

Biao Chen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5353994/publications.pdf>

Version: 2024-02-01

40
papers

3,018
citations

172457

29
h-index

289244

40
g-index

41
all docs

41
docs citations

41
times ranked

3620
citing authors

#	ARTICLE	IF	CITATIONS
1	Transition metal dichalcogenides for alkali metal ion batteries: engineering strategies at the atomic level. <i>Energy and Environmental Science</i> , 2020, 13, 1096-1131.	30.8	266
2	Preparation of MoS ₂ /TiO ₂ based nanocomposites for photocatalysis and rechargeable batteries: progress, challenges, and perspective. <i>Nanoscale</i> , 2018, 10, 34-68.	5.6	247
3	Thermal decomposition-reduced layer-by-layer nitrogen-doped graphene/MoS ₂ /nitrogen-doped graphene heterostructure for promising lithium-ion batteries. <i>Nano Energy</i> , 2017, 41, 154-163.	16.0	191
4	Porous MoS ₂ /Carbon Spheres Anchored on 3D Interconnected Multiwall Carbon Nanotube Networks for Ultrafast Na Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1702909.	19.5	190
5	Rational design of Co ₉ S ₈ /CoO heterostructures with well-defined interfaces for lithium sulfur batteries: A study of synergistic adsorption-electrocatalysis function. <i>Nano Energy</i> , 2019, 60, 332-339.	16.0	156
6	2D sandwich-like carbon-coated ultrathin TiO ₂ @defect-rich MoS ₂ hybrid nanosheets: Synergistic-effect-promoted electrochemical performance for lithium ion batteries. <i>Nano Energy</i> , 2016, 26, 541-549.	16.0	146
7	Revealing Principles for Design of Lean-Electrolyte Lithium Metal Anode via In Situ Spectroscopy. <i>Journal of the American Chemical Society</i> , 2020, 142, 2012-2022.	13.7	142
8	Controllable graphene incorporation and defect engineering in MoS ₂ -TiO ₂ based composites: Towards high-performance lithium-ion batteries anode materials. <i>Nano Energy</i> , 2017, 33, 247-256.	16.0	130
9	1D Sub-Nanotubes with Anatase/Bronze TiO ₂ Nanocrystal Wall for High-Rate and Long-Life Sodium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, e1804116.	21.0	109
10	Efficient Reversible Conversion between MoS ₂ and Mo/Na ₂ S Enabled by Graphene-Supported Single Atom Catalysts. <i>Advanced Materials</i> , 2021, 33, e2007090.	21.0	108
11	Graphene-Supported Atomically Dispersed Metals as Bifunctional Catalysts for Next-Generation Batteries Based on Conversion Reactions. <i>Advanced Materials</i> , 2022, 34, e2105812.	21.0	106
12	Designing Electrophilic and Nucleophilic Dual Centers in the ReS ₂ Plane toward Efficient Bifunctional Catalysts for Li-CO ₂ Batteries. <i>Journal of the American Chemical Society</i> , 2022, 144, 3106-3116.	13.7	93
13	Facile synthesis of 3D few-layered MoS ₂ coated TiO ₂ nanosheet core-shell nanostructures for stable and high-performance lithium-ion batteries. <i>Nanoscale</i> , 2015, 7, 12895-12905.	5.6	85
14	Revealing the Origin of Improved Reversible Capacity of Dual-Shell Bismuth Boxes Anode for Potassium-Ion Batteries. <i>Matter</i> , 2019, 1, 1681-1693.	10.0	81
15	Reversible electrochemical oxidation of sulfur in ionic liquid for high-voltage Al-S batteries. <i>Nature Communications</i> , 2021, 12, 5714.	12.8	80
16	Regulating Polysulfide Redox Kinetics on a Self-Healing Electrode for High-Performance Flexible Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	74
17	Engineering the Active Sites of Graphene Catalyst: From CO ₂ Activation to Activate Li-CO ₂ Batteries. <i>ACS Nano</i> , 2021, 15, 9841-9850.	14.6	71
18	Catalytic effect in Li-S batteries: From band theory to practical application. <i>Materials Today</i> , 2022, 57, 84-120.	14.2	69

