Zhen Zhou

List of Publications by Year in Descending Order

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	Targeted design of advanced electrocatalysts by machine learning. *Chinese Journal of Catalysis*, **2022**, 43, 11-32	11.3	10
357	Nickel single-atom catalysts intrinsically promoted by fast pyrolysis for selective electroreduction of CO2 into CO. *Applied Catalysis B: Environmental*, **2022**, 304, 120997	21.8	6
356	Perspective on Theoretical Models for CO2 Electrochemical Reduction. *Journal of Physical Chemistry C*, **2022**, 126, 3820-3829	3.8	3
355	Redox mediators for high-performance lithium-oxygen batteries.. *National Science Review*, **2022**, 9, nwac048	16.8	7
354	Cobalt oxyhydroxide decorating hollow carbon sphere: A high-efficiency multi-functional material for Li-S batteries and alkaline electrocatalysis. *Chemical Engineering Journal*, **2022**, 439, 135790	14.7	3
353	Fiber-Reinforced Composite Polymer Electrolytes for Solid-State Lithium Batteries. *Advanced Sustainable Systems*, **2022**, 6, 2100389	5.9	2
352	Oxygen reduction reaction on Pt-based electrocatalysts: Four-electron vs. two-electron pathway. *Chinese Journal of Catalysis*, **2022**, 43, 1433-1443	11.3	0
351	Frenkel-defected monolayer MoS catalysts for efficient hydrogen evolution.. *Nature Communications*, **2022**, 13, 2193	17.4	17
350	Atomic Fe-N /C in flexible carbon fiber membrane as binder-free air cathode for Zn-air batteries with stable cycling over 1000 hours. *Advanced Materials*, **2021**, e2105410	24	23
349	Understanding the role of axial O in CO2 electroreduction on NiN4 single-atom catalysts via simulations in realistic electrochemical environment. *Journal of Materials Chemistry A*, **2021**, 9, 23515-23521	13	5
348	In situ redox reaction induced firmly anchoring of Na3V2(PO4)2F3 on reduced graphene oxide & carbon nanosheets as cathodes for high stable sodium-ion batteries. *Journal of Power Sources*, **2021**, 516, 230515	8.9	3
347	Three-Dimensional Graphene-Based Macrostructures for Electrocatalysis. *Small*, **2021**, 17, e2005255	11	12
346	High-capacity and small-polarization aluminum organic batteries based on sustainable quinone-based cathodes with Al3+ insertion. *Cell Reports Physical Science*, **2021**, 2, 100354	6.1	14
345	Transition metal doping BiOBr nanosheets with oxygen vacancy and exposed {102} facets for visible light nitrogen fixation. *Applied Catalysis B: Environmental*, **2021**, 281, 119516	21.8	48
344	Tuning the structure and morphology of Li2O2 by controlling the crystallinity of catalysts for Li-O2 batteries. *Chemical Engineering Journal*, **2021**, 409, 128145	14.7	16
343	A composite of CoNiP quantum dot-decorated reduced graphene oxide as a sulfur host for Li-S batteries. *Journal of Materials Chemistry A*, **2021**, 9, 16692-16698	13	13
342	Controllable atomic defect engineering in layered NixFe1-x(OH)2 nanosheets for electrochemical overall water splitting. *Journal of Materials Chemistry A*, **2021**, 9, 14432-14443	13	30

341	Non-Metal Ion Co-Insertion Chemistry in Aqueous Zn/MnO2 Batteries. *Angewandte Chemie*, **2021**, 133, 7132-7136	3.6	5
340	Recent Advances in Alkali Metal-Ion Hybrid Supercapacitors. *Batteries and Supercaps*, **2021**, 4, 1108-1121	5.6	6
339	NASICON-Type Na3Zr2Si2PO12 Solid-State Electrolytes for Sodium Batteries**. *ChemElectroChem*, **2021**, 8, 1035-1047	4.3	15
338	Non-Metal Ion Co-Insertion Chemistry in Aqueous Zn/MnO Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 7056-7060	16.4	36
337	Single-atom catalysts for electrochemical energy storage and conversion. *Journal of Energy Chemistry*, **2021**,	12	12
336	Catalyst Design for Electrochemical Reduction of CO to Multicarbon Products.. *Small Methods*, **2021**, 5, e2100736	12.8	11
