Reza Shahbazian-Yassar

List of Publications by Year
in descending order

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233 papers	12,616 citations	23879 60 h-index	34195 103 g-index
244 all docs	244 docs citations	244 times ranked	16102 citing authors

#	Article	IF	Citations
1	Improvement of the thermal conductivity and tribological properties of polyethylene by incorporating functionalized boron nitride nanosheets. Tribology International, 2022, 165, 107277.	3.0	12
2	Deep learning for mapping element distribution of high-entropy alloys in scanning transmission electron microscopy images. Computational Materials Science, 2022, 201, 110905.	1.4	8
3	Atomistic Insights of Irreversible Li⁺ Intercalation in MnO₂ Electrode. Angewandte Chemie, 2022, 134, e202113420.	1.6	3
4	Atomistic Insights of Irreversible Li⁺ Intercalation in MnO₂ Electrode. Angewandte Chemie - International Edition, 2022, 61, .	7.2	8
5	A Smart Lithium Battery with Shape Memory Function. Small, 2022, 18, e2102666.	5.2	5
6	Interface Engineering Between Multiâ€Elemental Alloy Nanoparticles and a Carbon Support Toward Stable Catalysts. Advanced Materials, 2022, 34, e2106436.	11.1	30
7	Inhibition of lithium dendrite growth with highly concentrated ions: cellular automaton simulation and surrogate model with ensemble neural networks. Molecular Systems Design and Engineering, 2022, 7, 260-272.	1.7	3
8	An efficient gel polymer electrolyte for dendrite-free and long cycle life lithium metal batteries. Energy Storage Materials, 2022, 46, 352-365.	9.5	34
9	Taâ€“TiOx nanoparticles as radical scavengers to improve the durability of Feâ€“Nâ€“C oxygen reduction catalysts. Nature Energy, 2022, 7, 281-289.	19.8	93
10	Oxo dicopper anchored on carbon nitride for selective oxidation of methane. Nature Communications, 2022, 13, 1375.	5.8	98
11	Direct Ink Printing of PVdF Composite Polymer Electrolytes with Aligned BN Nanosheets for Lithium-Metal Batteries. ACS Nanoscience Au, 2022, 2, 297-306.	2.0	7
12	Electrochemical synthesis of high entropy hydroxides and oxides boosted by hydrogen evolution reaction. Cell Reports Physical Science, 2022, 3, 100847.	2.8	19
13	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	8.8	6
14	Efficient electrocatalytic conversion of CO2 to ethanol enabled by imidazolium-functionalized ionomer confined molybdenum phosphide. Applied Catalysis B: Environmental, 2022, 317, 121681.	10.8	6
15	Direct Ink Writing of Polymer Composite Electrolytes with Enhanced Thermal Conductivities. Advanced Functional Materials, 2021, 31, 2006683.	7.8	63
16	Recent progress of high-entropy materials for energy storage and conversion. Journal of Materials Chemistry A, 2021, 9, 782-823.	5.2	246
17	Revealing the Atomic Structures of Exposed Lateral Surfaces for Polymorphic Manganese Dioxide Nanowires. Small Structures, 2021, 2, 2000091.	6.9	18
18	Electrochemical Methods and Protocols for Characterization of Ceramic and Polymer Electrolytes for Rechargeable Batteries. Batteries and Supercaps, 2021, 4, 596-606.	2.4	9

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19	Counterâ€Intuitive Structural Instability Aroused by Transition Metal Migration in Polyanionic Sodium Ion Host. Advanced Energy Materials, 2021, 11, 2003256.	10.2	35
20	Denary oxide nanoparticles as highly stable catalysts for methane combustion. Nature Catalysis, 2021, 4, 62-70.	16.1	153
21	Direct growth of tungsten disulfide on gallium nitride and the photovoltaic characteristics of the heterojunctions. Semiconductor Science and Technology, 2021, 36, 025016.	1.0	3
22	Revealing High-Temperature Reduction Dynamics of High-Entropy Alloy Nanoparticles via In Situ Transmission Electron Microscopy. Nano Letters, 2021, 21, 1742-1748.	4.5	26
23	Communicationâ€”Deconvoluting the Conductivity Enhancement due to Nanoparticle Fillers in PVdF-Based Polymer Electrolytes for Li-Metal Batteries. Journal of the Electrochemical Society, 2021, 168, 020525.	1.3	4
24	In Situ Liquidâ€Cell TEM Observation of Multiphase Classical and Nonclassical Nucleation of Calcium Oxalate. Advanced Functional Materials, 2021, 31, 2007736.	7.8	19
25	Carbonâ€Supported Highâ€Entropy Oxide Nanoparticles as Stable Electrocatalysts for Oxygen Reduction Reactions. Advanced Functional Materials, 2021, 31, 2010561.	7.8	86
26	Polyethylene-BN nanosheets nanocomposites with enhanced thermal and mechanical properties. Composites Science and Technology, 2021, 204, 108631.	3.8	25
27	Dendritic Zn Deposition in Zincâ€Metal Batteries and Mitigation Strategies. Advanced Energy and Sustainability Research, 2021, 2, 2000082.	2.8	23
28	2D boron nitride nanosheets for polymer composite materials. Npj 2D Materials and Applications, 2021, 5, .	3.9	110
29	Mesocrystallizing Nanograins for Enhanced Li + Storage. Advanced Energy Materials, 2021, 11, 2100503.	10.2	5
30	Interfacial engineering of <scp>lithiumâ€polymer</scp> batteries with in situ <scp>UV</scp> crossâ€linking. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 1016-1027.	8.5	10
31	Collagen biomineralization: pathways, mechanisms, and thermodynamics. Emergent Materials, 2021, 4, 1205-1224.	3.2	18
32	STEM-EELS Analysis of High Entropy Oxide Nanoparticles. Microscopy and Microanalysis, 2021, 27, 884-886.	0.2	0
33	In situ visualization of superior nanomechanical flexibility of individual ydroxyapatite nanobelts. Microscopy and Microanalysis, 2021, 27, 1780-1781.	0.2	0
34	Extreme mixing in nanoscale transition metal alloys. Matter, 2021, 4, 2340-2353.	5.0	102
35	In Situ TEM Studies on the Nucleation and Growth of Multicomponent Alloy Nanoparticles on 2D Materials. Microscopy and Microanalysis, 2021, 27, 2978-2980.	0.2	0
36	In Situ Graphene Liquid Cell Investigation of Metal Ion Modifiers of Calcium Oxalate. Microscopy and Microanalysis, 2021, 27, 490-493.	0.2	0