#	ARTICLE	IF	CITATIONS
19	Distorted 1T-ReS ₂ Nanosheets Anchored on Porous TiO ₂ Nanofibers for Highly Enhanced Photocatalytic Hydrogen Production. ACS Applied Materials & Interfaces, 2019, 11, 23144-23151.	8.0	57
20	Vacancy-Rich MoSSe with Sulfiphilicity/Lithiophilicity Dual Function for Kinetics-Enhanced and Dendrite-Free Li-S Batteries. Nano Letters, 2022, 22, 4999-5008.	9.1	54
21	Toward an Understanding of the Reversible Li-CO ₂ Batteries over Metal-N ₄ -Functionalized Graphene Electrocatalysts. ACS Nano, 2022, 16, 1523-1532.	14.6	52
22	Facile synthesis and electrochemical properties of continuous porous spheres assembled from defect-rich, interlayer-expanded, and few-layered MoS ₂ /C nanosheets for reversible lithium storage. Journal of Power Sources, 2018, 387, 16-23.	7.8	51
23	Stabilized Solid Electrolyte Interphase Induced by Ultrathin Boron Nitride Membranes for Safe Lithium Metal Batteries. Nano Letters, 2021, 21, 8447-8454.	9.1	51
24	1Tâ€²â€²ReS ₂ Confined in 2Dâ€²Honeycombed Carbon Nanosheets as New Anode Materials for Highâ€²Performance Sodiumâ€²Ion Batteries. Advanced Energy Materials, 2019, 9, 1901146.	19.5	50
25	Electronic reconfiguration of Co ₂ P induced by Cu doping enhancing oxygen reduction reaction activity in zincâ€²air batteries. Journal of Materials Chemistry A, 2019, 7, 21232-21243.	10.3	46
26	Graphene Oxide-Assisted Synthesis of Microsized Ultrathin Single-Crystalline Anatase TiO ₂ Nanosheets and Their Application in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 2495-2504.	8.0	40
27	â€²Threeâ€²inâ€²Oneâ€² Multiâ€²Level Design of MoS ₂ -Based Anodes for Enhanced Sodium Storage: from Atomic to Macroscopic Level. Advanced Functional Materials, 2022, 32, .	14.9	40
28	Engineering the electronic structure of 1Tâ€² ² -ReS ₂ through nitrogen implantation for enhanced alkaline hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 11607-11616.	10.3	39
29	Revealing the Magnesiumâ€²Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Abâ€²Initio Simulations. Angewandte Chemie - International Edition, 2020, 59, 21728-21735.	13.8	34
30	Induced construction of large-area amorphous Li ₂ O ₂ film via elemental co-doping and spatial confinement to achieve high-performance Li-O ₂ batteries. Energy Storage Materials, 2022, 44, 285-295.	18.0	31
31	Interfacial effect on the electrochemical properties of the layered graphene/metal sulfide composites as anode materials for Li-ion batteries. Surface Science, 2016, 651, 10-15.	1.9	27
32	Multi-functional integration of pore P25@C@MoS ₂ core-double shell nanostructures as robust ternary anodes with enhanced lithium storage properties. Applied Surface Science, 2017, 401, 232-240.	6.1	24
33	ReS ₂ nanosheets anchored on rGO as an efficient polysulfides immobilizer and electrocatalyst for Li-S batteries. Applied Surface Science, 2020, 505, 144586.	6.1	23
34	Boosting the stable sodium-ion storage performance by tailoring the 1D TiO ₂ @ReS ₂ core-shell heterostructures. Electrochimica Acta, 2020, 338, 135695.	5.2	17
35	Octopus-Inspired Design of Apical NiS ₂ Nanoparticles Supported on Hierarchical Carbon Composites as an Efficient Host for Lithium Sulfur Batteries with High Sulfur Loading. ACS Applied Materials & Interfaces, 2020, 12, 17528-17537.	8.0	12
36	Synchrotron Xâ€²ray Spectroscopic Investigations of Inâ€²Situâ€²Formed Alloy Anodes for Magnesium Batteries. Advanced Materials, 2022, 34, e2108688.	21.0	9

#	ARTICLE	IF	CITATIONS
37	Interface engineering of MoS ₂ -based ternary hybrids towards reversible conversion of sodium storage. <i>Materials Today Energy</i> , 2022, 26, 100993.	4.7	5
38	Sodium-ion Batteries: 1Tâ€²â€²ReS ₂ Confined in 2Dâ€²Honeycombed Carbon Nanosheets as New Anode Materials for Highâ€²Performance Sodium-ion Batteries (<i>Adv. Energy Mater.</i> 30/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970117.	19.5	4
39	Revealing the Magnesiumâ€²Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Abâ€²Initio Simulations. <i>Angewandte Chemie</i> , 2020, 132, 21912-21919.	2.0	4
40	Chloroplast-granum-inspired porous nanorods composed of g-C ₃ N ₄ ultrathin nanosheets as visible light photocatalysts for highly enhanced hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 2829-2839.	7.1	4