Kai-Hui Liu

List of Publications by Year in Descending Order

235 papers	8,721 citations	51 h-index	88 g-index
257 ext. papers	10,847 ext. citations	12.8 avg, IF	6.05 L-index

#	Paper	IF	Citations
235	Engineering of atomic-scale flexoelectricity at grain boundaries.. *Nature Communications*, **2022**, 13, 216	17.4	4
234	Electrically driven motion, destruction, and chirality change of polar vortices in oxide superlattices. *Science China: Physics, Mechanics and Astronomy*, **2022**, 65, 1	3.6	1
233	Epitaxy of 2D Materials toward Single Crystals.. *Advanced Science*, **2022**, e2105201	13.6	1
232	Lattice Polarity Manipulation of Quasi-vdW Epitaxial GaN Films on Graphene Through Interface Atomic Configuration (Adv. Mater. 5/2022). *Advanced Materials*, **2022**, 34, 2270038	24	
231	Near-field infrared response of graphene on copper substrate. *Frontiers of Physics*, **2022**, 17, 1	3.7	0
230	Selective excitation of four-wave mixing by helicity in gated graphene.. *Optics Letters*, **2022**, 47, 234-237	3	
229	Non-van der Waals AgCrS2 nanosheet: a new member of 2D realm. *Science China Chemistry*, **2022**, 65, 419	7.9	
228	Controllable Growth of Graphene Photonic Crystal Fibers with Tunable Optical Nonlinearity. *ACS Photonics*, **2022**, 9, 961-968	6.3	0
227	Robust growth of two-dimensional metal dichalcogenides and their alloys by active chalcogen monomer supply.. *Nature Communications*, **2022**, 13, 1007	17.4	3
226	Monitoring the Material Quality of Two-Dimensional Transition Metal Dichalcogenides. *Journal of Physical Chemistry C*, **2022**, 126, 3797-3810	3.8	0
225	A qPlus-based scanning probe microscope compatible with optical measurements.. *Review of Scientific Instruments*, **2022**, 93, 043701	1.7	
224	Overall High-Performance Near-Infrared Photodetector Based on CVD-Grown MoTe2 and Graphene Vertical vdWs Heterostructure. *Applied Sciences (Switzerland)*, **2022**, 12, 3622	2.6	1
223	Polarization-Driven-Orientation Selective Growth of Single-Crystalline III-Nitride Semiconductors on Arbitrary Substrates (Adv. Funct. Mater. 14/2022). *Advanced Functional Materials*, **2022**, 32, 2270085	15.6	
222	Enhanced electrochemical CO2-to-C2+ conversion from synergistic interaction between terrace and step sites on monocrystalline high-index Cu facets. *Journal of Energy Chemistry*, **2022**, 70, 382-387	12	1
221	Extending Absorption of Cs 2 AgBiBr 6 to Near-Infrared Region (≈350 nm) with Intermediate Band. *Advanced Functional Materials*, **2022**, 32, 2109891	15.6	2
220	Enhanced Photoluminescence of Monolayer MoSe 2 in a Double Resonant Plasmonic Nanocavity with Fano Resonance and Mode Matching. *Laser and Photonics Reviews*, **2022**, 16, 2100199	8.3	1
219	Oxidizing Hexagonal Boron Nitride into Fluorescent Structures by Photodissociated Directional Oxygen Radical.. *Journal of Physical Chemistry Letters*, **2022**, 3369-3376	6.4	0

