

# Jian Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/157698/publications.pdf>

Version: 2024-02-01

66  
papers

8,287  
citations

87723

38  
h-index

114278

63  
g-index

73  
all docs

73  
docs citations

73  
times ranked

10339  
citing authors

#	ARTICLE	IF	CITATIONS
1	Characteristics of interface between solid electrolyte and electrode in all-solid-state batteries prepared by spark plasma sintering. <i>Journal of Power Sources</i> , 2022, 521, 230964.	4.0	9
2	The cell utilized partitioning model as a predictive tool for optimizing counter-current chromatography processes. <i>Separation and Purification Technology</i> , 2022, 285, 120330.	3.9	1
3	Extracting energy from ocean thermal and salinity gradients to power unmanned underwater vehicles: State of the art, current limitations, and future outlook. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 160, 112283.	8.2	17
4	Rare-earth element extraction from geothermal brine using magnetic core-shell nanoparticles-techno-economic analysis. <i>Geothermics</i> , 2021, 89, 101938.	1.5	15
5	Atomic/molecular layer deposition for energy storage and conversion. <i>Chemical Society Reviews</i> , 2021, 50, 3889-3956.	18.7	109
6	New Hybrid Organic-Inorganic Thin Films by Molecular Layer Deposition for Rechargeable Batteries. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	4
7	Improvement of Cyclic Stability of Na <sub>0.67</sub> Mn <sub>0.8</sub> Ni <sub>0.1</sub> Co <sub>0.1</sub> O <sub>2</sub> via Suppressing Lattice Variation. <i>Chinese Physics Letters</i> , 2021, 38, 076102.	1.3	1
8	Carbon capture using nanoporous adsorbents. , 2020, , 265-303.		0
9	Improving LiNi <sub>0.9</sub> Co <sub>0.08</sub> Mn <sub>0.02</sub> O <sub>2</sub> 's cyclic stability via abating mechanical damages. <i>Energy Storage Materials</i> , 2020, 28, 1-9.	9.5	44
10	Lignin-derived electrochemical energy materials and systems. <i>Biofuels, Bioproducts and Biorefining</i> , 2020, 14, 650-672.	1.9	73
11	Selective adsorption removal of carbonyl molecular foulants from real fast pyrolysis bio-oils. <i>Biomass and Bioenergy</i> , 2020, 136, 105522.	2.9	10
12	Understanding H <sub>2</sub> Evolution from the Decomposition of Dibutylmagnesium Isomers Using in-Situ X-ray Diffraction Coupled with Mass Spectroscopy. <i>ACS Applied Energy Materials</i> , 2019, 2, 5272-5278.	2.5	4
13	Hyper-Cross-linked Porous Organic Frameworks with Ultramicropores for Selective Xenon Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 13279-13284.	4.0	43
14	Toward Design Rules of Metal-Organic Frameworks for Adsorption Cooling: Effect of Topology on the Ethanol Working Capacity. <i>Chemistry of Materials</i> , 2019, 31, 2702-2706.	3.2	27
15	MoS <sub>2</sub> -modified graphite felt as a high performance electrode material for zinc-polyiodide redox flow batteries. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 731-735.	3.0	17
16	Formation of size-dependent and conductive phase on lithium iron phosphate during carbon coating. <i>Nature Communications</i> , 2018, 9, 929.	5.8	45
17	A Tunable Bimetallic MOF-74 for Adsorption Chiller Applications. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 885-889.	1.0	41
18	Techno-Economic Analysis of Magnesium Extraction from Seawater via a Catalyzed Organo-Metathetical Process. <i>Jom</i> , 2018, 70, 431-435.	0.9	9

