Ju Li

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538	42,976 citations	104	191
papers		h-index	g-index
564 ext. papers	50,096 ext. citations	12.2 avg, IF	7.94 L-index

#	Paper	IF	Citations
538	In situ observation of the electrochemical lithiation of a single SnOIhanowire electrode. <i>Science</i> , 2010 , 330, 1515-20	33.3	1305
537	Solid state theory. Quantum spin Hall effect in two-dimensional transition metal dichalcogenides. <i>Science</i> , 2014 , 346, 1344-7	33.3	1150
536	Ab initio calculation of ideal strength and phonon instability of graphene under tension. <i>Physical Review B</i> , 2007 , 76,	3.3	1042
535	AtomEye: an efficient atomistic configuration viewer. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2003 , 11, 173-177	2	1004
534	Size-Dependent Endocytosis of Nanoparticles. <i>Advanced Materials</i> , 2009 , 21, 419-424	24	788
533	Strain-engineered artificial atom as a broad-spectrum solar energy funnel. <i>Nature Photonics</i> , 2012 , 6, 866-872	33.9	766
532	Transition of lithium growth mechanisms in liquid electrolytes. <i>Energy and Environmental Science</i> , 2016 , 9, 3221-3229	35.4	794
531	Theory of Shear Banding in Metallic Glasses and Molecular Dynamics Calculations. <i>Materials Transactions</i> , 2007 , 48, 2923-2927	1.3	681
530	Anisotropic swelling and fracture of silicon nanowires during lithiation. <i>Nano Letters</i> , 2011 , 11, 3312-8	11.5	608
529	Ideal pure shear strength of aluminum and copper. <i>Science</i> , 2002 , 298, 807-11	33.3	608
528	Ultra-strength materials. <i>Progress in Materials Science</i> , 2010 , 55, 710-757	42.2	595
527	Atomistic mechanisms governing elastic limit and incipient plasticity in crystals. <i>Nature</i> , 2002 , 418, 307-	-1 9 0.4	564
526	Carbothermal shock synthesis of high-entropy-alloy nanoparticles. <i>Science</i> , 2018 , 359, 1489-1494	33.3	560
525	Temperature and strain-rate dependence of surface dislocation nucleation. <i>Physical Review Letters</i> , 2008 , 100, 025502	7.4	514
524	Interfacial plasticity governs strain rate sensitivity and ductility in nanostructured metals. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3031-6	11.5	462
523	Strong crystal size effect on deformation twinning. <i>Nature</i> , 2010 , 463, 335-8	50.4	460
522	In situ atomic-scale imaging of electrochemical lithiation in silicon. <i>Nature Nanotechnology</i> , 2012 , 7, 749	9- 56 .7	447

(2012-2012)

521	Icosahedral platinum alloy nanocrystals with enhanced electrocatalytic activities. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11880-3	16.4	445
520	Giant piezoelectricity of monolayer group IV monochalcogenides: SnSe, SnS, GeSe, and GeS. <i>Applied Physics Letters</i> , 2015 , 107, 173104	3.4	418
519	Pie-like electrode design for high-energy density lithium-sulfur batteries. <i>Nature Communications</i> , 2015 , 6, 8850	17.4	391
518	Mechanical instabilities of homogeneous crystals. <i>Physical Review B</i> , 1995 , 52, 12627-12635	3.3	387
517	Atomistic modeling of interfaces and their impact on microstructure and properties. <i>Acta Materialia</i> , 2010 , 58, 1117-1151	8.4	379
516	Indentation across size scales and disciplines: Recent developments in experimentation and modeling. <i>Acta Materialia</i> , 2007 , 55, 4015-4039	8.4	348
515	Ductile crystalline-amorphous nanolaminates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 11155-60	11.5	345
514	Fluorine-donating electrolytes enable highly reversible 5-V-class Li metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 1156-1161	11.5	341
