Xin Guo

List of Publications by Year in descending order

68 papers	7,696 citations	53660 45 h-index	98622 67 g-index
68 all docs	68 docs citations	68 times ranked	8853 citing authors

#	Article	IF	Citations
1	Single platinum atoms immobilized on an MXene as an efficient catalyst for the hydrogen evolution reaction. Nature Catalysis, 2018, 1, 985-992.	16.1	1,236
2	Nanoengineering of 2D MXeneâ€Based Materials for Energy Storage Applications. Small, 2021, 17, e1902085.	5.2	398
3	2D Metal Carbides and Nitrides (MXenes) as Highâ€Performance Electrode Materials for Lithiumâ€Based Batteries. Advanced Energy Materials, 2018, 8, 1801897.	10.2	341
4	Porous Cryo-Dried MXene for Efficient Capacitive Deionization. Joule, 2018, 2, 778-787.	11.7	326
5	Porous Carbon Composites for Next Generation Rechargeable Lithium Batteries. Advanced Energy Materials, 2017, 7, 1700283.	10.2	263
6	Sb₂O₃/MXene(Ti₃C₂T_x) hybrid anode materials with enhanced performance for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 12445-12452.	5.2	245
7	MXeneâ€Based Dendriteâ€Free Potassium Metal Batteries. Advanced Materials, 2020, 32, e1906739.	11.1	244
8	Immobilizing Polysulfides with MXene-Functionalized Separators for Stable Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 29427-29433.	4.0	234
9	Naâ€Ion Batteriesâ€”Approaching Old and New Challenges. Advanced Energy Materials, 2020, 10, 2002055.	10.2	229
10	Rational design of free-standing 3D porous MXene/rGO hybrid aerogels as polysulfide reservoirs for high-energy lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 6507-6513.	5.2	226
11	Boosting Performance of Naâ€“S Batteries Using Sulfur-Doped Ti₃C₂T_x MXene Nanosheets with a Strong Affinity to Sodium Polysulfides. ACS Nano, 2019, 13, 11500-11509.	7.3	220
12	3D Metal Carbide@Mesoporous Carbon Hybrid Architecture as a New Polysulfide Reservoir for Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2016, 26, 8746-8756.	7.8	210
13	Cobalt-doped MnO2 ultrathin nanosheets with abundant oxygen vacancies supported on functionalized carbon nanofibers for efficient oxygen evolution. Nano Energy, 2018, 54, 129-137.	8.2	182
14	Confined Sulfur in 3â€‰D MXene/Reduced Graphene Oxide Hybrid Nanosheets for Lithiumâ€“Sulfur Battery. Chemistry - A European Journal, 2017, 23, 12613-12619.	1.7	167
15	Boosting Sodium Storage in Two-Dimensional Phosphorene/Ti₃C₂T_x MXene Nanoarchitectures with Stable Fluorinated Interphase. ACS Nano, 2020, 14, 3651-3659.	7.3	155
16	Cu₂O Decorated with Cocatalyst MoS₂ for Solar Hydrogen Production with Enhanced Efficiency under Visible Light. Journal of Physical Chemistry C, 2014, 118, 14238-14245.	1.5	138
17	A versatile functionalized ionic liquid to boost the solution-mediated performances of lithium-oxygen batteries. Nature Communications, 2019, 10, 602.	5.8	138
18	A universal strategy towards highâ€“energy aqueous multivalentâ€“ion batteries. Nature Communications, 2021, 12, 2857.	5.8	126