218	Anisotropic Carrier Mobility from 2H WSe. *Advanced Materials*, **2021**, e2108615	24	2
217	Cr-Doped Pd Metallene Endows a Practical Formaldehyde Sensor New Limit and High Selectivity. *Advanced Materials*, **2021**, e2105276	24	8
216	Optical Spectroscopy of Individual Single-Walled Carbon Nanotubes. *Nano-optics and Nanophotonics*, **2021**, 135-163	0	0
215	Lattice Polarity Manipulation of Quasi-vdW Epitaxial GaN Films on Graphene Through Interface Atomic Configuration. *Advanced Materials*, **2021**, e2106814	24	2
214	Dual-coupling-guided epitaxial growth of wafer-scale single-crystal WS monolayer on vicinal a-plane sapphire. *Nature Nanotechnology*, **2021**,	28.7	31
213	Measuring phonon dispersion at an interface. *Nature*, **2021**, 599, 399-403	50.4	6
212	Polarizer-free polarimetric image sensor through anisotropic two-dimensional GeSe. *Science China Materials*, **2021**, 64, 1230-1237	7.1	6
211	Temperature evolution of quasiparticle dispersion and dynamics in semimetallic 1T□iTe2 via high-resolution angle-resolved photoemission spectroscopy and ultrafast optical pump-probe spectroscopy. *Physical Review B*, **2021**, 103,	3.3	2
210	Unravelling a Zigzag Pathway for Hot Carrier Collection with Graphene Electrode. *Journal of Physical Chemistry Letters*, **2021**, 12, 2886-2891	6.4	0
209	Augmenting photoluminescence of monolayer MoS2 using high order modes in a metal dimer-on-film nanocavity. *Photonics Research*, **2021**, 9, 501	6	5
208	Creating polar antivortex in PbTiO/SrTiO superlattice. *Nature Communications*, **2021**, 12, 2054	17.4	14
207	Engineering of multiferroic BiFeO3 grain boundaries with head-to-head polarization configurations. *Science Bulletin*, **2021**, 66, 771-776	10.6	2
206	Enhanced Electrochemical Methanation of Carbon Dioxide at the Single-Layer Hexagonal Boron Nitride/Cu Interfacial Perimeter. *Nano Letters*, **2021**, 21, 4469-4476	11.5	7
205	Pattern-Potential-Guided Growth of Textured Macromolecular Films on Graphene/High-Index Copper. *Advanced Materials*, **2021**, 33, e2006836	24	1
204	Continuously Graded Quantum Dots: Synthesis, Applications in Quantum Dot Light-Emitting Diodes, and Perspectives. *Journal of Physical Chemistry Letters*, **2021**, 12, 5967-5978	6.4	24
203	Direct Current Electricity Generation from Dynamic Polarized Water□Semiconductor Interface. *Journal of Physical Chemistry C*, **2021**, 125, 14180-14187	3.8	6
202	Engineering polar vortex from topologically trivial domain architecture. *Nature Communications*, **2021**, 12, 4620	17.4	4
201	Correlating the electronic structures of metallic/semiconducting MoTe interface to its atomic structures. *National Science Review*, **2021**, 8, nwaa087	10.8	1

200	Gate-tunable linear magnetoresistance in molybdenum disulfide field-effect transistors with graphene insertion layer. *Nano Research*, **2021**, 14, 1814-1818	10	3
199	Product-Specific Active Site Motifs of Cu for Electrochemical CO2 Reduction. *CheM*, **2021**, 7, 406-420	16.2	27
198	Colors of Single-Wall Carbon Nanotubes. *Advanced Materials*, **2021**, 33, e2006395	24	7
197	2D Polarized Materials: Ferromagnetic, Ferrovalley, Ferroelectric Materials, and Related Heterostructures. *Advanced Materials*, **2021**, 33, e2004469	24	15
196	Atomic-scale visualization of metallic lead leak related fine structure in CsPbBr quantum dots. *Nanoscale*, **2021**, 13, 124-130	7.7	4
195	Direct observation of highly confined phonon polaritons in suspended monolayer hexagonal boron nitride. *Nature Materials*, **2021**, 20, 43-48	27	34
194	Development of in situ optical spectroscopy with high temporal resolution in an aberration-corrected transmission electron microscope. *Review of Scientific Instruments*, **2021**, 92, 013704	1.7	3
193	Epitaxial growth mechanisms of single-crystalline GaN on single-crystalline graphene. *CrystEngComm*, **2021**, 23, 5451-5455	3.3	1
192	Enhanced Hemocompatibility of a Direct Chemical Vapor Deposition-Derived Graphene Film. *ACS Applied Materials & Interfaces*, **2021**, 13, 4835-4843	9.5	2
191	Polarized Water Driven Dynamic PN Junction-Based Direct-Current Generator. *Research*, **2021**, 2021, 7505638	7.8	14
190	Single-mode lasing of CsPbBr perovskite NWs enabled by the Vernier effect. *Nanoscale*, **2021**, 13, 4432-4438	7.7	11
189	Carbon Nanotubes: Colors of Single-Wall Carbon Nanotubes (Adv. Mater. 8/2021). *Advanced Materials*, **2021**, 33, 2170060	24	
188	Modulation of the second-harmonic generation in MoS2 by graphene covering*. *Chinese Physics B*, **2021**, 30, 027803	1.2	1
187	Giant All-Optical Modulation of Second-Harmonic Generation Mediated by Dark Excitons. *ACS Photonics*, **2021**, 8, 2320-2328	6.3	3
186	Investigating the Electrical Properties of Monolayer and Bilayer h-BNs via Atomic Force Microscopy. *Advanced Materials Interfaces*, **2021**, 8, 2100447	4.6	0
185	Complete structural characterization of single carbon nanotubes by Rayleigh scattering circular dichroism. *Nature Nanotechnology*, **2021**, 16, 1073-1078	28.7	9
184	Atomic-scale imaging of CHNHPbI structure and its decomposition pathway. *Nature Communications*, **2021**, 12, 5516	17.4	10
183	Negative friction coefficient in microscale graphite/mica layered heterojunctions. *Science Advances*, **2020**, 6, eaaz6787	14.3	10

