

# Peng Gao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

333 papers	19,762 citations	57 h-index	136 g-index
359 ext. papers	23,858 ext. citations	12.4 avg, IF	6.99 L-index

#	Paper	IF	Citations
333	Engineering of atomic-scale flexoelectricity at grain boundaries.. <i>Nature Communications</i> , <b>2022</b> , 13, 216	17.4	4
332	Electrically driven motion, destruction, and chirality change of polar vortices in oxide superlattices. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2022</b> , 65, 1	3.6	1
331	Computational Evaluation of Li-doped g-C2N Monolayer as Advanced Hydrogen Storage Media. <i>International Journal of Hydrogen Energy</i> , <b>2022</b> , 47, 3625-3632	6.7	1
330	Intrinsic Wettability in Pristine Graphene (Adv. Mater. 6/2022). <i>Advanced Materials</i> , <b>2022</b> , 34, 2270050	24	0
329	Atomic-Scale Mechanism of Spontaneous Polarity Inversion in AlN on Nonpolar Sapphire Substrate Grown by MOCVD.. <i>Small</i> , <b>2022</b> , e2200057	11	2
328	Microscopic physical origin of polarization induced large tunneling electroresistance in tetragonal-phase BiFeO3. <i>Acta Materialia</i> , <b>2022</b> , 225, 117564	8.4	0
327	Regulating Crystal Facets of MnO2 for Enhancing Peroxymonosulfate Activation to Degrade Pollutants: Performance and Mechanism. <i>Catalysts</i> , <b>2022</b> , 12, 342	4	2
326	Flexoelectric Domain Walls Originated from Structural Phase Transition in Epitaxial BiVO Films.. <i>Small</i> , <b>2022</b> , e2107540	11	0
325	Switching magnon chirality in artificial ferrimagnet.. <i>Nature Communications</i> , <b>2022</b> , 13, 1264	17.4	1
324	Vertical Graphene-Reinforced Titanium Alloy Bipolar Plates in Fuel Cells.. <i>Advanced Materials</i> , <b>2022</b> , e2110565	24	2
323	Role of oxygen vacancies in colossal polarization in SmFeO thin films.. <i>Science Advances</i> , <b>2022</b> , 8, eabm85503	10.5	2
322	Large-scale Hf Zr O Membranes with Robust Ferroelectricity.. <i>Advanced Materials</i> , <b>2022</b> , e2109889	24	2
321	Graphene-driving strain engineering to enable strain-free epitaxy of AlN film for deep ultraviolet light-emitting diode.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 88	16.7	3
320	Role of binary metal chalcogenides in extending the limits of energy storage systems: Challenges and possible solutions. <i>Science China Materials</i> , <b>2022</b> , 65, 559-592	7.1	1
319	Automatic classification of rural building characteristics using deep learning methods on oblique photography. <i>Building Simulation</i> , <b>2022</b> , 15, 1161-1174	3.9	2
318	Studying plasmon dispersion of MXene for enhanced electromagnetic absorption.. <i>Advanced Materials</i> , <b>2022</b> , e2201120	24	0
317	Van der Waals integration of high- $\kappa$ perovskite oxides and two-dimensional semiconductors. <i>Nature Electronics</i> , <b>2022</b> , 5, 233-240	28.4	13

316	Atomic structure and electrical/ionic activity of antiphase boundary in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> . <i>Acta Materialia</i> , <b>2022</b> , 234, 118010	8.4	1
315	Long decay length of magnon-polarons in BiFeO <sub>3</sub> /LaSrMnO heterostructures.. <i>Nature Communications</i> , <b>2021</b> , 12, 7258	17.4	2
314	Intrinsic Wettability in Pristine Graphene. <i>Advanced Materials</i> , <b>2021</b> , e2103620	24	9
313	Two Birds with One Stone: Interfacial Engineering of Multifunctional Janus Separator for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2021</b> , e2107638	24	11
312	Direct growth of wafer-scale highly oriented graphene on sapphire. <i>Science Advances</i> , <b>2021</b> , 7, eabk011514.3	14.3	5
311	Dual-coupling-guided epitaxial growth of wafer-scale single-crystal WS monolayer on vicinal a-plane sapphire. <i>Nature Nanotechnology</i> , <b>2021</b> ,	28.7	31
310	Measuring phonon dispersion at an interface. <i>Nature</i> , <b>2021</b> , 599, 399-403	50.4	6
309	Substitutionally Doped MoSe for High-Performance Electronics and Optoelectronics. <i>Small</i> , <b>2021</b> , 17, e2102855	11	3
