

# Jihui Gao

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2438812/jihui-gao-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

77  
papers

1,695  
citations

25  
h-index

38  
g-index

83  
ext. papers

2,447  
ext. citations

7.4  
avg, IF

5.33  
L-index

#	Paper	IF	Citations
77	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> , <b>2018</b> , 18, 3368-3376	11.5	118
76	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> , <b>2018</b> , 28, 1804190	15.6	101
75	Hydrogen peroxide generation from O electroreduction for environmental remediation: A state-of-the-art review. <i>Chemosphere</i> , <b>2019</b> , 225, 588-607	8.4	99
74	Activated carbon as effective cathode material in iron-free Electro-Fenton process: Integrated HO electrogeneration, activation, and pollutants adsorption. <i>Electrochimica Acta</i> , <b>2019</b> , 296, 317-326	6.7	68
73	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> , <b>2017</b> , 7, 40990	4.9	62
72	Nitrogen-rich carbon spheres made by a continuous spraying process for high-performance supercapacitors. <i>Nano Research</i> , <b>2016</b> , 9, 3209-3221	10	59
71	Controllable nitrogen introduction into porous carbon with porosity retaining for investigating nitrogen doping effect on SO <sub>2</sub> adsorption. <i>Chemical Engineering Journal</i> , <b>2016</b> , 290, 116-124	14.7	58
70	One-step ammonia activation of Zhundong coal generating nitrogen-doped microporous carbon for gas adsorption and energy storage. <i>Carbon</i> , <b>2016</b> , 109, 747-754	10.4	53
69	A green trace K <sub>2</sub> CO <sub>3</sub> induced catalytic activation strategy for developing coal-converted activated carbon as advanced candidate for CO <sub>2</sub> adsorption and supercapacitors. <i>Chemical Engineering Journal</i> , <b>2020</b> , 383, 123205	14.7	51
68	A systematic investigation of SO <sub>2</sub> removal dynamics by coal-based activated cokes: The synergic enhancement effect of hierarchical pore configuration and gas components. <i>Applied Surface Science</i> , <b>2015</b> , 357, 1895-1901	6.7	50
67	Adsorption of SO <sub>2</sub> by typical carbonaceous material: a comparative study of carbon nanotubes and activated carbons. <i>Adsorption</i> , <b>2013</b> , 19, 959-966	2.6	46
66	Efficient HO electrogeneration at graphite felt modified via electrode polarity reversal: Utilization for organic pollutants degradation. <i>Chemical Engineering Journal</i> , <b>2019</b> , 364, 428-439	14.7	41
65	Drastic Enhancement of HO Electro-generation by Pulsed Current for Ibuprofen Degradation: Strategy Based on Decoupling Study on HO Decomposition Pathways. <i>Chemical Engineering Journal</i> , <b>2018</b> , 338, 709-718	14.7	40
64	Selective H <sub>2</sub> O <sub>2</sub> electrosynthesis by O-doped and transition-metal-O-doped carbon cathodes via O <sub>2</sub> electroreduction: A critical review. <i>Chemical Engineering Journal</i> , <b>2021</b> , 410, 128368	14.7	36
63	Carboxyl-Dominant Oxygen Rich Carbon for Improved Sodium Ion Storage: Synergistic Enhancement of Adsorption and Intercalation Mechanisms. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002981	21.8	36
62	Broadening the pore size of coal-based activated carbon a washing-free chem-physical activation method for high-capacity dye adsorption.. <i>RSC Advances</i> , <b>2018</b> , 8, 14488-14499	3.7	34
61	Development of highly effective CaO@Al <sub>2</sub> O <sub>3</sub> with hierarchical architecture CO <sub>2</sub> sorbents via a scalable limited-space chemical vapor deposition technique. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 3462-3470	13	34

