

# Xunliang Liu

## List of Publications by Year in descending order

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28  
papers

644  
citations

687363

13  
h-index

580821

25  
g-index

28  
all docs

28  
docs citations

28  
times ranked

499  
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical simulation of the factors affecting the growth of lithium dendrites. <i>Journal of Energy Storage</i> , 2019, 26, 100921.	8.1	69
2	Molecular simulation of CO <sub>2</sub> /CH <sub>4</sub> /H <sub>2</sub> O competitive adsorption and diffusion in brown coal. <i>RSC Advances</i> , 2019, 9, 3004-3011.	3.6	69
3	Adsorption Mechanism of CO <sub>2</sub> /CH <sub>4</sub> in Kaolinite Clay: Insight from Molecular Simulation. <i>Energy &amp; Fuels</i> , 2019, 33, 6542-6551.	5.1	63
4	Ultra-low calorific gas combustion in a gradually-varied porous burner with annular heat recirculation. <i>Energy</i> , 2017, 119, 497-503.	8.8	50
5	Molecular insights into competitive adsorption of CO <sub>2</sub> /CH <sub>4</sub> mixture in shale nanopores. <i>RSC Advances</i> , 2018, 8, 33939-33946.	3.6	44
6	Numerical analysis of heat transfer and volatile evolution of coal particle. <i>Fuel</i> , 2013, 106, 667-673.	6.4	41
7	Confinement Effects and CO <sub>2</sub> /CH <sub>4</sub> Competitive Adsorption in Realistic Shale Kerogen Nanopores. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 6696-6706.	3.7	40
8	Parameter sensitivity analysis and cathode structure optimization of a non-aqueous Li <sup>+</sup> O <sub>2</sub> battery model. <i>Journal of Power Sources</i> , 2020, 451, 227821.	7.8	39
9	Mathematical Model of Lump Coal Falling in the Freeboard Zone of the COREX Melter Gasifier. <i>Energy &amp; Fuels</i> , 2011, 25, 5729-5735.	5.1	35
10	Molecular insights into the effect of anionic-nonionic and cationic surfactant mixtures on interfacial properties of oil-water interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 637, 128259.	4.7	25
11	Quantitative analysis of the inhibition effect of rising temperature and pulse charging on Lithium dendrite growth. <i>Journal of Energy Storage</i> , 2022, 49, 104137.	8.1	20
12	A novel dimensionless form of unreacted shrinking core model for solid conversion during chemical looping combustion. <i>Fuel</i> , 2014, 129, 231-237.	6.4	17
13	Experimental study on the permeability and resistance characteristics in the packed bed with the multi-size irregular particle applied in the sinter vertical waste heat recovery technology. <i>Powder Technology</i> , 2021, 384, 304-312.	4.2	14
14	Case study of a novel low rank coal to calcium carbide process based on techno-economic assessment. <i>Energy</i> , 2021, 228, 120566.	8.8	14
15	Numerical study and optimization of a porous burner with annular heat recirculation. <i>Applied Thermal Engineering</i> , 2019, 157, 113741.	6.0	13
16	Evolution of Discharge Products on Carbon Nanotube Cathodes in Li <sup>+</sup> O <sub>2</sub> Batteries Unraveled by Molecular Dynamics and Density Functional Theory. <i>ACS Catalysis</i> , 2022, 12, 5048-5059.	11.2	13
17	Modeling of solid-state lithium-oxygen battery with porous Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> -based cathode. <i>Journal of Energy Storage</i> , 2022, 45, 103747.	8.1	12
18	Multiscale modeling of gas flow behaviors in nanoporous shale matrix considering multiple transport mechanisms. <i>Physical Review E</i> , 2022, 105, .	2.1	10

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19	The effects of operational parameters on flue gas recirculation iron ore sintering process: sensitivity analysis based on numerical simulation and industrial onsite experimental validation. <i>Ironmaking and Steelmaking</i> , 2020, 47, 368-380.	2.1	9
20	Combustion Wave Propagation of a Modular Porous Burner with Annular Heat Recirculation. <i>Journal of Thermal Science</i> , 2020, 29, 98-107.	1.9	9
21	Mechanistic evaluation of Li <sub>2</sub> O <sub>2</sub> adsorption on carbon nanotube electrodes: A theoretical study. <i>Applied Surface Science</i> , 2020, 506, 145050.	6.1	9
22	Computational Insights into Li <sub>x</sub> O <sub>y</sub> Formation, Nucleation, and Adsorption on Carbon Nanotube Electrodes in Nonaqueous Li <sup>+</sup> O <sub>2</sub> Batteries. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2195-2202.	4.6	8
23	Unraveling the Control Mechanism of Carbon Nanotubes on the Oxygen Reduction Reaction and Product Growth Behavior in Lithium <sup>+</sup> Air Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 2148-2157.	5.1	6
24	Understanding the Catalytic Activity of the Preferred Nitrogen Configuration on the Carbon Nanotube Surface and Its Implications for Li <sup>+</sup> O <sub>2</sub> Batteries. <i>Journal of Physical Chemistry C</i> , 2021, 125, 22570-22580.	3.1	5
25	An Improved Comprehensive Model of Pyrolysis of Large Coal Particles to Predict Temperature Variation and Volatile Component Yields. <i>Energies</i> , 2019, 12, 884.	3.1	3
26	Reconstruction of Carbon Papers and Analysis of Structural and Characteristic Parameters Through Lattice Boltzmann Method. <i>Transport in Porous Media</i> , 2020, , 1.	2.6	3
27	Gas Flow Characteristics through Irregular Particle Bed with the Vertical Confined Wall for Waste Heat Recovery. <i>International Journal of Photoenergy</i> , 2022, 2022, 1-16.	2.5	3
28	Effect of TiC surface oxide overlayer on the control of Li O behavior in lithium-oxygen batteries: Implications for cathode catalyst design. <i>Applied Surface Science</i> , 2021, 567, 150785.	6.1	1