308	Transfer-Enabled Fabrication of Graphene Wrinkle Arrays for Epitaxial Growth of AlN Films. <i>Advanced Materials</i> , <b>2021</b> , e2105851	24	2
307	Bidirectional and reversible tuning of the interlayer spacing of two-dimensional materials. <i>Nature Communications</i> , <b>2021</b> , 12, 5886	17.4	8
306	Conceptual Framework for Dislocation-Modified Conductivity in Oxide Ceramics Deconvoluting Mesoscopic Structure, Core, and Space Charge Exemplified for SrTiO <sub>3</sub> . <i>ACS Nano</i> , <b>2021</b> , 15, 9355-9367	16.7	17
305	Graphene-Nanorod Enhanced Quasi-Van Der Waals Epitaxy for High Indium Composition Nitride Films. <i>Small</i> , <b>2021</b> , 17, e2100098	11	7
304	Microscopic Kinetics Pathway of Salt Crystallization in Graphene Nanocapillaries. <i>Physical Review Letters</i> , <b>2021</b> , 126, 136001	7.4	9
303	Toroidal polar topology in strained ferroelectric polymer. <i>Science</i> , <b>2021</b> , 371, 1050-1056	33.3	24
302	Seeded 2D epitaxy of large-area single-crystal films of the van der Waals semiconductor 2H MoTe <sub>2</sub> . <i>Science</i> , <b>2021</b> , 372, 195-200	33.3	52
301	Creating polar antivortex in PbTiO <sub>3</sub> /SrTiO <sub>3</sub> superlattice. <i>Nature Communications</i> , <b>2021</b> , 12, 2054	17.4	14
300	Wafer-Scale Oxygen-Doped MoS Monolayer.. <i>Small Methods</i> , <b>2021</b> , 5, e2100091	12.8	6
299	Engineering of multiferroic BiFeO <sub>3</sub> grain boundaries with head-to-head polarization configurations. <i>Science Bulletin</i> , <b>2021</b> , 66, 771-776	10.6	2

298	Three dimensional band-filling control of complex oxides triggered by interfacial electron transfer. <i>Nature Communications</i> , <b>2021</b> , 12, 2447	17.4	7
297	Au Clusters on Pd Nanosheets Selectively Switch the Pathway of Ethanol Electrooxidation: Amorphous/Crystalline Interface Matters. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100187	21.8	34
296	Zone-Folded Longitudinal Acoustic Phonons Driving Self-Trapped State Emission in Colloidal CdSe Nanoplatelet Superlattices. <i>Nano Letters</i> , <b>2021</b> , 21, 4137-4144	11.5	5
295	Modification of the Interlayer Coupling and Chemical Reactivity of Multilayer Graphene through Wrinkle Engineering. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 2506-2515	9.6	5
294	Lattice-resolution visualization of anisotropic sodiation degrees and revelation of sodium storage mechanisms in todorokite-type MnO <sub>2</sub> with in-situ TEM. <i>Energy Storage Materials</i> , <b>2021</b> , 37, 345-353	19.4	2
293	Adhesion-Enhanced Vertically Oriented Graphene on Titanium-Covered Quartz Glass toward High-Stability Light-Dimming-Related Applications. <i>ACS Nano</i> , <b>2021</b> , 15, 10514-10524	16.7	4
292	Prototype Design of a Domain-Wall-Based Magnetic Memory Using a Single Layer LaSrMnO Thin Film. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 23945-23950	9.5	1
291	Two-Dimensional BiSrCaCuO Nanosheets for Ultrafast Photonics and Optoelectronics. <i>ACS Nano</i> , <b>2021</b> , 15, 8919-8929	16.7	4
290	Tunable Pore Size from Sub-Nanometer to a Few Nanometers in Large-Area Graphene Nanoporous Atomically Thin Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	2
289	Two-Dimensional Room-Temperature Giant Antiferrodistortive SrTiO <sub>3</sub> at a Grain Boundary. <i>Physical Review Letters</i> , <b>2021</b> , 126, 225702	7.4	2
288	Anisotropic moiré optical transitions in twisted monolayer/bilayer phosphorene heterostructures. <i>Nature Communications</i> , <b>2021</b> , 12, 3947	17.4	9
287	Sub-Nanometer Pt Clusters on Defective NiFe LDH Nanosheets as Trifunctional Electrocatalysts for Water Splitting and Rechargeable Hybrid Sodium-Air Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 26891-26903	9.5	13
286	Superelastic oxide micropillars enabled by surface tension-modulated 90° domain switching with excellent fatigue resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	4
