Yuan Tian

List of Publications by Year
in descending order

55	4,341	109321 35	155660 55
papers	citations	h-index	g-index

55	55	55	3266
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flexible and Free-Standing Ti₃C₂T_{<i>x</i>} MXene@Zn Paper for Dendrite-Free Aqueous Zinc Metal Batteries and Nonaqueous Lithium Metal Batteries. ACS Nano, 2019, 13, 11676-11685.	14.6	420
2	Flexible and Freestanding Silicon/MXene Composite Papers for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 10004-10011.	8.0	241
3	Micron-Sized Nanoporous Antimony with Tunable Porosity for High-Performance Potassium-Ion Batteries. ACS Nano, 2018, 12, 12932-12940.	14.6	223
4	Rational Design of Sulfur-Doped Three-Dimensional Ti₃C₂T<i>_{<i>x</i>}</i> MXene/ZnS Heterostructure as Multifunctional Protective Layer for Dendrite-Free Zinc-Ion Batteries. ACS Nano, 2021, 15, 15259-15273.	14.6	167
5	A general method for constructing robust, flexible and freestanding MXene@metal anodes for high-performance potassium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 9716-9725.	10.3	162
6	Stable Aqueous Anodeâ€Free Zinc Batteries Enabled by Interfacial Engineering. Advanced Functional Materials, 2021, 31, 2101886.	14.9	162
7	Porosityâ€and Graphitizationâ€Controlled Fabrication of Nanoporous Silicon@Carbon for Lithium Storage and Its Conjugation with MXene for Lithiumâ€Metal Anode. Advanced Functional Materials, 2020, 30, 1908721.	14.9	159
8	Reversible zinc-based anodes enabled by zincophilic antimony engineered MXene for stable and dendrite-free aqueous zinc batteries. Energy Storage Materials, 2021, 41, 343-353.	18.0	145
9	Scalable and Physical Synthesis of 2D Silicon from Bulk Layered Alloy for Lithium-Ion Batteries and Lithium Metal Batteries. ACS Nano, 2019, 13, 13690-13701.	14.6	143
10	Recent Advances of Emerging 2D MXene for Stable and Dendriteâ€Free Metal Anodes. Advanced Functional Materials, 2020, 30, 2004613.	14.9	140
11	Scalable and Controllable Synthesis of Interface-Engineered Nanoporous Host for Dendrite-Free and High Rate Zinc Metal Batteries. ACS Nano, 2021, 15, 11828-11842.	14.6	140
12	Heteroatom-doped 3D porous carbon architectures for highly stable aqueous zinc metal batteries and non-aqueous lithium metal batteries. Chemical Engineering Journal, 2020, 400, 125843.	12.7	115
13	Recent Advances and Perspectives of Znâ€Metal Free â€œRockingâ€Chairâ€â€Type Znâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2002529.	19.5	111
14	Stable all-solid-state potassium battery operating at room temperature with a composite polymer electrolyte and a sustainable organic cathode. Journal of Power Sources, 2018, 399, 294-298.	7.8	109
15	Recently advances and perspectives of anode-free rechargeable batteries. Nano Energy, 2020, 78, 105344.	16.0	108
16	Two-Dimensional Silicon/Carbon from Commercial Alloy and CO₂ for Lithium Storage and Flexible Ti₃C₂T_{<i>x</i>} MXene-Based Lithiumâ€“Metal Batteries. ACS Nano, 2020, 14, 17574-17588.	14.6	108
17	Design of Robust, Lithiophilic, and Flexible Inorganicâ€Polymer Protective Layer by Separator Engineering Enables Dendriteâ€Free Lithium Metal Batteries with LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ Cathode. Small, 2021, 17, e2007717.	10.0	108
18	Micron-Sized Nanoporous Vanadium Pentoxide Arrays for High-Performance Gel Zinc-Ion Batteries and Potassium Batteries. Chemistry of Materials, 2020, 32, 4054-4064.	6.7	105