#	ARTICLE	IF	CITATIONS
19	Origin of phase inhomogeneity in lithium iron phosphate during carbon coating. <i>Nano Energy</i> , 2018, 45, 52-60.	8.2	26
20	Tailoring grain boundary structures and chemistry of Ni-rich layered cathodes for enhanced cycle stability of lithium-ion batteries. <i>Nature Energy</i> , 2018, 3, 600-605.	19.8	613
21	Minimizing Polysulfide Shuttle Effect in Lithium-Ion Sulfur Batteries by Anode Surface Passivation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21965-21972.	4.0	18
22	Enabling High-Energy-Density Cathode for Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 23094-23102.	4.0	67
23	Hollow Carbon Spheres with Abundant Micropores for Enhanced CO <sub>2</sub> Adsorption. <i>Langmuir</i> , 2017, 33, 1248-1255.	1.6	60
24	Electrospun metal-organic framework polymer composites for the catalytic degradation of methyl paraoxon. <i>New Journal of Chemistry</i> , 2017, 41, 8748-8753.	1.4	64
25	Nanoscale Manipulation of Spinel Lithium Nickel Manganese Oxide Surface by Multisite Ti Occupation as High-Performance Cathode. <i>Advanced Materials</i> , 2017, 29, 1703764.	11.1	119
26	Novel highly dispersible, thermally stable core/shell proppants for geothermal applications. <i>Geothermics</i> , 2017, 70, 98-109.	1.5	7
27	Increased Thermal Conductivity in Metal-Organic Heat Carrier Nanofluids. <i>Scientific Reports</i> , 2016, 6, 27805.	1.6	20
28	Redox-Active Metal-Organic Composites for Highly Selective Oxygen Separation Applications. <i>Advanced Materials</i> , 2016, 28, 3572-3577.	11.1	55
29	Metal-Organic Frameworks as Highly Active Electrocatalysts for High-Energy Density, Aqueous Zinc-Polyiodide Redox Flow Batteries. <i>Nano Letters</i> , 2016, 16, 4335-4340.	4.5	79
30	Anomalous water expulsion from carbon-based rods at high humidity. <i>Nature Nanotechnology</i> , 2016, 11, 791-797.	15.6	11
31	Preparation and Characterization of a Hydrophobic Metal-Organic Framework Membrane Supported on a Thin Porous Metal Sheet. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 3823-3832.	1.8	27
32	Metal-organic framework with optimally selective xenon adsorption and separation. <i>Nature Communications</i> , 2016, 7, ncomms11831.	5.8	325
33	Unravelling the Role of Electrochemically Active FePO <sub>4</sub> Coating by Atomic Layer Deposition for Increased High-Voltage Stability of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Cathode Material. <i>Advanced Science</i> , 2015, 2, 1500022.	5.6	108
34	Controlling Porosity in Lignin-Derived Nanoporous Carbon for Supercapacitor Applications. <i>ChemSusChem</i> , 2015, 8, 411-411.	3.6	7
35	Elegant design of electrode and electrode/electrolyte interface in lithium-ion batteries by atomic layer deposition. <i>Nanotechnology</i> , 2015, 26, 024001.	1.3	123
36	Separation of polar compounds using a flexible metal-organic framework. <i>Chemical Communications</i> , 2015, 51, 8421-8424.	2.2	41