513	Self-healing SEI enables full-cell cycling of a silicon-majority anode with a coulombic efficiency exceeding 99.9%. <i>Energy and Environmental Science</i> , 2017 , 10, 580-592	35.4	335
512	Reversible nanopore formation in Ge nanowires during lithiation-delithiation cycling: an in situ transmission electron microscopy study. <i>Nano Letters</i> , 2011 , 11, 3991-7	11.5	332
511	Quantifying the early stages of plasticity through nanoscale experiments and simulations. <i>Physical Review B</i> , 2003 , 67,	3.3	332
510	Spectrin-level modeling of the cytoskeleton and optical tweezers stretching of the erythrocyte. <i>Biophysical Journal</i> , 2005 , 88, 3707-19	2.9	327
509	Phase field modeling of defects and deformation. <i>Acta Materialia</i> , 2010 , 58, 1212-1235	8.4	322
508	In Situ TEM Experiments of Electrochemical Lithiation and Delithiation of Individual Nanostructures. <i>Advanced Energy Materials</i> , 2012 , 2, 722-741	21.8	315
507	Coordination Polymers Derived General Synthesis of Multishelled Mixed Metal-Oxide Particles for Hybrid Supercapacitors. <i>Advanced Materials</i> , 2017 , 29, 1605902	24	296
506	Ideal shear strain of metals and ceramics. <i>Physical Review B</i> , 2004 , 70,	3.3	289
505	Intercalation-conversion hybrid cathodes enabling Liß full-cell architectures with jointly superior gravimetric and volumetric energy densities. <i>Nature Energy</i> , 2019 , 4, 374-382	62.3	282
504	Approaching the ideal elastic limit of metallic glasses. <i>Nature Communications</i> , 2012 , 3, 609	17.4	280

503	The evolving quality of frictional contact with graphene. <i>Nature</i> , 2016 , 539, 541-545	50.4	278
502	Liquid cell transmission electron microscopy observation of lithium metal growth and dissolution: Root growth, dead lithium and lithium flotsams. <i>Nano Energy</i> , 2017 , 32, 271-279	17.1	261
501	Competition of shape and interaction patchiness for self-assembling nanoplates. <i>Nature Chemistry</i> , 2013 , 5, 466-73	17.6	253
500	Probing the failure mechanism of SnO2 nanowires for sodium-ion batteries. <i>Nano Letters</i> , 2013 , 13, 520	3r1.5	244
499	Developing High-Performance Lithium Metal Anode in Liquid Electrolytes: Challenges and Progress. <i>Advanced Materials</i> , 2018 , 30, e1706375	24	241
498	Optoelectronic crystal of artificial atoms in strain-textured molybdenum disulphide. <i>Nature Communications</i> , 2015 , 6, 7381	17.4	237
497	Theoretical evaluation of hydrogen storage capacity in pure carbon nanostructures. <i>Journal of Chemical Physics</i> , 2003 , 119, 2376-2385	3.9	232
496	How Solid-Electrolyte Interphase Forms in Aqueous Electrolytes. <i>Journal of the American Chemical Society</i> , 2017 , 139, 18670-18680	16.4	227
495	Microtwinning and other shearing mechanisms at intermediate temperatures in Ni-based superalloys. <i>Progress in Materials Science</i> , 2009 , 54, 839-873	42.2	220
494	Slurryless Li2S/reduced graphene oxide cathode paper for high-performance lithium sulfur battery. <i>Nano Letters</i> , 2015 , 15, 1796-802	11.5	219
493	Atomistic modeling of finite-temperature properties of crystalline EsiC: II. Thermal conductivity and effects of point defects. <i>Journal of Nuclear Materials</i> , 1998 , 255, 139-152	3.3	216
492	Signature of Metallic Behavior in the Metal-Organic Frameworks M(hexaiminobenzene) (M = Ni, Cu). <i>Journal of the American Chemical Society</i> , 2017 , 139, 13608-13611	16.4	214
491	Hydrogen embrittlement of ferritic steels: Observations on deformation microstructure, nanoscale dimples and failure by nanovoiding. <i>Acta Materialia</i> , 2012 , 60, 5160-5171	8.4	212