182	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS. *ACS Nano*, **2020**, 14, 6897-6905	16.7	8
181	Seeded growth of large single-crystal copper foils with high-index facets. *Nature*, **2020**, 581, 406-410	50.4	68
180	Direct Evidence of Spin Transfer Torque on Two-Dimensional Cobalt-Doped MoS2 Ferromagnetic Material. *ACS Applied Electronic Materials*, **2020**, 2, 1497-1504	4	1
179	Sandwiched graphene/hBN/graphene photonic crystal fibers with high electro-optical modulation depth and speed. *Nanoscale*, **2020**, 12, 14472-14478	7.7	8
178	Modulation of carrier lifetime in MoS2 monolayer by uniaxial strain. *Chinese Physics B*, **2020**, 29, 077201	1.2	2
177	Valley Polarization in Superacid-Treated Monolayer MoS2. *ACS Applied Electronic Materials*, **2020**, 2, 1981-1988	4	1
176	Designed Growth of Large-Size 2D Single Crystals. *Advanced Materials*, **2020**, 32, e2000046	24	51
175	Graphene-Assisted Epitaxy of Nitrogen Lattice Polarity GaN Films on Non-Polar Sapphire Substrates for Green Light Emitting Diodes. *Advanced Functional Materials*, **2020**, 30, 2001283	15.6	21
174	Atomic origin of spin-valve magnetoresistance at the SrRuO grain boundary. *National Science Review*, **2020**, 7, 755-762	10.8	8
173	Unveiling the Fine Structural Distortion of Atomically Thin Bi O Se by Third-Harmonic Generation. *Advanced Materials*, **2020**, 32, e2002831	24	5
172	The Coalescence Behavior of Two-Dimensional Materials Revealed by Multiscale Imaging during Chemical Vapor Deposition Growth. *ACS Nano*, **2020**, 14, 1902-1918	16.7	24
171	Superstable copper nanowire network electrodes by single-crystal graphene covering and their applications in flexible nanogenerator and light-emitting diode. *Nano Energy*, **2020**, 71, 104638	17.1	17
170	Utilization of Synergistic Effect of Dimension-Differentiated Hierarchical Nanomaterials for Transparent and Flexible Wireless Communicational Elements. *Advanced Materials Technologies*, **2020**, 5, 1901057	6.8	2
169	Efficient All-Optical Plasmonic Modulators with Atomically Thin Van Der Waals Heterostructures. *Advanced Materials*, **2020**, 32, e1907105	24	24
168	Precise control of the interlayer twist angle in large scale MoS homostructures. *Nature Communications*, **2020**, 11, 2153	17.4	55
167	Structured light beams created through a multimode fiber via virtual Fourier filtering based on digital optical phase conjugation. *Applied Optics*, **2020**, 59, 701-705	1.7	4
166	Scrolled Production of Large-Scale Continuous Graphene on Copper Foils*. *Chinese Physics Letters*, **2020**, 37, 108101	1.8	3
165	Pushing the conductance and transparency limit of monolayer graphene electrodes for flexible organic light-emitting diodes. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25991-25998	11.5	10

164	Broad-Spectral-Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in □MoO. *Advanced Materials*, **2020**, 32, e2002014	24	19
163	Hydrogenation-Induced Phase Transition in Atomic-Layered □MoCl3 Driven by Laser Illumination in a Moist Atmosphere. *ACS Applied Electronic Materials*, **2020**, 2, 2678-2684	4	1
162	Hyperbolic Phonon Polaritons: Broad-Spectral-Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in □MoO3 (Adv. Mater. 46/2020). *Advanced Materials*, **2020**, 32, 2070347	24	
161	MnPS spin-flop transition-induced anomalous Hall effect in graphite flake van der Waals proximity coupling. *Nanoscale*, **2020**, 12, 23266-23273	7.7	3
160	Rich information on 2D materials revealed by optical second harmonic generation. *Nanoscale*, **2020**, 12, 22891-22903	7.7	6
159	Patterning Graphene Films by HO-Based Magnetic-Assisted UV Photolysis. *ACS Applied Materials & Interfaces*, **2020**, 12, 55382-55389	9.5	4
158	Atomic-scale observations of electrical and mechanical manipulation of topological polar flux closure. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 18954-18961	11.5	23
157	Ultrafast Optical Modulation of Harmonic Generation in Two-Dimensional Materials. *Nano Letters*, **2020**, 20, 8053-8058	11.5	14
156	Optical fibres with embedded two-dimensional materials for ultrahigh nonlinearity. *Nature Nanotechnology*, **2020**, 15, 987-991	28.7	37
155	Giant pattern evolution in third-harmonic generation of strained monolayer WS2 at two-photon excitonic resonance. *Nano Research*, **2020**, 13, 3235-3240	10	2
154	Massive Growth of Graphene Quartz Fiber as a Multifunctional Electrode. *ACS Nano*, **2020**, 14, 5938-5945	16.7	20
153	Atomic imaging of mechanically induced topological transition of ferroelectric vortices. *Nature Communications*, **2020**, 11, 1840	17.4	24
152	Emerging properties of two-dimensional twisted bilayer materials. *Chinese Physics B*, **2019**, 28, 107304	1.2	14
151	Doping-Induced Second-Harmonic Generation in Centrosymmetric Graphene from Quadrupole Response. *Physical Review Letters*, **2019**, 122, 047401	7.4	35
150	Engineering Ultrafast Carrier Dynamics at the Graphene/GaAs Interface by Bulk Doping Level. *Advanced Optical Materials*, **2019**, 7, 1900580	8.1	5
149	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. *Nature*, **2019**, 570, 91-95	50.4	247
148	Characteristics of desert varnish from nanometer to micrometer scale: A photo-oxidation model on its formation. *Chemical Geology*, **2019**, 522, 55-70	4.2	19
147	Photoelectric conversion on Earth□ surface via widespread Fe- and Mn-mineral coatings. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9741-9746	11.5	62

