

# Peng Gao

## List of Publications by Year in descending order

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351  
papers

28,120  
citations

9756

73  
h-index

6282

158  
g-index

359  
all docs

359  
docs citations

359  
times ranked

30686  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. <i>Nature</i> , 2013, 499, 316-319.	13.7	8,542
2	Observation of conducting filament growth in nanoscale resistive memories. <i>Nature Communications</i> , 2012, 3, 732.	5.8	957
3	Impedance Spectroscopic Analysis of Lead Iodide Perovskite-Sensitized Solid-State Solar Cells. <i>ACS Nano</i> , 2014, 8, 362-373.	7.3	663
4	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. <i>Nature Communications</i> , 2014, 5, 4232.	5.8	511
5	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. <i>Science Bulletin</i> , 2017, 62, 1074-1080.	4.3	454
6	Ruthenium atomically dispersed in carbon outperforms platinum toward hydrogen evolution in alkaline media. <i>Nature Communications</i> , 2019, 10, 631.	5.8	423
7	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. <i>Nature</i> , 2019, 570, 91-95.	13.7	422
8	Batch production of 6-inch uniform monolayer molybdenum disulfide catalyzed by sodium in glass. <i>Nature Communications</i> , 2018, 9, 979.	5.8	338
9	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. <i>Nature Nanotechnology</i> , 2016, 11, 930-935.	15.6	330
10	Domain Dynamics During Ferroelectric Switching. <i>Science</i> , 2011, 334, 968-971.	6.0	320
11	Stable High-Index Faceted Pt Skin on Zigzag-Like PtFe Nanowires Enhances Oxygen Reduction Catalysis. <i>Advanced Materials</i> , 2018, 30, 1705515.	11.1	305
12	Thermal Emitting Strategy to Synthesize Atomically Dispersed Pt Metal Sites from Bulk Pt Metal. <i>Journal of the American Chemical Society</i> , 2019, 141, 4505-4509.	6.6	285
13	Hyperporous Sponge Interconnected by Hierarchical Carbon Nanotubes as a High-Performance Potassium-Ion Battery Anode. <i>Advanced Materials</i> , 2018, 30, e1802074.	11.1	268
14	Vertical Graphene Growth on SiO <sub>2</sub> Microparticles for Stable Lithium Ion Battery Anodes. <i>Nano Letters</i> , 2017, 17, 3681-3687.	4.5	241
15	Li-free Cathode Materials for High Energy Density Lithium Batteries. <i>Joule</i> , 2019, 3, 2086-2102.	11.7	239
16	A 3D Trilayered CNT/MoSe <sub>2</sub> /C Heterostructure with an Expanded MoSe <sub>2</sub> Interlayer Spacing for an Efficient Sodium Storage. <i>Advanced Energy Materials</i> , 2019, 9, 1900567.	10.2	218
17	Revealing the role of defects in ferroelectric switching with atomic resolution. <i>Nature Communications</i> , 2011, 2, 591.	5.8	214
18	Ultrafast Sodium/Potassium-Ion Intercalation into Hierarchically Porous Thin Carbon Shells. <i>Advanced Materials</i> , 2019, 31, e1805430.	11.1	214

