Yuzi Liu

List of Publications by Citations

187 papers	6,308 citations	39 h-index	72 g-index
199 ext. papers	7,777 ext. citations	10.7 avg, IF	5.98 L-index

#	Paper	IF	Citations
187	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. *Nature Energy*, **2018**, 3, 739-746	62.3	466
186	Making Li-metal electrodes rechargeable by controlling the dendrite growth direction. *Nature Energy*, **2017**, 2,	62.3	260
185	Morphological and crystalline evolution of nanostructured MnO2 and its application in lithium--air batteries. *ACS Nano*, **2012**, 6, 8067-77	16.7	239
184	Nanostructured Black Phosphorus/Ketjenblack-Multiwalled Carbon Nanotubes Composite as High Performance Anode Material for Sodium-Ion Batteries. *Nano Letters*, **2016**, 16, 3955-65	11.5	208
183	Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. *Nature Energy*, **2019**, 4, 484-494	62.3	190
182	Facet-dependent active sites of a single Cu2O particle photocatalyst for CO2 reduction to methanol. *Nature Energy*, **2019**, 4, 957-968	62.3	170
181	In situ visualization of self-assembly of charged gold nanoparticles. *Journal of the American Chemical Society*, **2013**, 135, 3764-7	16.4	164
180	Highly selective electrocatalytic CO2 reduction to ethanol by metallic clusters dynamically formed from atomically dispersed copper. *Nature Energy*, **2020**, 5, 623-632	62.3	159
179	Heterogeneous nucleation and shape transformation of multicomponent metallic nanostructures. *Nature Materials*, **2015**, 14, 215-23	27	155
178	Ru Nanoframes with an fcc Structure and Enhanced Catalytic Properties. *Nano Letters*, **2016**, 16, 2812-7	11.5	148
177	Nanostructured Layered Cathode for Rechargeable Mg-Ion Batteries. *ACS Nano*, **2015**, 9, 8194-205	16.7	144
176	Understanding Pt Nanoparticle Anchoring on Graphene Supports through Surface Functionalization. *ACS Catalysis*, **2016**, 6, 2642-2653	13.1	133
175	Enhancing the Photon- and Gas-Sensing Properties of a Single SnO 2 Nanowire Based Nanodevice by Nanoparticle Surface Functionalization. *Journal of Physical Chemistry C*, **2008**, 112, 11539-11544	3.8	121
174	Insights into the structural effects of layered cathode materials for high voltage sodium-ion batteries. *Energy and Environmental Science*, **2017**, 10, 1677-1693	35.4	111
173	Elastic Properties and Buckling of Silicon Nanowires. *Advanced Materials*, **2008**, 20, 3919-3923	24	108
172	Ambient-stable tetragonal phase in silver nanostructures. *Nature Communications*, **2012**, 3, 971	17.4	106
171	Nanostructured TiO2/Polypyrrole for Visible Light Photocatalysis. *Journal of Physical Chemistry C*, **2013**, 117, 15540-15544	3.8	102

170	Superstructures generated from truncated tetrahedral quantum dots. *Nature*, **2018**, 561, 378-382	50.4	98
169	Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. *Nano Letters*, **2017**, 17, 1512-1519	13	93
168	Li2S encapsulated by nitrogen-doped carbon for lithium sulfur batteries. *Journal of Materials Chemistry A*, **2014**, 2, 18026-18032	13	86
167	Solid-Solution CrCoCuFeNi High-Entropy Alloy Thin Films Synthesized by Sputter Deposition. *Materials Research Letters*, **2015**, 3, 203-209	7.4	84
166	Efficient photocatalytic H2 production via rational design of synergistic spatially-separated dual cocatalysts modified Mn0.5Cd0.5S photocatalyst under visible light irradiation. *Chemical Engineering Journal*, **2018**, 337, 480-487	14.7	69
165	Lead-Free CsCuSbCl Layered Double Perovskite Nanocrystals. *Journal of the American Chemical Society*, **2020**, 142, 11927-11936	16.4	66
164	Visualization of the magnetic structure of sculpted three-dimensional cobalt nanospirals. *Nano Letters*, **2014**, 14, 759-64	11.5	62