146	Band Engineering: Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals (Adv. Mater. 17/2019). *Advanced Materials*, **2019**, 31, 1970121	24	
145	Two meters graphene film for generators. *Science Bulletin*, **2019**, 64, 487-489	10.6	3
144	Scalable and ultrafast epitaxial growth of single-crystal graphene wafers for electrically tunable liquid-crystal microlens arrays. *Science Bulletin*, **2019**, 64, 659-668	10.6	50
143	Controllable Growth of Aligned Monocrystalline CsPbBr Microwire Arrays for Piezoelectric-Induced Dynamic Modulation of Single-Mode Lasing. *Advanced Materials*, **2019**, 31, e1900647	24	50
142	Universal Imaging of Full Strain Tensor in 2D Crystals with Third-Harmonic Generation. *Advanced Materials*, **2019**, 31, e1808160	24	21
141	Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals. *Advanced Materials*, **2019**, 31, e1806562	24	49
140	Direct observation of weakened interface clamping effect enabled ferroelastic domain switching. *Acta Materialia*, **2019**, 171, 184-189	8.4	8
139	Tracking sodium migration in TiS using in situ TEM. *Nanoscale*, **2019**, 11, 7474-7480	7.7	20
138	Controllable Growth of (n, n 1) Family of Semiconducting Carbon Nanotubes. *CheM*, **2019**, 5, 1182-1193	16.2	27
137	Graphene photonic crystal fibre with strong and tunable light matter interaction. *Nature Photonics*, **2019**, 13, 754-759	33.9	69
136	Ultrafast Catalyst-Free Graphene Growth on Glass Assisted by Local Fluorine Supply. *ACS Nano*, **2019**, 13, 10272-10278	16.7	19
135	Band evolution of two-dimensional transition metal dichalcogenides under electric fields. *Applied Physics Letters*, **2019**, 115, 083104	3.4	4
134	Kinetic modulation of graphene growth by fluorine through spatially confined decomposition of metal fluorides. *Nature Chemistry*, **2019**, 11, 730-736	17.6	61
133	Strong-coupled hybrid structure of carbon nanotube and MoS monolayer with ultrafast interfacial charge transfer. *Nanoscale*, **2019**, 11, 17195-17200	7.7	10
132	Epitaxy of Single-Crystalline GaN Film on CMOS-Compatible Si(100) Substrate Buffered by Graphene. *Advanced Functional Materials*, **2019**, 29, 1905056	15.6	33
131	The Impacts of Adhesion on the Wear Property of Graphene. *Advanced Materials Interfaces*, **2019**, 6, 1900721	4.7	10
130	Extreme nonlinear strong-field photoemission from carbon nanotubes. *Nature Communications*, **2019**, 10, 4891	17.4	8
129	GaN-on-Si(100): Epitaxy of Single-Crystalline GaN Film on CMOS-Compatible Si(100) Substrate Buffered by Graphene (Adv. Funct. Mater. 42/2019). *Advanced Functional Materials*, **2019**, 29, 1970293	15.6	

