

Zhen Zhou

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

358
papers

29,344
citations

97
h-index

158
g-index

378
ext. papers

33,566
ext. citations

8.9
avg, IF

7.86
L-index

#	Paper	IF	Citations
358	Are MXenes promising anode materials for Li ion batteries? Computational studies on electronic properties and Li storage capability of Ti ₃ C ₂ and Ti ₃ C ₂ X ₂ (X = F, OH) monolayer. <i>Journal of the American Chemical Society</i> , 2012 , 134, 16909-16	16.4	1304
357	MoS ₂ nanoribbons: high stability and unusual electronic and magnetic properties. <i>Journal of the American Chemical Society</i> , 2008 , 130, 16739-44	16.4	772
356	Graphene-analogous low-dimensional materials. <i>Progress in Materials Science</i> , 2013 , 58, 1244-1315	42.2	600
355	Recent progress in high-voltage lithium ion batteries. <i>Journal of Power Sources</i> , 2013 , 237, 229-242	8.9	598
354	The Influence of Carboxyl Groups on the Photoluminescence of Mercaptopropionic Acid-Stabilized CdTe Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 8-13	3.4	552
353	Graphene-related nanomaterials: tuning properties by functionalization. <i>Nanoscale</i> , 2013 , 5, 4541-83	7.7	524
352	Recent advances in MXene: Preparation, properties, and applications. <i>Frontiers of Physics</i> , 2015 , 10, 276-386	3.6	520
351	S-Doped N-Rich Carbon Nanosheets with Expanded Interlayer Distance as Anode Materials for Sodium-Ion Batteries. <i>Advanced Materials</i> , 2017 , 29, 1604108	24	468
350	Spin gapless semiconductor-metal-half-metal properties in nitrogen-doped zigzag graphene nanoribbons. <i>ACS Nano</i> , 2009 , 3, 1952-8	16.7	450
349	Metallic VS ₂ Monolayer: A Promising 2D Anode Material for Lithium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 25409-25413	3.8	438
348	Li ion battery materials with core-shell nanostructures. <i>Nanoscale</i> , 2011 , 3, 3967-83	7.7	426
347	CO Catalytic Oxidation on Iron-Embedded Graphene: Computational Quest for Low-Cost Nanocatalysts. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 6250-6254	3.8	412
346	MXene-based materials for electrochemical energy storage. <i>Journal of Energy Chemistry</i> , 2018 , 27, 73-85	12	354
345	Enhanced Li Adsorption and Diffusion on MoS ₂ Zigzag Nanoribbons by Edge Effects: A Computational Study. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2221-7	6.4	343
344	Preparation and electrochemical studies of Fe-doped Li ₃ V ₂ (PO ₄) ₃ cathode materials for lithium-ion batteries. <i>Journal of Power Sources</i> , 2006 , 162, 1357-1362	8.9	277
343	Recent Breakthroughs in Supercapacitors Boosted by Nitrogen-Rich Porous Carbon Materials. <i>Advanced Science</i> , 2017 , 4, 1600408	13.6	275
342	Hydrogenation: a simple approach to realize semiconductor-half-metal-metal transition in boron nitride nanoribbons. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1699-705	16.4	254