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19	Origins of Large Voltage Hysteresis in High-Energy-Density Metal Fluoride Lithium-Ion Battery Conversion Electrodes. <i>Journal of the American Chemical Society</i> , 2016, 138, 2838-2848.	6.6	212
20	Graphite as a potassium ion battery anode in carbonate-based electrolyte and ether-based electrolyte. <i>Journal of Power Sources</i> , 2019, 409, 24-30.	4.0	203
21	Sub-2 nm Ultrasmall High-Entropy Alloy Nanoparticles for Extremely Superior Electrocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2021, 143, 17117-17127.	6.6	202
22	Iridium-Tungsten Alloy Nanodendrites as pH-Universal Water-Splitting Electrocatalysts. <i>ACS Central Science</i> , 2018, 4, 1244-1252.	5.3	196
23	Li metal coated with amorphous Li <sub>3</sub> PO <sub>4</sub> via magnetron sputtering for stable and long-cycle life lithium metal batteries. <i>Journal of Power Sources</i> , 2017, 342, 175-182.	4.0	181
24	Long-distance propagation of short-wavelength spin waves. <i>Nature Communications</i> , 2018, 9, 738.	5.8	181
25	Wrinkle-Free Single-Crystal Graphene Wafer Grown on Strain-Engineered Substrates. <i>ACS Nano</i> , 2017, 11, 12337-12345.	7.3	172
26	Dual-coupling-guided epitaxial growth of wafer-scale single-crystal WS <sub>2</sub> monolayer on vicinal a-plane sapphire. <i>Nature Nanotechnology</i> , 2022, 17, 33-38.	15.6	171
27	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS <sub>2</sub> . <i>ACS Nano</i> , 2015, 9, 11296-11301.	7.3	167
28	Controllable conductive readout in self-assembled, topologically confined ferroelectric domain walls. <i>Nature Nanotechnology</i> , 2018, 13, 947-952.	15.6	163
29	Atomic scale insights into structure instability and decomposition pathway of methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018, 9, 4807.	5.8	161
30	Atomic-scale mechanisms of ferroelastic domain-wall-mediated ferroelectric switching. <i>Nature Communications</i> , 2013, 4, .	5.8	152
31	Controlled Synthesis of Core-Shell Carbon@MoS <sub>2</sub> Nanotube Sponges as High-Performance Battery Electrodes. <i>Advanced Materials</i> , 2016, 28, 10175-10181.	11.1	145
32	Role of the Exciton-Polariton in a Continuous-Wave Optically Pumped CsPbBr <sub>3</sub> Perovskite Laser. <i>Nano Letters</i> , 2020, 20, 6636-6643.	4.5	145
33	Seeded 2D epitaxy of large-area single-crystal films of the van der Waals semiconductor 2H MoTe <sub>2</sub> . <i>Science</i> , 2021, 372, 195-200.	6.0	143
34	Precise control of the interlayer twist angle in large scale MoS <sub>2</sub> homostructures. <i>Nature Communications</i> , 2020, 11, 2153.	5.8	142
35	A native oxide high- $\epsilon_r$ gate dielectric for two-dimensional electronics. <i>Nature Electronics</i> , 2020, 3, 473-478.	13.1	141
36	Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges. <i>Advanced Energy Materials</i> , 2016, 6, 1600490.	10.2	136

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37	Thermolysis of Noble Metal Nanoparticles into Electron-Rich Phosphorus-Coordinated Noble Metal Single Atoms at Low Temperature. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14184-14188.	7.2	136
38	Ferroelastic domain switching dynamics under electrical and mechanical excitations. <i>Nature Communications</i> , 2014, 5, 3801.	5.8	135
39	Ultrathin CsPbX <sub>3</sub> Nanowire Arrays with Strong Emission Anisotropy. <i>Advanced Materials</i> , 2018, 30, e1801805.	11.1	135
40	Towards super-clean graphene. <i>Nature Communications</i> , 2019, 10, 1912.	5.8	133
41	TiS <sub>2</sub> as a high performance potassium ion battery cathode in ether-based electrolyte. <i>Energy Storage Materials</i> , 2018, 12, 216-222.	9.5	129
42	Loofah-derived carbon as an anode material for potassium ion and lithium ion batteries. <i>Electrochimica Acta</i> , 2019, 306, 446-453.	2.6	129
43	Monitoring Local Strain Vector in Atomic-Layered MoSe <sub>2</sub> by Second-Harmonic Generation. <i>Nano Letters</i> , 2017, 17, 7539-7543.	4.5	128
44	Surface passivation and band engineering: a way toward high efficiency graphene-planar Si solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8567.	5.2	123
45	Improved Epitaxy of AlN Film for Deep-Ultraviolet Light-Emitting Diodes Enabled by Graphene. <i>Advanced Materials</i> , 2019, 31, e1807345.	11.1	116
46	Seeded growth of large single-crystal copper foils with high-index facets. <i>Nature</i> , 2020, 581, 406-410.	13.7	116
47	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. <i>Advanced Materials</i> , 2018, 30, 1702944.	11.1	113
48	3D star-like atypical hybrid MOF derived single-atom catalyst boosts oxygen reduction catalysis. <i>Journal of Energy Chemistry</i> , 2021, 55, 355-360.	7.1	113
49	Au Clusters on Pd Nanosheets Selectively Switch the Pathway of Ethanol Electrooxidation: Amorphous/Crystalline Interface Matters. <i>Advanced Energy Materials</i> , 2021, 11, 2100187.	10.2	113
50	Ultrathin PtPd-Based Nanorings with Abundant Step Atoms Enhance Oxygen Catalysis. <i>Advanced Materials</i> , 2018, 30, e1802136.	11.1	107
51	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. <i>Nature Communications</i> , 2017, 8, 15549.	5.8	104
52	Palladium Single Atoms on TiO <sub>2</sub> as a Photocatalytic Sensing Platform for Analyzing the Organophosphorus Pesticide Chlorpyrifos. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 232-236.	7.2	103
53	Electrically Driven Redox Process in Cerium Oxides. <i>Journal of the American Chemical Society</i> , 2010, 132, 4197-4201.	6.6	101
54	In situ TEM studies of oxygen vacancy migration for electrically induced resistance change effect in cerium oxides. <i>Micron</i> , 2010, 41, 301-305.	1.1	100