285	Computational exploration of magnesium-decorated carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) monolayer as advanced energy storage materials. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 21739-21747	6.7	11
284	Inside Back Cover: Wafer-Scale Oxygen-Doped MoS <sub>2</sub> Monolayer (Small Methods 6/2021). <i>Small Methods</i> , <b>2021</b> , 5, 2170026	12.8	
283	Engineering polar vortex from topologically trivial domain architecture. <i>Nature Communications</i> , <b>2021</b> , 12, 4620	17.4	4
282	Computational evaluation of superalkali-decorated graphene nanoribbon as advanced hydrogen storage materials. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 24510-24516	6.7	5
281	Correlating the electronic structures of metallic/semiconducting MoTe interface to its atomic structures. <i>National Science Review</i> , <b>2021</b> , 8, nwaa087	10.8	1

280	3D star-like atypical hybrid MOF derived single-atom catalyst boosts oxygen reduction catalysis. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 55, 355-360	12	46
279	A systematic benchmarking of <sup>31</sup> P and <sup>19</sup> F NMR chemical shift predictions using different DFT/GIAO methods and applying linear regression to improve the prediction accuracy. <i>International Journal of Quantum Chemistry</i> , <b>2021</b> , 121, e26482	2.1	2
278	Product-Specific Active Site Motifs of Cu for Electrochemical CO <sub>2</sub> Reduction. <i>CheM</i> , <b>2021</b> , 7, 406-420	16.2	27
277	Reaction Mechanism and Structural Evolution of Fluorographite Cathodes in Solid-State K/Na/Li Batteries. <i>Advanced Materials</i> , <b>2021</b> , 33, e2006118	24	19
276	Dislocation-induced large local polarization inhomogeneity of ferroelectric materials. <i>Scripta Materialia</i> , <b>2021</b> , 194, 113624	5.6	2
275	Bulk and surface degradation in layered Ni-rich cathode for Li ions batteries: Defect proliferation via chain reaction mechanism. <i>Energy Storage Materials</i> , <b>2021</b> , 35, 62-69	19.4	11
274	In situ TEM revealing the effects of dislocations on lithium-ion migration in transition metal dichalcogenides. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 58, 280-284	12	1
273	Direct observation of highly confined phonon polaritons in suspended monolayer hexagonal boron nitride. <i>Nature Materials</i> , <b>2021</b> , 20, 43-48	27	34
272	Modeling and simulation of high-efficiency GaAs PIN solar cells. <i>Journal of Computational Electronics</i> , <b>2021</b> , 20, 310-316	1.8	0
271	Development of in situ optical spectroscopy with high temporal resolution in an aberration-corrected transmission electron microscope. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 013704	1.7	3
270	A general QSPR protocol for the prediction of atomic/inter-atomic properties: a fragment based graph convolutional neural network (F-GCN). <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 13242-13249	3.6	1
269	A Highly Strained Phase in PbZrTiO Films with Enhanced Ferroelectric Properties. <i>Advanced Science</i> , <b>2021</b> , 8, 2003582	13.6	10
268	Four-dimensional vibrational spectroscopy for nanoscale mapping of phonon dispersion in BN nanotubes. <i>Nature Communications</i> , <b>2021</b> , 12, 1179	17.4	6
267	Understanding the Intra-Molecular Proton Transfer of Octahydrotriborate and Exploring the Dehydrogenation Pathways of NH <sub>4</sub> B <sub>3</sub> H <sub>8</sub> by DFT Calculations. <i>Advanced Theory and Simulations</i> , <b>2021</b> , 4, 2000287	3.5	4
266	Van der Waals epitaxy of nearly single-crystalline nitride films on amorphous graphene-glass wafer. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	12
265	Schottky Barrier-Induced Surface Electric Field Boosts Universal Reduction of NO in Water to Ammonia. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 20711-20716	16.4	14
264	Schottky Barrier-Induced Surface Electric Field Boosts Universal Reduction of NO <sub>x</sub> in Water to Ammonia. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 20879-20884	3.6	7