163	Synthesis of SmCo and SmCo/Fe nanocrystals by reductive annealing of nanoparticles. *Journal of Alloys and Compounds*, **2011**, 509, 2132-2136	5.7	51
162	Visualizing Redox Dynamics of a Single Ag/AgCl Heterogeneous Nanocatalyst at Atomic Resolution. *ACS Nano*, **2016**, 10, 3738-46	16.7	49
161	Hollow Silicon Nanospheres Encapsulated with a Thin Carbon Shell: An Electrochemical Study. *Electrochimica Acta*, **2016**, 215, 126-141	6.7	47
160	Binary Transition-Metal Oxide Hollow Nanoparticles for Oxygen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2018**, 10, 24715-24724	9.5	47
159	Hierarchical polybenzimidazole-grafted graphene hybrids as supports for Pt nanoparticle catalysts with excellent PEMFC performance. *Nano Energy*, **2015**, 16, 281-292	17.1	46
158	PVP-Assisted Synthesis of Uniform Carbon Coated Li2S/CB for High-Performance Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 25748-56	9.5	46
157	Photoinduced electron transfer pathways in hydrogen-evolving reduced graphene oxide-boosted hybrid nano-bio catalyst. *ACS Nano*, **2014**, 8, 7995-8002	16.7	46
156	Highly Asymmetric, Interfaced Dimers Made of Au Nanoparticles and Bimetallic Nanoshells: Synthesis and Photo-Enhanced Catalysis. *Advanced Functional Materials*, **2014**, 24, 2828-2836	15.6	44
155	Evolution of self-assembled ZnTe magic-sized nanoclusters. *Journal of the American Chemical Society*, **2015**, 137, 742-9	16.4	43
154	Hydrogenolysis of 5-hydroxymethylfurfural to 2,5-dimethylfuran over supported PtCo bimetallic catalysts under mild conditions. *Green Chemistry*, **2018**, 20, 2894-2902	10	43
153	X-ray micro-beam characterization of lattice rotations and distortions due to an individual dislocation. *Nature Communications*, **2013**, 4, 2774	17.4	42

152	Solid-State Lithium/Selenium□Sulfur Chemistry Enabled via a Robust Solid-Electrolyte Interphase. *Advanced Energy Materials*, **2019**, 9, 1802235	21.8	42
151	LiNiO/Ni Heterostructure with Strong Basic Lattice Oxygen Enables Electrocatalytic Hydrogen Evolution with Pt-like Activity. *Journal of the American Chemical Society*, **2020**, 142, 12613-12619	16.4	41
150	Quantifying the Nucleation and Growth Kinetics of Microwave Nanochemistry Enabled by in Situ High-Energy X-ray Scattering. *Nano Letters*, **2016**, 16, 715-20	11.5	41
149	Revealing mechanism responsible for structural reversibility of single-crystal VO2 nanorods upon lithiation/delithiation. *Nano Energy*, **2017**, 36, 197-205	17.1	40
148	Unprecedented non-hysteretic superelasticity of [001]-oriented NiCoFeGa single crystals. *Nature Materials*, **2020**, 19, 712-718	27	39
147	High thermal stability of carbon-coated L10-FePt nanoparticles prepared by salt-matrix annealing. *Journal of Applied Physics*, **2008**, 103, 07E131	2.5	39
146	Magnetoresistance and anomalous Hall effect in magnetic ZnO films. *Journal of Applied Physics*, **2007**, 101, 063918	2.5	39
145	Highly Reversible Sodiation/Desodiation from a Carbon-Sandwiched SnS Nanosheet Anode for Sodium Ion Batteries. *Nano Letters*, **2020**, 20, 3844-3851	11.5	37
144	Variability and origins of grain boundary electric potential detected by electron holography and atom-probe tomography. *Nature Materials*, **2020**, 19, 887-893	27	37
143	Atomic layer deposited Pt-Co bimetallic catalysts for selective hydrogenation of □,□-unsaturated aldehydes to unsaturated alcohols. *Journal of Catalysis*, **2018**, 366, 61-69	7.3	37
142	Electrostatic Self-Assembly Enabling Integrated Bulk and Interfacial Sodium Storage in 3D Titania-Graphene Hybrid. *Nano Letters*, **2018**, 18, 336-346	11.5	37
141	Birnessite-type MnO2 nanosheets with layered structures under high pressure: elimination of crystalline stacking faults and oriented laminar assembly. *Small*, **2015**, 11, 300-5	11	36