335	Pd-promoting reduction of zinc salt to PdZn alloy catalyst for the hydrogenation of nitrothioanisole. *Journal of Colloid and Interface Science*, **2021**, 602, 459-468	9.3	4
334	Carbon Nanofibers with Embedded Sb Se Nanoparticles as Highly Reversible Anodes for Na-Ion Batteries. *Small*, **2021**, 17, e2006016	11	22
333	Ultrathin salt-free polymer-in-ceramic electrolyte for solid-state sodium batteries. *EScience*, **2021**, 1, 194-202		6
332	Direct Spectroscopic Evidence for Solution-Mediated Oxygen Reduction Reaction Intermediates in Aprotic Lithium-Oxygen Batteries.. *Nano Letters*, **2021**,	11.5	2
331	Controllable fabrication and structure evolution of hierarchical 1T-MoS2 nanospheres for efficient hydrogen evolution. *Green Energy and Environment*, **2020**, 7, 314-314	5.7	8
330	Targeting specific cell organelles with different-faceted nanocrystals that are selectively recognized by organelle-targeting peptides. *Chemical Communications*, **2020**, 56, 7613-7616	5.8	3
329	Building Artificial Solid-Electrolyte Interphase with Uniform Intermolecular Ionic Bonds toward Dendrite-Free Lithium Metal Anodes. *Advanced Functional Materials*, **2020**, 30, 2002414	15.6	54
328	A CO-Assisted Sodium-Phenanthrenequinone Battery. *Journal of Physical Chemistry Letters*, **2020**, 11, 5350-5353	6.4	2
327	Well-dispersed Na3V2(PO4)2F3@rGO with improved kinetics for high-power sodium-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 12391-12397	13	31
326	Machine learning: Accelerating materials development for energy storage and conversion. *InformaMaterly*, **2020**, 2, 553-576	23.1	86
325	Boosting bifunctional electrocatalytic activity in S and N co-doped carbon nanosheets for high-efficiency Zn–air batteries. *Journal of Materials Chemistry A*, **2020**, 8, 4386-4395	13	62
324	A Cu2B2 monolayer with planar hypercoordinate motifs: an efficient catalyst for CO electroreduction to ethanol. *Journal of Materials Chemistry A*, **2020**, 8, 9607-9615	13	13

323	Electronic and photocatalytic performance of boron phosphide-blue phosphorene vdW heterostructures. *Applied Surface Science*, **2020**, 523, 146483	6.7	47
322	Critical interface between inorganic solid-state electrolyte and sodium metal. *Materials Today*, **2020**, 41, 200-218	21.8	27
321	Design of ultralong-life Li□O2 batteries with IrO2 nanoparticles highly dispersed on nitrogen-doped carbon nanotubes. *Journal of Materials Chemistry A*, **2020**, 8, 3763-3770	13	31
320	2 D Materials for Electrochemical Energy Storage: Design, Preparation, and Application. *ChemSusChem*, **2020**, 13, 1155-1171	8.3	45
319	Metal□O2 Batteries at the Crossroad to Practical Energy Storage and CO2 Recycle. *Advanced Functional Materials*, **2020**, 30, 1908285	15.6	53
318	Ni3S2 anchored to N/S co-doped reduced graphene oxide with highly pleated structure as a sulfur host for lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2020**, 8, 3834-3844	13	28
317	Understanding the Structure-Performance Relationship of Lithium-Rich Cathode Materials from an Oxygen-Vacancy Perspective. *ACS Applied Materials & Interfaces*, **2020**, 12, 47655-47666	9.5	18
316	Carbon block anodes with columnar nanopores constructed from amine-functionalized carbon nanosheets for sodium-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 24393-24400	13	5
315	Diversified development of CO2 in energy storage. *Green Chemical Engineering*, **2020**, 1, 79-81	3	5
314	A first-principles study of electronic structure and photocatalytic performance of two-dimensional van der Waals MTe2□As (M□=□Mo, W) heterostructures. *International Journal of Hydrogen Energy*, **2020**, 45, 27089-27097	6.7	20