263	Atomically Thin Bilayer Janus Membranes for Cryo-electron Microscopy. <i>ACS Nano</i> , <b>2021</b> , 15, 16562-16571	16.7	2

262	Sub-2 nm Ultrasmall High-Entropy Alloy Nanoparticles for Extremely Superior Electrocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 17117-17127	16.4	27
261	Atomic-scale imaging of CHNHPbI structure and its decomposition pathway. <i>Nature Communications</i> , <b>2021</b> , 12, 5516	17.4	10
260	Heterojunction-Based Electron Donators to Stabilize and Activate Ultrafine Pt Nanoparticles for Efficient Hydrogen Atom Dissociation and Gas Evolution. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 25766-25770	16.4	5
259	Accurate predictions of drugs aqueous solubility via deep learning tools. <i>Journal of Molecular Structure</i> , <b>2021</b> , 1249, 131562	3.4	2
258	Computational evaluation of Mg-decorated g-CN as clean energy gas storage media. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 35130-35136	6.7	3
257	A mechanistic study of electrode materials for rechargeable batteries beyond lithium ions by in situ transmission electron microscopy. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2670-2707	35.4	10
256	Synthesis of centimeter-scale high-quality polycrystalline hexagonal boron nitride films from Fe fluxes. <i>Nanoscale</i> , <b>2021</b> , 13, 11223-11231	7.7	1
255	Atomic-Scale Mechanism of Grain Boundary Effects on the Magnetic and Transport Properties of FeO Bicrystal Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 6889-6896	9.5	2
254	Graphene-induced crystal-healing of AlN film by thermal annealing for deep ultraviolet light-emitting diodes. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 181103	3.4	5
253	Elucidating the Roles of Hole Transport Layers in p-i-n Perovskite Solar Cells. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000149	6.4	7
252	A three-dimensional interconnected V6O13 nest with a V5+-rich state for ultrahigh Zn ion storage. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 10370-10376	13	39
251	General Decomposition Pathway of Organic-Inorganic Hybrid Perovskites through an Intermediate Superstructure and its Suppression Mechanism. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001107	24	23
250	Epitaxial array of Fe3O4 nanodots for high rate high capacity conversion type lithium ion batteries electrode with long cycling life. <i>Nano Energy</i> , <b>2020</b> , 74, 104876	17.1	31
249	Antiferromagnetic Magnetic Polaron Formation and Optical Properties of CVD-Grown Mn-Doped Zinc Stannate (ZTO). <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 1679-1688	4	6
248	Bending Strain-Tailored Magnetic and Electronic Transport Properties of Reactively Sputtered FeN/Muscovite Epitaxial Heterostructures toward Flexible Spintronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 27394-27404	9.5	9
247	Seeded growth of large single-crystal copper foils with high-index facets. <i>Nature</i> , <b>2020</b> , 581, 406-410	50.4	68
246	Highly Flexible and Twistable Freestanding Single Crystalline Magnetite Film with Robust Magnetism. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2003495	15.6	26
245	Unraveling Atomically Irreversible Cation Migration in Sodium Layered Oxide Cathodes. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 5464-5470	6.4	9

244	Image Restoration via Deep Memory-Based Latent Attention Network. <i>IEEE Access</i> , <b>2020</b> , 8, 104728-104739	3.9	2
243	Carbon Fibers Embedded With Iron Selenide (Fe Se ) as Anode for High-Performance Sodium and Potassium Ion Batteries. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 408	5	11
242	Direct Growth of Nanopatterned Graphene on Sapphire and Its Application in Light Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001483	15.6	15
241	Local modulation of excitons and trions in monolayer WS <sub>2</sub> by carbon nanotubes. <i>Nano Research</i> , <b>2020</b> , 13, 1982-1987	10	3
240	Manipulation of surface phonon polaritons in SiC nanorods. <i>Science Bulletin</i> , <b>2020</b> , 65, 820-826	10.6	11
