

Ju Li

List of Publications by Year in descending order

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547
papers

57,639
citations

807

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1527

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all docs

564
docs citations

564
times ranked

47083
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning of metal-ceramic wettability. <i>Journal of Materiomics</i> , 2022, 8, 195-203.	2.8	6
2	EML webinar overview: Elastic Strain Engineering for unprecedented properties. <i>Extreme Mechanics Letters</i> , 2022, 54, 101430.	2.0	5
3	Electrochemically stable lithium-ion and electron insulators (LEIs) for solid-state batteries. <i>Nano Research</i> , 2022, 15, 1213-1220.	5.8	4
4	Deep neural network battery life and voltage prediction by using data of one cycle only. <i>Applied Energy</i> , 2022, 306, 118134.	5.1	57
5	Effects of Elemental Modulation on Phase Purity and Electrochemical Properties of Co-free High-Entropy Spinel Oxide Anodes for Lithium-ion Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	48
6	Machine learning in nuclear materials research. <i>Current Opinion in Solid State and Materials Science</i> , 2022, 26, 100975.	5.6	42
7	Learning constitutive relations of plasticity using neural networks and full-field data. <i>Extreme Mechanics Letters</i> , 2022, 52, 101645.	2.0	2
8	In situ TEM visualization of LiF nanosheet formation on the cathode-electrolyte interphase (CEI) in liquid-electrolyte lithium-ion batteries. <i>Matter</i> , 2022, 5, 1235-1250.	5.0	56
9	Rejuvenation of plasticity via deformation graining in magnesium. <i>Nature Communications</i> , 2022, 13, 1060.	5.8	26
10	Cryo-Electron Tomography of Highly Deformable and Adherent Solid-Electrolyte Interphase Exoskeleton in Li-Metal Batteries with Ether-Based Electrolyte. <i>Advanced Materials</i> , 2022, 34, e2108252.	11.1	20
11	Charging sustainable batteries. <i>Nature Sustainability</i> , 2022, 5, 176-178.	11.5	70
12	Evidence of fifth- and higher-order phonon scattering entropy of zone-center optical phonons. <i>Physical Review B</i> , 2022, 105, .	1.1	10
13	Synthesizing Functional Ceramic Powders for Solid Oxide Cells in Minutes through Thermal Shock. <i>ACS Energy Letters</i> , 2022, 7, 1223-1229.	8.8	6
14	Pressureless two-step sintering of ultrafine-grained refractory metals: Tungsten-rhenium and molybdenum. <i>Journal of Materials Science and Technology</i> , 2022, 126, 203-214.	5.6	13
15	Cryo-Electron Tomography of Highly Deformable and Adherent Solid-Electrolyte Interphase Exoskeleton in Li-Metal Batteries with Ether-Based Electrolyte (Adv. Mater. 13/2022). <i>Advanced Materials</i> , 2022, 34, .	11.1	2
16	TeaNet: Universal neural network interatomic potential inspired by iterative electronic relaxations. <i>Computational Materials Science</i> , 2022, 207, 111280.	1.4	21
17	Intelligent disassembly of electric-vehicle batteries: a forward-looking overview. <i>Resources, Conservation and Recycling</i> , 2022, 182, 106207.	5.3	41
18	Dislocation-Mediated Hydride Precipitation in Zirconium. <i>Small</i> , 2022, 18, e2105881.	5.2	4