60	Oxygen Functional Group Modification of Cellulose-Derived Hard Carbon for Enhanced Sodium Ion Storage. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 18554-18565	8.3	31
59	Adjusting the Porosity of Coal-Based Activated Carbons Based on a Catalytic Physical Activation Process for Gas and Liquid Adsorption. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 1255-1264	4.1	30
58	Highlighting the role of nitrogen doping in enhancing CO <sub>2</sub> uptake onto carbon surfaces: a combined experimental and computational analysis. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 18248-18252	13.2	29
57	"Floating" cathode for efficient HO electrogeneration applied to degradation of ibuprofen as a model pollutant. <i>Electrochemistry Communications</i> , <b>2018</b> , 96, 37-41	5.1	29
56	Rates of HO Electrogeneration by Reduction of Anodic O at RVC Foam Cathodes in Batch and Flow-through Cells. <i>Electrochimica Acta</i> , <b>2018</b> , 277, 185-196	6.7	29
55	Mechanism of SO <sub>2</sub> adsorption and desorption on commercial activated coke. <i>Korean Journal of Chemical Engineering</i> , <b>2011</b> , 28, 2218-2225	2.8	28
54	Microwave Irradiation Induced High-Efficiency Regeneration for Desulfurized Activated Coke: A Comparative Study with Conventional Thermal Regeneration. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 9693-9702	4.1	27
53	Strongly coupled calcium carbonate/antioxidative graphite nanosheets composites with high cycling stability for thermochemical energy storage. <i>Applied Energy</i> , <b>2018</b> , 231, 412-422	10.7	26
52	A new insight into the SO adsorption behavior of oxidized carbon materials using model adsorbents and DFT calculations. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 9181-9188	3.6	24
51	N-Doped Porous Carbon Derived by Direct Carbonization of Metal-Organic Complexes Crystal Materials for SO <sub>2</sub> Adsorption. <i>Crystal Growth and Design</i> , <b>2019</b> , 19, 1973-1984	3.5	21
50	Green electrochemical modification of RVC foam electrode and improved HO electrogeneration by applying pulsed current for pollutant removal. <i>Environmental Science and Pollution Research</i> , <b>2018</b> , 25, 6015-6025	5.1	21
49	The role of quinone cycle in Fe-HO system in the regeneration of Fe. <i>Environmental Technology (United Kingdom)</i> , <b>2017</b> , 38, 1887-1896	2.6	21
48	Effect of char structures caused by varying the amount of FeCl <sub>3</sub> on the pore development during activation. <i>RSC Advances</i> , <b>2016</b> , 6, 87478-87485	3.7	20
47	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> , <b>2021</b> , 286, 119860	21.8	20
46	Influence of a reagents addition strategy on the Fenton oxidation of rhodamine B: control of the competitive reaction of HO. <i>RSC Advances</i> , <b>2016</b> , 6, 108791-108800	3.7	20
45	Highly efficient H <sub>2</sub> O <sub>2</sub> electrogeneration from O <sub>2</sub> reduction by pulsed current: Facilitated release of H <sub>2</sub> O <sub>2</sub> from porous cathode to bulk. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2018</b> , 83, 59-63	5.3	20
44	Effect of pore hierarchy and pore size on the combined adsorption of SO <sub>2</sub> and toluene in activated coke. <i>Fuel</i> , <b>2019</b> , 257, 116090	7.1	18
43	Pore Structure Modified CaO-Based Sorbents with Different Sized Templates for CO <sub>2</sub> Capture. <i>Energy &amp; Fuels</i> , <b>2019</b> , 33, 5398-5407	4.1	17

42	Recent Advances in Hydroliquefaction of Biomass for Bio-oil Production Using In Situ Hydrogen Donors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 16987-17007	3.9	17
41	High-performance CaO-based composites synthesized using a space-confined chemical vapor deposition strategy for thermochemical energy storage. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 206, 110346	6.4	16
40	Nitrogen-Doped Microporous Carbons Derived from Pyridine Ligand-Based Metal-Organic Complexes as High-Performance SO Adsorption Sorbents. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 37407-37416	9.5	15
39	A facile trace potassium assisted catalytic activation strategy regulating pore topology of activated coke for combined removal of toluene/SO <sub>2</sub> /NO. <i>Chemical Engineering Journal</i> , <b>2020</b> , 389, 124262	14.7	13
38	Preparation and characterization of activated carbons for SO <sub>2</sub> adsorption from Taixi anthracite by physical activation with steam. <i>Korean Journal of Chemical Engineering</i> , <b>2011</b> , 28, 2344-2350	2.8	13
37	Investigate the Role of Different Inherent Minerals in PEM Based Coal Assisted Water Electrolysis Cell. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, F949-F955	3.9	12
36	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> , <b>2021</b> , 14, 131-138	10	12
35	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> , <b>2020</b> , 221, 113201	10.6	11
34	Pore Reorganization of Porous Carbon during Trace Calcium-Catalyzed Coal Activation for Adsorption Applications. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 9191-9201	4.1	11
33	"Self-cleaning" electrochemical regeneration of dye-loaded activated carbon. <i>Electrochemistry Communications</i> , <b>2019</b> , 100, 85-89	5.1	10
32	Development of pomegranate-type CaCl <sub>2</sub> @C composites via a scalable one-pot pyrolysis strategy for solar-driven thermochemical heat storage. <i>Energy Conversion and Management</i> , <b>2020</b> , 212, 112694	10.6	10
31	Hydrothermal Co-Liquefaction of Lignite and Lignocellulosic Biomass with the Addition of Formic Acid: Study on Product Distribution, Characteristics, and Synergistic Effects. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 21663-21675	3.9	9
30	A new insight into SO <sub>2</sub> low-temperature catalytic oxidation in porous carbon materials: non-dissociated O <sub>2</sub> molecule as oxidant. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 4327-4338	5.5	9
29	H <sub>2</sub> O <sub>2</sub> Electrogeneration from O <sub>2</sub> Electroreduction by N-Doped Carbon Materials: A Mini-Review on Preparation Methods, Selectivity of N Sites, and Prospects. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2002091	10.6	9
28	Trace NaCO Addition to Limestone Inducing High-Capacity SO Capture. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 12692-12698	10.3	8
27	Effects of oxygen functional groups and FeCl on the evolution of physico-chemical structure in activated carbon obtained from Jixi bituminous coal.. <i>RSC Advances</i> , <b>2018</b> , 8, 8569-8579	3.7	8
26	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> , <b>2021</b> , 156, 105150	6	8
25	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> , <b>2018</b> , 8, 37880-37889	3.7	8