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55	Millimeter-Scale Single-Crystalline Semiconducting $\text{MoTe}_2$ via Solid-to-Solid Phase Transformation. <i>Journal of the American Chemical Society</i> , 2019, 141, 2128-2134.	6.6	100
56	A Dual Protection System for Heterostructured 3D CNT/ $\text{CoSe}_2$ /C as High Areal Capacity Anode for Sodium Storage. <i>Advanced Science</i> , 2020, 7, 1902907.	5.6	97
57	Low Residual Carrier Concentration and High Mobility in 2D Semiconducting $\text{Bi}_2\text{O}_2\text{Se}$ . <i>Nano Letters</i> , 2019, 19, 197-202.	4.5	95
58	Atomic-Scale Measurement of Flexoelectric Polarization at $\text{SrTiO}_3$ Dislocations. <i>Physical Review Letters</i> , 2018, 120, 267601.	2.9	93
59	Two Birds with One Stone: Interfacial Engineering of Multifunctional Janus Separator for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2022, 34, e2107638.	11.1	91
60	Sodiation via Heterogeneous Disproportionation in $\text{FeF}_2$ Electrodes for Sodium-Ion Batteries. <i>ACS Nano</i> , 2014, 8, 7251-7259.	7.3	89
61	Layered-Structure $\text{SbPO}_4$ /Reduced Graphene Oxide: An Advanced Anode Material for Sodium Ion Batteries. <i>ACS Nano</i> , 2018, 12, 12869-12878.	7.3	87
62	High-Brightness Blue Light-Emitting Diodes Enabled by a Directly Grown Graphene Buffer Layer. <i>Advanced Materials</i> , 2018, 30, e1801608.	11.1	87
63	Graphene-Armored Aluminum Foil with Enhanced Anticorrosion Performance as Current Collectors for Lithium-Ion Battery. <i>Advanced Materials</i> , 2017, 29, 1703882.	11.1	85
64	$\text{SnP}_2\text{O}_7$ Covered Carbon Nanosheets as a Long-Life and High-Rate Anode Material for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1804672.	7.8	84
65	Direct observation of highly confined phonon polaritons in suspended monolayer hexagonal boron nitride. <i>Nature Materials</i> , 2021, 20, 43-48.	13.3	84
66	Kinetic modulation of graphene growth by fluorine through spatially confined decomposition of metal fluorides. <i>Nature Chemistry</i> , 2019, 11, 730-736.	6.6	82
67	Origin of the metal-insulator transition in ultrathin films of $\text{LaS}_2$ .	1.1	80
68	Visualization of electrochemically driven solid-state phase transformations using operando hard X-ray spectro-imaging. <i>Nature Communications</i> , 2015, 6, 6883.	5.8	80
69	Chiral Spin-Wave Velocities Induced by All-Garnet Interfacial Dzyaloshinskii-Moriya Interaction in Ultrathin Yttrium Iron Garnet Films. <i>Physical Review Letters</i> , 2020, 124, 027203.	2.9	80
70	Room-Temperature Polar Ferromagnet $\text{ScFeO}_3$ Transformed from a High-Pressure Orthorhombic Perovskite Phase. <i>Journal of the American Chemical Society</i> , 2014, 136, 15291-15299.	6.6	78
71	Tunable Free-Standing Core-Shell CNT@ $\text{MoSe}_2$ Anode for Lithium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 14622-14631.	4.0	78
72	High-Yield Production of $\text{MoS}_2$ and $\text{WS}_2$ Quantum Sheets from Their Bulk Materials. <i>Nano Letters</i> , 2017, 17, 7767-7772.	4.5	77