341	Atomic Interface Engineering and Electric-Field Effect in Ultrathin Bi MoO Nanosheets for Superior Lithium Ion Storage. <i>Advanced Materials</i> , 2017 , 29, 1700396	24	251
340	The First Introduction of Graphene to Rechargeable Li-CO ₂ Batteries. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 6550-3	16.4	245
339	Core-shell Li ₃ V ₂ (PO ₄) ₃ @C Composites as Cathode Materials for Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 5689-5693	3.8	242
338	Fast Sodium Storage in TiO ₂ @CNT@C Nanorods for High-Performance Na-Ion Capacitors. <i>Advanced Energy Materials</i> , 2017 , 7, 1701222	21.8	235
337	Synthesis and Electrochemical Performance of Sulfur/Highly Porous Carbon Composites. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 4712-4716	3.8	233
336	CoCO ₃ submicrocube/graphene composites with high lithium storage capability. <i>Nano Energy</i> , 2013 , 2, 276-282	17.1	232
335	Towards practical lithium-metal anodes. <i>Chemical Society Reviews</i> , 2020 , 49, 3040-3071	58.5	224
334	Core double-shell Si@SiO ₂ @C nanocomposites as anode materials for Li-ion batteries. <i>Chemical Communications</i> , 2010 , 46, 2590-2	5.8	220
333	MnPSe Monolayer: A Promising 2D Visible-Light Photohydrolytic Catalyst with High Carrier Mobility. <i>Advanced Science</i> , 2016 , 3, 1600062	13.6	216
332	Graphene, inorganic graphene analogs and their composites for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12104	13	215
331	Nanosheet-Based NiO Microspheres: Controlled Solvothermal Synthesis and Lithium Storage Performances. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 251-255	3.8	209
330	Role of transition metal nanoparticles in the extra lithium storage capacity of transition metal oxides: a case study of hierarchical core-shell Fe ₃ O ₄ @C and Fe@C microspheres. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 15158	13	199
329	Bi ₂ O ₃ /Bi ₂ WO ₆ Composite Microspheres: Hydrothermal Synthesis and Photocatalytic Performances. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 5220-5225	3.8	199
328	Electronic structures of SiC nanoribbons. <i>Journal of Chemical Physics</i> , 2008 , 129, 174114	3.9	199
327	A Ti-anchored Ti ₂ CO ₂ monolayer (MXene) as a single-atom catalyst for CO oxidation. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 4871-4876	13	190
326	Preparation and lithium storage performances of mesoporous Fe ₃ O ₄ @C microcapsules. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 705-9	9.5	189
325	Towards better photocatalysts: first-principles studies of the alloying effects on the photocatalytic activities of bismuth oxyhalides under visible light. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1286-92	3.6	186
324	Ni/C Hierarchical Nanostructures with Ni Nanoparticles Highly Dispersed in N-Containing Carbon Nanosheets: Origin of Li Storage Capacity. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 23974-23980	3.8	180

323	Fabrication of High-Power Li-Ion Hybrid Supercapacitors by Enhancing the Exterior Surface Charge Storage. <i>Advanced Energy Materials</i> , 2015 , 5, 1500550	21.8	179
322	High and anisotropic carrier mobility in experimentally possible Ti ₂ CO ₂ (MXene) monolayers and nanoribbons. <i>Nanoscale</i> , 2015 , 7, 16020-5	7.7	176
321	Micro/Nanostructured Materials for Sodium Ion Batteries and Capacitors. <i>Small</i> , 2018 , 14, 1702961	11	173
320	Preparation and electrochemical properties of sulfur/cetylene black composites as cathode materials. <i>Electrochimica Acta</i> , 2009 , 54, 3708-3713	6.7	173
319	Innovation and discovery of graphene-like materials via density-functional theory computations. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2015 , 5, 360-379	7.9	172
318	Improved high-rate charge/discharge performances of LiFePO ₄ /C via V-doping. <i>Journal of Power Sources</i> , 2009 , 193, 841-845	8.9	171
317	Recent progress in rechargeable alkali metal-air batteries. <i>Green Energy and Environment</i> , 2016 , 1, 4-17	5.7	171
316	Metal-CO Batteries on the Road: CO from Contamination Gas to Energy Source. <i>Advanced Materials</i> , 2017 , 29, 1605891	24	169
315	First-principles studies on facet-dependent photocatalytic properties of bismuth oxyhalides (BiOXs). <i>RSC Advances</i> , 2012 , 2, 9224	3.7	167
314	Computational study of B- or N-doped single-walled carbon nanotubes as NH ₃ and NO ₂ sensors. <i>Carbon</i> , 2007 , 45, 2105-2110	10.4	166
313	Carbon-Supported Divacancy-Anchored Platinum Single-Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 1163-1167	16.4	166
312	Preparation and electrochemical performances of doughnut-like Ni(OH) ₂ /Co(OH) ₂ composites as pseudocapacitor materials. <i>Nanoscale</i> , 2012 , 4, 4498-503	7.7	163
311	Two-dimensional polyphenylene: experimentally available porous graphene as a hydrogen purification membrane. <i>Chemical Communications</i> , 2010 , 46, 3672-4	5.8	163
310	Orderly packed anodes for high-power lithium-ion batteries with super-long cycle life: rational design of MnCO ₃ /large-area graphene composites. <i>Advanced Materials</i> , 2015 , 27, 806-12	24	161
309	Ca-coated boron fullerenes and nanotubes as superior hydrogen storage materials. <i>Nano Letters</i> , 2009 , 9, 1944-8	11.5	152
308	Metal-Organic Frameworks (MOFs) and MOF-Derived Materials for Energy Storage and Conversion. <i>Electrochemical Energy Reviews</i> , 2019 , 2, 29-104	29.3	152
307	Sb nanoparticles decorated N-rich carbon nanosheets as anode materials for sodium ion batteries with superior rate capability and long cycling stability. <i>Chemical Communications</i> , 2014 , 50, 12888-91	5.8	151
306	Rechargeable Li-CO ₂ batteries with carbon nanotubes as air cathodes. <i>Chemical Communications</i> , 2015 , 51, 14636-9	5.8	150