239	Atomic scale insight into the fundamental mechanism of Mn doped LiFePO <sub>4</sub> . <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 2741-2751	5.8	1
238	Atomic origin of spin-valve magnetoresistance at the SrRuO grain boundary. <i>National Science Review</i> , <b>2020</b> , 7, 755-762	10.8	8
237	General Protocol for the Accurate Prediction of Molecular C/H NMR Chemical Shifts via Machine Learning Augmented DFT. <i>Journal of Chemical Information and Modeling</i> , <b>2020</b> , 60, 3746-3754	6.1	20
236	Interfacial modulation of spin pumping in YIG/Pt. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	7
235	Unveiling the Fine Structural Distortion of Atomically Thin Bi O Se by Third-Harmonic Generation. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002831	24	5
234	Quasi-2D Growth of Aluminum Nitride Film on Graphene for Boosting Deep Ultraviolet Light-Emitting Diodes. <i>Advanced Science</i> , <b>2020</b> , 7, 2001272	13.6	18
233	Challenges, myths, and opportunities of electron microscopy on halide perovskites. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 010901	2.5	21
232	Atomic-Scale insight into the reversibility of polar order in ultrathin epitaxial Nb:SrTiO <sub>3</sub> /BaTiO <sub>3</sub> heterostructure and its implication to resistive switching. <i>Acta Materialia</i> , <b>2020</b> , 188, 23-29	8.4	9
231	Quantitative Analyses of the Interfacial Properties of Current Collectors at the Mesoscopic Level in Lithium Ion Batteries by Using Hierarchical Graphene. <i>Nano Letters</i> , <b>2020</b> , 20, 2175-2182	11.5	12
230	Metal-Based Nanocatalysts: Metal-Based Nanocatalysts via a Universal Design on Cellular Structure (Adv. Sci. 3/2020). <i>Advanced Science</i> , <b>2020</b> , 7, 2070013	13.6	2
229	Insight into the Structural Disorder in Honeycomb-Ordered Sodium-Layered Oxide Cathodes. <i>IScience</i> , <b>2020</b> , 23, 100898	6.1	10
228	Interlayer Decoupling in 30° Twisted Bilayer Graphene Quasicrystal. <i>ACS Nano</i> , <b>2020</b> , 14, 1656-1664	16.7	31
227	Chiral Spin-Wave Velocities Induced by All-Garnet Interfacial Dzyaloshinskii-Moriya Interaction in Ultrathin Yttrium Iron Garnet Films. <i>Physical Review Letters</i> , <b>2020</b> , 124, 027203	7.4	36



226	High-Mobility Flexible Oxyselenide Thin-Film Transistors Prepared by a Solution-Assisted Method. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 2726-2731	16.4	25
225	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. <i>Nature Communications</i> , <b>2020</b> , 11, 541	17.4	21
224	Electrolyte-assisted dissolution-recrystallization mechanism towards high energy density and power density CF cathodes in potassium cell. <i>Nano Energy</i> , <b>2020</b> , 70, 104552	17.1	19
223	A Dual Protection System for Heterostructured 3D CNT/CoSe/C as High Areal Capacity Anode for Sodium Storage. <i>Advanced Science</i> , <b>2020</b> , 7, 1902907	13.6	50
222	Artificially engineered nanostrain in FeSexTe1-x superconductor thin films for supercurrent enhancement. <i>NPG Asia Materials</i> , <b>2020</b> , 12,	10.3	6
221	Direct Growth of Continuous and Uniform MoS Film on SiO/Si Substrate Catalyzed by Sodium Sulfate. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 1570-1577	6.4	10
220	Precise control of the interlayer twist angle in large scale MoS homostructures. <i>Nature Communications</i> , <b>2020</b> , 11, 2153	17.4	55
219	Catalyst-Free Synthesis of Few-Layer Graphdiyne Using a Microwave-Induced Temperature Gradient at a Solid/Liquid Interface. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001396	15.6	28
218	Record thermopower found in an IrMn-based spintronic stack. <i>Nature Communications</i> , <b>2020</b> , 11, 2023	17.4	12
217	Atomic-Precision Repair of a Few-Layer 2H-MoTe Thin Film by Phase Transition and Recrystallization Induced by a Heterophase Interface. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000236	24	12