140	Material Dimensionality Effects on Electron Transfer Rates Between CsPbBr and CdSe Nanoparticles. *Nano Letters*, **2018**, 18, 4771-4776	11.5	36
139	Li-ion battery material under high pressure: amorphization and enhanced conductivity of LiTiO. *National Science Review*, **2019**, 6, 239-246	10.8	35
138	An All-Ceramic, Anisotropic, and Flexible Aerogel Insulation Material. *Nano Letters*, **2020**, 20, 3828-3835	11.5	33
137	Electron beam induced evolution in Au, Ag, and interfaced heterogeneous Au/Ag nanoparticles. *Nanoscale*, **2015**, 7, 13687-93	7.7	32
136	A Low-Current and Analog Memristor with Ru as Mobile Species. *Advanced Materials*, **2020**, 32, e1904599	24	32
135	A practical phosphorus-based anode material for high-energy lithium-ion batteries. *Nano Energy*, **2020**, 74, 104849	17.1	32

134	Controlling Nanoparticle Orientations in the Self-Assembly of Patchy Quantum Dot-Gold Heterostructural Nanocrystals. *Journal of the American Chemical Society*, **2019**, 141, 6013-6021	16.4	31
133	Microstructure analysis of a SmCo/Fe exchange spring bilayer. *Applied Physics Letters*, **2008**, 93, 192502	3.4	30
132	In Situ Focused Ion Beam Scanning Electron Microscope Study of Microstructural Evolution of Single Tin Particle Anode for Li-Ion Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 1733-1738	9.5	30
131	Polyvinylpyrrolidone (PVP)-Capped Pt Nanocubes with Superior Peroxidase-Like Activity. *ChemNanoMat*, **2017**, 3, 33-38	3.5	29
130	Enhanced spin signals due to native oxide formation in Ni80Fe20/Ag lateral spin valves. *Applied Physics Letters*, **2010**, 97, 112502	3.4	29
129	H3PO4 treatment to enhance the electrochemical properties of Li(Ni1/3Mn1/3Co1/3)O2 and Li(Ni0.5Mn0.3Co0.2)O2 cathodes. *Electrochimica Acta*, **2019**, 301, 8-22	6.7	28
128	Semi-artificial Photosynthetic CO Reduction through Purple Membrane Re-engineering with Semiconductor. *Journal of the American Chemical Society*, **2019**, 141, 11811-11815	16.4	26
127	Synthesis and performance of nanostructured silicon/graphite composites with a thin carbon shell and engineered voids. *Electrochimica Acta*, **2017**, 258, 274-283	6.7	26
126	Perpendicular anisotropy dependence of oscillatory interlayer coupling behavior in [Pt/Co]5/Ru/[Co/Pt]5 multilayers. *Journal of Applied Physics*, **2008**, 104, 023911	2.5	25
125	Enhanced hardness in B-doped ZnO thin films on fused quartz substrates by pulsed-laser deposition. *Applied Surface Science*, **2006**, 253, 726-729	6.7	25
124	Li-Substituted Layered Spinel Cathode Material for Sodium Ion Batteries. *Chemistry of Materials*, **2018**, 30, 8145-8154	9.6	25
123	Bottom-up, hard template and scalable approaches toward designing nanostructured Li2S for high performance lithium sulfur batteries. *Nanoscale*, **2015**, 7, 18071-80	7.7	24
122	Investigations of Si Thin Films as Anode of Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 3487-3494	9.5	24
121	Redox Catalytic and Quasi-Solid Sulfur Conversion for High-Capacity Lean Lithium Sulfur Batteries. *ACS Nano*, **2019**, 13, 14540-14548	16.7	24
120	Mesoporous Colloidal Superparticles of Platinum-Group Nanocrystals with Surfactant-Free Surfaces and Enhanced Heterogeneous Catalysis. *Advanced Functional Materials*, **2015**, 25, 1638-1647	15.6	23
119	Elevated Temperature Photophysical Properties and Morphological Stability of CdSe and CdSe/CdS Nanoplatelets. *Journal of Physical Chemistry Letters*, **2018**, 9, 286-293	6.4	23
118	Do thermal fluctuations influence the recoil loops of nanocomposite magnets?. *Applied Physics Letters*, **2008**, 93, 042508	3.4	23
117	Disket-Nanorings of K2Ti6O13 Formed by Self-Spiraling of a Nanobelt. *Journal of Physical Chemistry C*, **2008**, 112, 7547-7551	3.8	22

