Xunliang Liu

List of Publications by Year
in descending order

28	644	687363	580821
papers	citations	13	25
		h-index	g-index

28	28	28	499
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular insights into the effect of anionic-nonionic and cationic surfactant mixtures on interfacial properties of oil-water interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 637, 128259.	4.7	25
2	Modeling of solid-state lithium-oxygen battery with porous Li1.3Al0.3Ti1.7(PO4)3-based cathode. Journal of Energy Storage, 2022, 45, 103747.	8.1	12
3	Quantitative analysis of the inhibition effect of rising temperature and pulse charging on Lithium dendrite growth. Journal of Energy Storage, 2022, 49, 104137.	8.1	20
4	Evolution of Discharge Products on Carbon Nanotube Cathodes in Li–O$_2$ Batteries Unraveled by Molecular Dynamics and Density Functional Theory. ACS Catalysis, 2022, 12, 5048-5059.	11.2	13
5	Multiscale modeling of gas flow behaviors in nanoporous shale matrix considering multiple transport mechanisms. Physical Review E, 2022, 105, .	2.1	10
6	Gas Flow Characteristics through Irregular Particle Bed with the Vertical Confined Wall for Waste Heat Recovery. International Journal of Photoenergy, 2022, 2022, 1-16.	2.5	3
7	Unraveling the Control Mechanism of Carbon Nanotubes on the Oxygen Reduction Reaction and Product Growth Behavior in Lithium–Air Batteries. ACS Applied Energy Materials, 2021, 4, 2148-2157.	5.1	6
8	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. Powder Technology, 2021, 384, 304-312.	4.2	14
9	Case study of a novel low rank coal to calcium carbide process based on techno-economic assessment. Energy, 2021, 228, 120566.	8.8	14
10	Effect of TiC surface oxide overlayer on the control of Li O behavior in lithium-oxygen batteries: Implications for cathode catalyst design. Applied Surface Science, 2021, 567, 150785.	6.1	1
11	Understanding the Catalytic Activity of the Preferred Nitrogen Configuration on the Carbon Nanotube Surface and Its Implications for Li–O$_2$ Batteries. Journal of Physical Chemistry C, 2021, 125, 22570-22580.	3.1	5
12	The effects of operational parameters on flue gas recirculation iron ore sintering process: sensitivity analysis based on numerical simulation and industrial onsite experimental validation. Ironmaking and Steelmaking, 2020, 47, 368-380.	2.1	9
13	Combustion Wave Propagation of a Modular Porous Burner with Annular Heat Recirculation. Journal of Thermal Science, 2020, 29, 98-107.	1.9	9
14	Mechanistic evaluation of Li2O2 adsorption on carbon nanotube electrodes: A theoretical study. Applied Surface Science, 2020, 506, 145050.	6.1	9
15	Reconstruction of Carbon Papers and Analysis of Structural and Characteristic Parameters Through Lattice Boltzmann Method. Transport in Porous Media, 2020, , 1.	2.6	3
16	Parameter sensitivity analysis and cathode structure optimization of a non-aqueous Li–O2 battery model. Journal of Power Sources, 2020, 451, 227821.	7.8	39
17	Computational Insights into Li$_x$O$_y$ Formation, Nucleation, and Adsorption on Carbon Nanotube Electrodes in Nonaqueous Li–O$_2$ Batteries. Journal of Physical Chemistry Letters, 2020, 11, 2195-2202.	4.6	8
18	Confinement Effects and CO$_2$/CH$_4$ Competitive Adsorption in Realistic Shale Kerogen Nanopores. Industrial & Engineering Chemistry Research, 2020, 59, 6696-6706.	3.7	40

#	Article	IF	Citations
19	Numerical simulation of the factors affecting the growth of lithium dendrites. Journal of Energy Storage, 2019, 26, 100921.	8.1	69
20	Molecular simulation of CO_2/CH_4/H_2O competitive adsorption and diffusion in brown coal. RSC Advances, 2019, 9, 3004-3011.	3.6	69
21	Adsorption Mechanism of CO_2/CH_4 in Kaolinite Clay: Insight from Molecular Simulation. Energy & Fuels, 2019, 33, 6542-6551.	5.1	63
22	Numerical study and optimization of a porous burner with annular heat recirculation. Applied Thermal Engineering, 2019, 157, 113741.	6.0	13
23	An Improved Comprehensive Model of Pyrolysis of Large Coal Particles to Predict Temperature Variation and Volatile Component Yields. Energies, 2019, 12, 884.	3.1	3
24	Molecular insights into competitive adsorption of CO_2/CH_4 mixture in shale nanopores. RSC Advances, 2018, 8, 33939-33946.	3.6	44
25	Ultra-low calorific gas combustion in a gradually-varied porous burner with annular heat recirculation. Energy, 2017, 119, 497-503.	8.8	50
26	A novel dimensionless form of unreacted shrinking core model for solid conversion during chemical looping combustion. Fuel, 2014, 129, 231-237.	6.4	17
27	Numerical analysis of heat transfer and volatile evolution of coal particle. Fuel, 2013, 106, 667-673.	6.4	41
28	Mathematical Model of Lump Coal Falling in the Freeboard Zone of the COREX Melter Gasifier. Energy & Fuels, 2011, 25, 5729-5735.	5.1	35