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19	Healing of donor defect states in monolayer molybdenum disulfide using oxygen-incorporated chemical vapour deposition. <i>Nature Electronics</i> , 2022, 5, 28-36.	13.1	44
20	Revitalizing interface in protonic ceramic cells by acid etch. <i>Nature</i> , 2022, 604, 479-485.	13.7	132
21	Ultralong one-dimensional plastic zone created in aluminum underneath a nanoscale indent. <i>Acta Materialia</i> , 2022, 232, 117944.	3.8	12
22	Acid-Induced Clay Electrolyte for Wide-Temperature-Range and Long-Cycle Proton Batteries. <i>Advanced Materials</i> , 2022, 34, e2202063.	11.1	16
23	Enhanced mobility of cations and anions in the redox state: The polaronium mechanism. <i>Acta Materialia</i> , 2022, 232, 117941.	3.8	14
24	Anodic Shock-Triggered Exsolution of Metal Nanoparticles from Perovskite Oxide. <i>Journal of the American Chemical Society</i> , 2022, 144, 7657-7666.	6.6	15
25	Battery degradation prediction against uncertain future conditions with recurrent neural network enabled deep learning. <i>Energy Storage Materials</i> , 2022, 50, 139-151.	9.5	61
26	Abnormal nonlinear optical responses on the surface of topological materials. <i>Npj Computational Materials</i> , 2022, 8, .	3.5	6
27	Charge-Discharge Mechanism of High-Entropy Co-Free Spinel Oxide Toward Li ⁺ Storage Examined Using Operando Quick-Scanning X-Ray Absorption Spectroscopy. <i>Advanced Science</i> , 2022, 9, .	5.6	28
28	Generalized Wilson loop method for nonlinear light-matter interaction. <i>Npj Quantum Materials</i> , 2022, 7, .	1.8	10
29	Transverse and Longitudinal Degradations in Ceramic Solid Electrolytes. <i>Chemistry of Materials</i> , 2022, 34, 5749-5765.	3.2	20
30	An Unbalanced Battle in Excellence: Revealing Effect of Ni/Co Occupancy on Water Splitting and Oxygen Reduction Reactions in Triple-Conducting Oxides for Protonic Ceramic Electrochemical Cells. <i>Small</i> , 2022, 18, .	5.2	16
31	Nonlinear nonreciprocal photocurrents under phonon dressing. <i>Physical Review B</i> , 2022, 106, .	1.1	3
32	Electrospinning-Based Strategies for Battery Materials. <i>Advanced Energy Materials</i> , 2021, 11, 2000845.	10.2	169
33	Lithium Manganese Spinel Cathodes for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2000997.	10.2	177
34	Ultra-Uniform Nanocrystalline Materials via Two-Step Sintering. <i>Advanced Functional Materials</i> , 2021, 31, .	7.8	41
35	Coarse-grained reduced Mo Ti _{1-x} Nb ₂ O ₇ + anodes for high-rate lithium-ion batteries. <i>Energy Storage Materials</i> , 2021, 34, 574-581.	9.5	13
36	Carbon nanotube (CNT) metal composites exhibit greatly reduced radiation damage. <i>Acta Materialia</i> , 2021, 203, 116483.	3.8	23