116	Ultrafine Pt cluster and RuO2 heterojunction anode catalysts designed for ultra-low Pt-loading anion exchange membrane fuel cells. *Nanoscale Horizons*, **2020**, 5, 316-324	10.8	22
115	Oxidation Studies of High-Entropy Alloy Nanoparticles. *ACS Nano*, **2020**, 14, 15131-15143	16.7	22
114	Oxidation Induced Doping of Nanoparticles Revealed by in Situ X-ray Absorption Studies. *Nano Letters*, **2016**, 16, 3738-47	11.5	22
113	Insights into the Distinct Lithiation/Sodiation of Porous Cobalt Oxide by in Operando Synchrotron X-ray Techniques and Ab Initio Molecular Dynamics Simulations. *Nano Letters*, **2017**, 17, 953-962	11.5	21
112	Photoinitiated [corrected] charge separation in a hybrid titanium dioxide metalloporphyrin peptide material. *Nature Communications*, **2014**, 5, 4606	17.4	21
111	Kinetic pathway of palladium nanoparticle sulfidation process at high temperatures. *Nano Letters*, **2013**, 13, 4893-901	11.5	21
110	Disordered 3 D Multi-layer Graphene Anode Material from CO2 for Sodium-Ion Batteries. *ChemSusChem*, **2016**, 9, 1397-402	8.3	21
109	A revisit to atomic layer deposition of zinc oxide using diethylzinc and water as precursors. *Journal of Materials Science*, **2019**, 54, 5236-5248	4.3	21
108	Selenium Nanocomposite Cathode with Long Cycle Life for Rechargeable Lithium-Selenium Batteries. *Batteries and Supercaps*, **2019**, 2, 784-791	5.6	20
107	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. *Nature Communications*, **2020**, 11, 6373	17.4	20
106	A mechanistic study of mesoporous TiO2 nanoparticle negative electrode materials with varying crystallinity for lithium ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 3333-3343	13	20
105	Silicon compatible Sn-based resistive switching memory. *Nanoscale*, **2018**, 10, 9441-9449	7.7	20
104	Glancing-incidence focussed ion beam milling: A coherent X-ray diffraction study of 3D nano-scale lattice strains and crystal defects. *Acta Materialia*, **2018**, 154, 113-123	8.4	20
103	Tunable and rapid self-assembly of block copolymers using mixed solvent vapors. *Nanoscale*, **2014**, 6, 15216-21	7.7	20
102	Insight into the Structural Evolution of a High-Voltage Spinel for Lithium-Ion Batteries. *Chemistry of Materials*, **2014**, 26, 4750-4756	9.6	20
101	Silicon Nanoparticles: Stability in Aqueous Slurries and the Optimization of the Oxide Layer Thickness for Optimal Electrochemical Performance. *ACS Applied Materials & Interfaces*, **2017**, 9, 32727-32736	9.5	20
100	Novel chemoresistive CH4 sensor with 10 ppm sensitivity based on multiwalled carbon nanotubes functionalized with SnO2 nanocrystals. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 01A131	2.9	20
99	High-Performance High-Loading Lithium–Sulfur Batteries by Low Temperature Atomic Layer Deposition of Aluminum Oxide on Nanophase S Cathodes. *Advanced Materials Interfaces*, **2017**, 4, 1700096	4.6	19

98	Stabilized Electrode/Electrolyte Interphase by a Saturated Ionic Liquid Electrolyte for High-Voltage NMC532/Si-Graphite Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 23035-23045	9.5	19
97	Synthesis of uniformly distributed single- and double-sided zinc oxide (ZnO) nanocombs. *Journal of Crystal Growth*, **2015**, 430, 34-40	1.6	18
96	Improved cyclability of a lithium–sulfur battery using POP–sulfur composite materials. *RSC Advances*, **2014**, 4, 27518-27521	3.7	18
95	Effect of hydrogen flow during cooling phase to achieve uniform and repeatable growth of bilayer graphene on copper foils over large area. *Carbon*, **2014**, 77, 341-350	10.4	18
94	Boosting Superior Lithium Storage Performance of Alloy-Based Anode Materials via Ultraconformal Sb Coating–Derived Favorable Solid-Electrolyte Interphase. *Advanced Energy Materials*, **2020**, 10, 1903186	21.8	18