313	Enzyme-Inspired Room-Temperature Lithium-Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. *Angewandte Chemie - International Edition*, **2020**, 59, 17856-17863	16.4	12
312	Coupling of triporosity and strong Au□i interaction to enable dendrite-free lithium plating/stripping for long-life lithium metal anodes. *Journal of Materials Chemistry A*, **2020**, 8, 18094-18105	13	25
311	Surface modification of garnet with amorphous SnO2via atomic layer deposition. *Journal of Materials Chemistry A*, **2020**, 8, 18087-18093	13	11
310	Enzyme-Inspired Room-Temperature Lithium□Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. *Angewandte Chemie*, **2020**, 132, 18012-18019	3.6	2
309	A Machine Learning Model on Simple Features for CO2 Reduction Electrocatalysts. *Journal of Physical Chemistry C*, **2020**, 124, 22471-22478	3.8	50
308	Towards practical lithium-metal anodes. *Chemical Society Reviews*, **2020**, 49, 3040-3071	58.5	224
307	Bifunctional electrocatalysts for rechargeable Zn-air batteries. *Chinese Journal of Catalysis*, **2019**, 40, 1298-1310	11.3	58
306	Metal□rganic-framework-derived porous 3D heterogeneous NiFex/NiFe2O4@NC nanoflowers as highly stable and efficient electrocatalysts for the oxygen-evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 21338-21348	13	42

305	Integrated insights into Na+ storage mechanism and electrochemical kinetics of ultrafine V2O3/S and N co-doped rGO composites as anodes for sodium ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 22429-22435	13	16
304	Recent Progress in Protecting Lithium Anodes for Li-O2 Batteries. *ChemElectroChem*, **2019**, 6, 1969-1977	4.3	27
303	Synergistic effect of Zr-MOF on phosphomolybdic acid promotes efficient oxidative desulfurization. *Applied Catalysis B: Environmental*, **2019**, 256, 117804	21.8	69
302	Computationally predicting spin semiconductors and half metals from doped phosphorene monolayers. *Frontiers of Physics*, **2019**, 14, 1	3.7	8
301	Lithium-air batteries: Challenges coexist with opportunities. *APL Materials*, **2019**, 7, 040701	5.7	26
300	MoCl5 as a dual-function redox mediator for Li□O2 batteries. *Journal of Materials Chemistry A*, **2019**, 7, 14239-14243	13	14
299	A Gadolinium(III) Zeolite-like Metal-Organic-Framework-Based Magnetic Resonance Thermometer. *CheM*, **2019**, 5, 1609-1618	16.2	21
298	Computational Screening of Layered Materials for Multivalent Ion Batteries. *ACS Omega*, **2019**, 4, 7822-7828	3.7	15
297	Band engineering of two-dimensional Ruddlesden□Popper perovskites for solar utilization: the relationship between chemical components and electronic properties. *Journal of Materials Chemistry A*, **2019**, 7, 11530-11536	13	13
296	Carbon-Based Substrates for Highly Dispersed Nanoparticle and Even Single-Atom Electrocatalysts. *Small Methods*, **2019**, 3, 1900050	12.8	52
295	Understanding Rechargeable Li□O2 Batteries via First-Principles Computations. *Batteries and Supercaps*, **2019**, 2, 498-508	5.6	25
294	Bi-layer Graphene: Structure, Properties, Preparation and Prospects. *Current Graphene Science*, **2019**, 2, 97-105	0.7	1
293	2D Triphosphides: SbP3 and GaP3 monolayer as promising photocatalysts for water splitting. *International Journal of Hydrogen Energy*, **2019**, 44, 5948-5954	6.7	33
292	Sulfur/nickel ferrite composite as cathode with high-volumetric-capacity for lithium-sulfur battery. *Science China Materials*, **2019**, 62, 74-86	7.1	68
291	High-throughput computational screening of layered and two-dimensional materials. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2019**, 9, e1385	7.9	26
290	CuO Nanoplates for High-Performance Potassium-Ion Batteries. *Small*, **2019**, 15, e1901775	11	67