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37	Additive manufacturing for energy: A review. <i>Applied Energy</i> , 2021, 282, 116041.	5.1	146
38	Chemical and structural origin of hole states in yttria-stabilized zirconia. <i>Acta Materialia</i> , 2021, 203, 116487.	3.8	15
39	Achieving large uniform tensile elasticity in microfabricated diamond. <i>Science</i> , 2021, 371, 76-78.	6.0	95
40	Additive stabilization of SEI on graphite observed using cryo-electron microscopy. <i>Energy and Environmental Science</i> , 2021, 14, 4882-4889.	15.6	73
41	The impact of hydrogen valence on its bonding and transport in molten fluoride salts. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1784-1794.	5.2	18
42	Analysis of SteraMist ionized hydrogen peroxide technology in the sterilization of N95 respirators and other PPE. <i>Scientific Reports</i> , 2021, 11, 2051.	1.6	34
43	Layer number dependent ferroelasticity in 2D Ruddlesden-Popper organic-inorganic hybrid perovskites. <i>Nature Communications</i> , 2021, 12, 1332.	5.8	28
44	Boosting photocatalytic hydrogen production from water by photothermally induced biphasic systems. <i>Nature Communications</i> , 2021, 12, 1343.	5.8	209
45	Colossal switchable photocurrents in topological Janus transition metal dichalcogenides. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	27
46	Interplay of Lithium Intercalation and Plating on a Single Graphite Particle. <i>Joule</i> , 2021, 5, 393-414.	11.7	168
47	Complex Structure of Molten NaCl-CrCl ₃ Salt: Cr-Cl Octahedral Network and Intermediate-Range Order. <i>ACS Applied Energy Materials</i> , 2021, 4, 3044-3056.	2.5	14
48	Porous Mixed Ionic Electronic Conductor Interlayers for Solid-State Batteries. <i>Energy Material Advances</i> , 2021, 2021, .	4.7	31
49	Effects of recoil spectra and electronic energy dissipation on defect survival in 3C-SiC. <i>Materialia</i> , 2021, 15, 101023.	1.3	7
50	Development of robust neural-network interatomic potential for molten salt. <i>Cell Reports Physical Science</i> , 2021, 2, 100359.	2.8	40
51	Reactive boride infusion stabilizes Ni-rich cathodes for lithium-ion batteries. <i>Nature Energy</i> , 2021, 6, 362-371.	19.8	274
52	Ultra-high-voltage Ni-rich layered cathodes in practical Li metal batteries enabled by a sulfonamide-based electrolyte. <i>Nature Energy</i> , 2021, 6, 495-505.	19.8	323
53	Hybrid diffusive-displacive helium outgassing in Cu/Nb multilayer composites. <i>Scripta Materialia</i> , 2021, 194, 113706.	2.6	10
54	Achieving room-temperature M2-phase VO ₂ nanowires for superior thermal actuation. <i>Nano Research</i> , 2021, 14, 4146-4153.	5.8	10

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55	Phase transitions in 2D materials. <i>Nature Reviews Materials</i> , 2021, 6, 829-846.	23.3	205
56	Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides. <i>Advanced Science</i> , 2021, 8, e2003832.	5.6	25
57	Poor Stability of Li_2CO_3 in the Solid Electrolyte Interphase of a Lithium-Metal Anode Revealed by Cryo-Electron Microscopy. <i>Advanced Materials</i> , 2021, 33, e2100404.	11.1	147
58	Self-Perpetuating Carbon Foam Microwave Plasma Conversion of Hydrocarbon Wastes into Useful Fuels and Chemicals. <i>Environmental Science & Technology</i> , 2021, 55, 6239-6247.	4.6	34
59	Switching of metal-oxygen hybridization for selective CO_2 electrohydrogenation under mild temperature and pressure. <i>Nature Catalysis</i> , 2021, 4, 274-283.	16.1	77
60	Machine learning for deep elastic strain engineering of semiconductor electronic band structure and effective mass. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	17
61	Tension-compression asymmetry in amorphous silicon. <i>Nature Materials</i> , 2021, 20, 1371-1377.	13.3	36
62	Determining the Criticality of Li-Excess for Disordered-Rocksalt Li-Ion Battery Cathodes. <i>Advanced Energy Materials</i> , 2021, 11, 2100204.	10.2	31
63	Modeling LiF and FLiBe Molten Salts with Robust Neural Network Interatomic Potential. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 24582-24592.	4.0	22
64	Air-Stable Li _x Al Foil as Free-Standing Electrode with Improved Electrochemical Ductility by Shot-Peening Treatment. <i>Advanced Functional Materials</i> , 2021, 31, 2100978.	7.8	17
65	Light-induced static magnetization: Nonlinear Edelstein effect. <i>Physical Review B</i> , 2021, 103, .	1.1	11
66	Dense Al-Electrochemically Active Electrodes for All-Solid-State Lithium Batteries. <i>Advanced Materials</i> , 2021, 33, e2008723.	11.1	26
67	Thermally Aged Li-Mn-O Cathode with Stabilized Hybrid Cation and Anion Redox. <i>Nano Letters</i> , 2021, 21, 4176-4184.	4.5	6
68	Ultralow contact resistance between semimetal and monolayer semiconductors. <i>Nature</i> , 2021, 593, 211-217.	13.7	579
69	Highly efficient parallel grand canonical simulations of interstitial-driven diffusion-deformation processes. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2021, 29, 055018.	0.8	0
70	Hollow-grained Voronoi foam-ceramics with high strength and thermal superinsulation up to 1400 °C. <i>Materials Today</i> , 2021, 46, 35-43.	8.3	14
71	Topological Phase Transition: Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides (<i>Adv. Sci.</i> 12/2021). <i>Advanced Science</i> , 2021, 8, 2170072.	5.6	0
72	Assessing the filtration efficiency and regulatory status of N95s and nontraditional filtering face-piece respirators available during the COVID-19 pandemic. <i>BMC Infectious Diseases</i> , 2021, 21, 712.	1.3	16