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37	Ultrafast Synthesis of High Entropy Oxide Nanoparticles by Flame Spray Pyrolysis. Langmuir, 2021, 37, 9059-9068.	1.6	45
38	Gold-like activity copper-like selectivity of heteroatomic transition metal carbides for electrocatalytic carbon dioxide reduction reaction. Nature Communications, 2021, 12, 5067.	5.8	40
39	Scalable Synthesis of High Entropy Alloy Nanoparticles by Microwave Heating. ACS Nano, 2021, 15, 14928-14937.	7.3	85
40	Alloying of Alkali Metals with Tellurene. Advanced Energy Materials, 2021, 11, 2003248.	10.2	11
41	Prelithiated Li-Enriched Gradient Interphase toward Practical High-Energy NMCâ€“Silicon Full Cell. ACS Energy Letters, 2021, 6, 320-328.	8.8	50
42	Optimization of the Mechanical Properties and the Cytocompatibility for the PMMA Nanocomposites Reinforced with the Hydroxyapatite Nanofibers and the Magnesium Phosphate Nanosheets. Materials, 2021, 14, 5893.	1.3	6
43	Composition-dependent structure and properties of 5- and 15-element high-entropy alloy nanoparticles. Cell Reports Physical Science, 2021, 2, 100641.	2.8	8
44	Facile microwave approach towards high performance MoS2/graphene nanocomposite for hydrogen evolution reaction. Science China Materials, 2020, 63, 62-74.	3.5	38
45	Revealing Grain-Boundary-Induced Degradation Mechanisms in Li-Rich Cathode Materials. Nano Letters, 2020, 20, 1208-1217.	4.5	62
46	Continuous 2000â€¯K droplet-to-particle synthesis. Materials Today, 2020, 35, 106-114.	8.3	43
47	3D Printing of Electrochemical Energy Storage Devices: A Review of Printing Techniques and Electrode/Electrolyte Architectures. Batteries and Supercaps, 2020, 3, 130-146.	2.4	93
48	Novel PMMA bone cement nanocomposites containing magnesium phosphate nanosheets and hydroxyapatite nanofibers. Materials Science and Engineering C, 2020, 109, 110497.	3.8	47
49	In Situ Oxidation Studies of High-Entropy Alloy Nanoparticles. ACS Nano, 2020, 14, 15131-15143.	7.3	71
50	Continuous Synthesis of Hollow Highâ€Entropy Nanoparticles for Energy and Catalysis Applications. Advanced Materials, 2020, 32, e2002853.	11.1	93
51	Cation Additive Enabled Rechargeable LiOHâ€Based Lithiumâ€“Oxygen Batteries. Angewandte Chemie - International Edition, 2020, 59, 22978-22982.	7.2	29
52	The Mechanism of Zn Diffusion Through ZnO in Secondary Battery: A Combined Theoretical and Experimental Study. Journal of Physical Chemistry C, 2020, 124, 15730-15738.	1.5	3
53	Hydrous Nickelâ€“Iron Turnbullâ€™s Blue as a High-Rate and Low-Temperature Proton Electrode. ACS Applied Materials & Interfaces, 2020, 12, 9201-9208.	4.0	49
54	Revealing nanoscale mineralization pathways of hydroxyapatite using in situ liquid cell transmission electron microscopy. Science Advances, 2020, 6, .	4.7	61