93	In situ and operando investigation of the dynamic morphological and phase changes of a selenium-doped germanium electrode during (de)lithiation processes. *Journal of Materials Chemistry A*, **2020**, 8, 750-759	13	17
92	Stress- and Interface-Compatible Red Phosphorus Anode for High-Energy and Durable Sodium-Ion Batteries. *ACS Energy Letters*, **2021**, 6, 547-556	20.1	17
91	Amorphous boron nanorod as an anode material for lithium-ion batteries at room temperature. *Nanoscale*, **2017**, 9, 10757-10763	7.7	16
90	Magnetic Damping Modulation in IrMn_{3}/Ni_{80}Fe_{20} via the Magnetic Spin Hall Effect. *Physical Review Letters*, **2020**, 124, 087204	7.4	16
89	Capacity Fading Mechanism and Improvement of Cycling Stability of the SiO Anode for Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2018**, 165, A2102-A2107	3.9	16
88	Visualization of magnetic domain structure changes induced by interfacial strain in CoFe2O4/BaTiO3 heterostructures. *Journal Physics D: Applied Physics*, **2013**, 46, 055001	3	16
87	Fabrication and characterization of high quality n-ZnO/p-GaN heterojunction light emission diodes. *Thin Solid Films*, **2011**, 520, 445-447	2.2	16
86	In Situ Small-Angle X-ray Scattering from Pd Nanoparticles Formed by Thermal Decomposition of Organo-Pd Catalyst Precursors Dissolved in Hydrocarbons. *Journal of Physical Chemistry C*, **2013**, 117, 22627-22635	3.8	15
85	A novel multifunctional NiTi/Ag hierarchical composite. *Scientific Reports*, **2014**, 4, 5267	4.9	15
84	Effects of elemental distributions on the behavior of MgO-based magnetic tunnel junctions. *Journal of Applied Physics*, **2011**, 109, 103909	2.5	15
83	Effect of annealing and applied bias on barrier shape in CoFe/MgO/CoFe tunnel junctions. *Physical Review B*, **2011**, 83,	3.3	15
82	Co location and valence state determination in ferromagnetic ZnO:Co thin films by atom-location-by-channeling-enhanced-microanalysis electron energy-loss spectroscopy. *Applied Physics Letters*, **2007**, 90, 154101	3.4	15
81	Amorphous and crystalline TiO2 nanoparticle negative electrodes for sodium-ion batteries. *Electrochimica Acta*, **2019**, 321, 134723	6.7	14

80	Tunable LiAlO2/Al2O3 Coating through a Wet-Chemical Method To Improve Cycle Stability of Nano-LiCoO2. *ACS Applied Energy Materials*, **2019**, 2, 3098-3113	6.1	13
79	In Situ Focused Ion Beam-Scanning Electron Microscope Study of Crack and Nanopore Formation in Germanium Particle During (De)lithiation. *ACS Applied Energy Materials*, **2019**, 2, 2441-2446	6.1	13
78	Dynamic Lithium Intercalation/Deintercalation in 18650 Lithium Ion Battery by Time-Resolved High Energy Synchrotron X-Ray Diffraction. *Journal of the Electrochemical Society*, **2015**, 162, A2195-A2200	3.9	13
77	Nanocrystallization in Fluorochlorozirconate Glass-Ceramics. *Journal of the American Ceramic Society*, **2013**, 96, 3617-3621	3.8	13
76	Interfacial control of LaAlO3 films deposited on Si (100) using a thin LaAlSiO silicate film as the barrier layer. *Thin Solid Films*, **2006**, 515, 2722-2725	2.2	13
75	Tunable room-temperature ferromagnetism in Co-doped two-dimensional van der Waals ZnO. *Nature Communications*, **2021**, 12, 3952	17.4	13
74	Hydrogen bonding directed co-assembly of polyoxometalates and polymers to core–shell nanoparticles. *Materials Chemistry Frontiers*, **2018**, 2, 2070-2075	7.8	13
73	Solution Blowing Synthesis of Li-Conductive Ceramic Nanofibers. *ACS Applied Materials & Interfaces*, **2020**, 12, 16200-16208	9.5	12
72	Effect of proton irradiation on anatase TiO2 nanotube anodes for lithium-ion batteries. *Journal of Materials Science*, **2019**, 54, 13221-13235	4.3	12