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73	Light-Induced Quantum Anomalous Hall Effect on the 2D Surfaces of 3D Topological Insulators. <i>Advanced Science</i> , 2021, 8, e2101508.	5.6	11
74	Ultralow Resistance Two-Stage Electrostatically Assisted Air Filtration by Polydopamine Coated PET Coarse Filter. <i>Small</i> , 2021, 17, e2102051.	5.2	40
75	Extreme mixing in nanoscale transition metal alloys. <i>Matter</i> , 2021, 4, 2340-2353.	5.0	102
76	Composition manipulation of bis(fluorosulfonyl)imide-based ionic liquid electrolyte for high-voltage graphite//LiNi _{0.5} Mn _{1.5} O ₄ lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2021, 415, 128904.	6.6	21
77	CMOS-Compatible Protonic Programmable Resistor Based on Phosphosilicate Glass Electrolyte for Analog Deep Learning. <i>Nano Letters</i> , 2021, 21, 6111-6116.	4.5	25
78	Supercritical CO ₂ -Assisted SiO _x /Carbon Multi-Layer Coating on Si Anode for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2104135.	7.8	59
79	Pure spin photocurrent in non-centrosymmetric crystals: bulk spin photovoltaic effect. <i>Nature Communications</i> , 2021, 12, 4330.	5.8	51
80	Uranium In Situ Electrolytic Deposition with a Reusable Functional Graphene-Foam Electrode. <i>Advanced Materials</i> , 2021, 33, e2102633.	11.1	52
81	Reusable Polyacrylonitrile-Sulfur Extractor of Heavy Metal Ions from Wastewater. <i>Advanced Functional Materials</i> , 2021, 31, 2105845.	7.8	20
82	3D-Printing Damage-Tolerant Architected Metallic Materials with Shape Recoverability via Special Deformation Design of Constituent Material. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 39915-39924.	4.0	17
83	Designing artificial two-dimensional landscapes via atomic-layer substitution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	43
84	Ultralow Resistance Two-Stage Electrostatically Assisted Air Filtration by Polydopamine Coated PET Coarse Filter (Small 33/2021). <i>Small</i> , 2021, 17, 2170172.	5.2	1
85	Peristalsis-like migration of carbon-metabolizing catalytic nanoparticles. <i>Extreme Mechanics Letters</i> , 2021, 49, 101463.	2.0	1
86	A new approach of using Lorentz force to study single-asperity friction inside TEM. <i>Journal of Materials Science and Technology</i> , 2021, 84, 43-48.	5.6	5
87	Towards pressureless sintering of nanocrystalline tungsten. <i>Acta Materialia</i> , 2021, 220, 117344.	3.8	18
88	Electrochemically Engineered, Highly Energy-Efficient Conversion of Ethane to Ethylene and Hydrogen below 550 Å°C in a Protonic Ceramic Electrochemical Cell. <i>ACS Catalysis</i> , 2021, 11, 12194-12202.	5.5	17
89	De Novo Powered Air-Purifying Respirator Design and Fabrication for Pandemic Response. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 690905.	2.0	3
90	Atomic-scale investigation of Lithiation/Delithiation mechanism in High-entropy spinel oxide with superior electrochemical performance. <i>Chemical Engineering Journal</i> , 2021, 420, 129838.	6.6	53