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55	TEM Studies on the Role of Local Chemistry and Atomic Structure in Battery Materials. Microscopy and Microanalysis, 2020, 26, 148-149.	0.2	1
56	Isolated Ni single atoms in nitrogen doped ultrathin porous carbon templated from porous g-C3N4 for high-performance CO2 reduction. Nano Energy, 2020, 77, 105158.	8.2	83
57	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. Nature Communications, 2020, 11, 6373.	5.8	65
58	Titelbild: Cation Additive Enabled Rechargeable LiOHâ€Based Lithiumâ€“Oxygen Batteries (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock	1.6	0
59	In Situ TEM Visualization on the Super Flexibility of Multi-layered Hydroxyapatite Nanobelts with Antibacterial Property. Microscopy and Microanalysis, 2020, 26, 1428-1429.	0.2	0
60	Beyond Volume Variation: Anisotropic and Protrusive Lithiation in Bismuth Nanowire. ACS Nano, 2020, 14, 15669-15677.	7.3	18
61	Kinetically Stable Oxide Overlayers on Mo₃P Nanoparticles Enabling Lithiumâ€“Air Batteries with Low Overpotentials and Long Cycle Life. Advanced Materials, 2020, 32, e2004028.	11.1	42
62	Stability of Solid-Electrolyte Interphase (SEI) on the Lithium Metal Surface in Lithium Metal Batteries (LMBs). ACS Applied Energy Materials, 2020, 3, 10560-10567.	2.5	37
63	Cation Additive Enabled Rechargeable LiOHâ€Based Lithiumâ€“Oxygen Batteries. Angewandte Chemie, 2020, 132, 23178-23182.	1.6	8
64	Atomic-Level Understanding of Surface Reconstruction Based on Li[Ni_xMn_yCo_{1â€“xâ€“y}]O₂ Single-Crystal Studies. ACS Applied Energy Materials, 2020, 3, 4799-4811.	2.5	51
65	TEM Studies on Antibacterial Mechanisms of Black Phosphorous Nanosheets . International Journal of Nanomedicine, 2020, Volume 15, 3071-3085.	3.3	28
66	From Sodiumâ€“Oxygen to Sodiumâ€“Air Battery: Enabled by Sodium Peroxide Dihydrate. Nano Letters, 2020, 20, 4681-4686.	4.5	31
67	Assessment of Pressure and Density of Confined Water in Graphene Liquid Cells. Advanced Materials Interfaces, 2020, 7, 1901727.	1.9	8
68	Highlyâ€Cyclable Roomâ€Temperature Phosphorene Polymer Electrolyte Composites for Li Metal Batteries. Advanced Functional Materials, 2020, 30, 1910749.	7.8	78
69	Computationally aided, entropy-driven synthesis of highly efficient and durable multi-elemental alloy catalysts. Science Advances, 2020, 6, eaaz0510.	4.7	158
70	Rooting binder-free tin nanoarrays into copper substrate via tin-copper alloying for robust energy storage. Nature Communications, 2020, 11, 1212.	5.8	64
71	Consolidating Lithiothermicâ€Ready Transition Metals for Li₂Sâ€Based Cathodes. Advanced Materials, 2020, 32, e2002403.	11.1	59
72	Solution Blowing Synthesis of Li-Conductive Ceramic Nanofibers. ACS Applied Materials & Interfaces, 2020, 12, 16200-16208.	4.0	15

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73	Highâ€Performance, Longâ€Life, Rechargeable Liâ€“CO₂ Batteries based on a 3D Holey Graphene Cathode Implanted with Single Iron Atoms. Advanced Materials, 2020, 32, e1907436.	11.1	133
74	Aerosol Synthesis of High Entropy Alloy Nanoparticles. Langmuir, 2020, 36, 1985-1992.	1.6	74
75	Two-Dimensional Materials to Address the Lithium Battery Challenges. ACS Nano, 2020, 14, 2628-2658.	7.3	214
76	A novel antimicrobial electrochemical glucose biosensor based on silverâ€“Prussian blueâ€modified TiO 2 nanotube arrays. Medical Devices & Sensors, 2020, 3, e10061.	2.7	3
77	Oxygen Functionalized Copper Nanoparticles for Solar-Driven Conversion of Carbon Dioxide to Methane. ACS Nano, 2020, 14, 2099-2108.	7.3	21
78	Mechanistic understanding of Li dendrites growth by in- situ/operando imaging techniques. Journal of Power Sources, 2020, 461, 228135.	4.0	71
79	Synthesis of high-entropy alloy nanoparticles on supports by the fast moving bed pyrolysis. Nature Communications, 2020, 11, 2016.	5.8	195
80	Atomic column heights detection in metallic nanoparticles using deep convolutional learning. Computational Materials Science, 2020, 180, 109722.	1.4	20
81	Revealing Sintering Kinetics of MoS₂-Supported Metal Nanocatalysts in Atmospheric Gas Environments via Operando Transmission Electron Microscopy. ACS Nano, 2020, 14, 4074-4086.	7.3	15
82	In Situ Visualization of Ferritin Biomineralization via Graphene Liquid Cell-Transmission Electron Microscopy. ACS Biomaterials Science and Engineering, 2020, 6, 3208-3216.	2.6	11
83	High-throughput, combinatorial synthesis of multimetallic nanoclusters. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6316-6322.	3.3	119
84	Understanding Zn Electrodeposits Morphology in Secondary Batteries Using Phase-Field Model. Journal of the Electrochemical Society, 2020, 167, 060503.	1.3	28
85	Correlative ex situ and Liquid-Cell TEM Observation of Bacterial Cell Membrane Damage Induced by Rough Surface Topology . International Journal of Nanomedicine, 2020, Volume 15, 1929-1938.	3.3	13
86	Real-Time Observation of Ferritin Biomineralization Using Graphene Liquid Cells Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 1122-1123.	0.2	0
87	Strained Phase Boundaries in Li-rich Cathodes; An Atomic Resolution Study. Microscopy and Microanalysis, 2019, 25, 2044-2045.	0.2	0
88	High temperature shockwave stabilized single atoms. Nature Nanotechnology, 2019, 14, 851-857.	15.6	278
89	Manipulation of an ionic and electronic conductive interface for highly-stable high-voltage cathodes. Nano Energy, 2019, 65, 103988.	8.2	45
90	Stable Multimetallic Nanoparticles for Oxygen Electrocatalysis. Nano Letters, 2019, 19, 5149-5158.	4.5	94