216	Oxygen Reduction Reaction Catalyzed by Carbon-Supported Platinum Few-Atom Clusters: Significant Enhancement by Doping of Atomic Cobalt. <i>Research</i> , <b>2020</b> , 2020, 9167829	7.8	8
215	Graphene-Assisted Quasi-van der Waals Epitaxy of AlN Film on Nano-Patterned Sapphire Substrate for Ultraviolet Light Emitting Diodes. <i>Journal of Visualized Experiments</i> , <b>2020</b> ,	1.6	1
214	Transmission electron microscopy of organic-inorganic hybrid perovskites: myths and truths. <i>Science Bulletin</i> , <b>2020</b> , 65, 1643-1649	10.6	17
213	First Atomic-Scale Insight into Degradation in Lithium Iron Phosphate Cathodes by Transmission Electron Microscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 4608-4617	6.4	4
212	Ultrathin RuRh@(RuRh)O2 core@shell nanosheets as stable oxygen evolution electrocatalysts. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 15746-15751	13	10
211	Intercalation of van der Waals layered materials: A route towards engineering of electron correlation. <i>Chinese Physics B</i> , <b>2020</b> , 29, 097104	1.2	3
210	Achieving electronic structure reconfiguration in metallic carbides for robust electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 2453-2462	13	38
209	Selective doping to relax glassified grain boundaries substantially enhances the ionic conductivity of LiTi2(PO4)3 glass-ceramic electrolytes. <i>Journal of Power Sources</i> , <b>2020</b> , 449, 227574	8.9	9



208	Inhomogeneous-strain-induced magnetic vortex cluster in one-dimensional manganite wire. <i>Science Bulletin</i> , <b>2020</b> , 65, 201-207	10.6	5
207	Thickness-Dependent In-Plane Polarization and Structural Phase Transition in van der Waals Ferroelectric CuInP S. <i>Small</i> , <b>2020</b> , 16, e1904529	11	22
206	Electronic-structure tuning of honeycomb layered oxide cathodes for superior performance. <i>Acta Materialia</i> , <b>2020</b> , 199, 34-41	8.4	3
205	Broad-Spectral-Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in $\text{BiMoO}_6$ . <i>Advanced Materials</i> , <b>2020</b> , 32, e2002014	24	19
204	Nanocable with thick active intermediate layer for stable and high-area-capacity sodium storage. <i>Nano Energy</i> , <b>2020</b> , 78, 105265	17.1	5
203	Accurate predictions of aqueous solubility of drug molecules via the multilevel graph convolutional network (MGCN) and SchNet architectures. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 23766-23772	3.6	11
202	Stabilization of ferroelastic charged domain walls in self-assembled $\text{BiFeO}_3$ nanoislands. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 124103	2.5	2
201	Eightfold fermionic excitation in a charge density wave compound. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	7
200	Atomic-environment-dependent thickness of ferroelastic domain walls near dislocations. <i>Acta Materialia</i> , <b>2020</b> , 188, 635-640	8.4	
199	Exploration of the Dehydrogenation Pathways of Ammonia Diborane and Diammoniate of Diborane by Molecular Dynamics Simulations Using Reactive Force Fields. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 1698-1704	2.8	14
198	Hyperbolic Phonon Polaritons: Broad-Spectral-Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in $\text{BiMoO}_3$ (Adv. Mater. 46/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070347	24	
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71	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide SnS <sub>2</sub> nanostructures. <i>Nano Energy</i> , <b>2017</b> , 32, 302-309	17.1	60
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61	Metal Organic Framework-Derived Cobalt Dicarboxylate as a High-Capacity Anode Material for Lithium-ion Batteries. <i>Energy Technology</i> , <b>2017</b> , 5, 637-642	3.5	16
60	Asymmetric Phase Transition Pathways During Li/Na Migration in 2D Materials. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 2070-2071	0.5	
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57	Misalignment Induced Artifacts in Quantitative Annular Bright-Field Imaging. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 888-889	0.5	7