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19	MXene encapsulated titanium oxide nanospheres for ultra-stable and fast sodium storage. Energy Storage Materials, 2018, 14, 306-313.	9.5	119
20	Fe₃C@nitrogen doped CNT arrays aligned on nitrogen functionalized carbon nanofibers as highly efficient catalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 19672-19679.	5.2	109
21	A Stable Conversion and Alloying Anode for Potassiumâ€Ion Batteries: A Combined Strategy of Encapsulation and Confinement. Advanced Functional Materials, 2020, 30, 2001588.	7.8	104
22	Polyolefinâ€Based Janus Separator for Rechargeable Sodium Batteries. Angewandte Chemie - International Edition, 2020, 59, 16725-16734.	7.2	102
23	Composition dependent activity of Cuâ€“Pt nanocrystals for electrochemical reduction of CO₂. Chemical Communications, 2015, 51, 1345-1348.	2.2	101
24	A bulky and flexible electrocatalyst for efficient hydrogen evolution based on the growth of MoS2 nanoparticles on carbon nanofiber foam. Journal of Materials Chemistry A, 2015, 3, 5041-5046.	5.2	100
25	Interface Engineering of MXene Composite Separator for Highâ€Performance Liâ€“Se and Naâ€“Se Batteries. Advanced Energy Materials, 2020, 10, 2000446.	10.2	94
26	The Rise of Prussian Blue Analogs: Challenges and Opportunities for Highâ€Performance Cathode Materials in Potassiumâ€Ion Batteries. Small Structures, 2021, 2, 2000054.	6.9	91
27	2D Materialâ€Based Heterostructures for Rechargeable Batteries. Advanced Energy Materials, 2022, 12, 2100864.	10.2	91
28	Constructing Atomic Heterometallic Sites in Ultrathin Nickel-Incorporated Cobalt Phosphide Nanosheets via a Boron-Assisted Strategy for Highly Efficient Water Splitting. Nano Letters, 2021, 21, 823-832.	4.5	91
29	Ultrathin Li₄Ti₅O₁₂ Nanosheets as Anode Materials for Lithium and Sodium Storage. ACS Applied Materials & Interfaces, 2016, 8, 16718-16726.	4.0	87
30	Yolkâ€“shell N-doped carbon coated FeS₂nanocages as a high-performance anode for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 14051-14059.	5.2	84
31	Diethylenetriamine (DETA)-assisted anchoring of Co₃O₄nanorods on carbon nanotubes as efficient electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 1761-1768.	5.2	79
32	Solid-state synthesis and electrochemical performance of Li4Ti5O12/graphene composite for lithium-ion batteries. Electrochimica Acta, 2013, 109, 33-38.	2.6	78
33	High-Performance Quasi-Solid-State MXene-Based Liâ€“I Batteries. ACS Central Science, 2019, 5, 365-373.	5.3	78
34	Catalytic Mechanism of Oxygen Vacancies in Perovskite Oxides for Lithiumâ€“Sulfur Batteries. Advanced Materials, 2022, 34, e2202222.	11.1	78
35	Entrapping polysulfides by using ultrathin hollow carbon sphere-functionalized separators in high-rate lithium-sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 16610-16616.	5.2	76
36	Ternary polyanilineâ€“grapheneâ€“TiO₂hybrid with enhanced activity for visible-light photo-electrocatalytic water oxidation. Journal of Materials Chemistry A, 2014, 2, 1068-1075.	5.2	68

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37	A novel lithium-ion hybrid capacitor based on an aerogel-like MXene wrapped Fe₂O₃nanosphere anode and a 3D nitrogen sulphur dual-doped porous carbon cathode. Materials Chemistry Frontiers, 2018, 2, 1811-1821.	3.2	65
38	MXene-Based Aerogel Anchored with Antimony Single Atoms and Quantum Dots for High-Performance Potassium-Ion Batteries. Nano Letters, 2022, 22, 1225-1232.	4.5	64
39	A nitrogen, sulphur dual-doped hierarchical porous carbon with interconnected conductive polyaniline coating for high-performance sodium-selenium batteries. Energy Storage Materials, 2019, 19, 251-260.	9.5	60
40	Solid-state synthesis and electrochemical performance of Ce-doped Li4Ti5O12 anode materials for lithium-ion batteries. Electrochimica Acta, 2015, 174, 369-375.	2.6	54
41	Recent developments of aprotic lithium-oxygen batteries: functional materials determine the electrochemical performance. Science Bulletin, 2017, 62, 442-452.	4.3	54
42	Achieving Highâ€Performance 3D K⁺â€Preâ€intercalated Ti₃C₂T_x MXene for Potassiumâ€Ion Hybrid Capacitors via Regulating Electrolyte Solvation Structure. Angewandte Chemie - International Edition, 2021, 60, 26246-26253.	7.2	50
43	Organic sodium terephthalate@graphene hybrid anode materials for sodium-ion batteries. RSC Advances, 2016, 6, 57098-57102.	1.7	49
44	Morphologies and structures of carbon coated on Li4Ti5O12 and their effects on lithium storage performance. Electrochimica Acta, 2014, 130, 470-476.	2.6	48
45	Nanoconfined SnO2/SnSe2 heterostructures in N-doped carbon nanotubes for high-performance sodium-ion batteries. Chemical Engineering Journal, 2021, 418, 129501.	6.6	48
46	WO₃ nanolayer coated 3D-graphene/sulfur composites for high performance lithium/sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 4596-4603.	5.2	47
47	Ruthenium decorated hierarchically ordered macroâ€“mesoporous carbon for lithium oxygen batteries. Journal of Materials Chemistry A, 2016, 4, 9774-9780.	5.2	42
48	Two-dimensional Sb@TiO2â^'x nanoplates as a high-performance anode material for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 2553-2559.	5.2	42
49	Synergy of MXene with Se Infiltrated Porous Nâ€Doped Carbon Nanofibers as Janus Electrodes for Highâ€Performance Sodium/Lithiumâ€“Selenium Batteries. Advanced Energy Materials, 2022, 12, .	10.2	38
50	Antimonyâ€based nanomaterials for highâ€performance potassiumâ€ion batteries. EcoMat, 2020, 2, e12027.	6.8	35
51	A Dualâ€Protective Artificial Interface for Stable Lithium Metal Anodes. Advanced Energy Materials, 2021, 11, 2102242.	10.2	35
52	Porous Mo2C nanorods as an efficient catalyst for the hydrogen evolution reaction. Journal of Physics and Chemistry of Solids, 2019, 132, 230-235.	1.9	32
53	A multi-functional gel co-polymer bridging liquid electrolyte and solid cathode nanoparticles: An efficient route to Liâ€“O 2 batteries with improved performance. Energy Storage Materials, 2017, 7, 1-7.	9.5	30
54	Ultraefficiently Calming Cytokine Storm Using Ti₃C₂T_x MXene. Small Methods, 2021, 5, 2001108.	4.6	29