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19	Highly Reversible Zn Metal Anodes Enabled by Freestanding, Lightweight, and Zincophilic MXene/Nanoporous Oxide Heterostructure Engineered Separator for Flexible Zn-MnO₂ Batteries. ACS Nano, 2022, 16, 6755-6770.	14.6	103
20	Isotropic Li nucleation and growth achieved by an amorphous liquid metal nucleation seed on MXene framework for dendrite-free Li metal anode. Energy Storage Materials, 2020, 26, 223-233.	18.0	100
21	Recent advances and perspectives in stable and dendrite-free potassium metal anodes. Energy Storage Materials, 2020, 30, 206-227.	18.0	95
22	Dealloying: An effective method for scalable fabrication of 0D, 1D, 2D, 3D materials and its application in energy storage. Nano Today, 2021, 37, 101094.	11.9	93
23	Interfacial passivation by room-temperature liquid metal enabling stable 5 V-class lithium-metal batteries in commercial carbonate-based electrolyte. Energy Storage Materials, 2021, 34, 12-21.	18.0	85
24	Roomâ€Temperature Liquid Metal Confined in MXene Paper as a Flexible, Freestanding, and Binderâ€Free Anode for Nextâ€Generation Lithiumâ€Ion Batteries. Small, 2019, 15, e1903214.	10.0	79
25	One-Step, Vacuum-Assisted Construction of Micrometer-Sized Nanoporous Silicon Confined by Uniform Two-Dimensional N-Doped Carbon toward Advanced Li Ion and MXene-Based Li Metal Batteries. ACS Nano, 2022, 16, 4560-4577.	14.6	75
26	Recent advances and perspectives of 2D silicon: Synthesis and application for energy storage and conversion. Energy Storage Materials, 2020, 32, 115-150.	18.0	74
27	Robust nitrogen/selenium engineered MXene/ZnSe hierarchical multifunctional interfaces for dendrite-free zinc-metal batteries. Energy Storage Materials, 2022, 49, 122-134.	18.0	57
28	Design of safe, long-cycling and high-energy lithium metal anodes in all working conditions: Progress, challenges and perspectives. Energy Storage Materials, 2021, 38, 157-189.	18.0	52
29	Stable and Safe Lithium Metal Batteries with Ni-Rich Cathodes Enabled by a High Efficiency Flame Retardant Additive. Journal of the Electrochemical Society, 2019, 166, A2736-A2740.	2.9	51
30	Green and tunable fabrication of graphene-like N-doped carbon on a 3D metal substrate as a binder-free anode for high-performance potassium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 21966-21975.	10.3	48
31	Stable and dendrite-free lithium metal anodes enabled by carbon paper incorporated with ultrafine lithiophilic TiO2 derived from MXene and carbon dioxide. Chemical Engineering Journal, 2021, 406, 126836.	12.7	45
32	Advancing Metalâ€“Phenolic Networks for Visual Information Storage. ACS Applied Materials & Interfaces, 2019, 11, 29305-29311.	8.0	43
33	Building stable solid electrolyte interphases (SEI) for microsized silicon anode and 5V-class cathode with salt engineered nonflammable phosphate-based lithium-ion battery electrolyte. Applied Surface Science, 2021, 553, 149566.	6.1	42
34	Constructing ultrafine lithiophilic layer on MXene paper by sputtering for stable and flexible 3D lithium metal anode. Chemical Engineering Journal, 2021, 421, 129685.	12.7	42
35	Scalable construction of SiO/wrinkled MXene composite by a simple electrostatic self-assembly strategy as anode for high-energy lithium-ion batteries. Chinese Chemical Letters, 2020, 31, 980-983.	9.0	41
36	MXenes and their derivatives for advanced aqueous rechargeable batteries. Materials Today, 2022, 52, 225-249.	14.2	39

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37	MXenes for advanced separator in rechargeable batteries. Materials Today, 2022, 57, 146-179.	14.2	38
38	Poly(ethylene glycol)-mediated mineralization of metalâ€“organic frameworks. Chemical Communications, 2020, 56, 11078-11081.	4.1	31
39	Robust and flexible polymer/MXene-derived two dimensional TiO2 hybrid gel electrolyte for dendrite-free solid-state zinc-ion batteries. Chemical Engineering Journal, 2022, 430, 132748.	12.7	31
40	High-Safety and High-Voltage Lithium Metal Batteries Enabled by a Nonflammable Ether-Based Electrolyte with Phosphazene as a Cosolvent. ACS Applied Materials & Interfaces, 2021, 13, 10141-10148.	8.0	29
41	Enhanced magnetic heating efficiency and thermal conductivity of magnetic nanofluids with FeZrB amorphous nanoparticles. Journal of Magnetism and Magnetic Materials, 2018, 465, 480-488.	2.3	26
42	Lithium dendrite suppression by facile interfacial barium engineering for stable 5ÂV-class lithium metal batteries with carbonate-based electrolyte. Chemical Engineering Journal, 2021, 414, 128928.	12.7	19
43	MXene-based materials for advanced nanogenerators. Nano Energy, 2022, 101, 107556.	16.0	19
44	Recent development and prospect of potassium-ion batteries with high energy and high safety for post-lithium batteries. Functional Materials Letters, 2019, 12, 1930002.	1.2	16
45	Structureâ€Controllable Binary Nanoporousâ€Silicon/Antimony Alloy as Anode for Highâ€Performance Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 3809-3816.	3.4	15
46	Controlled synthesis of copper reinforced nanoporous silicon microsphere with boosted electrochemical performance. Journal of Power Sources, 2020, 455, 227967.	7.8	15
47	Facile preparation of fullerene nanorods for high-performance lithium-sulfur batteries. Materials Letters, 2018, 228, 175-178.	2.6	13
48	Magnetoviscous Property and Hyperthermia Effect of Amorphous Nanoparticle Aqueous Ferrofluids. Nanoscale Research Letters, 2018, 13, 378.	5.7	12
49	Scalable and controlled synthesis of 2D nanoporous Co₃O₄ from bulk alloy for potassium ion batteries. Materials Technology, 2020, 35, 594-599.	3.0	12
50	Green and facile fabrication of nanoporous silicon@carbon from commercial alloy with high graphitization degree for high-energy lithium-ion batteries. Sustainable Materials and Technologies, 2021, 27, e00238.	3.3	10
51	Vaccine Nanoparticles Derived from Mung Beans for Cancer Immunotherapy. Chemistry of Materials, 2021, 33, 4057-4066.	6.7	10
52	Synthesis of a Micro-Crosslinked Polyacrylamide Flocculant and Its Application in Treatment of Oily Produced Water. Energy & Fuels, 2021, 35, 18396-18405.	5.1	6
53	Porous lithium cobalt oxide fabricated from metalâ€“organic frameworks as a high-rate cathode for lithium-ion batteries. RSC Advances, 2020, 10, 31889-31893.	3.6	4
54	Rocking Chair Batteries: Recent Advances and Perspectives of Znâ€Metal Free â€œRockingâ€Chairâ€â€Type Znâ€Ion Batteries (Adv. Energy Mater. 5/2021). Advanced Energy Materials, 2021, 11, 2170023.	19.5	3

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55	Nanoporous Si@Carbon: Porosityâ€•and Graphitizationâ€Controlled Fabrication of Nanoporous Silicon@Carbon for Lithium Storage and Its Conjugation with MXene for Lithiumâ€Metal Anode (Adv.) Tj ETQq1 1 0.784314 rgBT /Overl	14.8	2