71	Enhanced magnetoresistance in naturally oxidized MgO-based magnetic tunnel junctions with ferromagnetic CoFe/CoFeB bilayers. *Applied Physics Letters*, **2011**, 98, 232506	3.4	12
70	Spatial and Temporal Analysis of Sodium-Ion Batteries. *ACS Energy Letters*, **2021**, 6, 4023-4054	20.1	12
69	Synthesis of Highly Dispersed and Highly Stable Supported Au–Pt Bimetallic Catalysts by a Two-Step Method. *Catalysis Letters*, **2016**, 146, 2606-2613	2.8	11
68	Structure-property relationships in self-assembled metalorganic chemical vapor deposition–grown CoFe2O4–PbTiO3 multiferroic nanocomposites using three-dimensional characterization. *Journal of Applied Physics*, **2011**, 110, 034103	2.5	11
67	Rapid photoresponse of single-crystalline selenium nanobelts. *Solid State Communications*, **2008**, 148, 145-147	1.6	11
66	Inversion domain boundary in a ZnO film. *Philosophical Magazine Letters*, **2007**, 87, 687-693	1	11
65	In Situ Construction of an Ultrarobust and Lithiophilic Li-Enriched Li–N Nanoshield for High-Performance Ge-Based Anode Materials. *ACS Energy Letters*, **2020**, 5, 3490-3497	20.1	11
64	Strain Recovery and Defect Characterization in Mg-Implanted Homoepitaxial GaN on High-Quality GaN Substrates. *Physica Status Solidi (B): Basic Research*, **2020**, 257, 1900705	1.3	10
63	A stable rhodium single-site catalyst encapsulated within dendritic mesoporous nanochannels. *Nanoscale*, **2018**, 10, 1047-1055	7.7	10

62	Synergistic Multisites FeMoS Electrocatalysts for Ambient Nitrogen Conversion to Ammonia. *ACS Nano*, **2021**, 15, 16887-16895	16.7	10
61	Carbon Free and Noble Metal Free Ni2Mo6S8 Electrocatalyst for Selective Electrosynthesis of H2O2. *Advanced Functional Materials*, **2021**, 31, 2104716	15.6	10
60	Revealing Sintering Kinetics of MoS-Supported Metal Nanocatalysts in Atmospheric Gas Environments Transmission Electron Microscopy. *ACS Nano*, **2020**, 14, 4074-4086	16.7	9
59	In situ TEM study of reversible and irreversible electroforming in Pt/Ti:NiO/Pt heterostructures. *Physica Status Solidi - Rapid Research Letters*, **2015**, 9, 301-306	2.5	9
58	Thermal transformation of MnO2 nanoflowers studied by in-situ TEM. *Science China Chemistry*, **2012**, 55, 2346-2352	7.9	9
57	Formation of metastable MgO structures on type-III oxide surfaces: Effect of periodic out-of-plane electric dipole moment of substrates. *Journal of Crystal Growth*, **2009**, 311, 425-428	1.6	9
56	The 30 rotation domains in wurtzite ZnO films. *Journal of Crystal Growth*, **2006**, 290, 631-636	1.6	9
55	Lithium Assisted Dissolution Alloying Synthesis of Nanoalloys from Individual Bulk Metals. *Chemistry of Materials*, **2016**, 28, 2267-2277	9.6	9
54	Microstructure and polarity of epitaxial ZnO films grown on LSAT(111) substrate studied by transmission electron microscopy. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 339, 497-502	2.3	8
53	Morphological Control of Chromophore Spin State in Zinc Porphyrin-Peptide Assemblies. *Journal of the American Chemical Society*, **2020**, 142, 233-241	16.4	8
52	Bottom-up direct writing approach for controlled fabrication of WS2/MoS2 heterostructure systems. *RSC Advances*, **2016**, 6, 66589-66594	3.7	8
51	Revealing High-Temperature Reduction Dynamics of High-Entropy Alloy Nanoparticles Transmission Electron Microscopy. *Nano Letters*, **2021**, 21, 1742-1748	11.5	8
50	In Situ Monitoring of the Growth of Nickel, Manganese, and Cobalt Hydroxide Precursors during Co-Precipitation Synthesis of Li-Ion Cathode Materials. *Journal of the Electrochemical Society*, **2018**, 165, A3077-A3083	3.9	8
49	Electrochemically induced amorphous-to-rock-salt phase transformation in niobium oxide electrode for Li-ion batteries.. *Nature Materials*, **2022**,	27	8