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73	A three-dimensional interconnected $V_6O_{13}$ nest with a $V^{5+}$ -rich state for ultrahigh Zn ion storage. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10370-10376.	5.2	77
74	Ferroc domains regulate photocurrent in single-crystalline $CH_3NH_3PbI_3$ films self-grown on FTO/TiO <sub>2</sub> substrate. <i>Npj Quantum Materials</i> , 2018, 3, .	1.8	76
75	Graphene-assisted quasi-van der Waals epitaxy of AlN film for ultraviolet light emitting diodes on nano-patterned sapphire substrate. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	76
76	Fast Growth of Strain-Free AlN on Graphene-Buffered Sapphire. <i>Journal of the American Chemical Society</i> , 2018, 140, 11935-11941.	6.6	75
77	Toroidal polar topology in strained ferroelectric polymer. <i>Science</i> , 2021, 371, 1050-1056.	6.0	74
78	Enhancement of Heat Dissipation in Ultraviolet Light-Emitting Diodes by a Vertically Oriented Graphene Nanowall Buffer Layer. <i>Advanced Materials</i> , 2019, 31, e1901624.	11.1	72
79	Core-Shell $FeSe_2/C$ Nanostructures Embedded in a Carbon Framework as a Free Standing Anode for a Sodium Ion Battery. <i>Small</i> , 2020, 16, e2002200.	5.2	72
80	Product-Specific Active Site Motifs of Cu for Electrochemical CO <sub>2</sub> Reduction. <i>CheM</i> , 2021, 7, 406-420.	5.8	72
81	Current-controlled propagation of spin waves in antiparallel, coupled domains. <i>Nature Nanotechnology</i> , 2019, 14, 691-697.	15.6	71
82	Achieving electronic structure reconfiguration in metallic carbides for robust electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2453-2462.	5.2	71
83	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide $SnS_2$ nanostructures. <i>Nano Energy</i> , 2017, 32, 302-309.	8.2	69
84	Single crystalline $CH_3NH_3PbI_3$ self-grown on FTO/TiO <sub>2</sub> substrate for high efficiency perovskite solar cells. <i>Science Bulletin</i> , 2017, 62, 1173-1176.	4.3	69
85	Densification by Compaction as an Effective Low-Cost Method to Attain a High Areal Lithium Storage Capacity in a $CNT@Co_3O_4$ Sponge. <i>Advanced Energy Materials</i> , 2018, 8, 1702981.	10.2	69
86	Bioactive Functionalized Monolayer Graphene for High-Resolution Cryo-Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 4016-4025.	6.6	69
87	Schottky Barrier-Induced Surface Electric Field Boosts Universal Reduction of $NO_x$ in Water to Ammonia. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20711-20716.	7.2	68
88	Van der Waals integration of high- $\kappa$ perovskite oxides and two-dimensional semiconductors. <i>Nature Electronics</i> , 2022, 5, 233-240.	13.1	68
89	Intermetallic $Pd_3Pb$ Nanoplates Enhance Oxygen Reduction Catalysis with Excellent Methanol Tolerance. <i>Small Methods</i> , 2018, 2, 1700331.	4.6	66
90	Constructing $CsPbBr_3$ Cluster Passivated $\delta$ -Triple Cation Perovskite for Highly Efficient and Operationally Stable Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1809180.	7.8	64