128	Low-temperature epitaxy of transferable high-quality Pd(111) films on hybrid graphene/Cu(111) substrate. *Nano Research*, **2019**, 12, 2712-2717	10	4
127	Atomic-scale imaging of the defect dynamics in ceria nanowires under heating by in situ aberration-corrected TEM. *Science China Chemistry*, **2019**, 62, 1704-1709	7.9	3
126	Robust circular polarization of indirect Q-K transitions in bilayer 3R WS2. *Physical Review B*, **2019**, 100,	3.3	7
125	Comprehensive insights into effect of van der Waals contact on carbon nanotube network field-effect transistors. *Applied Physics Letters*, **2019**, 115, 173503	3.4	2
124	Nanoassembly Growth Model for Subdomain and Grain Boundary Formation in 1T? Layered ReS2. *Advanced Functional Materials*, **2019**, 29, 1906385	15.6	30
123	Ultrafast and low-power optoelectronic infrared-to-visible upconversion devices. *Photonics Research*, **2019**, 7, 1161	6	6
122	Giant Valley Coherence at Room Temperature in 3R WS with Broken Inversion Symmetry. *Research*, **2019**, 2019, 6494565	7.8	7
121	Optical Spectroscopy of Individual Carbon Nanotubes. *World Scientific Series on Carbon Nanoscience* , **2019**, 105-121	0.5	
120	Sub-10 nm stable graphene quantum dots embedded in hexagonal boron nitride. *Nanoscale*, **2019**, 11, 4226-4230	7.7	15
119	Atomic origin of Ti-deficient dislocation in SrTiO3 bicrystals and their electronic structures. *Journal of Applied Physics*, **2019**, 126, 174106	2.5	2
118	Grain Boundaries: Nanoassembly Growth Model for Subdomain and Grain Boundary Formation in 1T? Layered ReS2 (Adv. Funct. Mater. 49/2019). *Advanced Functional Materials*, **2019**, 29, 1970335	15.6	1
117	Subunit cell-level measurement of polarization in an individual polar vortex. *Science Advances*, **2019** , 5, eaav4355	14.3	23
116	Power- and Spectral-Dependent Photon-Recycling Effects in a Double-Junction Gallium Arsenide Photodiode. *ACS Photonics*, **2019**, 6, 59-65	6.3	6
115	Elastic Properties and Fracture Behaviors of Biaxially Deformed, Polymorphic MoTe. *Nano Letters*, **2019**, 19, 761-769	11.5	31
114	High-Performance Photoinduced Memory with Ultrafast Charge Transfer Based on MoS /SWCNTs Network Van Der Waals Heterostructure. *Small*, **2019**, 15, e1804661	11	17
113	Interfacial engineering in graphene bandgap. *Chemical Society Reviews*, **2018**, 47, 3059-3099	58.5	94
112	Selective growth of chirality-enriched semiconducting carbon nanotubes by using bimetallic catalysts from salt precursors. *Nanoscale*, **2018**, 10, 6922-6927	7.7	15
111	Visualizing grain boundaries in monolayer MoSe2 using mild H2O vapor etching. *Nano Research*, **2018**, 11, 4082-4089	10	14

110	Engineering active edge sites of fractal-shaped single-layer MoS2 catalysts for high-efficiency hydrogen evolution. *Nano Energy*, **2018**, 51, 786-792	17.1	64
109	Broadband nonlinear optical response of monolayer MoSe2 under ultrafast excitation. *Applied Physics Letters*, **2018**, 112, 031108	3.4	21
108	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. *Advanced Materials*, **2018**, 30, 1702944	24	85
107	Probing Phonon Dynamics in Individual Single-Walled Carbon Nanotubes. *Nano Letters*, **2018**, 18, 2590-2594	11.5	2
106	Reconstruction of structured laser beams through a multimode fiber based on digital optical phase conjugation. *Optics Letters*, **2018**, 43, 3333-3336	3	12
105	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. *Nature Communications*, **2018**, 9, 3311	17.4	135
104	Measurement of complex optical susceptibility for individual carbon nanotubes by elliptically polarized light excitation. *Nature Communications*, **2018**, 9, 3387	17.4	13
103	New Pathway for Hot Electron Relaxation in Two-Dimensional Heterostructures. *Nano Letters*, **2018**, 18, 6057-6063	11.5	37
102	Simulations of Quantum Transport in Sub-5-nm Monolayer Phosphorene Transistors. *Physical Review Applied*, **2018**, 10,	4.3	90
101	Moiré Phonons in Twisted Bilayer MoS. *ACS Nano*, **2018**, 12, 8770-8780	16.7	85
100	Enhancement of HfO2 Based RRAM Performance Through Hexagonal Boron Nitride Interface Layer **2018**,		1
99	Gate Switching of Ultrafast Photoluminescence in Graphene. *Nano Letters*, **2018**, 18, 7985-7990	11.5	14
98	Green Synthesis of Porous Cocoon-like rGO for Enhanced Microwave-Absorbing Performances. *ACS Applied Materials & Interfaces*, **2018**, 10, 42865-42874	9.5	42
97	Atomic scale insights into structure instability and decomposition pathway of methylammonium lead iodide perovskite. *Nature Communications*, **2018**, 9, 4807	17.4	113
96	Surface Index: Identification of Copper Surface Index by Optical Contrast (Adv. Mater. Interfaces 18/2018). *Advanced Materials Interfaces*, **2018**, 5, 1870087	4.6	
95	Ultrafast Broadband Charge Collection from Clean Graphene/CHNHPbI Interface. *Journal of the American Chemical Society*, **2018**, 140, 14952-14957	16.4	21
94	Sensitive and Robust Ultraviolet Photodetector Array Based on Self-Assembled Graphene/C Hybrid Films. *ACS Applied Materials & Interfaces*, **2018**, 10, 38326-38333	9.5	33
93	Fast Growth of Strain-Free AlN on Graphene-Buffered Sapphire. *Journal of the American Chemical Society*, **2018**, 140, 11935-11941	16.4	54