305	Double-atom catalysts: transition metal dimer-anchored C ₂ N monolayers as N ₂ fixation electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18599-18604	13	150
304	Doping effects of B and N on hydrogen adsorption in single-walled carbon nanotubes through density functional calculations. <i>Carbon</i> , 2006 , 44, 939-947	10.4	149
303	Comparative study of hydrogen adsorption on carbon and BN nanotubes. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 13363-9	3.4	149
302	Ti ₂ CO ₂ MXene: a highly active and selective photocatalyst for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12899-12903	13	148
301	SiC ₂ silagraphene and its one-dimensional derivatives: where planar tetracoordinate silicon happens. <i>Journal of the American Chemical Society</i> , 2011 , 133, 900-8	16.4	147
300	Hierarchical Carbon-Nitrogen Architectures with Both Mesopores and Macrochannels as Excellent Cathodes for Rechargeable LiO ₂ Batteries. <i>Advanced Functional Materials</i> , 2014 , 24, 6826-6833	15.6	145
299	Computational Insights into Oxygen Reduction Reaction and Initial Li ₂ O ₂ Nucleation on Pristine and N-Doped Graphene in LiO ₂ Batteries. <i>ACS Catalysis</i> , 2015 , 5, 4309-4317	13.1	142
298	Small molecules make big differences: molecular doping effects on electronic and optical properties of phosphorene. <i>Nanotechnology</i> , 2015 , 26, 095201	3.4	136
297	Electrochemical performance of nanocrystalline Li ₃ V ₂ (PO ₄) ₃ /carbon composite material synthesized by a novel sol-gel method. <i>Electrochimica Acta</i> , 2006 , 51, 6498-6502	6.7	133
296	Transition metal anchored C ₂ N monolayers as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11446-11452	13	133
295	Effects of dopants and hydrogen on the electrical conductivity of ZnO. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 139-146	6	131
294	Structure-modulated crystalline covalent organic frameworks as high-rate cathodes for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 18621-18627	13	130
293	Pre-lithiated graphene nanosheets as negative electrode materials for Li-ion capacitors with high power and energy density. <i>Journal of Power Sources</i> , 2014 , 264, 108-113	8.9	130
292	Stable layered P ₃ /P ₂ Na _{0.66} Co _{0.5} Mn _{0.5} O ₂ cathode materials for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 20708-20714	13	129
291	Bifunctional electrocatalysts of MOF-derived Co-N/C on bamboo-like MnO nanowires for high-performance liquid- and solid-state Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 9716-9722	13	128
290	Fast synthesis of core-shell LiCoPO ₄ /C nanocomposite via microwave heating and its electrochemical Li intercalation performances. <i>Electrochemistry Communications</i> , 2009 , 11, 95-98	5.1	126
289	A P ₂ -Na _{0.67} Co _{0.5} Mn _{0.5} O ₂ cathode material with excellent rate capability and cycling stability for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11103-11109	13	123
288	Enhanced Photocatalytic Properties in BiOBr Nanosheets with Dominantly Exposed (102) Facets. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 14662-14669	3.8	123