289	Algorithm screening to accelerate discovery of 2D metal-free electrocatalysts for hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 19290-19296	13	31
288	Li-N Batteries: A Reversible Energy Storage System?. *Angewandte Chemie - International Edition*, **2019**, 58, 17782-17787	16.4	18

287	Cation-induced chirality in a bifunctional metal-organic framework for quantitative enantioselective recognition. *Nature Communications*, **2019**, 10, 5117	17.4	77
286	Li-N2 Batteries: A Reversible Energy Storage System?. *Angewandte Chemie*, **2019**, 131, 17946-17951	3.6	2
285	LiFePO4 Particles Embedded in Fast Bifunctional Conductor rGO&C@Li3V2(PO4)3 Nanosheets as Cathodes for High-Performance Li-Ion Hybrid Capacitors. *Advanced Functional Materials*, **2019**, 29, 1807895	15.6	29
284	Titelbild: Li-N2 Batteries: A Reversible Energy Storage System? (Angew. Chem. 49/2019). *Angewandte Chemie*, **2019**, 131, 17645-17645	3.6	1
283	Fe nanodot-decorated MoS2 nanosheets on carbon cloth: an efficient and flexible electrode for ambient ammonia synthesis. *Journal of Materials Chemistry A*, **2019**, 7, 27417-27422	13	44
282	Rational design of C2N-based type-II heterojunctions for overall photocatalytic water splitting. *Nanoscale Advances*, **2019**, 1, 154-161	5.1	46
281	Exploiting Synergistic Effect by Integrating Ruthenium–Copper Nanoparticles Highly Co-Dispersed on Graphene as Efficient Air Cathodes for Li–CO2 Batteries. *Advanced Energy Materials*, **2019**, 9, 1802805	21.8	69
280	Highly reversible alloying/dealloying behavior of SnSb nanoparticles incorporated into N-rich porous carbon nanowires for ultra-stable Na storage. *Energy Storage Materials*, **2019**, 21, 203-209	19.4	30
279	Metal–Organic Frameworks (MOFs) and MOF-Derived Materials for Energy Storage and Conversion. *Electrochemical Energy Reviews*, **2019**, 2, 29-104	29.3	152
278	Promoting Nitrogen Electroreduction on Mo2C Nanoparticles Highly Dispersed on N-Doped Carbon Nanosheets toward Rechargeable Li–N2 Batteries. *Small Methods*, **2019**, 3, 1800334	12.8	24
277	Carbon-Supported Divacancy-Anchored Platinum Single-Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. *Angewandte Chemie*, **2019**, 131, 1175-1179	3.6	52
276	Carbon-Supported Divacancy-Anchored Platinum Single-Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 1163-1167	16.4	166
275	Fabricating high-performance sodium ion capacitors with P2-Na0.67Co0.5Mn0.5O2 and MOF-derived carbon. *Journal of Energy Chemistry*, **2019**, 28, 79-84	12	22
274	Bifunctional electrocatalysts of MOF-derived Co–N/C on bamboo-like MnO nanowires for high-performance liquid- and solid-state Zn–air batteries. *Journal of Materials Chemistry A*, **2018**, 6, 9716-9722	12	128
273	Thermal Instability Induced Oriented 2D Pores for Enhanced Sodium Storage. *Small*, **2018**, 14, e1800639	11	33
272	Synergistic electrocatalytic oxygen reduction reactions of Pd/B4C for ultra-stable Zn-air batteries. *Energy Storage Materials*, **2018**, 15, 226-233	19.4	29
271	Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts. *Small Methods*, **2018**, 2, 1700359	12.8	96
270	Binder-free NiFe2O4/C nanofibers as air cathodes for Li-O2 batteries. *Journal of Power Sources*, **2018**, 377, 136-141	8.9	46

269	Micro/Nanostructured Materials for Sodium Ion Batteries and Capacitors. *Small*, **2018**, 14, 1702961	11	173
268	Identification of cathode stability in Li□O2 batteries with Cu nanoparticles highly dispersed on N-doped graphene. *Journal of Materials Chemistry A*, **2018**, 6, 3218-3223	13	94
267	What is the promising anode material for Na ion batteries?. *Science Bulletin*, **2018**, 63, 146-148	10.6	20