48	Metastable rocksalt ZnO interfacial layer and its influence on polarity selection of Zn-polar ZnO films. *Journal of Crystal Growth*, **2010**, 312, 263-266	1.6	7
47	Engineering the Si Anode Interface via Particle Surface Modification: Embedded Organic Carbonates Lead to Enhanced Performance. *ACS Applied Energy Materials*, **2021**, 4, 8193-8200	6.1	7
46	Structural underpinnings of cathode protection by in situ generated lithium oxyfluorophosphates. *Journal of Power Sources*, **2019**, 438, 227039	8.9	6
45	Crack-Free Silicon Monoxide as Anodes for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 57141-57145	9.5	6

44	Synergetic effect of carbon and AlF3 coatings on the lithium titanium oxide anode material for high power lithium-ion batteries. *Journal of Electroanalytical Chemistry*, **2019**, 837, 240-245	4.1	5
43	In Situ and Operando Morphology Study of Germanium–Selenium Alloy Anode for Lithium-Ion Batteries. *ACS Applied Energy Materials*, **2020**, 3, 6115-6120	6.1	5
42	Unexpected compositional and structural modification of CoPt nanoparticles by extensive surface purification. *Nanoscale*, **2018**, 10, 6382-6392	7.7	5
41	Leakage current suppression in solution-deposited barium titanate films on copper foils. *Journal of Materials Science: Materials in Electronics*, **2012**, 23, 901-908	2.1	5
40	Secondary growth of small ZnO tripodlike arms on the end of nanowires. *Applied Physics Letters*, **2007**, 91, 013106	3.4	5
39	Quantifying mean inner potential of ZnO nanowires by off-axis electron holography. *Micron*, **2015**, 78, 67-72	2.3	4
38	Evaluation of the microstructure and property of TiNi SMA prepared using VIM in BaZrO3 crucible. *Vacuum*, **2019**, 168, 108843	3.7	4
37	Investigation towards scalable processing of silicon/graphite nanocomposite anodes with good cycle stability and specific capacity. *Nano Materials Science*, **2020**, 2, 297-308	10.2	4
36	Anisotropic Transient Disordering of Colloidal, Two-Dimensional CdSe Nanoplatelets upon Optical Excitation. *Nano Letters*, **2021**, 21, 1288-1294	11.5	4
35	One-Step Chemical Vapor Deposition Synthesis of Hierarchical Ni and N Co-Doped Carbon Nanosheet/Nanotube Hybrids for Efficient Electrochemical CO2 Reduction at Commercially Viable Current Densities. *ACS Catalysis*, **2021**, 11, 10333-10344	13.1	4
34	Blade-Type Reaction Front in Micrometer-Sized Germanium Particles during Lithiation. *ACS Applied Materials & Interfaces*, **2020**, 12, 47574-47579	9.5	3
33	A macromolecular assembly directed ceramic aerogel monolith material. *Journal of Materials Chemistry C*, **2020**, 8, 10319-10324	7.1	3
32	Size-dependent phase transition of Er2O3 under high pressure. *Applied Physics Letters*, **2018**, 112, 143102	3.4	3
31	Synthesis of lamellar niobic acid nanorods via proton-exchange and their conversion to T-Nb2O5 nanorods. *Ceramics International*, **2012**, 38, 861-865	5.1	3
30	Native lattice strain induced structural earthquake in sodium layered oxide cathodes.. *Nature Communications*, **2022**, 13, 436	17.4	3
29	Microfluidic, One-Batch Synthesis of Pd Nanocrystals on N-Doped Carbon in Surfactant-Free Deep Eutectic Solvents for Formic Acid Electrochemical Oxidation. *ACS Applied Materials & Interfaces* , **2020**, 12, 42704-42710	9.5	3
28	In-Situ Characterization of Dynamic Morphological and Phase Changes of Selenium-doped Germanium Using a Single Particle Cell and Synchrotron Transmission X-ray Microscopy. *ChemSusChem*, **2021**, 14, 1370-1376	8.3	3
27	Transfer of Graphene with Protective Oxide Layers. *ChemEngineering*, **2018**, 2, 58	2.6	3

26	Investigations on the effect of current density on SiO/Si composite electrodes. *Electrochimica Acta*, **2021**, 393, 139072	6.7	3
