Jianfeng Mao

List of Publications by Year
in descending order

82 papers	9,426 citations	53794 45 h-index	66911 78 g-index
82 all docs	82 docs citations	82 times ranked	7365 citing authors

#	Article	IF	Citations
1	Electrolyte Engineering Enables High Performance Zincâ€Ion Batteries. Small, 2022, 18, e2107033.	10.0	118
2	Challenges and prospects of lithiumâ€“CO₂batteries. , 2022, 1, e9120001.		99
3	From room temperature to harsh temperature applications: Fundamentals and perspectives on electrolytes in zinc metal batteries. Science Advances, 2022, 8, eabn5097.	10.3	164
4	NiS2 nanodots on N,S-doped graphene synthesized via interlayer confinement for enhanced lithium-/sodium-ion storage. Journal of Colloid and Interface Science, 2022, 619, 359-368.	9.4	11
5	Organic electrolyte design for practical potassium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 19090-19106.	10.3	30
6	Toward practical lithium-ion battery recycling: adding value, tackling circularity and recycling-oriented design. Energy and Environmental Science, 2022, 15, 2732-2752.	30.8	110
7	A Highâ€Performance Alginate Hydrogel Binder for Aqueous Znâˆ’Ion Batteries. ChemPhysChem, 2022, 23, .	2.1	7
8	Bi2Se0.5Te2.5/S, N-doped reduced graphene oxide as anode materials for high-performance Lithium ion batteries. Journal of Alloys and Compounds, 2022, 920, 166003.	5.5	7
9	Manipulating the Solvation Structure of Nonflammable Electrolyte and Interface to Enable Unprecedented Stability of Graphite Anodes beyond 2 Years for Safe Potassiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2006313.	21.0	155
10	Carbonâ€based metalâ€free catalysts for electrochemical CO₂ reduction: Activity, selectivity, and stability. , 2021, 3, 24-49.		60
11	Constructing nitrided interfaces for stabilizing Li metal electrodes in liquid electrolytes. Chemical Science, 2021, 12, 8945-8966.	7.4	72
12	Back Cover Image, Volume 3, Number 1, March 2021. , 2021, 3, ii.		0
13	Electrolyte Design for In Situ Construction of Highly Zn²⁺â€Conductive Solid Electrolyte Interphase to Enable Highâ€Performance Aqueous Znâ€Ion Batteries under Practical Conditions. Advanced Materials, 2021, 33, e2007416.	21.0	484
14	Phase Engineering of Nickel Sulfides to Boost Sodiumâ€and Potassiumâ€Ion Storage Performance. Advanced Functional Materials, 2021, 31, 2010832.	14.9	86
15	Tuning the Electrolyte Solvation Structure to Suppress Cathode Dissolution, Water Reactivity, and Zn Dendrite Growth in Zincâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2104281.	14.9	225
16	Bio-inspired design of an<i>in situ</i>multifunctional polymeric solidâ€“electrolyte interphase for Zn metal anode cycling at 30 mA cm^{âˆ’2}and 30 mA h cm^{âˆ’2}. Energy and Environmental Science, 2021, 14, 5947-5957.	30.8	289
17	An Intrinsically Nonâ€flammable Electrolyte for Highâ€Performance Potassium Batteries. Angewandte Chemie - International Edition, 2020, 59, 3638-3644.	13.8	211
18	Carbon-encapsulated Bi2Te3 derived from metal-organic framework as anode for highly durable lithium and sodium storage. Journal of Alloys and Compounds, 2020, 837, 155536.	5.5	26