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91	Beating 1 Sievert: Optimal Radiation Shielding of Astronauts on a Mission to Mars. <i>Space Weather</i> , 2021, 19, e2021SW002749.	1.3	20
92	Friction and Adhesion Govern Yielding of Disordered Nanoparticle Packings: A Multiscale Adhesive Discrete Element Method Study. <i>Nano Letters</i> , 2021, 21, 7989-7997.	4.5	0
93	High-voltage lithium-metal battery with three-dimensional mesoporous carbon anode host and ether/carbonate binary electrolyte. <i>Carbon</i> , 2021, 184, 752-763.	5.4	10
94	Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries. <i>Progress in Energy and Combustion Science</i> , 2021, 87, 100953.	15.8	117
95	Electrospinning Techniques: Electrospinning-Based Strategies for Battery Materials (<i>Adv. Energy</i>)	10.2	10
96	Efficient polysulfide trapping in lithium-sulfur batteries using ultrathin and flexible BaTiO ₃ /graphene oxide/carbon nanotube layers. <i>Nanoscale</i> , 2021, 13, 6863-6870.	2.8	3
97	A Robust Flow-Through Platform for Organic Contaminant Removal. <i>Cell Reports Physical Science</i> , 2021, 2, 100296.	2.8	8
98	Stabilizing electrode-electrolyte interfaces to realize high-voltage Li LiCoO ₂ batteries by a sulfonamide-based electrolyte. <i>Energy and Environmental Science</i> , 2021, 14, 6030-6040.	15.6	84
99	Revealing the Brønsted-Evans-Polanyi relation in halide-activated fast MoS ₂ growth toward millimeter-sized 2D crystals. <i>Science Advances</i> , 2021, 7, eabj3274.	4.7	18
100	Stable two-dimensional lead iodide hybrid materials for light detection and broadband photoluminescence. <i>Materials Chemistry Frontiers</i> , 2021, 6, 71-77.	3.2	1
101	Sliding ferroelectricity in 2D van der Waals materials: Related physics and future opportunities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	83
102	Reusable Polyacrylonitrile-Sulfur Extractor of Heavy Metal Ions from Wastewater (<i>Adv. Funct. Mater.</i>)	7.8	5
103	First-principles investigation of monatomic gold wires under tension. <i>Computational Materials Science</i> , 2020, 171, 109226.	1.4	4
104	A low-cost intermediate temperature Fe/Graphite battery for grid-scale energy storage. <i>Energy Storage Materials</i> , 2020, 25, 801-810.	9.5	10
105	Optimal annealing of Al foil anode for prelithiation and full-cell cycling in Li-ion battery: The role of grain boundaries in lithiation/delithiation ductility. <i>Nano Energy</i> , 2020, 67, 104274.	8.2	36
106	Focused-helium-ion-beam blow forming of nanostructures: radiation damage and nanofabrication. <i>Nanotechnology</i> , 2020, 31, 045302.	1.3	16
107	Pressureless two-step sintering of ultrafine-grained tungsten. <i>Acta Materialia</i> , 2020, 186, 116-123.	3.8	48
108	FSI-inspired solvent and full fluorosulfonyl electrolyte for 4 V class lithium-metal batteries. <i>Energy and Environmental Science</i> , 2020, 13, 212-220.	15.6	198