490	Predictive modeling of nanoindentation-induced homogeneous dislocation nucleation in copper. <i>Journal of the Mechanics and Physics of Solids</i> , 2004 , 52, 691-724	5	206
489	Liquid-like pseudoelasticity of sub-10-nm crystalline silver particles. <i>Nature Materials</i> , 2014 , 13, 1007-12	. 27	205
488	Cytoskeletal dynamics of human erythrocyte. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 4937-42	11.5	204
487	Yield point of metallic glass. <i>Acta Materialia</i> , 2006 , 54, 4293-4298	8.4	200
486	Engineering the shape and structure of materials by fractal cut. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17390-5	11.5	196

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485	Li metal deposition and stripping in a solid-state battery via Coble creep. <i>Nature</i> , 2020 , 578, 251-255	50.4	196
484	Orientation-dependent interfacial mobility governs the anisotropic swelling in lithiated silicon nanowires. <i>Nano Letters</i> , 2012 , 12, 1953-8	11.5	191
483	Triple Point Topological Metals. <i>Physical Review X</i> , 2016 , 6,	9.1	190
482	A transforming metal nanocomposite with large elastic strain, low modulus, and high strength. <i>Science</i> , 2013 , 339, 1191-4	33.3	190
481	The nanostructured origin of deformation twinning. Nano Letters, 2012, 12, 887-92	11.5	189
480	In situ observation of graphene sublimation and multi-layer edge reconstructions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 10103-8	11.5	186
479	Energy landscape of deformation twinning in bcc and fcc metals. <i>Physical Review B</i> , 2005 , 71,	3.3	178
478	A universal cooperative assembly-directed method for coating of mesoporous TiO(2) nanoshells with enhanced lithium storage properties. <i>Science Advances</i> , 2016 , 2, e1501554	14.3	174
477	Atomistic study of dislocation loop emission from a crack tip. <i>Physical Review Letters</i> , 2004 , 93, 025503	7.4	174
476	Elastic strain engineering for unprecedented materials properties. MRS Bulletin, 2014 , 39, 108-114	3.2	173
475	Nitrogen-Doped Carbon for Sodium-Ion Battery Anode by Self-Etching and Graphitization of Bimetallic MOF-Based Composite. <i>CheM</i> , 2017 , 3, 152-163	16.2	171
474	Piezoelectricity in two-dimensional group-III monochalcogenides. <i>Nano Research</i> , 2015 , 8, 3796-3802	10	167
473	Periodic image effects in dislocation modelling. <i>Philosophical Magazine</i> , 2003 , 83, 539-567	1.6	166
472	High-rate aluminium yolk-shell nanoparticle anode for Li-ion battery with long cycle life and ultrahigh capacity. <i>Nature Communications</i> , 2015 , 6, 7872	17.4	164
471	Periodic stacking of 2D charged sheets: Self-assembled superlattice of NiAl layered double hydroxide (LDH) and reduced graphene oxide. <i>Nano Energy</i> , 2016 , 20, 185-193	17.1	162
470	Strain-engineering of band gaps in piezoelectric boron nitride nanoribbons. <i>Nano Letters</i> , 2012 , 12, 122	4 1 8.5	162
469	Parallel Stitching of 2D Materials. <i>Advanced Materials</i> , 2016 , 28, 2322-9	24	161
468	Leapfrog cracking and nanoamorphization of ZnO nanowires during in situ electrochemical lithiation. <i>Nano Letters</i> , 2011 , 11, 4535-41	11.5	159

467	Molecularly based analysis of deformation of spectrin network and human erythrocyte. <i>Materials Science and Engineering C</i> , 2006 , 26, 1232-1244	8.3	157
466	Stress generation during lithiation of high-capacity electrode particles in lithium ion batteries. <i>Acta Materialia</i> , 2013 , 61, 4354-4364	8.4	155
465	Highly active Pt3Pb and core-shell Pt3Pb-Pt electrocatalysts for formic acid oxidation. <i>ACS Nano</i> , 2012 , 6, 2818-25	16.7	155