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91	Interlayer Decoupling in 30Å° Twisted Bilayer Graphene Quasicrystal. ACS Nano, 2020, 14, 1656-1664.	7.3	64
92	Rice husk derived carbon-silica composites as anodes for lithium ion batteries. RSC Advances, 2014, 4, 64744-64746.	1.7	62
93	Switching Vertical to Horizontal Graphene Growth Using Faraday Cage-Assisted PECVD Approach for High-Performance Transparent Heating Device. Advanced Materials, 2018, 30, 1704839.	11.1	62
94	Atomic mechanism of polarization-controlled surface reconstruction in ferroelectric thin films. Nature Communications, 2016, 7, 11318.	5.8	61
95	Atomic Scale Structure Changes Induced by Charged Domain Walls in Ferroelectric Materials. Nano Letters, 2013, 13, 5218-5223.	4.5	59
96	Molecular Beam Epitaxy and Electronic Structure of Atomically Thin Oxyselenide Films. Advanced Materials, 2019, 31, e1901964.	11.1	59
97	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS <sub>2</sub> . Nano Letters, 2016, 16, 5582-5588.	4.5	58
98	Direct Observations of Retention Failure in Ferroelectric Memories. Advanced Materials, 2012, 24, 1106-1110.	11.1	56
99	In Situ Oxygen Doping of Monolayer MoS <sub>2</sub> for Novel Electronics. Small, 2020, 16, e2004276.	5.2	54
100	Catalyst-Free Synthesis of Few-Layer Graphdiyne Using a Microwave-Induced Temperature Gradient at a Solid/Liquid Interface. Advanced Functional Materials, 2020, 30, 2001396.	7.8	54
101	Ultrahigh Photocatalytic Rate at a Single-Metal-Atom-Oxide. Advanced Materials, 2019, 31, e1903491.	11.1	53
102	General Protocol for the Accurate Prediction of Molecular <sup>13</sup> C/ <sup>1</sup> H NMR Chemical Shifts via Machine Learning Augmented DFT. Journal of Chemical Information and Modeling, 2020, 60, 3746-3754.	2.5	53
103	Defect-Induced Hedgehog Polarization States in Multiferroics. Physical Review Letters, 2018, 120, 137602.	2.9	52
104	Heterojunction-Based Electron Donators to Stabilize and Activate Ultrafine Pt Nanoparticles for Efficient Hydrogen Atom Dissociation and Gas Evolution. Angewandte Chemie - International Edition, 2021, 60, 25766-25770.	7.2	52
105	Giant Electroresistance in Ferroionic Tunnel Junctions. IScience, 2019, 16, 368-377.	1.9	51
106	Epitaxial array of Fe <sub>3</sub> O <sub>4</sub> nanodots for high rate high capacity conversion type lithium ion batteries electrode with long cycling life. Nano Energy, 2020, 74, 104876.	8.2	51
107	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. Chemistry of Materials, 2015, 27, 5712-5718.	3.2	50
108	Thickness-Dependent In-Plane Polarization and Structural Phase Transition in van der Waals Ferroelectric CuInP <sub>2</sub> S <sub>6</sub> . Small, 2020, 16, e1904529.	5.2	50

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109	Creating polar antivortex in PbTiO <sub>3</sub> /SrTiO <sub>3</sub> superlattice. Nature Communications, 2021, 12, 2054.	5.8	50
110	Giant enhancement of optical nonlinearity in two-dimensional materials by multiphoton-excitation resonance energy transfer from quantum dots. Nature Photonics, 2021, 15, 510-515.	15.6	50
111	Atomic imaging of mechanically induced topological transition of ferroelectric vortices. Nature Communications, 2020, 11, 1840.	5.8	49
112	Upgrading Electrode/Electrolyte Interphases via Polyamide-Based Quasi-Solid Electrolyte for Long-Life Nickel-Rich Lithium Metal Batteries. ACS Energy Letters, 0, , 1280-1289.	8.8	49
113	Picometer-scale atom position analysis in annular bright-field STEM imaging. Ultramicroscopy, 2018, 184, 177-187.	0.8	47
114	High-Mobility Flexible Oxyselenide Thin-Film Transistors Prepared by a Solution-Assisted Method. Journal of the American Chemical Society, 2020, 142, 2726-2731.	6.6	47
115	Giant Ferroelectric Polarization in Ultrathin Ferroelectrics via Boundary Condition Engineering. Advanced Materials, 2017, 29, 1701475.	11.1	47
116	Measuring phonon dispersion at an interface. Nature, 2021, 599, 399-403.	13.7	47
117	Scaling-up Atomically Thin Coplanar Semiconductor Metal Circuitry via Phase Engineered Chemical Assembly. Nano Letters, 2019, 19, 6845-6852.	4.5	46
118	Bulk and surface degradation in layered Ni-rich cathode for Li ions batteries: Defect proliferation via chain reaction mechanism. Energy Storage Materials, 2021, 35, 62-69.	9.5	46
119	Atomic-scale structure relaxation, chemistry and charge distribution of dislocation cores in SrTiO <sub>3</sub> . Ultramicroscopy, 2018, 184, 217-224.	0.8	45
120	Reaction Mechanism and Structural Evolution of Fluorographite Cathodes in Solid State K/Na/Li Batteries. Advanced Materials, 2021, 33, e2006118.	11.1	44
121	Anomalous Hall effect and magnetic orderings in nanoscale $V_5S_8$ . Physical Review B, 2017, 96, 080401.	1.1	43
122	Grouping Effect of Single Nickel Sites in Nitrogen-Doped Carbon Boosts Hydrogen Transfer Coupling of Alcohols and Amines. Angewandte Chemie - International Edition, 2018, 57, 15194-15198.	7.2	43
123	Direct growth of wafer-scale highly oriented graphene on sapphire. Science Advances, 2021, 7, eabk0115.	4.7	43
124	Atomic structure and migration dynamics of MoS <sub>2</sub> /Li <sub>x</sub> MoS <sub>2</sub> interface. Nano Energy, 2018, 48, 560-568.	8.2	42
125	General Decomposition Pathway of Organic-Inorganic Hybrid Perovskites through an Intermediate Superstructure and its Suppression Mechanism. Advanced Materials, 2020, 32, e2001107.	11.1	42
126	Highly Flexible and Twistable Freestanding Single Crystalline Magnetite Film with Robust Magnetism. Advanced Functional Materials, 2020, 30, 2003495.	7.8	42



