassium assisted catalytic activation strategy regulating pore topology of activated coke for combined removal of toluene/SO ₂ /NO. <i>Chemical Engineering Journal</i> , 2020, 389, 124262.	6.6	35
28	The change of hydrogen bonding network during adsorption of multi-water molecules in lignite: Quantitative analysis based on AIM and DFT. <i>Materials Chemistry and Physics</i> , 2020, 247, 122863.	2.0	9
29	Hierarchical porous carbon derived from wood tar using crab as the template: Performance on supercapacitor. <i>Journal of Power Sources</i> , 2020, 455, 227982.	4.0	122
30	Producing elemental sulfur from SO ₂ by calcium loaded activated coke: Enhanced activity and selectivity. <i>Chemical Engineering Journal</i> , 2020, 401, 126022.	6.6	27
31	Ultraviolet Raman spectra: The reasonable method of evaluating coal pyrolysis graphitization. <i>AIP Advances</i> , 2020, 10, .	0.6	10
32	A new insight into the role of coal adsorbed water in low-temperature oxidation: Enhanced •OH radical generation. <i>Combustion and Flame</i> , 2019, 208, 27-36.	2.8	42
33	A new insight into SO ₂ low-temperature catalytic oxidation in porous carbon materials: non-dissociated O ₂ molecule as oxidant. <i>Catalysis Science and Technology</i> , 2019, 9, 4327-4338.	2.1	20
34	Effect of pore hierarchy and pore size on the combined adsorption of SO ₂ and toluene in activated coke. <i>Fuel</i> , 2019, 257, 116090.	3.4	33
35	Oxygen Functional Group Modification of Cellulose-Derived Hard Carbon for Enhanced Sodium Ion Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18554-18565.	3.2	72
36	Hierarchical porous carbon sheets with compressed framework and optimized pore configuration for high-rate and long-term sodium and lithium ions storage. <i>Carbon</i> , 2019, 155, 166-175.	5.4	26

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37	A new insight into the SO ₂ adsorption behavior of oxidized carbon materials using model adsorbents and DFT calculations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 9181-9188.	1.3	46
38	Novel method for regeneration/reactivation of spent dolomite-based sorbents from calcium looping cycles. <i>Chemical Engineering Journal</i> , 2019, 360, 148-156.	6.6	20
39	Broadening the pore size of coal-based activated carbon via a washing-free chem-physical activation method for high-capacity dye adsorption. <i>RSC Advances</i> , 2018, 8, 14488-14499.	1.7	51
40	Adjusting the Porosity of Coal-Based Activated Carbons Based on a Catalytic Physical Activation Process for Gas and Liquid Adsorption. <i>Energy & Fuels</i> , 2018, 32, 1255-1264.	2.5	46
41	In Situ High-Level Nitrogen Doping into Carbon Nanospheres and Boosting of Capacitive Charge Storage in Both Anode and Cathode for a High-Energy 4.5 V Full-Carbon Lithium-Ion Capacitor. <i>Nano Letters</i> , 2018, 18, 3368-3376.	4.5	163
42	Converting biomass waste into microporous carbon with simultaneously high surface area and carbon purity as advanced electrochemical energy storage materials. <i>Applied Surface Science</i> , 2018, 436, 486-494.	3.1	58
43	Introducing catalytic gasification into chemical activation for the conversion of natural coal into hierarchically porous carbons with broadened pore size for enhanced supercapacitive utilization. <i>RSC Advances</i> , 2018, 8, 37880-37889.	1.7	9
44	Strongly coupled calcium carbonate/antioxidative graphite nanosheets composites with high cycling stability for thermochemical energy storage. <i>Applied Energy</i> , 2018, 231, 412-422.	5.1	41
45	In Situ Doping Boron Atoms into Porous Carbon Nanoparticles with Increased Oxygen Graft Enhances both Affinity and Durability toward Electrolyte for Greatly Improved Supercapacitive Performance. <i>Advanced Functional Materials</i> , 2018, 28, 1804190.	7.8	149
46	Pore Reorganization of Porous Carbon during Trace Calcium-Catalyzed Coal Activation for Adsorption Applications. <i>Energy & Fuels</i> , 2018, 32, 9191-9201.	2.5	21
47	A high-rate and ultrastable anode enabled by boron-doped nanoporous carbon spheres for high-power and long life lithium ion capacitors. <i>Materials Today Energy</i> , 2018, 9, 428-439.	2.5	19
48	A novel melt infiltration method promoting porosity development of low-rank coal derived activated carbon as supercapacitor electrode materials. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 91, 588-596.	2.7	35
49	The effect of nitrogen-containing functional groups on SO ₂ adsorption on carbon surface: Enhanced physical adsorption interactions. <i>Surface Science</i> , 2018, 677, 78-82.	0.8	66
50	A high performance lithium ion capacitor achieved by the integration of a Sn-C anode and a biomass-derived microporous activated carbon cathode. <i>Scientific Reports</i> , 2017, 7, 40990.	1.6	79
51	Regenerative Polysulfide-Scavenging Layers Enabling Lithium-Sulfur Batteries with High Energy Density and Prolonged Cycling Life. <i>ACS Nano</i> , 2017, 11, 2697-2705.	7.3	132
52	Effect of the presence of NaCl vapour on indirect sulphation of limestone. <i>Fuel Processing Technology</i> , 2017, 160, 39-46.	3.7	0
53	Trace Na ₂ CO ₃ Addition to Limestone Inducing High-Capacity SO ₂ Capture. <i>Environmental Science & Technology</i> , 2017, 51, 12692-12698.	4.6	11
54	Microwave Irradiation Induced High-Efficiency Regeneration for Desulfurized Activated Coke: A Comparative Study with Conventional Thermal Regeneration. <i>Energy & Fuels</i> , 2017, 31, 9693-9702.	2.5	41

