

Shulai Lei

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5194127/publications.pdf>

Version: 2024-02-01

49
papers

2,470
citations

279798
23
h-index

206112
48
g-index

49
all docs

49
docs citations

49
times ranked

3096
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly efficient photocatalytic reduction of nitrogen into ammonia by single Ru atom catalyst supported by BeO monolayer. Chinese Chemical Letters, 2022, 33, 399-403.	9.0	13
2	Precise identification of active sites of a high bifunctional performance 3D Co/N-C catalyst in Zinc-air batteries. Chemical Engineering Journal, 2022, 433, 134500.	12.7	44
3	Boosting reaction kinetics and improving long cycle life in lamellar VS ₂ /MoS ₂ heterojunctions for superior sodium storage performance. Journal of Materials Chemistry A, 2022, 10, 939-949.	10.3	44
4	High zinc-ion intercalation reaction activity of MoS ₂ cathode based on regulation of thermodynamic metastability and interlayer water. Electrochimica Acta, 2022, 410, 140016.	5.2	16
5	Okra-like hollow Cu _{0.15} -CoP/Co ₃ O ₄ @CC nanotube arrays catalyst for overall water splitting. International Journal of Hydrogen Energy, 2022, 47, 7168-7179.	7.1	3
6	NiO nanobelts with exposed {110} crystal planes as an efficient electrocatalyst for the oxygen evolution reaction. Physical Chemistry Chemical Physics, 2022, 24, 6087-6092.	2.8	10
7	Computational prediction of Mo ₂ @g-C ₆ N ₆ monolayer as an efficient electrocatalyst for N ₂ reduction. Chinese Chemical Letters, 2022, 33, 4623-4627.	9.0	24
8	DFT study of N,S co-doped graphene anodes for Na-ion storage and diffusion. New Journal of Chemistry, 2022, 46, 13866-13873.	2.8	3
9	Fast Activation of Graphene with a Highly Distorted Surface and Its Role in Improved Aqueous Electrochemical Capacitors. ACS Applied Energy Materials, 2022, 5, 8004-8014.	5.1	6
10	Synergy of a hierarchical porous morphology and anionic defects of nanosized Li ₄ Ti ₅ O ₁₂ toward a high-rate and large-capacity lithium-ion battery. Journal of Energy Chemistry, 2021, 54, 699-711.	12.9	13
11	First-principles calculations of stability of graphene-like BC ₃ monolayer and its high-performance potassium storage. Chinese Chemical Letters, 2021, 32, 900-905.	9.0	32
12	Two-dimensional blue-phase CX (X = S, Se) monolayers with high carrier mobility and tunable photocatalytic water splitting capability. Chinese Chemical Letters, 2021, 32, 1977-1982.	9.0	31
13	Interlayer Modification of Pseudocapacitive Vanadium Oxide and Zn(H ₂ O) _n ²⁺ Migration Regulation for Ultrahigh Rate and Durable Aqueous Zinc-Ion Batteries. Advanced Science, 2021, 8, e2004924.	11.2	118
14	Promoting the energy density of lithium-ion capacitor by coupling the pore-size and nitrogen content in capacitive carbon cathode. Journal of Power Sources, 2021, 498, 229912.	7.8	36
15	The graphene-supported non-noble metal catalysts activate ammonia decomposition: A DFT study. Chemical Physics, 2021, 548, 111249.	1.9	10
16	Structural insights of catalytic intermediates in dialumene based CO ₂ capture: Evidences from theoretical resonance Raman spectra. Chinese Chemical Letters, 2021, 32, 2469-2473.	9.0	10
17	Interlayer-decoupled BiOX (X=Cl, Br, and I) sheets for photocatalytic water splitting: a computational study. Optoelectronics Letters, 2021, 17, 32-35.	0.8	4
18	HSH-C10: A new quasi-2D carbon allotrope with a honeycomb-star-honeycomb lattice. Chinese Chemical Letters, 2021, , .	9.0	3