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127	A mechanistic study of electrode materials for rechargeable batteries beyond lithium ions by <i>in situ</i> transmission electron microscopy. <i>Energy and Environmental Science</i> , 2021, 14, 2670-2707.	15.6	42
128	Bidirectional and reversible tuning of the interlayer spacing of two-dimensional materials. <i>Nature Communications</i> , 2021, 12, 5886.	5.8	42
129	In situ visualization of sodium transport and conversion reactions of FeS <sub>2</sub> nanotubes made by morphology engineering. <i>Nano Energy</i> , 2019, 60, 424-431.	8.2	41
130	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> , 2021, 15, 9355-9367.	7.3	41
131	Atomic-scale observations of electrical and mechanical manipulation of topological polar flux closure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18954-18961.	3.3	41
132	Electrolyte-assisted dissolution-recrystallization mechanism towards high energy density and power density CF cathodes in potassium cell. <i>Nano Energy</i> , 2020, 70, 104552.	8.2	41
133	Reticulate Dual-Nanowire Aerogel for Multifunctional Applications: a High-Performance Strain Sensor and a High Areal Capacity Rechargeable Anode. <i>Advanced Functional Materials</i> , 2019, 29, 1807467.	7.8	40
134	Identifying the Conversion Mechanism of NiCo <sub>2</sub> O <sub>4</sub> during Sodiation-Desodiation Cycling by In Situ TEM. <i>Advanced Functional Materials</i> , 2017, 27, 1606163.	7.8	39
135	Quasi-2D Growth of Aluminum Nitride Film on Graphene for Boosting Deep Ultraviolet Light-Emitting Diodes. <i>Advanced Science</i> , 2020, 7, 2001272.	5.6	37
136	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. <i>Nature Communications</i> , 2020, 11, 541.	5.8	37
137	Atomic-scale imaging of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> structure and its decomposition pathway. <i>Nature Communications</i> , 2021, 12, 5516.	5.8	36
138	Challenges, myths, and opportunities of electron microscopy on halide perovskites. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	35
139	Van der Waals epitaxy of nearly single-crystalline nitride films on amorphous graphene-glass wafer. <i>Science Advances</i> , 2021, 7, .	4.7	35
140	Evidence for electric-field-driven migration and diffusion of oxygen vacancies in Pr <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> . <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	34
141	Single-Crystal $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> with Engineered Exposed (001) Facet for High-Rate, Long-Cycle-Life Lithium-Ion Battery Anode. <i>Inorganic Chemistry</i> , 2019, 58, 12724-12732.	1.9	34
142	Transmission electron microscopy of organic-inorganic hybrid perovskites: myths and truths. <i>Science Bulletin</i> , 2020, 65, 1643-1649.	4.3	34
143	Electric Current Aligning Component Units during Graphene Fiber Joule Heating. <i>Advanced Functional Materials</i> , 2022, 32, 2103493.	7.8	33
144	Anisotropic moiré optical transitions in twisted monolayer/bilayer phosphorene heterostructures. <i>Nature Communications</i> , 2021, 12, 3947.	5.8	33

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145	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> , 2021, 46, 21739-21747.	3.8	33
146	Atomic-Scale Tracking of a Phase Transition from Spinel to Rocksalt in Lithium Manganese Oxide. <i>Chemistry of Materials</i> , 2017, 29, 1006-1013.	3.2	32
147	Stable interstitial layer to alleviate fatigue fracture of high nickel cathode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 376, 200-206.	4.0	32
148	Surface and Near-Surface Engineering of PtCo Nanowires at Atomic Scale for Enhanced Electrochemical Sensing and Catalysis. <i>Chemistry of Materials</i> , 2018, 30, 6660-6667.	3.2	32
149	Universal Imaging of Full Strain Tensor in 2D Crystals with Third-Harmonic Generation. <i>Advanced Materials</i> , 2019, 31, e1808160.	11.1	32
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