266	High performance Li□O2 batteries with NiO□CNT cathodes. *Journal of Materials Chemistry A*, **2018**, 6, 2792-2796	13	116
265	Computational screening and first-principles investigations of NASICON-type LixM2(PO4)3 as solid electrolytes for Li batteries. *Journal of Materials Chemistry A*, **2018**, 6, 2625-2631	13	35
264	An effective method to screen sodium-based layered materials for sodium ion batteries. *Npj Computational Materials*, **2018**, 4,	10.9	52
263	SiP monolayers: New 2D structures of group IV□V compounds for visible-light photohydrolytic catalysts. *Frontiers of Physics*, **2018**, 13, 1	3.7	24
262	Metal-oxygen bonds: Stabilizing the intermediate species towards practical Li-air batteries. *Electrochimica Acta*, **2018**, 259, 313-320	6.7	10
261	Hard carbon derived from corn straw piths as anode materials for sodium ion batteries. *Ionics*, **2018**, 24, 1075-1081	2.7	30
260	An Extremely Simple Method for Protecting Lithium Anodes in Li-O2 Batteries. *Angewandte Chemie* , **2018**, 130, 12996-13000	3.6	32
259	Molten-Salt-Assisted Synthesis of 3D Holey N-Doped Graphene as Bifunctional Electrocatalysts for Rechargeable Zn□Air Batteries. *Small Methods*, **2018**, 2, 1800144	12.8	51
258	An Extremely Simple Method for Protecting Lithium Anodes in Li-O Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 12814-12818	16.4	68
257	Electronic structure of heterojunction MoO2/g-C3N4 catalyst for oxidative desulfurization. *Applied Catalysis B: Environmental*, **2018**, 238, 263-273	21.8	106
256	In Situ Chelating Synthesis of Hierarchical LiNi Co Mn O Polyhedron Assemblies with Ultralong Cycle Life for Li-Ion Batteries. *Small*, **2018**, 14, e1704354	11	23
255	Fabricating Ir/C Nanofiber Networks as Free-Standing Air Cathodes for Rechargeable Li-CO Batteries. *Small*, **2018**, 14, e1800641	11	84
254	Water Splitting: Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts (Small Methods 5/2018). *Small Methods*, **2018**, 2, 1800031	12.8	
253	Verifying the Rechargeability of Li-CO Batteries on Working Cathodes of Ni Nanoparticles Highly Dispersed on N-Doped Graphene. *Advanced Science*, **2018**, 5, 1700567	13.6	117
252	MXene-based materials for electrochemical energy storage. *Journal of Energy Chemistry*, **2018**, 27, 73-85	12	354

251	Li□O2 Batteries **2018**, 1-17		
250	PAN@ZIF-67-Derived "Gypsophila"-Like CNFs@Co-CoO Composite as a Cathode for Li-O Batteries. *Inorganic Chemistry*, **2018**, 57, 14476-14479	5.1	16
249	Electrolyte-Regulated Solid-Electrolyte Interphase Enables Long Cycle Life Performance in Organic Cathodes for Potassium-Ion Batteries. *Advanced Functional Materials*, **2018**, 29, 1807137	15.6	70
248	Heteroatom-doped carbon materials and their composites as electrocatalysts for CO2 reduction. *Journal of Materials Chemistry A*, **2018**, 6, 18782-18793	13	89
247	Cu-Cluster-Doped Monolayer MoCO (MXene) as an Electron Reservoir for Catalyzing a CO Oxidation Reaction. *ACS Applied Materials & Interfaces*, **2018**, 10, 32903-32912	9.5	38
246	Double-atom catalysts: transition metal dimer-anchored C2N monolayers as N2 fixation electrocatalysts. *Journal of Materials Chemistry A*, **2018**, 6, 18599-18604	13	150
245	Robust ferromagnetism in zigzag-edge rich MoS pyramids. *Nanoscale*, **2018**, 10, 11578-11584	7.7	15
244	Unveiling the Complex Effects of HO on Discharge-Recharge Behaviors of Aprotic Lithium-O Batteries. *Journal of Physical Chemistry Letters*, **2018**, 9, 3333-3339	6.4	38
243	Transition metal anchored C2N monolayers as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. *Journal of Materials Chemistry A*, **2018**, 6, 11446-11452	13	133