56	Flexible hybrid carbon nanotube sponges embedded with SnS <sub>2</sub> from tubular nanosheaths to nanosheets as free-standing anodes for lithium-ion batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 30098-30105	3.7	23
55	Origins of Large Voltage Hysteresis in High-Energy-Density Metal Fluoride Lithium-Ion Battery Conversion Electrodes. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 2838-48	16.4	166
54	Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600490	21.8	95
53	Similarities and Differences in Kinetics and Dynamics During Li and Na Transport in MoS <sub>2</sub> Nanostructures. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 1386-1387	0.5	0
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48	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS <sub>2</sub> . <i>Nano Letters</i> , <b>2016</b> , 16, 5582-8	11.5	48
47	Structure Tracking Aided Design and Synthesis of Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Nanocrystals as High-Power Cathodes for Lithium Ion Batteries. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5712-5718	9.6	48

46	Visualization of electrochemically driven solid-state phase transformations using operando hard X-ray spectro-imaging. <i>Nature Communications</i> , <b>2015</b> , 6, 6883	17.4	72
45	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS <sub>2</sub> <i>ACS Nano</i> , <b>2015</b> , 9, 11296-301	16.7	136
44	Origin of the metal-insulator transition in ultrathin films of La <sub>2</sub> /3Sr <sub>1</sub> /3MnO <sub>3</sub> . <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	53
43	Atomic Observation of Phase Transformation from Spinel to Rock Salt in Lithium Manganese Oxide. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 333-334	0.5	
42	Tetragonal BiFeO <sub>3</sub> on yttria-stabilized zirconia. <i>APL Materials</i> , <b>2015</b> , 3, 116104	5.7	6
41	Annular Bright-Field Electron Microscopy Tracking Solid-State Chemical Reaction. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 963-964	0.5	
40	Tracking Ionic Transport and Electrochemical Dynamics in Battery Electrodes Using in situ TEM-EELS. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 803-804	0.5	
39	B11-O-11Atomic-scale Tracking Cation Diffusion in Lithium Manganese Oxide. <i>Microscopy (Oxford, England)</i> , <b>2015</b> , 64, i15.2-i15	1.3	
38	Ferroelastic domain switching dynamics under electrical and mechanical excitations. <i>Nature Communications</i> , <b>2014</b> , 5, 3801	17.4	110
37	Impedance spectroscopic analysis of lead iodide perovskite-sensitized solid-state solar cells. <i>ACS Nano</i> , <b>2014</b> , 8, 362-73	16.7	617
36	Rice husk derived carbon-silica composites as anodes for lithium ion batteries. <i>RSC Advances</i> , <b>2014</b> , 4, 64744-64746	3.7	51
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33	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. <i>Nature Communications</i> , <b>2014</b> , 5, 4232	17.4	411
32	Tracking Displacement Reactions in Cu <sub>x</sub> V <sub>2</sub> O <sub>5</sub> Cathodes by in-situ TEM. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 450-451	0.5	
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29	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. <i>Nature</i> , <b>2013</b> , 499, 316-9	50.4	7488

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12	Ultraviolet/Visible Quasicylindrical Waves on Semimetal Cd <sub>3</sub> As <sub>2</sub> Nanoplates. <i>Advanced Photonics Research</i> , <b>2010</b> , 2100354	1.9	1
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6	Electric Current Aligning Component Units during Graphene Fiber Joule Heating. <i>Advanced Functional Materials</i> ,2103493	15.6	10
5	Heterojunction-based electron donators to stabilize and activate ultrafine Pt nanoparticles for efficient hydrogen atom dissociation and gas evolution. <i>Angewandte Chemie</i> ,	3.6	1
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