#	ARTICLE	IF	CITATIONS
19	Synergistic Catalytic Effect of Hollow Carbon Nanosphere and Silver Nanoparticles for Oxygen Reduction Reaction. ChemistrySelect, 2020, 5, 8099-8105.	1.5	11
20	Photoelectrochemical Catalysis of Fluorineâ€Doped Amorphous TiO₂ Nanotube Array for Water Splitting. ChemistrySelect, 2020, 5, 8831-8838.	1.5	4
21	Synergy of binders and electrolytes in enabling microsized alloy anodes for high performance potassium-ion batteries. Nano Energy, 2020, 77, 105118.	16.0	82
22	Ultrafast Li-ion migration in eggshell-inspired 2D@2D dual porous construction towards high rate energy storage. Carbon, 2020, 170, 66-74.	10.3	10
23	Deeply understanding the Zn anode behaviour and corresponding improvement strategies in different aqueous Zn-based batteries. Energy and Environmental Science, 2020, 13, 3917-3949.	30.8	480
24	MOFs-derived core-shell Co3Fe7@Fe2N nanopaticles supported on rGO as high-performance bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions. Materials Today Energy, 2020, 17, 100433.	4.7	29
25	Catalytic Performances of NiCuP@rGO and NiCuN@rGO for Oxygen Reduction and Oxygen Evolution Reactions in Alkaline Electrolyte. ChemistrySelect, 2020, 5, 5855-5863.	1.5	4
26	Co/Ni-MOF-74-derived CoNi₂S₄ nanoparticles embedded in porous carbon as a high performance anode material for sodium ion batteries. New Journal of Chemistry, 2020, 44, 13141-13147.	2.8	10
27	Boosted Charge Transfer in Twinborn Î±-(Mn₂O₃â€“MnO₂) Heterostructures: Toward High-Rate and Ultralong-Life Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 32526-32535.	8.0	70
28	Toward a Reversible Mn⁴⁺/Mn²⁺ Redox Reaction and Dendriteâ€Free Zn Anode in Nearâ€Neutral Aqueous Zn/MnO₂ Batteries via Salt Anion Chemistry. Advanced Energy Materials, 2020, 10, 1904163.	19.5	221
29	An Intrinsically Nonâ€flammable Electrolyte for Highâ€Performance Potassium Batteries. Angewandte Chemie, 2020, 132, 3667-3673.	2.0	16
30	Enhanced lithium storage for MoS2-based composites via a vacancy-assisted method. Applied Surface Science, 2020, 515, 146103.	6.1	13
31	Insights into 2D graphene-like TiO2 (B) nanosheets as highly efficient catalyst for improved low-temperature hydrogen storage properties of MgH2. Materials Today Energy, 2020, 16, 100411.	4.7	25
32	Highly porous, low band-gap Ni_xMn_{3âˆ’x}O₄(0.55 â‰<i>x</i>â‰ 1.2) spinel nanoparticles with<i>in situ</i>coated carbon as advanced cathode materials for zinc-ion batteries. Journal of Materials Chemistry A, 2019, 7, 17854-17866.	10.3	65
33	The critical role of carbon in marrying silicon and graphite anodes for highâ€energy lithiumâ€ion batteries. , 2019, 1, 57-76.		261
34	Synergistic catalysis in monodispersed transition metal oxide nanoparticles anchored on amorphous carbon for excellent low-temperature dehydrogenation of magnesium hydride. Materials Today Energy, 2019, 12, 146-154.	4.7	57
35	Ultrafast Li-ion migration in holey-graphene-based composites constructed by a generalized <i>ex situ</i> method towards high capacity energy storage. Journal of Materials Chemistry A, 2019, 7, 4788-4796.	10.3	34
36	Structural Insight into Layer Gliding and Lattice Distortion in Layered Manganese Oxide Electrodes for Potassiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1900568.	19.5	125