92	Gate tunable Kondo effect in magnetic molecule decorated graphene. *Solid State Communications*, **2018**, 278, 24-30	1.6	5
91	Rotational scanning and multiple-spot focusing through a multimode fiber based on digital optical phase conjugation. *Applied Physics Express*, **2018**, 11, 062501	2.4	9
90	Identification of Copper Surface Index by Optical Contrast. *Advanced Materials Interfaces*, **2018**, 5, 1800377	4.6	12
89	Gate-tunable third-order nonlinear optical response of massless Dirac fermions in graphene. *Nature Photonics*, **2018**, 12, 430-436	33.9	129
88	Atomic-scale mechanism of internal structural relaxation screening at polar interfaces. *Physical Review B*, **2018**, 97,	3.3	3
87	High-Mobility Multilayered MoS Flakes with Low Contact Resistance Grown by Chemical Vapor Deposition. *Advanced Materials*, **2017**, 29, 1604540	24	153
86	Sub-10 nm Nanopattern Architecture for 2D Material Field-Effect Transistors. *Nano Letters*, **2017**, 17, 1065-1070	11.5	126
85	Interfacial Engineering of Van der Waals Coupled 2D Layered Materials. *Advanced Materials Interfaces*, **2017**, 4, 1601054	4.6	18
84	Interlayer-State-Coupling Dependent Ultrafast Charge Transfer in MoS/WS Bilayers. *Advanced Science*, **2017**, 4, 1700086	13.6	61
83	Superlubricity between MoS Monolayers. *Advanced Materials*, **2017**, 29, 1701474	24	138
82	Quantification of light-enhanced ionic transport in lead iodide perovskite thin films and its solar cell applications. *Light: Science and Applications*, **2017**, 6, e16243	16.7	257
81	Carbon Nanotubes as an Ultrafast Emitter with a Narrow Energy Spread at Optical Frequency. *Advanced Materials*, **2017**, 29, 1701580	24	25
80	Real-Time Observation of Carbon Nanotube Etching Process Using Polarized Optical Microscope. *Advanced Materials*, **2017**, 29, 1701959	24	13
79	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. *Nature Communications*, **2017**, 8, 15549	17.4	74
78	The Way towards Ultrafast Growth of Single-Crystal Graphene on Copper. *Advanced Science*, **2017**, 4, 1700087	13.6	32
77	High-Throughput Optical Imaging and Spectroscopy of One-Dimensional Materials. *Chemistry - A European Journal*, **2017**, 23, 9703-9710	4.8	
76	SWCNT-MoS -SWCNT Vertical Point Heterostructures. *Advanced Materials*, **2017**, 29, 1604469	24	26
75	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide SnS2 nanostructures. *Nano Energy*, **2017**, 32, 302-309	17.1	60

74	Chemical Intercalation of Topological Insulator Grid Nanostructures for High-Performance Transparent Electrodes. *Advanced Materials*, **2017**, 29, 1703424	24	17
73	Quiver-quenched optical-field-emission from carbon nanotubes. *Applied Physics Letters*, **2017**, 111, 133101	3.4	11
72	Control the Raman response of individual carbon nanotubes by orbital angular momentum of light. *Optics Letters*, **2017**, 42, 2491-2494	3	2
71	Probing the crystallographic orientation of two-dimensional atomic crystals with supramolecular self-assembly. *Nature Communications*, **2017**, 8, 377	17.4	25
70	2D Materials: Superlubricity between MoS2 Monolayers (Adv. Mater. 27/2017). *Advanced Materials*, **2017**, 29,	24	23
69	Carbon Nanotubes: Carbon Nanotubes as an Ultrafast Emitter with a Narrow Energy Spread at Optical Frequency (Adv. Mater. 30/2017). *Advanced Materials*, **2017**, 29,	24	3
68	Light-Independent Ionic Transport in Inorganic Perovskite and Ultrastable Cs-Based Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2017**, 8, 4122-4128	6.4	186
67	Monitoring Local Strain Vector in Atomic-Layered MoSe by Second-Harmonic Generation. *Nano Letters*, **2017**, 17, 7539-7543	11.5	80
66	Unique Transformation from Graphene to Carbide on Re(0001) Induced by Strong Carbon-Metal Interaction. *Journal of the American Chemical Society*, **2017**, 139, 17574-17581	16.4	29
65	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS Continuous Films. *ACS Nano*, **2017**, 11, 12001-12007	16.7	264
64	Robust Stacking-Independent Ultrafast Charge Transfer in MoS/WS Bilayers. *ACS Nano*, **2017**, 11, 12020-12026	16.7	89
63	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. *Science Bulletin*, **2017**, 62, 1074-1080	10.6	326
62	Bandgap opening in graphene. *Chinese Science Bulletin*, **2017**, 62, 2220-2232	2.9	4
61	Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow. *Advanced Materials*, **2016**, 28, 8968-8974	24	110
60	High Conversion Efficiency Carbon Nanotube-Based Barrier-Free Bipolar-Diode Photodetector. *ACS Nano*, **2016**, 10, 9595-9601	16.7	18
59	Multiple electronic Raman scatterings in a single metallic carbon nanotube. *Physical Review B*, **2016**, 93,	3.3	9
58	Tuning the photo-response in monolayer MoS2 by plasmonic nano-antenna. *Scientific Reports*, **2016**, 6, 23626	4.9	35
57	Far-field nanoscale infrared spectroscopy of vibrational fingerprints of molecules with graphene plasmons. *Nature Communications*, **2016**, 7, 12334	17.4	174