464	Ultralow contact resistance between semimetal and monolayer semiconductors. <i>Nature</i> , 2021 , 593, 21	1-31.4	154
463	Variable nanoparticle-cell adhesion strength regulates cellular uptake. <i>Physical Review Letters</i> , 2010 , 105, 138101	7.4	148
462	Electrical Percolation Behavior in Silver Nanowire Polystyrene Composites: Simulation and Experiment. <i>Advanced Functional Materials</i> , 2010 , 20, 2709-2716	15.6	147
461	Structure-property relationships from universal signatures of plasticity in disordered solids. <i>Science</i> , 2017 , 358, 1033-1037	33.3	144
460	Electrical wind force-driven and dislocation-templated amorphization in phase-change nanowires. <i>Science</i> , 2012 , 336, 1561-6	33.3	141
459	In-Plane Optical Anisotropy of Layered Gallium Telluride. ACS Nano, 2016, 10, 8964-72	16.7	140
458	Emergence of strain-rate sensitivity in Cu nanopillars: Transition from dislocation multiplication to dislocation nucleation. <i>Acta Materialia</i> , 2011 , 59, 5627-5637	8.4	139
457	Does p-type ohmic contact exist in WSe2-metal interfaces?. <i>Nanoscale</i> , 2016 , 8, 1179-91	7.7	133
456	A high-performance sodium-ion battery enhanced by macadamia shell derived hard carbon anode. <i>Nano Energy</i> , 2017 , 39, 489-498	17.1	132
455	Fast mass transport through carbon nanotube membranes. <i>Small</i> , 2007 , 3, 1996-2004	11	131
454	Gradient Li-rich oxide cathode particles immunized against oxygen release by a molten salt treatment. <i>Nature Energy</i> , 2019 , 4, 1049-1058	62.3	131
453	Twinning-like lattice reorientation without a crystallographic twinning plane. <i>Nature Communications</i> , 2014 , 5, 3297	17.4	128
452	Super-elastic ferroelectric single-crystal membrane with continuous electric dipole rotation. <i>Science</i> , 2019 , 366, 475-479	33.3	127
451	Anion-redox nanolithia cathodes for Li-ion batteries. <i>Nature Energy</i> , 2016 , 1,	62.3	125
450	Mechanism of thermal transport in dilute nanocolloids. <i>Physical Review Letters</i> , 2007 , 98, 028302	7.4	125

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449	Conductive graphene oxide-polyacrylic acid (GOPAA) binder for lithium-sulfur battery. <i>Nano Energy</i> , 2017 , 31, 568-574	17.1	124
448	Large plasticity in magnesium mediated by pyramidal dislocations. <i>Science</i> , 2019 , 365, 73-75	33.3	123
447	The Mechanics and Physics of Defect Nucleation. MRS Bulletin, 2007, 32, 151-159	3.2	119
446	Approaching the ideal elastic strain limit in silicon nanowires. Science Advances, 2016, 2, e1501382	14.3	116
445	Electrochemomechanical degradation of high-capacity battery electrode materials. <i>Progress in Materials Science</i> , 2017 , 89, 479-521	42.2	115
444	Coupling and Stacking Order of ReS2 Atomic Layers Revealed by Ultralow-Frequency Raman Spectroscopy. <i>Nano Letters</i> , 2016 , 16, 1404-9	11.5	115
443	Electrochemically-mediated selective capture of heavy metal chromium and arsenic oxyanions from water. <i>Nature Communications</i> , 2018 , 9, 4701	17.4	114
442	Computing the viscosity of supercooled liquids. <i>Journal of Chemical Physics</i> , 2009 , 130, 224504	3.9	113
441	Interactions between Lithium Growths and Nanoporous Ceramic Separators. <i>Joule</i> , 2018 , 2, 2434-2449	27.8	112
440	Mechanistic aspects and atomic-level consequences of elastic instabilities in homogeneous crystals. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing , 2001, 317, 236-240	5.3	111
439	Atomistic simulation of shear localization in Cu🏿r bulk metallic glass. <i>Intermetallics</i> , 2006 , 14, 1033-1037	⁷ 3.5	110