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109	Nanocrystalline Li-Al-Mn-Si Foil as Reversible Li Host: Electronic Percolation and Electrochemical Cycling Stability. <i>Nano Letters</i> , 2020, 20, 896-904.	4.5	33
110	Lithium metal electrode protected by stiff and tough self-compacting separator. <i>Nano Energy</i> , 2020, 69, 104399.	8.2	25
111	Unveiling Nickel Chemistry in Stabilizing High-Voltage Cobalt-Rich Cathodes for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1907903.	7.8	107
112	Is graphite lithiophobic or lithiophilic?. <i>National Science Review</i> , 2020, 7, 1208-1217.	4.6	126
113	Creep-Enabled 3D Solid-State Lithium-Metal Battery. <i>CheM</i> , 2020, 6, 2878-2892.	5.8	63
114	Metallization of diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24634-24639.	3.3	29
115	Superconducting Cu/Nb nanolaminate by coded accumulative roll bonding and its helium damage characteristics. <i>Acta Materialia</i> , 2020, 197, 212-223.	3.8	41
116	Giant Photonic Response of Mexican-Hat Topological Semiconductors for Mid-infrared to Terahertz Applications. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6119-6126.	2.1	18
117	Kinetic Rejuvenation of Li-Rich Li-Ion Battery Cathodes upon Oxygen Redox. <i>ACS Applied Energy Materials</i> , 2020, 3, 7931-7943.	2.5	12
118	Ultrastrong adhesion of fluorinated graphene on a substrate: In situ electrochemical conversion to ionic-covalent bonding at the interface. <i>Carbon</i> , 2020, 169, 248-257.	5.4	12
119	Stabilized Co-Free Li-Rich Oxide Cathode Particles with An Artificial Surface Prereconstruction. <i>Advanced Energy Materials</i> , 2020, 10, 2001120.	10.2	74
120	Hydrogen-Enhanced Vacancy Diffusion in Metals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7015-7020.	2.1	26
121	Periodic Wrinkle-Patterned Single-Crystalline Ferroelectric Oxide Membranes with Enhanced Piezoelectricity. <i>Advanced Materials</i> , 2020, 32, e2004477.	11.1	47
122	Metal-Organic Framework-Polyacrylonitrile Composite Beads for Xenon Capture. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 45342-45350.	4.0	25
123	Sample spinning to mitigate polarization artifact and interstitial-vacancy imbalance in ion-beam irradiation. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	7
124	Coexistence of multi-deformation modes in beta Ti alloys with improved yielding strength and ductility. <i>MATEC Web of Conferences</i> , 2020, 321, 11069.	0.1	0
125	<i>In Situ</i> Scanning Transmission Electron Microscopy Observations of Fracture at the Atomic Scale. <i>Physical Review Letters</i> , 2020, 125, 246102.	2.9	34
126	EELS Evidence for Nascent Polymerization of Carbon and Silicon in Amorphization of SiC. <i>Microscopy and Microanalysis</i> , 2020, 26, 648-651.	0.2	0