#	ARTICLE	IF	CITATIONS
19	Theoretical investigation of spin-crossover temperature and transport properties of two Fe(II) mononuclear complexes. <i>Chemical Physics Letters</i> , 2020, 758, 137925.	2.6	7
20	Controllable S-Vacancies of monolayered MoS ₂ nanocrystals for highly harvesting lithium storage. <i>Nano Energy</i> , 2020, 78, 105235.	16.0	41
21	Sol-gel combustion synthesis and characterization of CoCr ₂ O ₄ ceramic powder used as color solar absorber pigment. <i>Optoelectronics Letters</i> , 2020, 16, 365-368.	0.8	5
22	Improved charge injection of edge aligned MoS ₂ /MoO ₃ hybrid nanosheets for highly robust and efficient electrocatalysis of H ₂ production. <i>Nanoscale</i> , 2020, 12, 5003-5013.	5.6	26
23	Rational Design of Ion Transport Paths at the Interface of Metal-Organic Framework Modified Solid Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22930-22938.	8.0	45
24	Optimization of Organic/Water Hybrid Electrolytes for High-Rate Carbon-Based Supercapacitor. <i>Advanced Functional Materials</i> , 2019, 29, 1904136.	14.9	102
25	One-Step Synthesis of a Nanosized Cubic Li ₄ Ti ₅ O ₁₂ -Coated Br, C, and N Co-Doped Li ₄ Ti ₅ O ₁₂ Anode Material for Stable High-Rate Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 25804-25816.	8.0	22
26	A sodium perchlorate-based hybrid electrolyte with high salt-to-water molar ratio for safe 2.5 V carbon-based supercapacitor. <i>Energy Storage Materials</i> , 2019, 23, 603-609.	18.0	102
27	A low-cost seawater-in-salt electrolyte for a 2.3 V high-rate carbon-based supercapacitor. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7541-7547.	10.3	260
28	Silica-grafted ionic liquid for maximizing the operational voltage of electrical double-layer capacitors. <i>Energy Storage Materials</i> , 2019, 18, 253-259.	18.0	18
29	The Charge Storage Mechanisms of 2D Cation-Intercalated Manganese Oxide in Different Electrolytes. <i>Advanced Energy Materials</i> , 2019, 9, 1802707.	19.5	89
30	The Origin of Electrochemical Actuation of MnO ₂ /Ni Bilayer Film Derived by Redox Pseudocapacitive Process. <i>Advanced Functional Materials</i> , 2019, 29, 1806778.	14.9	59
31	Spontaneous Growth of 3D Framework Carbon from Sodium Citrate for High Energy and Power Density and Long-Life Sodium-Ion Hybrid Capacitors. <i>Advanced Energy Materials</i> , 2018, 8, 1702409.	19.5	221
32	Tuning the Doping Types in Graphene Sheets by N Monoelement. <i>Nano Letters</i> , 2018, 18, 386-394.	9.1	44
33	Sprinkling MnFe ₂ O ₄ quantum dots on nitrogen-doped graphene sheets: the formation mechanism and application for high-performance supercapacitor electrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9997-10007.	10.3	59
34	Opening Magnesium Storage Capability of Two-Dimensional MXene by Intercalation of Cationic Surfactant. <i>ACS Nano</i> , 2018, 12, 3733-3740.	14.6	208
35	A High-Performance Sodium-Ion Hybrid Capacitor Constructed by Metal-Organic Framework-Derived Anode and Cathode Materials. <i>Advanced Functional Materials</i> , 2018, 28, 1800757.	14.9	205
36	Safe and high-rate supercapacitors based on an acetonitrile/water in salt hybrid electrolyte. <i>Energy and Environmental Science</i> , 2018, 11, 3212-3219.	30.8	297

#	ARTICLE	IF	CITATIONS
37	A combined DFT and experimental study on the nucleation mechanism of NiO nanodots on graphene. Journal of Materials Chemistry A, 2018, 6, 13717-13724.	10.3	17
38	Conformational adaptation and manipulation of manganese tetra(4-pyridyl)porphyrin molecules on Cu(111). Journal of Chemical Physics, 2017, 146, .	3.0	15
39	Enhanced capacities of carbon nanosheets derived from functionalized bacterial cellulose as anodes for sodium ion batteries. RSC Advances, 2017, 7, 50336-50342.	3.6	23
40	Curvature-dependent adsorption of water inside and outside armchair carbon nanotubes. Journal of Computational Chemistry, 2016, 37, 1313-1320.	3.3	20
41	Incremental DF-LCCSD(T) Calculations for a Water Molecule Inside and Outside Armchair Carbon Nanotubes. Zeitschrift Fur Physikalische Chemie, 2016, 230, 651-666.	2.8	0
42	Orbital-selective single molecule rectifier on graphene-covered Ru(0001) surface. Applied Physics Letters, 2013, 102, 163506.	3.3	10
43	A First-Principles Investigation of the Carrier Doping Effect on the Magnetic Properties of Defective Graphene. Chinese Physics Letters, 2013, 30, 077502.	3.3	4
44	Carrier-tunable magnetism of graphene with single-atom vacancy. Journal of Applied Physics, 2013, 113, 213709.	2.5	7
45	Iron-phthalocyanine molecular junction with high spin filter efficiency and negative differential resistance. Journal of Chemical Physics, 2012, 136, 064707.	3.0	58
46	Periodically Modulated Electronic Properties of the Epitaxial Monolayer Graphene on Ru(0001). Journal of Physical Chemistry C, 2011, 115, 24858-24864.	3.1	36
47	First-principles Study on the Electronic Structure of Novel Titanium Yttrium Mixed-metal Nitride Clusterfullerene. Chinese Journal of Chemical Physics, 2011, 24, 439-443.	1.3	2
48	First-principles Study of Single Tin-phthalocyanine Molecule on Ag(111) Surface. Chinese Journal of Chemical Physics, 2010, 23, 565-569.	1.3	5
49	Efficient organometallic spin filter based on Europium-cyclooctatetraene wire. Journal of Chemical Physics, 2009, 131, .	3.0	43