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37	Recent progress and perspectives on aqueous Zn-based rechargeable batteries with mild aqueous electrolytes. Energy Storage Materials, 2019, 20, 410-437.	18.0	525
38	<i>In situ</i> incorporation of nanostructured antimony in an N-doped carbon matrix for advanced sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 12842-12850.	10.3	25
39	Electrochemical Reduction of CO₂ by SnO_{<i>x</i>} Nanosheets Anchored on Multiwalled Carbon Nanotubes with Tunable Functional Groups. ChemSusChem, 2019, 12, 1443-1450.	6.8	50
40	Facile synthesis of Co/Pd supported by few-walled carbon nanotubes as an efficient bidirectional catalyst for improving the low temperature hydrogen storage properties of magnesium hydride. Journal of Materials Chemistry A, 2019, 7, 5277-5287.	10.3	88
41	Electrochemical impacts of sheet-like hafnium phosphide and hafnium disulfide catalysts bonded with reduced graphene oxide sheets for bifunctional oxygen reactions in alkaline electrolytes. RSC Advances, 2019, 9, 2599-2607.	3.6	17
42	Synthesis of porous MoV2O8 nanosheets as anode material for superior lithium storage. Energy Storage Materials, 2019, 22, 128-137.	18.0	28
43	Boosting the Potassium Storage Performance of Alloyâ€Based Anode Materials via Electrolyte Salt Chemistry. Advanced Energy Materials, 2018, 8, 1703288.	19.5	382
44	Two-dimensional nanostructures for sodium-ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 3284-3303.	10.3	224
45	Investigation on the Catalytic Performance of Reducedâ€Grapheneâ€Oxideâ€Interpolated FeS₂ and FeS for Oxygen Reduction Reaction. ChemistrySelect, 2018, 3, 10418-10427.	1.5	17
46	Cathode Materials for Potassium-Ion Batteries: Current Status and Perspective. Electrochemical Energy Reviews, 2018, 1, 625-658.	25.5	201
47	Graphitic Carbon Nanocage as a Stable and High Power Anode for Potassiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1801149.	19.5	442
48	Creating fast ion conducting composites via in-situ introduction of titanium as oxygen getter. Nano Energy, 2018, 49, 549-554.	16.0	18
49	Alkaline Exchange Polymer Membrane Electrolyte for High Performance of All-Solid-State Electrochemical Devices. ACS Applied Materials & Interfaces, 2018, 10, 29593-29598.	8.0	52
50	Phosphorus-Based Alloy Materials for Advanced Potassium-Ion Battery Anode. Journal of the American Chemical Society, 2017, 139, 3316-3319.	13.7	755
51	Large-scale synthesis of ternary Sn5SbP3/C composite by ball milling for superior stable sodium-ion battery anode. Electrochimica Acta, 2017, 235, 107-113.	5.2	45
52	Boosted Charge Transfer in SnS/SnO₂ Heterostructures: Toward High Rate Capability for Sodiumâ€Ion Batteries. Angewandte Chemie, 2016, 128, 3469-3474.	2.0	116
53	Boosted Charge Transfer in SnS/SnO₂ Heterostructures: Toward High Rate Capability for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 3408-3413.	13.8	621
54	Building Self-Healing Alloy Architecture for Stable Sodium-Ion Battery Anodes: A Case Study of Tin Anode Materials. ACS Applied Materials & Interfaces, 2016, 8, 7147-7155.	8.0	92