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55	A long-life lithium-oxygen battery via a molecular quenching/mediating mechanism. Science Advances, 2022, 8, eabm1899.	4.7	26
56	Dense SnS₂ nanoplates vertically anchored on a graphene aerogel for pseudocapacitive sodium storage. Materials Chemistry Frontiers, 2022, 6, 325-332.	3.2	22
57	Recent advances in â€œwater in saltâ€•electrolytes for aqueous rechargeable monovalent-ion (Li+, Na+,) Tj ETQq1 1 0.784314 rgBT /Ov	7.1	21
58	Flexible sodium-ion capacitors boosted by high electrochemically-reactive and structurally-stable Sb2S3 nanowire/Ti3C2Tx MXene film anodes. Nano Research, 2023, 16, 5592-5600.	5.8	20
59	Ultrathin Porous NiCo₂O₄ Nanosheets for Lithiumâ€“Oxygen Batteries: An Excellent Performance Deriving from an Enhanced Solution Mechanism. ACS Applied Energy Materials, 2019, 2, 4215-4223.	2.5	18
60	Bifunctional effects of carbon coating on high-capacity Li1.2Ni0.13Co0.13Mn0.54O2 cathode for lithium-ion batteries. Journal of Solid State Electrochemistry, 2015, 19, 1027-1035.	1.2	13
61	Highly Reversible Lithium Polysulfide Semiliquid Battery with Nitrogenâ€Rich Carbon Fiber Electrodes. Energy Technology, 2018, 6, 251-256.	1.8	11
62	High Modulation Depth Enabled by Mo2Ti2C3Tx MXene for Q-Switched Pulse Generation in a Mid-Infrared Fiber Laser. Nanomaterials, 2022, 12, 1343.	1.9	11
63	A Robust Transition-Metal Sulfide Anode Material Enabled by Truss Structures. CheM, 2020, 6, 334-336.	5.8	10
64	Polyolefinâ€Based Janus Separator for Rechargeable Sodium Batteries. Angewandte Chemie, 2020, 132, 16868-16877.	1.6	5
65	Mxeneâ€Directed Dual Amphiphilicity at Liquid, Solid, and Gas Interfaces. Chemistry - an Asian Journal, 2018, 13, 3850-3854.	1.7	4
66	Structuring Al3+-doped LiNi1â^•3Co1â^•3Mn1â^•3O₂by 3D-birdnest-shaped MnO₂. Functional Materials Letters, 2019, 12, 1950051.	0.7	4
67	Synthesis and Electrochemical Property of Flowerlike LiFePO4by Poly(ethylene glycol)â€assisted Hydrothermal Process. Chinese Journal of Chemical Physics, 2013, 26, 337-340.	0.6	1
68	Sleeping Lion or Sick Man? Machine Learning Approaches to Deciphering Heterogeneous Images of Chinese in North America. Annals of the American Association of Geographers, 0, , 1-19.	1.5	0