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127	A Surface Se-Substituted LiCo[O ₂ Se] Cathode with Ultrastable High-Voltage Cycling in Pouch Full-Cells. <i>Advanced Materials</i> , 2020, 32, e2005182.	11.1	110
128	Sacrificial Poly(propylene carbonate) Membrane for Dispersing Nanoparticles and Preparing Artificial Solid Electrolyte Interphase on Li Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27087-27094.	4.0	8
129	Gradient-morph LiCoO ₂ single crystals with stabilized energy density above 3400 Wh L ⁻¹ . <i>Energy and Environmental Science</i> , 2020, 13, 1865-1878.	15.6	118
130	Assessment of the Qualitative Fit Test and Quantitative Single-Pass Filtration Efficiency of Disposable N95 Masks Following Gamma Irradiation. <i>JAMA Network Open</i> , 2020, 3, e209961.	2.8	25
131	Molar-volume asymmetry enabled low-frequency mechanical energy harvesting in electrochemical cells. <i>Applied Energy</i> , 2020, 273, 115230.	5.1	12
132	Radiation-resistant metal-organic framework enables efficient separation of krypton fission gas from spent nuclear fuel. <i>Nature Communications</i> , 2020, 11, 3103.	5.8	54
133	Electrostatic Air Filtration by Multifunctional Dielectric Heterocaking Filters with Ultralow Pressure Drop. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29383-29392.	4.0	14
134	Origin of micrometer-scale dislocation motion during hydrogen desorption. <i>Science Advances</i> , 2020, 6, eaaz1187.	4.7	29
135	Manipulation of Nitrogen-Heteroatom Configuration for Enhanced Charge-Storage Performance and Reliability of Nanoporous Carbon Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32797-32805.	4.0	32
136	Protonic solid-state electrochemical synapse for physical neural networks. <i>Nature Communications</i> , 2020, 11, 3134.	5.8	82
137	Semi-Flooded Sulfur Cathode with Ultralean Absorbed Electrolyte in Li-S Battery. <i>Advanced Science</i> , 2020, 7, 1903168.	5.6	40
138	Toward a Safer Battery Management System: A Critical Review on Diagnosis and Prognosis of Battery Short Circuit. <i>IScience</i> , 2020, 23, 101010.	1.9	122
139	Dendrimer-Au Nanoparticle Network Covered Alumina Membrane for Ion Rectification and Enhanced Bioanalysis. <i>Nano Letters</i> , 2020, 20, 1846-1854.	4.5	71
140	Deformation mechanism maps for sub-micron sized aluminum. <i>Acta Materialia</i> , 2020, 188, 570-578.	3.8	11
141	Rafting-Enabled Recovery Avoids Recrystallization in 3D-Printing-Repaired Single-Crystal Superalloys. <i>Advanced Materials</i> , 2020, 32, e1907164.	11.1	28
142	Normal-to-topological insulator martensitic phase transition in group-IV monochalcogenides driven by light. <i>NPG Asia Materials</i> , 2020, 12, .	3.8	18
143	Molecular Dynamics. , 2020, , 573-594.		6
144	A Novel Moisture-Insensitive and Low-Corrosivity Ionic Liquid Electrolyte for Rechargeable Aluminum Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1909565.	7.8	38

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145	Hierarchical {332}<113> twinning in a metastable $\hat{\Gamma}^2$ Ti-alloy showing tolerance to strain localization. <i>Materials Research Letters</i> , 2020, 8, 247-253.	4.1	35
146	Achieving 5.9% elastic strain in kilograms of metallic glasses: Nanoscopic strain engineering goes macro. <i>Materials Today</i> , 2020, 37, 18-26.	8.3	25
147	Observation of strong higher-order lattice anharmonicity in Raman and infrared spectra. <i>Physical Review B</i> , 2020, 101, .	1.1	43
148	Surpassing lithium metal rechargeable batteries with self-supporting Li-Sb foil anode. <i>Nano Energy</i> , 2020, 74, 104815.	8.2	28
149	More Efficient and Accurate Simulations of Primary Radiation Damage in Materials with Nanosized Microstructural Features or $\hat{\Gamma}$ Beams. , 2020, , 2381-2412.		2
150	Li metal deposition and stripping in a solid-state battery via Coble creep. <i>Nature</i> , 2020, 578, 251-255.	13.7	333
151	Understanding the Interplay between Li Intercalation and Li Plating Using Single Graphite Particle Electrochemistry. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 447-447.	0.0	0
152	(Invited) Controlling the Size and Dispersion of Exsolved Catalyst Particles By Electrochemistry and By Strain. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 1473-1473.	0.0	0
153	Flexible Ferroelectrics: Periodic Wrinkle-Patterned Single-Crystalline Ferroelectric Oxide Membranes with Enhanced Piezoelectricity (<i>Adv. Mater.</i> 50/2020). <i>Advanced Materials</i> , 2020, 32, 2070377.	11.1	0
154	Advanced Electron Microscopy Characterization of Intergranular Corrosion in Ni-20Cr Alloy Under Molten Salt Environment. <i>Microscopy and Microanalysis</i> , 2020, 26, 180-182.	0.2	0
155	Complex Structure of Molten NaCl-CrCl _x Salts: Octahedra Network and Intermediate-Range Order. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 2918-2918.	0.0	0
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