#	ARTICLE	IF	CITATIONS
37	Potential of Metal-Organic Frameworks for Separation of Xenon and Krypton. <i>Accounts of Chemical Research</i> , 2015, 48, 211-219.	7.6	330
38	Controlling Porosity in Lignin-Derived Nanoporous Carbon for Supercapacitor Applications. <i>ChemSusChem</i> , 2015, 8, 428-432.	3.6	196
39	Size-dependent surface phase change of lithium iron phosphate during carbon coating. <i>Nature Communications</i> , 2014, 5, 3415.	5.8	66
40	The effect of pyridine modification of Ni-DOBDC on CO <sub>2</sub> capture under humid conditions. <i>Chemical Communications</i> , 2014, 50, 3296-3298.	2.2	52
41	Enhanced noble gas adsorption in Ag@MOF-74Ni. <i>Chemical Communications</i> , 2014, 50, 466-468.	2.2	153
42	Atomic layer deposited coatings to significantly stabilize anodes for Li ion batteries: effects of coating thickness and the size of anode particles. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2306.	5.2	78
43	Separation of rare gases and chiral molecules by selective binding in porous organic cages. <i>Nature Materials</i> , 2014, 13, 954-960.	13.3	532
44	A Two-Column Method for the Separation of Kr and Xe from Process Off-Gases. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 12893-12899.	1.8	65
45	Atomic layer deposition of solid-state electrolyte coated cathode materials with superior high-voltage cycling behavior for lithium ion battery application. <i>Energy and Environmental Science</i> , 2014, 7, 768-778.	15.6	363
46	Introduction of $\pi$ -Complexation into Porous Aromatic Framework for Highly Selective Adsorption of Ethylene over Ethane. <i>Journal of the American Chemical Society</i> , 2014, 136, 8654-8660.	6.6	383
47	Significant impact on cathode performance of lithium-ion batteries by precisely controlled metal oxide nanocoatings via atomic layer deposition. <i>Journal of Power Sources</i> , 2014, 247, 57-69.	4.0	212
48	METAL ORGANIC FRAMEWORKS-SYNTHESIS AND APPLICATIONS. , 2014, , 61-103.		6
49	Identification of solid-state forms of cucurbit[6]uril for carbon dioxide capture. <i>CrystEngComm</i> , 2013, 15, 1528.	1.3	32
50	Mechanism of Preferential Adsorption of SO <sub>2</sub> into Two Microporous Paddle Wheel Frameworks M(bdc)(ted) <sub>0.5</sub> . <i>Chemistry of Materials</i> , 2013, 25, 4653-4662.	3.2	127
51	A porous covalent porphyrin framework with exceptional uptake capacity of saturated hydrocarbons for oil spill cleanup. <i>Chemical Communications</i> , 2013, 49, 1533.	2.2	136
52	Progress in adsorption-based CO <sub>2</sub> capture by metal-organic frameworks. <i>Chemical Society Reviews</i> , 2012, 41, 2308-2322.	18.7	1,205
53	Selective CO <sub>2</sub> Capture from Flue Gas Using Metal-Organic Frameworks-A Fixed Bed Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9575-9581.	1.5	176
54	Metal-Organic Frameworks for Removal of Xe and Kr from Nuclear Fuel Reprocessing Plants. <i>Langmuir</i> , 2012, 28, 11584-11589.	1.6	172

#	ARTICLE	IF	CITATIONS
55	Switching Kr/Xe Selectivity with Temperature in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2012, 134, 9046-9049.	6.6	160
56	Accessible Volumes for Adsorption in Carbon Nanopores of Different Geometries and Wall Thicknesses. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12077-12081.	1.5	4
57	Stability Effects on CO <sub>2</sub> Adsorption for the DOBDC Series of Metal-Organic Frameworks. <i>Langmuir</i> , 2011, 27, 11451-11456.	1.6	171
58	Mesoporous silica-metal organic composite: synthesis, characterization, and ammonia adsorption. <i>Journal of Materials Chemistry</i> , 2011, 21, 6698.	6.7	88
59	Henry's law constants and isosteric heats of adsorption at zero loading for multi-wall carbon surfaces with different geometries. <i>Carbon</i> , 2010, 48, 3454-3462.	5.4	16
60	CO <sub>2</sub> /H <sub>2</sub> O Adsorption Equilibrium and Rates on Metal-Organic Frameworks: HKUST-1 and Ni/DOBDC. <i>Langmuir</i> , 2010, 26, 14301-14307.	1.6	390
61	Isosteric heats of adsorption in the Henry's law region for carbon single wall cylindrical nanopores and spherical nanocavities. <i>Carbon</i> , 2009, 47, 3415-3423.	5.4	19
62	Screening of Metal-Organic Frameworks for Carbon Dioxide Capture from Flue Gas Using a Combined Experimental and Modeling Approach. <i>Journal of the American Chemical Society</i> , 2009, 131, 18198-18199.	6.6	816
63	Calcination Effects on the Properties of Gallium-Doped Zinc Oxide Powders. <i>Journal of the American Ceramic Society</i> , 2006, 89, 2440-2443.	1.9	52
64	Large-scale preparation of needle-like zinc oxide with high electrical conductivity. <i>Materials Letters</i> , 2006, 60, 3133-3136.	1.3	8
65	Template-free synthesis of NiO hollow microspheres covered with nanoflakes. <i>Materials Letters</i> , 2006, 60, 3601-3604.	1.3	36
66	Understanding the Adsorption of Noble Gases in Metal-Organic Frameworks Using Diffuse Reflectance Infrared Fourier Transform Spectroscopy. <i>Industrial &amp; Engineering Chemistry Research</i> , 0, , .	1.8	0