438	Lithiation-induced embrittlement of multiwalled carbon nanotubes. ACS Nano, 2011, 5, 7245-53	16.7	109
437	In situ atomic-scale imaging of phase boundary migration in FePO(4) microparticles during electrochemical lithiation. <i>Advanced Materials</i> , 2013 , 25, 5461-6	24	108
436	Engineering catalytic contacts and thermal stability: gold/iron oxide binary nanocrystal superlattices for CO oxidation. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1499-505	16.4	107
435	The interaction of dislocations and hydrogen-vacancy complexes and its importance for deformation-induced proto nano-voids formation in 臣e. <i>International Journal of Plasticity</i> , 2015 , 74, 175-191	7.6	104
434	Coupling continuum to molecular-dynamics simulation: Reflecting particle method and the field estimator. <i>Physical Review E</i> , 1998 , 57, 7259-7267	2.4	104
433	Electrochemically driven mechanical energy harvesting. <i>Nature Communications</i> , 2016 , 7, 10146	17.4	103
432	Stress-dependent molecular pathways of silicaWater reaction. <i>Journal of the Mechanics and Physics of Solids</i> , 2005 , 53, 1597-1623	5	103

431	In situ study of the initiation of hydrogen bubbles at the aluminium metal/oxide interface. <i>Nature Materials</i> , 2015 , 14, 899-903	27	100
430	Atomistic modeling of mechanical behavior. <i>Acta Materialia</i> , 2003 , 51, 5711-5742	8.4	99
429	Unexpected high-temperature stability of EZn4Sb3 opens the door to enhanced thermoelectric performance. <i>Journal of the American Chemical Society</i> , 2014 , 136, 1497-504	16.4	97
428	Core energy and Peierls stress of a screw dislocation in bcc molybdenum: A periodic-cell tight-binding study. <i>Physical Review B</i> , 2004 , 70,	3.3	97
427	FSI-inspired solvent and full fluorosulfonyllelectrolyte for 4 V class lithium-metal batteries. <i>Energy and Environmental Science</i> , 2020 , 13, 212-220	35.4	97
426	Plasticity of a scandium-based nanoglass. <i>Scripta Materialia</i> , 2015 , 98, 40-43	5.6	95
425	Ferroelasticity and domain physics in two-dimensional transition metal dichalcogenide monolayers. <i>Nature Communications</i> , 2016 , 7, 10843	17.4	95
424	Mechanics of Ultra-Strength Materials. MRS Bulletin, 2009, 34, 167-172	3.2	94
423	In situ observation of random solid solution zone in LiFePOlelectrode. <i>Nano Letters</i> , 2014 , 14, 4005-10	11.5	93
422	Patterning of graphene. <i>Nanoscale</i> , 2012 , 4, 4883-99	7.7	93
422	Patterning of graphene. <i>Nanoscale</i> , 2012 , 4, 4883-99 Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370-		93
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421	Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370- Transitions from near-surface to interior redox upon lithiation in conversion electrode materials.	-5 3 . 7 9	93
421 420	Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370- Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. Nano Letters, 2015 , 15, 1437-44 Quantitative fracture strength and plasticity measurements of lithiated silicon nanowires by in situ	25 8.7 49	93
421 420 419	Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370- Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. Nano Letters, 2015 , 15, 1437-44 Quantitative fracture strength and plasticity measurements of lithiated silicon nanowires by in situ TEM tensile experiments. <i>ACS Nano</i> , 2012 , 6, 9425-32 Synthesis of High-Quality Large-Area Homogenous 1T' MoTe from Chemical Vapor Deposition.	11.5 16.7	93 92 92 88