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91	Tuning Li₂O₂ Formation Routes by Facet Engineering of MnO₂ Cathode Catalysts. Journal of the American Chemical Society, 2019, 141, 12832-12838.	6.6	107
92	Ultrafast, Controllable Synthesis of Sub-Nano Metallic Clusters through Defect Engineering. ACS Applied Materials & Interfaces, 2019, 11, 29773-29779.	4.0	28
93	Transmission electron microscopy of the iron oxide core in ferritin proteins: current status and future directions. Journal Physics D: Applied Physics, 2019, 52, 453001.	1.3	10
94	Composite Polymer Electrolyte for Highly Cyclable Room-Temperature Solid-State Magnesium Batteries. ACS Applied Energy Materials, 2019, 2, 7980-7990.	2.5	36
95	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. Nature Communications, 2019, 10, 4721.	5.8	182
96	Direct Ink Writing of Wearable Thermoresponsive Supercapacitors with rGO/CNT Composite Electrodes. Advanced Materials Technologies, 2019, 4, 1900691.	3.0	36
97	In situ Liquid Cell Transmission Electron Microscopy Study of Hydroxyapatite Mineralization Process. Microscopy and Microanalysis, 2019, 25, 1502-1502.	0.2	1
98	Operando TEM Investigation of Sintering Kinetics of Nanocatalysts on MoS2 in Hydrogen Environment. Microscopy and Microanalysis, 2019, 25, 1906-1907.	0.2	0
99	Non-Dendritic Zn Electrodeposition Enabled by Zincophilic Graphene Substrates. ACS Applied Materials & Interfaces, 2019, 11, 44077-44089.	4.0	129
100	In situ TEM Investigation on Rotation and Coalescence Behaviors of Au Nanoparticles on h-BN Substrate. Microscopy and Microanalysis, 2019, 25, 1484-1485.	0.2	0
101	Uniform, Scalable, High-Temperature Microwave Shock for Nanoparticle Synthesis through Defect Engineering. Matter, 2019, 1, 759-769.	5.0	58
102	On the structure and chemistry of iron oxide cores in human heart and human spleen ferritins using graphene liquid cell electron microscopy. Nanoscale, 2019, 11, 16868-16878.	2.8	18
103	Highly efficient decomposition of ammonia using high-entropy alloy catalysts. Nature Communications, 2019, 10, 4011.	5.8	376
104	In situ TEM Observation of Nanoparticles Formation during Carbothermal Shock. Microscopy and Microanalysis, 2019, 25, 1534-1535.	0.2	0
105	Investigation of the magnetosome biomineralization in magnetotactic bacteria using graphene liquid cell â€“ transmission electron microscopy. Nanoscale, 2019, 11, 698-705.	2.8	29
106	Nanocomposite materials in orthopedic applications. Frontiers of Chemical Science and Engineering, 2019, 13, 1-13.	2.3	23
107	In situ graphene liquid cell-transmission electron microscopy study of insulin secretion in pancreatic islet cells. International Journal of Nanomedicine, 2019, Volume 14, 371-382.	3.3	13
108	Insights into Structural Evolution of Lithium Peroxides with Reduced Charge Overpotential in Liâ€“O₂ System. Advanced Energy Materials, 2019, 9, 1900662.	10.2	38