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55	Hydrogen Storage Materials for Mobile and Stationary Applications: Current State of the Art. ChemSusChem, 2015, 8, 2789-2825.	6.8	302
56	Superior Stable Selfâ€Healing SnP₃ Anode for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500174.	19.5	197
57	Solid-State Fabrication of SnS₂/C Nanospheres for High-Performance Sodium Ion Battery Anode. ACS Applied Materials & Interfaces, 2015, 7, 11476-11481.	8.0	176
58	Revisiting the Hydrogen Storage Behavior of the Na-O-H System. Materials, 2015, 8, 2191-2203.	2.9	18
59	Recent Advances in the Use of Sodium Borohydride as a Solid State Hydrogen Store. Energies, 2015, 8, 430-453.	3.1	97
60	Scalable synthesis of Na₃V₂(PO₄)₃/C porous hollow spheres as a cathode for Na-ion batteries. Journal of Materials Chemistry A, 2015, 3, 10378-10385.	10.3	109
61	Sodium borohydride hydrazinates: synthesis, crystal structures, and thermal decomposition behavior. Journal of Materials Chemistry A, 2015, 3, 11269-11276.	10.3	19
62	In situ formed carbon bonded and encapsulated selenium composites for Liâ€“Se and Naâ€“Se batteries. Journal of Materials Chemistry A, 2015, 3, 555-561.	10.3	115
63	Combined effects of hydrogen back-pressure andÂNbF5 addition on the dehydrogenation and rehydrogenation kinetics of the LiBH4â€“MgH2 composite system. International Journal of Hydrogen Energy, 2013, 38, 3650-3660.	7.1	41
64	Reversible storage of hydrogen in NaFâ€“MB2 (M = Mg, Al) composites. Journal of Materials Chemistry A, 2013, 1, 2806.	10.3	13
65	Hydrogen De-/Absorption Improvement of NaBH4 Catalyzed by Titanium-Based Additives. Journal of Physical Chemistry C, 2012, 116, 1596-1604.	3.1	74
66	Enhanced hydrogen storage properties of NaAlH4co-catalysed with niobium fluoride and single-walled carbon nanotubes. RSC Advances, 2012, 2, 1569-1576.	3.6	25
67	A GBH/LiBH4 coordination system with favorable dehydrogenation. Journal of Materials Chemistry, 2011, 21, 7138.	6.7	27
68	Nanoconfinement of lithium borohydride in Cu-MOFs towards low temperature dehydrogenation. Dalton Transactions, 2011, 40, 5673.	3.3	64
69	Improved reversible dehydrogenation of 2LiBH₄+MgH₂ system by introducing Ni nanoparticles. Journal of Materials Research, 2011, 26, 1143-1150.	2.6	18
70	Enhanced hydrogen sorption properties in the LiBH4â€“MgH2 system catalysed by Ru nanoparticles supported on multiwalled carbon nanotubes. Journal of Alloys and Compounds, 2011, 509, 5012-5016.	5.5	25
71	Improved hydrogen sorption performance of NbF5-catalysed NaAlH4. International Journal of Hydrogen Energy, 2011, 36, 14503-14511.	7.1	39
72	Improved Hydrogen Storage Properties of NaBH₄ Destabilized by CaH₂ and Ca(BH₄)₂. Journal of Physical Chemistry C, 2011, 115, 9283-9290.	3.1	41

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73	Enhanced hydrogen storage performance of LiAlH4â€“MgH2â€“TiF3 composite. International Journal of Hydrogen Energy, 2011, 36, 5369-5374.	7.1	58
74	The hydrogen storage properties and reaction mechanism of the MgH 2 â€“NaAlH 4 composite system. International Journal of Hydrogen Energy, 2011, 36, 9045-9050.	7.1	85
75	Enhanced hydrogen sorption properties of Ni and Co-catalyzed MgH2. International Journal of Hydrogen Energy, 2010, 35, 4569-4575.	7.1	149
76	Reversible Hydrogen Storage in Destabilized LiAlH₄â^'MgH₂â^'LiBH₄ Ternary-Hydride System Doped with TiF₃. Journal of Physical Chemistry C, 2010, 114, 11643-11649.	3.1	48
77	Study on the dehydrogenation kinetics and thermodynamics of Ca(BH4)2. Journal of Alloys and Compounds, 2010, 500, 200-205.	5.5	53
78	Improvement of the LiAlH4â^'NaBH4 System for Reversible Hydrogen Storage. Journal of Physical Chemistry C, 2009, 113, 10813-10818.	3.1	42
79	Enhanced hydrogen storage performances of NaBH4â€“MgH2 system. Journal of Alloys and Compounds, 2009, 479, 619-623.	5.5	93
80	Reversible hydrogen storage in titanium-catalyzed LiAlH4â€“LiBH4 system. Journal of Alloys and Compounds, 2009, 487, 434-438.	5.5	51
81	Application of commercial ferrovanadium to reduce cost of Tiâ€“V-based BCC phase hydrogen storage alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 476, 34-38.	5.6	20
82	Improved Hydrogen Storage of LiBH₄ Catalyzed Magnesium. Journal of Physical Chemistry C, 2007, 111, 12495-12498.	3.1	58