421 420 419 418	Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370- Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. Nano Letters, 2015 , 15, 1437-44 Quantitative fracture strength and plasticity measurements of lithiated silicon nanowires by in situ TEM tensile experiments. <i>ACS Nano</i> , 2012 , 6, 9425-32 Synthesis of High-Quality Large-Area Homogenous 1T' MoTe from Chemical Vapor Deposition. <i>Advanced Materials</i> , 2016 , 28, 9526-9531	11.5 16.7	93 92 92 88
421 420 419 418 417	Sample size matters for Al88Fe7Gd5 metallic glass: Smaller is stronger. <i>Acta Materialia</i> , 2012 , 60, 5370- Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. <i>Nano Letters</i> , 2015 , 15, 1437-44 Quantitative fracture strength and plasticity measurements of lithiated silicon nanowires by in situ TEM tensile experiments. <i>ACS Nano</i> , 2012 , 6, 9425-32 Synthesis of High-Quality Large-Area Homogenous 1T' MoTe from Chemical Vapor Deposition. <i>Advanced Materials</i> , 2016 , 28, 9526-9531 Hydrogenated vacancies lock dislocations in aluminium. <i>Nature Communications</i> , 2016 , 7, 13341 Lithium titanate hydrates with superfast and stable cycling in lithium ion batteries. <i>Nature</i>	11.5 16.7 24	93 92 92 88 88

413	Dislocation Core Effects on Mobility. <i>Dislocations in Solids</i> , 2004 , 12, 1-80		87	
412	Size effects on the onset of plastic deformation during nanoindentation of thin films and patterned lines. <i>Journal of Applied Physics</i> , 2003 , 94, 6050-6058	2.5	87	
411	Anisotropic elastic interactions of a periodic dislocation array. <i>Physical Review Letters</i> , 2001 , 86, 5727-30	7.4	87	
410	In situ transmission electron microscopy of electrochemical lithiation, delithiation and deformation of individual graphene nanoribbons. <i>Carbon</i> , 2012 , 50, 3836-3844	10.4	86	
409	Theoretical assessment of the elastic constants and hydrogen storage capacity of some metal-organic framework materials. <i>Journal of Chemical Physics</i> , 2006 , 125, 084714	3.9	86	
408	Ripplocations in van der Waals layers. <i>Nano Letters</i> , 2015 , 15, 1302-8	11.5	84	
407	Reactive boride infusion stabilizes Ni-rich cathodes for lithium-ion batteries. <i>Nature Energy</i> , 2021 , 6, 362-	62 7.3	84	
406	Ti3+-free three-phase Li4Ti5O12/TiO2 for high-rate lithium ion batteries: Capacity and conductivity enhancement by phase boundaries. <i>Nano Energy</i> , 2017 , 32, 294-301	17.1	83	
405	Controlled rejuvenation of amorphous metals with thermal processing. Scientific Reports, 2015, 5, 10545	4.9	83	
404	Nanowire liquid pumps. <i>Nature Nanotechnology</i> , 2013 , 8, 277-81	28.7	82	
403	Superelasticity in bcc nanowires by a reversible twinning mechanism. <i>Physical Review B</i> , 2010 , 82,	3.3	82	
402	Atomistic modeling of finite-temperature properties of ESiC. I. Lattice vibrations, heat capacity, and thermal expansion. <i>Journal of Nuclear Materials</i> , 1997 , 246, 53-59	3.3	82	
401	The gap-tooth method in particle simulations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2003 , 316, 190-195	2.3	82	
400	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	62.3	82	
399	Charging/Discharging Nanomorphology Asymmetry and Rate-Dependent Capacity Degradation in Li-Oxygen Battery. <i>Nano Letters</i> , 2015 , 15, 8260-5	11.5	81	
398	Radiation-Induced Helium Nanobubbles Enhance Ductility in Submicron-Sized Single-Crystalline Copper. <i>Nano Letters</i> , 2016 , 16, 4118-24	11.5	81	
397	Multiple stiffening effects of nanoscale knobs on human red blood cells infected with Plasmodium falciparum malaria parasite. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 6068-73	11.5	80	