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109	Progress in development of electrolytes for magnesium batteries. Energy Storage Materials, 2019, 21, 136-153.	9.5	156
110	Insights on the Stabilization of Nickel-Rich Cathode Surfaces: Evidence of Inherent Instabilities in the Presence of Conformal Coatings. Chemistry of Materials, 2019, 31, 3891-3899.	3.2	30
111	Interpreting Electrochemical and Chemical Sodiation Mechanisms and Kinetics in Tin Antimony Battery Anodes Using in Situ Transmission Electron Microscopy and Computational Methods. ACS Applied Energy Materials, 2019, 2, 3578-3586.	2.5	14
112	Deciphering the Atomic Patterns Leading to MnO2 Polymorphism. CheM, 2019, 5, 1793-1805.	5.8	46
113	Oxygen Release Degradation in Liâ€Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. Advanced Energy Materials, 2019, 9, 1900551.	10.2	293
114	Identifying Catalytic Active Sites of Trimolybdenum Phosphide (Mo₃P) for Electrochemical Hydrogen Evolution. Advanced Energy Materials, 2019, 9, 1900516.	10.2	47
115	Metalâ€“organic framework derived 3D graphene decorated NaTi₂(PO₄)₃ for fast Na-ion storage. Nanoscale, 2019, 11, 7347-7357.	2.8	23
116	In Situ Study of Molecular Structure of Water and Ice Entrapped in Graphene Nanovessels. ACS Nano, 2019, 13, 4677-4685.	7.3	27
117	Purifying the Phase of NaTi₂(PO₄)₃ for Enhanced Na⁺ Storage Properties. ACS Applied Materials & Interfaces, 2019, 11, 10663-10671.	4.0	27
118	Lithium Diffusion Mechanism through Solidâ€“Electrolyte Interphase in Rechargeable Lithium Batteries. Journal of Physical Chemistry C, 2019, 123, 10237-10245.	1.5	181
119	Antiâ€Oxygen Leaking LiCoO₂. Advanced Functional Materials, 2019, 29, 1901110.	7.8	60
120	Real-Time TEM Study of Nanopore Evolution in Battery Materials and Their Suppression for Enhanced Cycling Performance. Nano Letters, 2019, 19, 3074-3082.	4.5	29
121	Advances in Grapheneâ€Based Liquid Cell Electron Microscopy: Working Principles, Opportunities, and Challenges. Small Methods, 2019, 3, 1900026.	4.6	38
122	Ordering Heterogeneity of [MnO6] Octahedra in Tunnel-Structured MnO2 and Its Influence on Ion Storage. Joule, 2019, 3, 471-484.	11.7	123
123	Synthesis and Properties of Plasmonic Boronâ€Hyperdoped Silicon Nanoparticles. Advanced Functional Materials, 2019, 29, 1807788.	7.8	23
124	Effect of electrolyte composition on rock salt surface degradation in NMC cathodes during high-voltage potentiostatic holds. Nano Energy, 2019, 55, 216-225.	8.2	88
125	Imaging of soft materials using in situ liquid-cell transmission electron microscopy. Journal of Physics Condensed Matter, 2019, 31, 103001.	0.7	23
126	Encapsulating Various Sulfur Allotropes within Graphene Nanocages for Longâ€Lasting Lithium Storage. Advanced Functional Materials, 2018, 28, 1706443.	7.8	60

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127	High-rate, long cycle-life Li-ion battery anodes enabled by ultrasmall tin-based nanoparticles encapsulation. Energy Storage Materials, 2018, 14, 169-178.	9.5	47
128	Synergistic Effect of Graphene Oxide for Impeding the Dendritic Plating of Li. Advanced Functional Materials, 2018, 28, 1705917.	7.8	92
129	In situ visualization of the superior nanomechanical flexibility of individual hydroxyapatite nanobelts. CrystEngComm, 2018, 20, 1031-1036.	1.3	7
130	Directly Formed Alucone on Lithium Metal for High-Performance Li Batteries and Liâ€“S Batteries with High Sulfur Mass Loading. ACS Applied Materials & Interfaces, 2018, 10, 7043-7051.	4.0	66
131	Facile hydrothermal synthesis of antibacterial multi-layered hydroxyapatite nanostructures with superior flexibility. CrystEngComm, 2018, 20, 1304-1312.	1.3	15
132	Phase-field modeling of solid electrolyte interface (SEI) influence on Li dendritic behavior. Electrochimica Acta, 2018, 265, 609-619.	2.6	88
133	Operando liquid cell electron microscopy of discharge and charge kinetics in lithium-oxygen batteries. Nano Energy, 2018, 49, 338-345.	8.2	59
134	Carbothermal shock synthesis of high-entropy-alloy nanoparticles. Science, 2018, 359, 1489-1494.	6.0	1,065
135	Cations controlled growth of Î²-MnO2 crystals with tunable facets for electrochemical energy storage. Nano Energy, 2018, 48, 301-311.	8.2	56
136	Energy-driven surface evolution in beta-MnO2 structures. Nano Research, 2018, 11, 206-215.	5.8	15
137	Modulating the Hysteresis of an Electronic Transition: Launching Alternative Transformation Pathways in the Metalâ€“Insulator Transition of Vanadium(IV) Oxide. Chemistry of Materials, 2018, 30, 214-224.	3.2	20
138	Microscopy Observation of Lithium Deposition Behavior on Graphene Matrix. Microscopy and Microanalysis, 2018, 24, 908-909.	0.2	0
139	Investigation of the Magnetosome Biomineralization in Magnetotactic Bacteria Using GLC-TEM. Microscopy and Microanalysis, 2018, 24, 1330-1331.	0.2	0
140	In situ TEM Investigation of Anti-sintering Au@Pt Core-shell Nanostructures on MoS2 at Elevated Temperatures. Microscopy and Microanalysis, 2018, 24, 1892-1893.	0.2	1
141	In Situ Transmission Electron Microscopy Explores a New Nanoscale Pathway for Direct Gypsum Formation in Aqueous Solution. ACS Applied Nano Materials, 2018, 1, 5430-5440.	2.4	22
142	Insights into the Performance Degradation of Oxygen-Type Manganese-Rich Layered Oxide Cathodes for High-Voltage Sodium-Ion Batteries. ACS Applied Energy Materials, 2018, , .	2.5	2
143	Investigation of the Effect of Graphene-encapsulation on the O2 Release Phenomenon from LixCoO2, Studied by In-situ Heating STEM/EELS. Microscopy and Microanalysis, 2018, 24, 1626-1627.	0.2	0
144	Aberration-Corrected Scanning Transmission Electron Microscopy of Single Crystals and Chemically-Gradient NMC Cathodes. Microscopy and Microanalysis, 2018, 24, 1536-1537.	0.2	2