24	Janus graphite felt cathode dramatically enhance the H <sub>2</sub> O <sub>2</sub> yield from O <sub>2</sub> electroreduction by the hydrophilicity-hydrophobicity regulation. <i>Chemosphere</i> , <b>2021</b> , 278, 130382	8.4	7
23	Energy-Saving Cathodic Hydrogen Production Enabled by Anodic Oxidation of Aqueous Sodium Sulfite Solutions. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 9058-9063	4.1	6
22	Fe <sup>3+</sup> -mediated coal-assisted water electrolysis for hydrogen production: Roles of mineral matter and oxygen-containing functional groups in coal. <i>Energy</i> , <b>2021</b> , 220, 119677	7.9	6
21	Pulsed electrocatalysis enables an efficient 2-electron oxygen reduction reaction for H <sub>2</sub> O <sub>2</sub> production. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 15948-15954	13	6
20	Compressing Two-Dimensional Graphite-Nanosheet-Supported CaO for Optimizing Porous Structures toward High-Volumetric-Performance Heat Storage. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 10841-10849	4.1	6
19	Computer-Free Group-Addition Method for pKa Prediction of 73 Amines for CO <sub>2</sub> Capture. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2017</b> , 62, 111-122	2.8	5
18	Scalable Production of EP/CaCl <sub>2</sub> @C Multistage Core-Shell Sorbent for Solar-Driven Sorption Heat Storage Application. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 6845-6857	4.1	5
17	Enhancement mechanism of SO <sub>2</sub> removal with calcium hydroxide in the presence of NO <sub>2</sub> . <i>Korean Journal of Chemical Engineering</i> , <b>2012</b> , 29, 263-269	2.8	4
16	O-doped Graphitic Granular Biochar Enables Pollutants Removal via Simultaneous HO <sub>2</sub> Generation and Activation in Neutral Fe-free Electro-Fenton Process. <i>Separation and Purification Technology</i> , <b>2021</b> , 262,	8.3	4
15	Mechanism investigation of carboxyl functional groups catalytic oxidation in coal assisted water electrolysis cell. <i>Energy</i> , <b>2021</b> , 226, 120243	7.9	4
14	Coal-Assisted Water Electrolysis for Hydrogen Production: Evolution of Carbon Structure in Different-Rank Coal. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 3512-3520	4.1	4
13	Communication Oxalic Acid Assisted Water Electrolysis for Less Energy-Intensive Electrochemical Hydrogen Production. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 134503	3.9	3
12	In-situ catalytic conversion of coal pyrolysis gas to nanoporous carbon rods and superior sodium ion storage performance. <i>Fuel</i> , <b>2020</b> , 281, 118782	7.1	3
11	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> ,	13	3
10	Oxidation of Zhundong subbituminous coal by Fe <sup>2+</sup> /H <sub>2</sub> O <sub>2</sub> system under mild conditions. <i>Korean Journal of Chemical Engineering</i> , <b>2020</b> , 37, 597-603	2.8	2
9	Transformation and catalytic effects of sodium during coal pyrolysis. <i>International Journal of Energy Research</i> , <b>2018</b> , 42, 4131-4141	4.5	2
8	Investigation of advanced NO oxidation process with the delivery of $\cdot\text{OH}$ from thermal decomposition of H <sub>2</sub> O <sub>2</sub> . <i>Canadian Journal of Chemical Engineering</i> , <b>2019</b> , 97, 2419-2425	2.3	1
7	Analysis of SO Physisorption by Edge-Functionalized Nanoporous Carbons Using Grand Canonical Monte Carlo Methods and Density Functional Theory: Implications for SO Removal.. <i>ACS Omega</i> , <b>2021</b> , 6, 33735-33746	3.9	1

6	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> , <b>2021</b> ,	9.3	1
5	A novel H <sub>2</sub> O <sub>2</sub> -persulfate hybrid system supported by electrochemically induced acidic and alkaline conditions for organic pollutant removal. <i>Journal of Applied Electrochemistry</i> , <b>2020</b> , 50, 791-797	2.6	1
4	Influence of minerals with different porous structures on thermochemical heat storage performance of CaCl <sub>2</sub> -based composite sorbents. <i>Solar Energy Materials and Solar Cells</i> , <b>2022</b> , 243, 111769	6.4	1
3	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> , <b>2022</b> , 613, 47-56	9.3	0
2	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> , <b>2022</b> , 335, 130360	10.3	0
1	Agglomeration of particles during coal combustion in multistage spouted fluidized tower. <i>Korean Journal of Chemical Engineering</i> , <b>2009</b> , 26, 907-912	2.8	