242	Micro/Nanostructure-Dependent Electrochemical Performances of Sb2O3 Micro-Bundles as Anode Materials for Sodium-Ion Batteries. *ChemElectroChem*, **2018**, 5, 2522-2527	4.3	12
241	Interlayer-Spacing-Regulated VOPO Nanosheets with Fast Kinetics for High-Capacity and Durable Rechargeable Magnesium Batteries. *Advanced Materials*, **2018**, 30, e1801984	24	115
240	Ultrathin Layered Hydroxide Cobalt Acetate Nanoplates Face-to-Face Anchored to Graphene Nanosheets for High-Efficiency Lithium Storage. *Advanced Functional Materials*, **2017**, 27, 1605544	15.6	86
239	Metal-CO Batteries on the Road: CO from Contamination Gas to Energy Source. *Advanced Materials*, **2017**, 29, 1605891	24	169
238	Tetragonal-structured anisotropic 2D metal nitride monolayers and their halides with versatile promises in energy storage and conversion. *Journal of Materials Chemistry A*, **2017**, 5, 2870-2875	13	32
237	A Robust Hybrid of SnO2 Nanoparticles Sheathed by N-Doped Carbon Derived from ZIF-8 as Anodes for Li-Ion Batteries. *ChemNanoMat*, **2017**, 3, 252-258	3.5	20
236	Recent Breakthroughs in Supercapacitors Boosted by Nitrogen-Rich Porous Carbon Materials. *Advanced Science*, **2017**, 4, 1600408	13.6	275
235	Atomic Interface Engineering and Electric-Field Effect in Ultrathin Bi MoO Nanosheets for Superior Lithium Ion Storage. *Advanced Materials*, **2017**, 29, 1700396	24	251
234	Boosting the rate capability of hard carbon with an ether-based electrolyte for sodium ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 9528-9532	13	105

233	Ti2CO2 MXene: a highly active and selective photocatalyst for CO2 reduction. *Journal of Materials Chemistry A*, **2017**, 5, 12899-12903	13	148
232	Improving Electrochemical Performances of Rechargeable Li□CO2 Batteries with an Electrolyte Redox Mediator. *ChemElectroChem*, **2017**, 4, 2145-2149	4.3	54
231	First-principles computational studies on layered Na2Mn3O7 as a high-rate cathode material for sodium ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 12752-12756	13	28
230	K1□Mo3P2O14 as Support for Single-Atom Catalysts. *Journal of Physical Chemistry C*, **2017**, 121, 22895-22900	3.8	10
229	T-Nb O /C Nanofibers Prepared through Electrospinning with Prolonged Cycle Durability for High-Rate Sodium-Ion Batteries Induced by Pseudocapacitance. *Small*, **2017**, 13, 1702588	11	95
228	Graphitization and Pore Structure Adjustment of Graphene for Energy Storage and Conversion. *Current Graphene Science*, **2017**, 1,	0.7	2
227	Fast Sodium Storage in TiO2@CNT@C Nanorods for High-Performance Na-Ion Capacitors. *Advanced Energy Materials*, **2017**, 7, 1701222	21.8	235
226	Oriented SnS nanoflakes bound on S-doped N-rich carbon nanosheets with a rapid pseudocapacitive response as high-rate anodes for sodium-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 19745-19751	13	91
225	Zeolitic imidazole framework derived composites of nitrogen-doped porous carbon and reduced graphene oxide as high-efficiency cathode catalysts for Li□2 batteries. *Inorganic Chemistry Frontiers*, **2017**, 4, 1533-1538	6.8	22
224	MnBx monolayers with quasi-planar hypercoordinate Mn atoms and unique magnetic and mechanical properties. *FlatChem*, **2017**, 4, 42-47	5.1	8
223	GO-induced preparation of flake-shaped Na3V2(PO4)3@rGO as high-rate and long-life cathodes for sodium-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 25276-25281	13	49
222	Heteroatom-doped graphene as electrocatalysts for air cathodes. *Materials Horizons*, **2017**, 4, 7-19	14.4	119
221	S-Doped N-Rich Carbon Nanosheets with Expanded Interlayer Distance as Anode Materials for Sodium-Ion Batteries. *Advanced Materials*, **2017**, 29, 1604108	24	468
220	Yolk-Shell MnO@ZnMn O /N-C Nanorods Derived from □MnO /ZIF-8 as Anode Materials for Lithium Ion Batteries. *Small*, **2016**, 12, 5564-5571	11	103