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145	Experimentally Validated Structures of Supported Metal Nanoclusters on MoS₂. Journal of Physical Chemistry Letters, 2018, 9, 2972-2978.	2.1	23
146	TRIP-1 in the extracellular matrix promotes nucleation of calcium phosphate polymorphs. Connective Tissue Research, 2018, 59, 13-19.	1.1	5
147	Selective Growth of Two-Dimensional Heterostructures of Gallium Selenide on Monolayer Graphene and the Thickness Dependent p- and n-Type Nature. ACS Applied Nano Materials, 2018, 1, 3293-3302.	2.4	9
148	The influence of stress field on Li electrodeposition in Li-metal battery. MRS Communications, 2018, 8, 1285-1291.	0.8	24
149	Highâ€Temperature Atomic Mixing toward Wellâ€Dispersed Bimetallic Electrocatalysts. Advanced Energy Materials, 2018, 8, 1800466.	10.2	43
150	Novel ALD Chemistry Enabled Low-Temperature Synthesis of Lithium Fluoride Coatings for Durable Lithium Anodes. ACS Applied Materials & Interfaces, 2018, 10, 26972-26981.	4.0	99
151	In situstudy of nucleation and growth dynamics of Au nanoparticles on MoS₂nanoflakes. Nanoscale, 2018, 10, 15809-15818.	2.8	38
152	Elevatedâ€Temperature 3D Printing of Hybrid Solidâ€State Electrolyte for Liâ€Ion Batteries. Advanced Materials, 2018, 30, e1800615.	11.1	159
153	Investigation of In Situ Radiation Effects in Liquid Cell Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 1980-1981.	0.2	0
154	Study of the Li-Oxygen Battery Discharging and Charging Process using In-situ TEM. Microscopy and Microanalysis, 2018, 24, 328-329.	0.2	3
155	Tunnel Intergrowth Structures in Manganese Dioxide and Their Influence on Ion Storage. Microscopy and Microanalysis, 2018, 24, 1500-1501.	0.2	1
156	Sodium-Induced Reordering of Atomic Stacks in Black Phosphorus. Chemistry of Materials, 2017, 29, 1350-1356.	3.2	55
157	Freestanding highly defect nitrogen-enriched carbon nanofibers for lithium ion battery thin-film anodes. Journal of Materials Chemistry A, 2017, 5, 5532-5540.	5.2	33
158	Facet-Dependent Thermal Instability in LiCoO₂. Nano Letters, 2017, 17, 2165-2171.	4.5	99
159	In Situ High Temperature Synthesis of Single-Component Metallic Nanoparticles. ACS Central Science, 2017, 3, 294-301.	5.3	34
160	Toward Highly Efficient Electrocatalyst for Liâ€“O₂ Batteries Using Biphasic N-Doping Cobalt@Graphene Multiple-Capsule Heterostructures. Nano Letters, 2017, 17, 2959-2966.	4.5	91
161	Evaluation of Lemna minor and Chlamydomonas to treat palm oil mill effluent and fertilizer production. Journal of Water Process Engineering, 2017, 17, 229-236.	2.6	45
162	Local Lattice Distortion Activate Metastable Metal Sulfide as Catalyst with Stable Full Dischargeâ€“Charge Capability for Liâ€“O₂ Batteries. Nano Letters, 2017, 17, 3518-3526.	4.5	68

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163	Direct Growth of High Mobility and Lowâ€Noise Lateral MoS₂â€“Graphene Heterostructure Electronics. Small, 2017, 13, 1604301.	5.2	61
164	Anisotropic Friction of Wrinkled Graphene Grown by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2017, 9, 20922-20927.	4.0	51
165	Hydroxyapatite Fibers: A Review of Synthesis Methods. Jom, 2017, 69, 1354-1360.	0.9	21
166	Evaluation of Lipid Content in Microalgae Biomass Using Palm Oil Mill Effluent (Pome). Jom, 2017, 69, 1361-1367.	0.9	29
167	Postsynthetic Route for Modifying the Metalâ€"Insulator Transition of VO₂ by Interstitial Dopant Incorporation. Chemistry of Materials, 2017, 29, 5401-5412.	3.2	36
168	Two-Dimensional Holey Co₃O₄ Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. Nano Letters, 2017, 17, 3907-3913.	4.5	158
169	Lithium metal protected by atomic layer deposition metal oxide for high performance anodes. Journal of Materials Chemistry A, 2017, 5, 12297-12309.	5.2	150
170	Direct characterization of the Li intercalation mechanism into Î±-V2O5 nanowires using in-situ transmission electron microscopy. Applied Physics Letters, 2017, 110, .	1.5	11
171	Bio-camouflage of anatase nanoparticles explored by in situ high-resolution electron microscopy. Nanoscale, 2017, 9, 10684-10693.	2.8	18
172	Burning lithium in CS2 for high-performing compact Li2Sâ€“graphene nanocapsules for Liâ€“SÂbatteries. Nature Energy, 2017, 2, .	19.8	349
173	Direct evidence of M2 phase during the monoclinic-tetragonal (rutile) phase transition of W-doped VO2 nanowires. Applied Physics Letters, 2017, 110, .	1.5	11
174	Tailoring the Edge Structure of Molybdenum Disulfide toward Electrocatalytic Reduction of Carbon Dioxide. ACS Nano, 2017, 11, 453-460.	7.3	208
175	3D Hierarchical nano-flake/micro-flower iron fluoride with hydration water induced tunnels for secondary lithium battery cathodes. Nano Energy, 2017, 32, 10-18.	8.2	73
176	Multiâ€Step Crystallization of Barium Carbonate: Rapid Interconversion of Amorphous and Crystalline Precursors. Angewandte Chemie - International Edition, 2017, 56, 16028-16031.	7.2	12
177	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. Nature Communications, 2017, 8, .	5.8	301
178	Oxygen evolution and phase transformation in LCO cathode: A phase-field modeling study. Computational Materials Science, 2017, 140, 299-306.	1.4	8
179	Competitive Ion Diffusion within Grain Boundary and Grain Interiors in Polycrystalline Electrodes with the Inclusion of Stress Field. Journal of the Electrochemical Society, 2017, 164, A2830-A2839.	1.3	11
180	Electron Microscopy and Spectroscopy of Citrate Induced Calcium Oxalate Crystal Structure and Hydration State Changes, and Implications for Kidney Stones. Microscopy and Microanalysis, 2017, 23, 1208-1209.	0.2	1