287	Tuning electronic and optical properties of MoS ₂ monolayer via molecular charge transfer. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 16892-16897	13	123
286	MOF-Derived Porous Co ₃ O ₄ Hollow Tetrahedra with Excellent Performance as Anode Materials for Lithium-Ion Batteries. <i>Inorganic Chemistry</i> , 2015 , 54, 8159-61	5.1	122
285	Tunable Band Structures of Heterostructured Bilayers with Transition-Metal Dichalcogenide and MXene Monolayer. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5593-5599	3.8	122
284	Heteroatom-doped graphene as electrocatalysts for air cathodes. <i>Materials Horizons</i> , 2017 , 4, 7-19	14.4	119
283	Electronic Structure and Reactivity of Boron Nitride Nanoribbons with Stone-Wales Defects. <i>Journal of Chemical Theory and Computation</i> , 2009 , 5, 3088-95	6.4	118
282	Verifying the Rechargeability of Li-CO Batteries on Working Cathodes of Ni Nanoparticles Highly Dispersed on N-Doped Graphene. <i>Advanced Science</i> , 2018 , 5, 1700567	13.6	117
281	High performance LiCO ₂ batteries with NiO ₂ NT cathodes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2792-2796	13	116
280	Achieving battery-level energy density by constructing aqueous carbonaceous supercapacitors with hierarchical porous N-rich carbon materials. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11387-11394	13	115
279	Interlayer-Spacing-Regulated VOPO Nanosheets with Fast Kinetics for High-Capacity and Durable Rechargeable Magnesium Batteries. <i>Advanced Materials</i> , 2018 , 30, e1801984	24	115
278	Do Composite Single-Walled Nanotubes Have Enhanced Capability for Lithium Storage?. <i>Chemistry of Materials</i> , 2005 , 17, 992-1000	9.6	113
277	Phosphorene: what can we know from computations?. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2016 , 6, 5-19	7.9	112
276	Core-shell Fe@Fe ₃ C/C nanocomposites as anode materials for Li ion batteries. <i>Electrochimica Acta</i> , 2013 , 87, 180-185	6.7	111
275	Layer-by-Layer Hybrids of MoS ₂ and Reduced Graphene Oxide for Lithium Ion Batteries. <i>Electrochimica Acta</i> , 2014 , 147, 392-400	6.7	110
274	Structural and Electronic Properties of Graphane Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 15043-15045	3.8	110
273	To achieve stable spherical clusters: general principles and experimental confirmations. <i>Journal of the American Chemical Society</i> , 2006 , 128, 12829-34	16.4	110
272	Preparation and electrochemical hydrogen storage of boron nitride nanotubes. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11525-9	3.4	109
271	Electronic structure of heterojunction MoO ₂ /g-C ₃ N ₄ catalyst for oxidative desulfurization. <i>Applied Catalysis B: Environmental</i> , 2018 , 238, 263-273	21.8	106
270	Boosting the rate capability of hard carbon with an ether-based electrolyte for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9528-9532	13	105