56	Observation of Strong Interlayer Coupling in MoS2/WS2 Heterostructures. *Advanced Materials*, **2016**, 28, 1950-6	24	172
55	Correlations between Immobilizing Ions and Suppressing Hysteresis in Perovskite Solar Cells. *ACS Energy Letters*, **2016**, 1, 266-272	20.1	93
54	Optical Anisotropy of Black Phosphorus in the Visible Regime. *Journal of the American Chemical Society*, **2016**, 138, 300-5	16.4	217
53	Reversible Healing Effect of Water Molecules on Fully Crystallized Metal Halide Perovskite Film. *Journal of Physical Chemistry C*, **2016**, 120, 4759-4765	3.8	45
52	High-Throughput Determination of Statistical Structure Information for Horizontal Carbon Nanotube Arrays by Optical Imaging. *Advanced Materials*, **2016**, 28, 2018-23	24	8
51	Ultralow-frequency Raman system down to 10 cm(-1) with longpass edge filters and its application to the interface coupling in t(2+2)LGs. *Review of Scientific Instruments*, **2016**, 87, 053122	1.7	10
50	Monitoring mechanical motion of carbon nanotube based nanomotor by optical absorption spectrum. *Applied Physics Letters*, **2016**, 109, 263104	3.4	4
49	A simple method to tune graphene growth between monolayer and bilayer. *AIP Advances*, **2016**, 6, 025026	1.5	10
48	Two-Dimensional (CHNH)PbBr Perovskite Crystals for High-Performance Photodetector. *Journal of the American Chemical Society*, **2016**, 138, 16612-16615	16.4	273
47	Ultrafast nonlinear photoresponse of single-wall carbon nanotubes: a broadband degenerate investigation. *Nanoscale*, **2016**, 8, 9304-9	7.7	32
46	Structure property relations in individual carbon nanotubes [Invited]. *Journal of the Optical Society of America B: Optical Physics*, **2016**, 33, C102	1.7	4
45	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. *Nature Nanotechnology*, **2016**, 11, 930-935	28.7	277
44	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS2. *Nano Letters*, **2016**, 16, 5582-8	11.5	48
43	Strong Second-Harmonic Generation in Atomic Layered GaSe. *Journal of the American Chemical Society*, **2015**, 137, 7994-7	16.4	206
42	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS *ACS Nano*, **2015**, 9, 11296-301	16.7	136
41	Photovoltaic Effect and Evidence of Carrier Multiplication in Graphene Vertical Homojunctions with Asymmetrical Metal Contacts. *ACS Nano*, **2015**, 9, 8851-8	16.7	15
40	Surface-Facet-Dependent Phonon Deformation Potential in Individual Strained Topological Insulator Bi2Se3 Nanoribbons. *ACS Nano*, **2015**, 9, 10244-51	16.7	18
39	BN-Enabled Epitaxy of Pb(1-x)Sn(x)Se Nanoplates on SiO Si for High-Performance Mid-Infrared Detection. *Small*, **2015**, 11, 5388-94	11	34