25	Synthesis and Characterization of Bio-Active GFP-P4VP Core–Shell Nanoparticles. *Catalysts*, **2020**, 10, 627	4	2
24	Unusual Reduction of Graphene Oxide by Titanium Dioxide Electrons Produced by Ionizing Radiation: Reaction Products and Mechanism. *Journal of Physical Chemistry C*, **2020**, 124, 5425-5435	3.8	2
23	Novel colloidal materials from functionalized polyoxometalates. *Inorganic Chemistry Communication*, **2017**, 84, 20-23	3.1	2
22	Experimental evidence of dipolar interaction in bilayer nanocomposite magnets. *Applied Physics A: Materials Science and Processing*, **2011**, 103, 1183-1187	2.6	2
21	Potential mapping of ZnO by off-axis electron holography. *Philosophical Magazine Letters*, **2007**, 87, 103-111		2
20	Measurement of specimen thickness by phase change determination in TEM. *Ultramicroscopy*, **2008**, 108, 1616-22	3.1	2
19	Synergistics of FeC and Fe on Mesoporous Fe-N-C Sulfur Host for Nearly Complete and Fast Lithium Polysulfide Conversion. *ACS Applied Materials & Interfaces*, **2021**, 13, 17791-17799	9.5	2
18	Selective volatile organic compound gas sensor based on carbon nanotubes functionalized with ZnO nanoparticles. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2021**, 39, 042803	1.3	2
17	Mask-free patterning and selective CVD-growth of 2D-TMDCs semiconductors. *Semiconductor Science and Technology*, **2019**, 34, 085010	1.8	1
16	A unique approach to accurately measure thickness in thick multilayers. *Journal of Synchrotron Radiation*, **2012**, 19, 425-7	2.4	1
15	Controlled growth of Zn-polar ZnO film on MgAl2O4(1 1 1) substrate using MgO buffer layer. *Journal Physics D: Applied Physics*, **2010**, 43, 085301	3	1
14	3-Dimensional Nanoscale Structural Characterization of Magnetic Tunnel Junction. *Microscopy and Microanalysis*, **2009**, 15, 1248-1249	0.5	1
13	Low-field positive and high-field negative magneto-resistances in multiphase Fe-oxide thin films at room temperature. *Science Bulletin*, **2007**, 52, 1607-1611		1
12	Silicon Microreactor as a Fast Charge, Long Cycle Life Anode with High Initial Coulombic Efficiency Synthesized via a Scalable Method. *ACS Applied Energy Materials*, **2021**, 4, 4744-4757	6.1	1
11	Visualization of Magnetization in CoFe Nanofibers by Lorentz TEM and Electron Holography. *Microscopy and Microanalysis*, **2016**, 22, 1692-1693	0.5	1
10	Hypoxia-induced biosynthesis of gold nanoparticles in the living brain. *Nanoscale*, **2019**, 11, 19285-19290	7.7	1
9	Lithium trapping in germanium nanopores during delithiation process. *Applied Materials Today*, **2021**, 24, 101140	6.6	1

8	Thermal dynamics of P2-Na0.67Ni0.33Mn0.67O2 cathode materials for sodium ion batteries studied by in situ analysis. *Journal of Materials Research*, **2022**, 37, 1156-1163	2.5	1
7	A Unified test for the Intercept of a Predictive Regression Model*. *Oxford Bulletin of Economics and Statistics*, **2021**, 83, 571-588	2.5	0
6	The effect of annealing on optical transmittance and structure of ZLANI fluorozirconate glass thin films. *Micron*, **2021**, 140, 102977	2.3	0
5	Three-dimensional characterization of near-field transducers by electron tomography. *Materials Characterization*, **2012**, 72, 104-110	3.9	
4	Operando Investigation of Energy Storage Material by FIB-SEM System. *Microscopy and Microanalysis*, **2020**, 26, 416-418	0.5	
3	Study of Functional Materials by Correlative Electron and Synchrotron X-ray Microscopy. *Microscopy and Microanalysis*, **2021**, 27, 364-366	0.5	
2	Operando Investigation of Energy Storage Material by FIB-SEM System. *Microscopy and Microanalysis*, **2021**, 27, 440-442	0.5	
1	Synchrotron X-Ray-Driven Nitrogen Reduction on an AgCu Thin Film. *Small*,2202720	11	