396	Double-oxide sulfur host for advanced lithium-sulfur batteries. <i>Nano Energy</i> , 2017 , 38, 12-18	17.1	79	

395	Roll-to-roll prelithiation of Sn foil anode suppresses gassing and enables stable full-cell cycling of lithium ion batteries. <i>Energy and Environmental Science</i> , 2019 , 12, 2991-3000	35.4	79
394	Size dependence of rate-controlling deformation mechanisms in nanotwinned copper. <i>Scripta Materialia</i> , 2009 , 60, 1062-1066	5.6	79
393	One-particle-thick, solvent-free, coarse-grained model for biological and biomimetic fluid membranes. <i>Physical Review E</i> , 2010 , 82, 011905	2.4	78
392	Double-inverse grain size dependence of deformation twinning in nanocrystalline Cu. <i>Physical Review B</i> , 2010 , 81,	3.3	78
391	Topological Phase Transition: Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides (Adv. Sci. 12/2021). <i>Advanced Science</i> , 2021 , 8, 2170072	13.6	78
390	Electrospinning-Based Strategies for Battery Materials. <i>Advanced Energy Materials</i> , 2021 , 11, 2000845	21.8	78
389	Colloidal synthesis of 1T' phase dominated WS2 towards endurable electrocatalysis. <i>Nano Energy</i> , 2018 , 50, 176-181	17.1	77
388	Quasiatomic orbitals for ab initio tight-binding analysis. <i>Physical Review B</i> , 2008 , 78,	3.3	77
387	Ultra-large suspended graphene as a highly elastic membrane for capacitive pressure sensors. <i>Nanoscale</i> , 2016 , 8, 3555-64	7.7	76
386	Proximity-Driven Enhanced Magnetic Order at Ferromagnetic-Insulator Interface. <i>Physical Review Letters</i> , 2015 , 115, 087201	7.4	75
385	Lithium Manganese Spinel Cathodes for Lithium-Ion Batteries. Advanced Energy Materials, 2021, 11, 200	00997	75
384	Origin of size dependency in coherent-twin-propagation-mediated tensile deformation of noble metal nanowires. <i>Nano Letters</i> , 2013 , 13, 5112-6	11.5	74
383	A thin multifunctional coating on a separator improves the cyclability and safety of lithium sulfur batteries. <i>Chemical Science</i> , 2017 , 8, 6619-6625	9.4	74
382	Origin of Two-Dimensional Vertical Ferroelectricity in WTe Bilayer and Multilayer. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 7160-7164	6.4	74
381	Simulations and generalized model of the effect of filler size dispersity on electrical percolation in rod networks. <i>Physical Review B</i> , 2012 , 86,	3.3	73
380	Nanovoid formation and annihilation in gallium nanodroplets under lithiation-delithiation cycling. <i>Nano Letters</i> , 2013 , 13, 5212-7	11.5	73
379	Strain-engineered diffusive atomic switching in two-dimensional crystals. <i>Nature Communications</i> , 2016 , 7, 11983	17.4	72
378	Screw dislocation mobility in BCC metals: the role of the compact core on double-kink nucleation. Modelling and Simulation in Materials Science and Engineering, 2010, 18, 085008	2	71

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377	A new regime for mechanical annealing and strong sample-size strengthening in body centred cubic molybdenum. <i>Nature Communications</i> , 2011 , 2, 547	17.4	71
376	Lithium fiber growth on the anode in a nanowire lithium ion battery during charging. <i>Applied Physics Letters</i> , 2011 , 98, 183107	3.4	69
375	Thermochemical and Mechanical Stabilities of the Oxide Scale of ZrB2+SiC and Oxygen Transport Mechanisms. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 1475-1480	3.8	69
374	Gravimetric and volumetric energy densities of lithium-sulfur batteries. <i>Current Opinion in Electrochemistry</i> , 2017 , 6, 92-99	7.2	68
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