38	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. *ACS Nano*, **2015**, 9, 6478-83	16.7	57
37	Eukaryotic microbial communities in hypersaline soils and sediments from the alkaline hypersaline Huama Lake as revealed by 454 pyrosequencing. *Antonie Van Leeuwenhoek*, **2014**, 105, 871-80	2.1	14
36	Three-dimensional spirals of atomic layered MoS2. *Nano Letters*, **2014**, 14, 6418-23	11.5	136
35	Growth of high-density-aligned and semiconducting-enriched single-walled carbon nanotubes: decoupling the conflict between density and selectivity. *ACS Nano*, **2014**, 8, 554-62	16.7	58
34	Van der Waals-coupled electronic states in incommensurate double-walled carbon nanotubes. *Nature Physics*, **2014**, 10, 737-742	16.2	50
33	Evolution of interlayer coupling in twisted molybdenum disulfide bilayers. *Nature Communications*, **2014**, 5, 4966	17.4	410
32	Importance of diameter control on selective synthesis of semiconducting single-walled carbon nanotubes. *ACS Nano*, **2014**, 8, 8564-72	16.7	37
31	Systematic determination of absolute absorption cross-section of individual carbon nanotubes. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7564-9	11.5	59
30	High-throughput optical imaging and spectroscopy of individual carbon nanotubes in devices. *Nature Nanotechnology*, **2013**, 8, 917-22	28.7	80
29	Quantum-coupled radial-breathing oscillations in double-walled carbon nanotubes. *Nature Communications*, **2013**, 4, 1375	17.4	52
28	Electrical, Optical and Ionic Probe inside Transmission Electron Microscope. *Materials Research Society Symposia Proceedings*, **2013**, 1525, 1		
27	An atlas of carbon nanotube optical transitions. *Nature Nanotechnology*, **2012**, 7, 325-9	28.7	154
26	Ultralong aligned single-walled carbon nanotubes on flexible fluorphlogopite mica for strain sensors. *Nano Research*, **2012**, 5, 443-449	10	11
25	Direct synthesis of self-aligned single-walled carbon nanotubes on paper. *Carbon*, **2012**, 50, 1179-1185	10.4	5
24	Absorption spectroscopy of individual cadmium selenide nanowire. *Applied Physics Letters*, **2012**, 101, 093106	3.4	3
23	Intrinsic radial breathing oscillation in suspended single-walled carbon nanotubes. *Physical Review B*, **2011**, 83,	3.3	32
22	Higher-order harmonic resonances and mechanical properties of individual cadmium sulphide nanowires measured by in situ transmission electron microscopy. *Journal of Electron Microscopy*, **2010**, 59, 285-9		13
21	In situ TEM studies of oxygen vacancy migration for electrically induced resistance change effect in cerium oxides. *Micron*, **2010**, 41, 301-5	2.3	87

20	Chirality-dependent transport properties of double-walled nanotubes measured in situ on their field-effect transistors. *Journal of the American Chemical Society*, **2009**, 131, 62-3	16.4	72
19	Direct determination of atomic structure of large-indexed carbon nanotubes by electron diffraction: application to double-walled nanotubes. *Journal Physics D: Applied Physics*, **2009**, 42, 125412	3	20
18	Photoconducting response on bending of individual ZnO nanowires. *Journal of Materials Chemistry*, **2009**, 19, 1002-1005		75
17	Nanowire field-effect transistor with Bi1.5Zn1.0Nb1.5O7 dielectric. *Applied Physics Letters*, **2008**, 93, 213107	3.4	2
16	In situ probing electrical response on bending of ZnO nanowires inside transmission electron microscope. *Applied Physics Letters*, **2008**, 92, 213105	3.4	41
15	Converting Metallic Single-Walled Carbon Nanotubes into Semiconductors by Boron/Nitrogen Co-Doping. *Advanced Materials*, **2008**, 20, 3615-3619	24	95
14	Multiwall boron carbonitride/carbon nanotube junction and its rectification behavior. *Journal of the American Chemical Society*, **2007**, 129, 9562-3	16.4	83
13	Large-scale aligned silicon carbonitride nanotube arrays: Synthesis, characterization, and field emission property. *Journal of Applied Physics*, **2007**, 101, 114306	2.5	4
12	In situ TEM probing properties of individual one-dimensional nanostructures. *International Journal of Nanotechnology*, **2007**, 4, 119	1.5	3
11	In situ probing mechanical properties of individual tungsten oxide nanowires directly grown on tungsten tips inside transmission electron microscope. *Applied Physics Letters*, **2006**, 89, 221908	3.4	49
10	Direct synthesis of B-C-N single-walled nanotubes by bias-assisted hot filament chemical vapor deposition. *Journal of the American Chemical Society*, **2006**, 128, 6530-1	16.4	150
9	Polarization-Driven-Orientation Selective Growth of Single-Crystalline III-Nitride Semiconductors on Arbitrary Substrates. *Advanced Functional Materials*,2113211	15.6	0
8	Enhanced Hot Carrier Up-Conversion in Graphene By Quantum Dot Coating. *Advanced Optical Materials*,2101563	8.1	0
7	Giant enhancement of optical nonlinearity in two-dimensional materials by multiphoton-excitation resonance energy transfer from quantum dots. *Nature Photonics*,	33.9	13
6	Towards intrinsically pure graphene grown on copper. *Nano Research*,1	10	3
5	Tunable and highly sensitive temperature sensor based on graphene photonic crystal fiber. *Chinese Physics B*,	1.2	2
4	The Rise of Graphene Photonic Crystal Fibers. *Advanced Functional Materials*,2202282	15.6	
3	Ultra-broadband Strong Electromagnetic Interference Shielding with Ferromagnetic Graphene Quartz Fabric. *Advanced Materials*,2202982	24	3

2	Strong Second Harmonic Generation from Bilayer Graphene with Symmetry Breaking by Redox-Governed Charge Doping. *Nano Letters*,	11.5	2
1	Visualizing the Anomalous Catalysis in Two-Dimensional Confined Space. *Nano Letters*,	11.5	