269	A first-principles study of lithium absorption in boron- or nitrogen-doped single-walled carbon nanotubes. <i>Carbon</i> , 2004 , 42, 2677-2682	10.4	104
268	Yolk-Shell MnO@ZnMn O /N-C Nanorods Derived from MnO /ZIF-8 as Anode Materials for Lithium Ion Batteries. <i>Small</i> , 2016 , 12, 5564-5571	11	103
267	Rambutan-like FeCO ₃ hollow microspheres: facile preparation and superior lithium storage performances. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 11212-7	9.5	102
266	Computational studies on structural and electronic properties of functionalized MXene monolayers and nanotubes. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 4960-4966	13	101
265	Structural evolution from mesoporous FeFe ₂ O ₃ to Fe ₃ O ₄ @C and FeFe ₂ O ₃ nanospheres and their lithium storage performances. <i>CrystEngComm</i> , 2011 , 13, 4709	3.3	101
264	Structural design for anodes of lithium-ion batteries: emerging horizons from materials to electrodes. <i>Materials Horizons</i> , 2015 , 2, 553-566	14.4	100
263	Molecular Charge Transfer: A Simple and Effective Route To Engineer the Band Structures of BN Nanosheets and Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 18531-18537	3.8	97
262	Stone-Wales Defects in Single-Walled Boron Nitride Nanotubes: Formation Energies, Electronic Structures, and Reactivity. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1365-1370	3.8	97
261	Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts. <i>Small Methods</i> , 2018 , 2, 1700359	12.8	96
260	T-Nb O /C Nanofibers Prepared through Electrospinning with Prolonged Cycle Durability for High-Rate Sodium-Ion Batteries Induced by Pseudocapacitance. <i>Small</i> , 2017 , 13, 1702588	11	95
259	Origin of photoactivity in graphitic carbon nitride and strategies for enhancement of photocatalytic efficiency: insights from first-principles computations. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 6280-8	3.6	95
258	Co ₂ (OH) ₂ CO ₃ Nanosheets and CoO Nanonets with Tailored Pore Sizes as Anodes for Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 12022-9	9.5	95
257	Identification of cathode stability in LiNiO ₂ batteries with Cu nanoparticles highly dispersed on N-doped graphene. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3218-3223	13	94
256	A promising sol-gel route based on citric acid to synthesize Li ₃ V ₂ (PO ₄) ₃ /carbon composite material for lithium ion batteries. <i>Electrochimica Acta</i> , 2007 , 52, 4922-4926	6.7	92
255	Oriented SnS nanoflakes bound on S-doped N-rich carbon nanosheets with a rapid pseudocapacitive response as high-rate anodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19745-19751	13	91
254	Li- and Er-codoped ZnO with enhanced 1.54eV photoemission. <i>Applied Physics Letters</i> , 2005 , 87, 091109	3.4	90
253	Sunlight-driven degradation of Rhodamine B by peanut-shaped porous BiVO ₄ nanostructures in the H ₂ O ₂ -containing system. <i>CrystEngComm</i> , 2012 , 14, 1038-1044	3.3	89
252	Heteroatom-doped carbon materials and their composites as electrocatalysts for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18782-18793	13	89

251	A New Approach to the Fabrication of a Self-Organizing Film of Heterostructured Polymer/Cu ₂ S Nanoparticles. <i>Advanced Materials</i> , 1998 , 10, 529-532	24	88
250	Ultrathin Layered Hydroxide Cobalt Acetate Nanoplates Face-to-Face Anchored to Graphene Nanosheets for High-Efficiency Lithium Storage. <i>Advanced Functional Materials</i> , 2017 , 27, 1605544	15.6	86
249	Machine learning: Accelerating materials development for energy storage and conversion. <i>Information Materials</i> , 2020 , 2, 553-576	23.1	86
248	Alkaline rechargeable Ni/Co batteries: Cobalt hydroxides as negative electrode materials. <i>Energy and Environmental Science</i> , 2009 , 2, 502	35.4	86
247	Fabricating Ir/C Nanofiber Networks as Free-Standing Air Cathodes for Rechargeable Li-CO Batteries. <i>Small</i> , 2018 , 14, e1800641	11	84
246	A composite of Co nanoparticles highly dispersed on N-rich carbon substrates: an efficient electrocatalyst for Li-O(2) battery cathodes. <i>Chemical Communications</i> , 2014 , 50, 776-8	5.8	81
245	CN(x) nanotubes with pyridinelike structures: p-type semiconductors and Li storage materials. <i>Journal of Chemical Physics</i> , 2008 , 129, 104703	3.9	81
244	First-principles studies on doped graphene as anode materials in lithium-ion batteries. <i>Theoretical Chemistry Accounts</i> , 2011 , 130, 209-213	1.9	80
243	Ultrasml MnO@N-rich carbon nanosheets for high-power asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12519	13	79
242	A novel sol-gel method to synthesize nanocrystalline LiVPO ₄ F and its electrochemical Li intercalation performances. <i>Journal of Power Sources</i> , 2006 , 160, 633-637	8.9	79
241	Cation-induced chirality in a bifunctional metal-organic framework for quantitative enantioselective recognition. <i>Nature Communications</i> , 2019 , 10, 5117	17.4	77
240	Porous graphene: Properties, preparation, and potential applications. <i>Science Bulletin</i> , 2012 , 57, 2948-2955		77
239	Do transition metal carbonates have greater lithium storage capability than oxides? A case study of monodisperse CoCO ₃ and CoO microspindles. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 12346-52	9.5	75
238	Morphology Control of ZnS ₃ from Chrysanthemum-Like Microspheres to Hollow Microspheres: Synthesis and Electrochemical Properties. <i>Crystal Growth and Design</i> , 2009 , 9, 113-117	3.5	75
237	Tuning electronic and magnetic properties of wurtzite ZnO nanosheets by surface hydrogenation. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 2442-7	9.5	72
236	LiVOPO ₄ : A cathode material for 4V lithium ion batteries. <i>Journal of Power Sources</i> , 2009 , 189, 786-789	8.9	72
235	Structural and electrochemical properties of Cl-doped LiFePO ₄ /C. <i>Journal of Power Sources</i> , 2010 , 195, 3680-3683	8.9	72
234	Facile preparation of hierarchical Nb ₂ O ₅ microspheres with photocatalytic activities and electrochemical properties. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9236-9243	13	70