#	Article	IF	Citations
181	In Situ TEM Investigation of ZnO Nanowires during Sodiation and Lithiation Cycling. Small Methods, 2017, 1, 1700202.	4.6	45
182	Multiâ€Step Crystallization of Barium Carbonate: Rapid Interconversion of Amorphous and Crystalline Precursors. Angewandte Chemie, 2017, 129, 16244-16247.	1.6	1
183	Simultaneous Structural and Electrical Analysis of Vanadium Dioxide Using In Situ TEM. Microscopy and Microanalysis, 2017, 23, 1672-1673.	0.2	1
184	A Comparative Study on Continuum-Scale Modeling of Elasto-Plastic Deformation in Rechargeable Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A3418-A3425.	1.3	6
185	Revealing the Iron Oxides Mineral Core in Ferritin due to the Variations in the H and L Subunits. Microscopy and Microanalysis, 2017, 23, 1184-1185.	0.2	1
186	In situ cooling and heating study of VO 2 phase transition. Microscopy and Microanalysis, 2016, 22, 816-817.	0.2	0
187	Atomic Resolution Studies of W Dopants Effect on the Phase Transformation of VO2. Microscopy and Microanalysis, 2016, 22, 884-885.	0.2	1
188	In Situ TEM for Rechargeable Batteries. Microscopy and Microanalysis, 2016, 22, 758-759.	0.2	0
189	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.	0.2	0
190	Effect of Mechanical Stress on Lithiation and Sodiation Process. Microscopy and Microanalysis, 2016, 22, 1382-1383.	0.2	0
191	Characteristic Work Function Variations of Graphene Line Defects. ACS Applied Materials & Interfaces, 2016, 8, 18360-18366.	4.0	43
192	Highâ€Rate, Durable Sodiumâ€Ion Battery Cathode Enabled by Carbonâ€Coated Microâ€Sized Na₃V₂(PO₄)₃ Particles with Interconnected Vertical Nanowalls. Advanced Materials Interfaces, 2016, 3, 1500740.	1.9	46
193	Is there value in chemical modification of fish scale surfaces?. Journal of Applied Polymer Science, 2016, 133, .	1.3	5
194	Evidence of Splitting 1,2,3â€Triazole into an Alkyne and Azide by Low Mechanical Force in the Presence of Other Covalent Bonds. Chemistry - A European Journal, 2016, 22, 9760-9767.	1.7	11
195	Synthesis and Characterization of Paramagnetic Iron Nanoparticles with Minimal Gold Coating for Optimal Drug Delivery. Microscopy and Microanalysis, 2016, 22, 1096-1097.	0.2	0
196	Transmission Electron Microscopy Studies of Calcium Phosphate Biomineralization. Microscopy and Microanalysis, 2016, 22, 798-799.	0.2	0
197	In-situ TEM Investigation on Thermal Stability and Oxygen Release Behavior of Charged and Discharged LiCoO2. Microscopy and Microanalysis, 2016, 22, 844-845.	0.2	0
198	Spatially Resolved Electron Energy Loss Spectroscopy Studies in Graphene Liquid Cell for the Investigation of the Biomineralization Processes in Human Body. Microscopy and Microanalysis, 2016, 22, 806-807.	0.2	0