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55	High performance aqueous supercapacitor based on highly nitrogen-doped carbon nanospheres with unimodal mesoporosity. <i>Journal of Power Sources</i> , 2017, 337, 189-196.	4.0	99
56	Confined growth of small ZnO nanoparticles in a nitrogen-rich carbon framework: Advanced anodes for long-life Li-ion batteries. <i>Carbon</i> , 2017, 113, 46-54.	5.4	55
57	Post Iron Decoration of Mesoporous Nitrogen-Doped Carbon Spheres for Efficient Electrochemical Oxygen Reduction. <i>Advanced Energy Materials</i> , 2017, 7, 1701154.	10.2	65
58	Robust iron nanoparticles with graphitic shells for high-performance Ni-Fe battery. <i>Nano Energy</i> , 2016, 30, 217-224.	8.2	76
59	Nitrogen-rich carbon spheres made by a continuous spraying process for high-performance supercapacitors. <i>Nano Research</i> , 2016, 9, 3209-3221.	5.8	78
60	High-energy Li-ion hybrid supercapacitor enabled by a long life N-rich carbon based anode. <i>Electrochimica Acta</i> , 2016, 213, 626-632.	2.6	37
61	One-step ammonia activation of Zhundong coal generating nitrogen-doped microporous carbon for gas adsorption and energy storage. <i>Carbon</i> , 2016, 109, 747-754.	5.4	75
62	Porous carbon with a large surface area and an ultrahigh carbon purity via templating carbonization coupling with KOH activation as excellent supercapacitor electrode materials. <i>Applied Surface Science</i> , 2016, 387, 857-863.	3.1	70
63	Highlighting the role of nitrogen doping in enhancing CO ₂ uptake onto carbon surfaces: a combined experimental and computational analysis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18248-18252.	5.2	48
64	Controllable nitrogen introduction into porous carbon with porosity retaining for investigating nitrogen doping effect on SO ₂ adsorption. <i>Chemical Engineering Journal</i> , 2016, 290, 116-124.	6.6	84
65	Fluorine-rich nanoporous carbon with enhanced surface affinity in organic electrolyte for high-performance supercapacitors. <i>Nano Energy</i> , 2016, 21, 80-89.	8.2	89
66	Size-controllable templates for the synthesis of porous carbon with tunable pore configurations. <i>Materials Letters</i> , 2016, 175, 56-59.	1.3	3
67	The effect of functional groups on the SO ₂ adsorption on carbon surface I: A new insight into noncovalent interaction between SO ₂ molecule and acidic oxygen-containing groups. <i>Applied Surface Science</i> , 2016, 369, 552-557.	3.1	45
68	A systematic investigation of SO ₂ removal dynamics by coal-based activated cokes: The synergic enhancement effect of hierarchical pore configuration and gas components. <i>Applied Surface Science</i> , 2015, 357, 1895-1901.	3.1	73
69	Adsorption of SO ₂ by typical carbonaceous material: a comparative study of carbon nanotubes and activated carbons. <i>Adsorption</i> , 2013, 19, 959-966.	1.4	60
70	Preparation of activated carbons for SO ₂ adsorption by CO ₂ and steam activation. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2011, 43, 112-112.	2.7	32
71	Mechanism of SO ₂ adsorption and desorption on commercial activated coke. <i>Korean Journal of Chemical Engineering</i> , 2011, 28, 2218-2225.	1.2	35
72	Preparation and characterization of activated carbons for SO ₂ adsorption from Taixi anthracite by physical activation with steam. <i>Korean Journal of Chemical Engineering</i> , 2011, 28, 2344-2350.	1.2	13

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73	Preparation and Characterization of Activated Carbons for SO ₂ Adsorption from Taixi Anthracite. , 2011, , .		0