233	Electrolyte-Regulated Solid-Electrolyte Interphase Enables Long Cycle Life Performance in Organic Cathodes for Potassium-Ion Batteries. <i>Advanced Functional Materials</i> , 2018 , 29, 1807137	15.6	70
232	Synergistic effect of Zr-MOF on phosphomolybdic acid promotes efficient oxidative desulfurization. <i>Applied Catalysis B: Environmental</i> , 2019 , 256, 117804	21.8	69
231	Exploiting Synergistic Effect by Integrating Ruthenium-Copper Nanoparticles Highly Co-Dispersed on Graphene as Efficient Air Cathodes for Li-O ₂ Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1802805	21.8	69
230	An Extremely Simple Method for Protecting Lithium Anodes in Li-O Batteries. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 12814-12818	16.4	68
229	Sulfur/nickel ferrite composite as cathode with high-volumetric-capacity for lithium-sulfur battery. <i>Science China Materials</i> , 2019 , 62, 74-86	7.1	68
228	CuO Nanoplates for High-Performance Potassium-Ion Batteries. <i>Small</i> , 2019 , 15, e1901775	11	67
227	Effect of lithium difluoro(oxalate)borate (LiDFOB) additive on the performance of high-voltage lithium-ion batteries. <i>Journal of Applied Electrochemistry</i> , 2012 , 42, 291-296	2.6	67
226	Energetics and electronic structures of AlN nanotubes/wires and their potential application as ammonia sensors. <i>Nanotechnology</i> , 2007 , 18, 424023	3.4	67
225	Engineering the electronic structure of single-walled carbon nanotubes by chemical functionalization. <i>ChemPhysChem</i> , 2005 , 6, 598-601	3.2	67
224	Li/LiFePO ₄ batteries with room temperature ionic liquid as electrolyte. <i>Electrochemistry Communications</i> , 2009 , 11, 1500-1503	5.1	65
223	Atomic and electronic structures of fluorinated BN nanotubes: computational study. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 25678-85	3.4	64
222	Comparative Study of Carbon and BN Nanographenes: Ground Electronic States and Energy Gap Engineering. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 12677-12682	3.8	63
221	Size- and Surface-dependent Stability, Electronic Properties, and Potential as Chemical Sensors: Computational Studies on One-dimensional ZnO Nanostructures. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 13926-13931	3.8	63
220	Boosting bifunctional electrocatalytic activity in S and N co-doped carbon nanosheets for high-efficiency Zn/Ni batteries. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4386-4395	13	62
219	Computational prediction of experimentally possible g-C ₃ N ₃ monolayer as hydrogen purification membrane. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 5037-5042	6.7	62
218	Improved cyclic performances of LiCoPO ₄ /C cathode materials for high-cell-potential lithium-ion batteries with thiophene as an electrolyte additive. <i>Electrochimica Acta</i> , 2012 , 59, 172-178	6.7	61
217	Nanomaterials and Technologies for Lithium-Ion Hybrid Supercapacitors. <i>ChemNanoMat</i> , 2016 , 2, 578-587	7.5	61
216	Structural and electronic properties of graphene-ZnO interfaces: dispersion-corrected density functional theory investigations. <i>Nanotechnology</i> , 2013 , 24, 305401	3.4	59

215	Bifunctional electrocatalysts for rechargeable Zn-air batteries. <i>Chinese Journal of Catalysis</i> , 2019 , 40, 1298-1310	11.3	58
214	Tuning band gaps of BN nanosheets and nanoribbons via interfacial dihalogen bonding and external electric field. <i>Nanoscale</i> , 2014 , 6, 8624-34	7.7	58
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