#	Article	IF	Citations
199	Stabilizing metastable tetragonal HfO₂ using a non-hydrolytic solution-phase route: ligand exchange as a means of controlling particle size. Chemical Science, 2016, 7, 4930-4939.	3.7	29
200	Systematic study on the discharge product of Pt-based lithium oxygen batteries. Journal of Power Sources, 2016, 332, 96-102.	4.0	20
201	Mesocarbon Microbead Carbon-Supported Magnesium Hydroxide Nanoparticles: Turning Spent Li-ion Battery Anode into a Highly Efficient Phosphate Adsorbent for Wastewater Treatment. ACS Applied Materials & Interfaces, 2016, 8, 21315-21325.	4.0	88
202	Platinumâ€Coated Hollow Graphene Nanocages as Cathode Used in Lithiumâ€Oxygen Batteries. Advanced Functional Materials, 2016, 26, 7626-7633.	7.8	88
203	In Situ Transmission Electron Microscopy Observation of Sodiationâ€“Desodiation in a Long Cycle, High-Capacity Reduced Graphene Oxide Sodium-Ion Battery Anode. Chemistry of Materials, 2016, 28, 6528-6535.	3.2	79
204	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. Nature Communications, 2016, 7, 13374.	5.8	180
205	Freestanding three-dimensional coreâ€“shell nanoarrays for lithium-ion battery anodes. Nature Communications, 2016, 7, 11774.	5.8	143
206	Localized Mechanical Stress Induced Ionic Redistribution in a Layered LiCoO₂ Cathode. ACS Applied Materials & Interfaces, 2016, 8, 29391-29399.	4.0	7
207	Elucidation of Structure and Chemistry of Iron Core in Human Heart Ferritin via Graphene Liquid Cell. Microscopy and Microanalysis, 2016, 22, 800-801.	0.2	1
208	Ultrafast and Highly Reversible Sodium Storage in Zincâ€Antimony Intermetallic Nanomaterials. Advanced Functional Materials, 2016, 26, 543-552.	7.8	81
209	Creasable Batteries: Understanding Failure Modes through Dynamic Electrochemical Mechanical Testing. ACS Applied Materials & Interfaces, 2016, 8, 5196-5204.	4.0	28
210	Selective Ionic Transport Pathways in Phosphorene. Nano Letters, 2016, 16, 2240-2247.	4.5	79
211	Atomistic Insights into the Oriented Attachment of Tunnel-Based Oxide Nanostructures. ACS Nano, 2016, 10, 539-548.	7.3	66
212	Dynamic studies of solution-based reactions using operando TEM. Microscopy and Microanalysis, 2015, 21, 263-264.	0.2	0
213	In situ TEM Observation of Lithiation and Sodiation Process of ZnO Nanowire. Microscopy and Microanalysis, 2015, 21, 1371-1372.	0.2	2
214	Can Na+ Transport Faster Than Li+ inside Zn-Sb Intermetallic Nanomaterials?. Microscopy and Microanalysis, 2015, 21, 1195-1196.	0.2	2
215	In Situ TEM Studies of Li and Na ion Transport and Li/Na-Induced Phase Transitions in Crystalline Materials. Microscopy and Microanalysis, 2015, 21, 1189-1190.	0.2	0
216	Capacity retention behavior and morphology evolution of Si_xGe_{1â^'x}nanoparticles as lithium-ion battery anode. Nanotechnology, 2015, 26, 255702.	1.3	13

#	Article	IF	Citations
217	Improve First-Cycle Efficiency and Rate Performance of Layered-Layered Li_{1.2}Mn_{0.6}Ni_{0.2}O₂Using Oxygen Stabilizing Dopant. ACS Applied Materials & Interfaces, 2015, 7, 16040-16045.	4.0	42
218	Asynchronous Crystal Cell Expansion during Lithiation of K⁺-Stabilized Î±-MnO₂. Nano Letters, 2015, 15, 2998-3007.	4.5	161
219	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO₂ Nanowires. Nano Letters, 2015, 15, 7179-7188.	4.5	52
220	Preformed Seeds Modulate Native Insulin Aggregation Kinetics. Journal of Physical Chemistry B, 2015, 119, 15089-15099.	1.2	13
221	Twin Boundary-Assisted Lithium Ion Transport. Nano Letters, 2015, 15, 610-615.	4.5	80
222	Evolution of Lattice Structure and Chemical Composition of the Surface Reconstruction Layer in Li_{1.2}Ni_{0.2}Mn_{0.6}O₂ Cathode Material for Lithium Ion Batteries. Nano Letters, 2015, 15, 514-522.	4.5	261
223	Facile electrochemical synthesis of antimicrobial TiO2 nanotube arrays. International Journal of Nanomedicine, 2014, 9, 5177.	3.3	18
224	Modification of a single-molecule AFM probe with highly defined surface functionality. Beilstein Journal of Nanotechnology, 2014, 5, 2122-2128.	1.5	5
225	Thermoelectric properties of large-scale Zn3P2nanowire assemblies. Nanotechnology, 2014, 25, 145401.	1.3	15
226	Insight into Sulfur Reactions in Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2014, 6, 21938-21945.	4.0	120
227	Direct Evidence of Lithium-Induced Atomic Ordering in Amorphous TiO₂ Nanotubes. Chemistry of Materials, 2014, 26, 1660-1669.	3.2	75
228	Origin of the Phase Transition in Lithiated Molybdenum Disulfide. ACS Nano, 2014, 8, 11447-11453.	7.3	111
229	Lithiation-Induced Shuffling of Atomic Stacks. Nano Letters, 2014, 14, 5301-5307.	4.5	18
230	In-situ TEM Study on Electrochemical Behavior of Î±-MnO₂ Nanowire. Microscopy and Microanalysis, 2014, 20, 496-497.	0.2	2
231	Composite of LiFePO₄ with Titanium Phosphate Phases as Lithium-Ion Battery Electrode Material. Journal of Physical Chemistry C, 2013, 117, 21132-21138.	1.5	11
232	Structural inhomogeneity and piezoelectric enhancement in ZnO nanobelts. Applied Physics A: Materials Science and Processing, 2012, 109, 95-100.	1.1	20
233	Self-assembly of LiFePO4 nanodendrites in a novel system of ethylene glycolâ€“water. Journal of Crystal Growth, 2010, 312, 3493-3502.	0.7	45