219	Ab initio investigations on bulk and monolayer V2O5 as cathode materials for Li-, Na-, K- and Mg-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 16606-16611	13	54
218	Structure-modulated crystalline covalent organic frameworks as high-rate cathodes for Li-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 18621-18627	13	130
217	A P2-Na0.67Co0.5Mn0.5O2 cathode material with excellent rate capability and cycling stability for sodium ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 11103-11109	13	123
216	NiFe2O4□CNT composite: an efficient electrocatalyst for oxygen evolution reactions in Li□2 batteries guided by computations. *Journal of Materials Chemistry A*, **2016**, 4, 9390-9393	13	42

215	Rational design of SnO2@C nanocomposites for lithium ion batteries by utilizing adsorption properties of MOFs. *Chemical Communications*, **2016**, 52, 717-20	5.8	56
214	Nanomaterials and Technologies for Lithium-Ion Hybrid Supercapacitors. *ChemNanoMat*, **2016**, 2, 578-587	3.5	61
213	Recent progress in rechargeable alkali metal–air batteries. *Green Energy and Environment*, **2016**, 1, 4-17	5.7	171
212	A Ti-anchored Ti2CO2 monolayer (MXene) as a single-atom catalyst for CO oxidation. *Journal of Materials Chemistry A*, **2016**, 4, 4871-4876	13	190
211	Structure and properties of phosphorene-like IV-VI 2D materials. *Nanotechnology*, **2016**, 27, 415203	3.4	41
210	Towards visible-light water splitting Photocatalysts: Band engineering of two-dimensional A5B4O15 perovskites. *Nano Energy*, **2016**, 28, 390-396	17.1	27
209	The First Example of Hetero-Triple-Walled Metal-Organic Frameworks with High Chemical Stability Constructed via Flexible Integration of Mixed Molecular Building Blocks. *Advanced Science*, **2016**, 3, 1500283	13.6	26
208	MnPSe Monolayer: A Promising 2D Visible-Light Photohydrolytic Catalyst with High Carrier Mobility. *Advanced Science*, **2016**, 3, 1600062	13.6	216
207	Phosphorene: what can we know from computations?. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2016**, 6, 5-19	7.9	112
206	Synthesis of mesoporous wall-structured TiO2 on reduced graphene oxide nanosheets with high rate performance for lithium-ion batteries. *Chemistry - A European Journal*, **2015**, 21, 5317-22	4.8	24
205	Computational study of catalytic effect of C3N4 on H2 release from complex hydrides. *International Journal of Hydrogen Energy*, **2015**, 40, 8897-8902	6.7	11
204	Two better than one: cobalt–copper bimetallic yolk–shell nanoparticles supported on graphene as excellent cathode catalysts for Li–O2 batteries. *Journal of Materials Chemistry A*, **2015**, 3, 17874-17879	13	50
203	Recent advances in MXene: Preparation, properties, and applications. *Frontiers of Physics*, **2015**, 10, 276-286	37	520
202	Achieving battery-level energy density by constructing aqueous carbonaceous supercapacitors with hierarchical porous N-rich carbon materials. *Journal of Materials Chemistry A*, **2015**, 3, 11387-11394	13	115
201	Alluaudite Na2Co2Fe(PO4)3 as an electroactive material for sodium ion batteries. *Dalton Transactions*, **2015**, 44, 7881-6	4.3	49
200	MOF-Derived Porous Co3O4 Hollow Tetrahedra with Excellent Performance as Anode Materials for Lithium-Ion Batteries. *Inorganic Chemistry*, **2015**, 54, 8159-61	5.1	122
199	Rechargeable Li-CO2 batteries with carbon nanotubes as air cathodes. *Chemical Communications*, **2015**, 51, 14636-9	5.8	150
198	Structural design for anodes of lithium-ion batteries: emerging horizons from materials to electrodes. *Materials Horizons*, **2015**, 2, 553-566	14.4	100

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