Wentao Yao

List of Publications by Year
in descending order

36 papers	1,566 citations	430874 18 h-index	414414 32 g-index
36 all docs	36 docs citations	36 times ranked	2430 citing authors

#	Article	IF	Citations
1	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. Nature Communications, 2016, 7, 13374.	12.8	180
2	Tipâ€Enhanced Electric Field: A New Mechanism Promoting Mass Transfer in Oxygen Evolution Reactions. Advanced Materials, 2021, 33, e2007377.	21.0	179
3	Elevatedâ€Temperature 3D Printing of Hybrid Solidâ€State Electrolyte for Liâ€Ion Batteries. Advanced Materials, 2018, 30, e1800615.	21.0	159
4	Ordering Heterogeneity of [MnO6] Octahedra in Tunnel-Structured MnO2 and Its Influence on Ion Storage. Joule, 2019, 3, 471-484.	24.0	123
5	Tuning Li₂O₂ Formation Routes by Facet Engineering of MnO₂ Cathode Catalysts. Journal of the American Chemical Society, 2019, 141, 12832-12838.	13.7	107
6	A conductive-dielectric gradient framework for stable lithium metal anode. Energy Storage Materials, 2020, 24, 700-706.	18.0	88
7	Design Principle, Optimization Strategies, and Future Perspectives of Anode-Free Configurations for High-Energy Rechargeable Metal Batteries. Electrochemical Energy Reviews, 2021, 4, 601-631.	25.5	69
8	Atomistic Insights into the Oriented Attachment of Tunnel-Based Oxide Nanostructures. ACS Nano, 2016, 10, 539-548.	14.6	66
9	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. Nature Communications, 2020, 11, 6373.	12.8	65
10	Cations Coordinationâ€Regulated Reversibility Enhancement for Aqueous Znâ€Ion Battery. Advanced Functional Materials, 2021, 31, 2105736.	14.9	59
11	Cations controlled growth of Î²-MnO2 crystals with tunable facets for electrochemical energy storage. Nano Energy, 2018, 48, 301-311.	16.0	56
12	Dynamic study of (De)sodiation in alpha-MnO2 nanowires. Nano Energy, 2016, 19, 382-390.	16.0	54
13	Anisotropic Friction of Wrinkled Graphene Grown by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2017, 9, 20922-20927.	8.0	51
14	A compact Bi2WO6 microflowers anode for potassium-ion storage: Taming a sequential phase evolution toward stable electrochemical cycling. Nano Energy, 2021, 82, 105784.	16.0	49
15	In Situ TEM Investigation of ZnO Nanowires during Sodiation and Lithiation Cycling. Small Methods, 2017, 1, 1700202.	8.6	45
16	Characteristic Work Function Variations of Graphene Line Defects. ACS Applied Materials & Interfaces, 2016, 8, 18360-18366.	8.0	43
17	Real-Time TEM Study of Nanopore Evolution in Battery Materials and Their Suppression for Enhanced Cycling Performance. Nano Letters, 2019, 19, 3074-3082.	9.1	29
18	Beyond Volume Variation: Anisotropic and Protrusive Lithiation in Bismuth Nanowire. ACS Nano, 2020, 14, 15669-15677.	14.6	18

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19	An asymmetric supercapacitor based on a NiO/Co3O4@NiCo cathode and an activated carbon anode. New Carbon Materials, 2020, 35, 112-120.	6.1	18
20	Revealing the Atomic Structures of Exposed Lateral Surfaces for Polymorphic Manganese Dioxide Nanowires. Small Structures, 2021, 2, 2000091.	12.0	18
21	Facile hydrothermal synthesis of antibacterial multi-layered hydroxyapatite nanostructures with superior flexibility. CrystEngComm, 2018, 20, 1304-1312.	2.6	15
22	Energy-driven surface evolution in beta-MnO2 structures. Nano Research, 2018, 11, 206-215.	10.4	15
23	Direct evidence of M2 phase during the monoclinic-tetragonal (rutile) phase transition of W-doped VO2 nanowires. Applied Physics Letters, 2017, 110, .	3.3	11
24	Toward real-time monitoring of lithium metal growth and dendrite formation surveillance for safe lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 7090-7099.	10.3	11
25	Atomistic Insights of Irreversible Li⁺ Intercalation in MnO₂ Electrode. Angewandte Chemie - International Edition, 2022, 61, .	13.8	8
26	Localized Mechanical Stress Induced Ionic Redistribution in a Layered LiCoO₂ Cathode. ACS Applied Materials & Interfaces, 2016, 8, 29391-29399.	8.0	7
27	In situ visualization of the superior nanomechanical flexibility of individual hydroxyapatite nanobelts. CrystEngComm, 2018, 20, 1031-1036.	2.6	7
28	Battery-on-Separator: A platform technology for arbitrary-shaped lithium ion batteries for high energy density storage. Journal of Power Sources, 2021, 490, 229527.	7.8	6
29	Interface metallization enabled an ultra-stable Fe₂O₃ hierarchical anode for pseudocapacitors. RSC Advances, 2020, 10, 8636-8644.	3.6	4
30	Atomistic Insights of Irreversible Li⁺ Intercalation in MnO₂ Electrode. Angewandte Chemie, 2022, 134, e202113420.	2.0	3
31	Simultaneous Structural and Electrical Analysis of Vanadium Dioxide Using In Situ TEM. Microscopy and Microanalysis, 2017, 23, 1672-1673.	0.4	1
32	Tunnel Intergrowth Structures in Manganese Dioxide and Their Influence on Ion Storage. Microscopy and Microanalysis, 2018, 24, 1500-1501.	0.4	1
33	Laser-Induced Nitrogen-doped Graphene for High-Performance Flexible Supercapacitors. , 2020, , .		1
34	Dynamic Study of Sodiation Process in Single Crystalline a-MnO2 Nanowires. Microscopy and Microanalysis, 2015, 21, 1543-1544.	0.4	0
35	In situ cooling and heating study of VO 2 phase transition. Microscopy and Microanalysis, 2016, 22, 816-817.	0.4	0
36	Atomistic Exploration of the Surface-Sensitive Oriented Attachment Growth of a-MnCh Nanowires and the Formation of Defective Interface with 2Ã—3 and 2Ã—4 Tunnel Intergrowth. Microscopy and Microanalysis, 2016, 22, 386-387.	0.4	0