

# Jamie H Warner

## List of Publications by Year in descending order

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343  
papers

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13827

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117  
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348  
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348  
docs citations

348  
times ranked

22786  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shape Evolution of Monolayer MoS <sub>2</sub> Crystals Grown by Chemical Vapor Deposition. Chemistry of Materials, 2014, 26, 6371-6379.	3.2	698
2	MoS <sub>2</sub> monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. Nature Chemistry, 2017, 9, 810-816.	6.6	683
3	Water-Soluble Photoluminescent Silicon Quantum Dots. Angewandte Chemie - International Edition, 2005, 44, 4550-4554.	7.2	483
4	Broadband transparent optical phase change materials for high-performance nonvolatile photonics. Nature Communications, 2019, 10, 4279.	5.8	349
5	Atomic Resolution Imaging and Topography of Boron Nitride Sheets Produced by Chemical Exfoliation. ACS Nano, 2010, 4, 1299-1304.	7.3	337
6	Superparamagnetic Fe <sub>3</sub> O <sub>4</sub> nanocrystals@graphene composites for energy storage devices. Journal of Materials Chemistry, 2011, 21, 5069.	6.7	336
7	Dislocation-Driven Deformations in Graphene. Science, 2012, 337, 209-212.	6.0	332
8	All Chemical Vapor Deposition Growth of MoS <sub>2</sub> :h-BN Vertical van der Waals Heterostructures. ACS Nano, 2015, 9, 5246-5254.	7.3	326
9	Direct Low-Temperature Nanographene CVD Synthesis over a Dielectric Insulator. ACS Nano, 2010, 4, 4206-4210.	7.3	311
10	Spatial control of defect creation in graphene at the nanoscale. Nature Communications, 2012, 3, 1144.	5.8	305
11	Hexagonal Single Crystal Domains of Few-Layer Graphene on Copper Foils. Nano Letters, 2011, 11, 1182-1189.	4.5	289
12	Ultrathin 2D Photodetectors Utilizing Chemical Vapor Deposition Grown WS <sub>2</sub> With Graphene Electrodes. ACS Nano, 2016, 10, 7866-7873.	7.3	264
13	Dynamics of Single Fe Atoms in Graphene Vacancies. Nano Letters, 2013, 13, 1468-1475.	4.5	228
14	Direct Imaging of Rotational Stacking Faults in Few Layer Graphene. Nano Letters, 2009, 9, 102-106.	4.5	225
15	Atomic Structure and Dynamics of Metal Dopant Pairs in Graphene. Nano Letters, 2014, 14, 3766-3772.	4.5	219
16	Large Single Crystals of Graphene on Melted Copper Using Chemical Vapor Deposition. ACS Nano, 2012, 6, 5010-5017.	7.3	218
17	Structural transformations in graphene studied with high spatial and temporal resolution. Nature Nanotechnology, 2009, 4, 500-504.	15.6	203
18	Micro-emulsion synthesis of monodisperse surface stabilized silicon nanocrystals. Chemical Communications, 2005, , 1833.	2.2	191

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19	Generalized Mechanistic Model for the Chemical Vapor Deposition of 2D Transition Metal Dichalcogenide Monolayers. ACS Nano, 2016, 10, 4330-4344.	7.3	190
20	Visible light-driven CO <sub>2</sub> reduction by enzyme coupled CdS nanocrystals. Chemical Communications, 2012, 48, 58-60.	2.2	184
21	Growth of Ultrahigh Density Single-Walled Carbon Nanotube Forests by Improved Catalyst Design. ACS Nano, 2012, 6, 2893-2903.	7.3	184
22	Atomic structure of defects and dopants in 2D layered transition metal dichalcogenides. Chemical Society Reviews, 2018, 47, 6764-6794.	18.7	178
23	Detailed Atomic Reconstruction of Extended Line Defects in Monolayer MoS <sub>2</sub> . ACS Nano, 2016, 10, 5419-5430.	7.3	161
24	Chemistry and Structure of Graphene Oxide <i>via</i> Direct Imaging. ACS Nano, 2016, 10, 7515-7522.	7.3	159
25	Low-temperature Chemical Vapor Deposition Synthesis of Pt-Co Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis. Advanced Materials, 2016, 28, 7115-7122.	11.1	156
26	Controlling sulphur precursor addition for large single crystal domains of WS <sub>2</sub> . Nanoscale, 2014, 6, 12096-12103.	2.8	149
27	Lead sulfide nanocrystal: conducting polymer solar cells. Journal Physics D: Applied Physics, 2005, 38, 2006-2012.	1.3	147
28	Time-resolved photoluminescence spectroscopy of ligand-capped PbS nanocrystals. Nanotechnology, 2005, 16, 175-179.	1.3	142
29	Structural Reconstruction of the Graphene Monovacancy. ACS Nano, 2013, 7, 4495-4502.	7.3	131
30	Atomically Sharp Crack Tips in Monolayer MoS <sub>2</sub> and Their Enhanced Toughness by Vacancy Defects. ACS Nano, 2016, 10, 9831-9839.	7.3	130
31	Atomic Structure and Dynamics of Single Platinum Atom Interactions with Monolayer MoS <sub>2</sub> . ACS Nano, 2017, 11, 3392-3403.	7.3	126
32	Atomic resolution imaging of graphene by transmission electron microscopy. Nanoscale, 2013, 5, 4079.	2.8	125
33	Edge-Enriched 2D MoS <sub>2</sub> Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. ACS Catalysis, 2017, 7, 877-886.	5.5	123
34	Acetylene: A Key Growth Precursor for Single-Walled Carbon Nanotube Forests. Journal of Physical Chemistry C, 2009, 113, 17321-17325.	1.5	120
35	Controlled Preferential Oxidation of Grain Boundaries in Monolayer Tungsten Disulfide for Direct Optical Imaging. ACS Nano, 2015, 9, 3695-3703.	7.3	119
36	<i>In Situ</i> Observations of Free-Standing Graphene-like Mono- and Bilayer ZnO Membranes. ACS Nano, 2015, 9, 11408-11413.	7.3	118

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37	Biomolecule-Assisted Synthesis of Water-Soluble Silver Nanoparticles and Their Biomedical Applications. <i>Inorganic Chemistry</i> , 2008, 47, 5882-5888.	1.9	116
38	Lateral Graphene-Contacted Vertically Stacked WS <sub>2</sub> /MoS <sub>2</sub> Hybrid Photodetectors with Large Gain. <i>Advanced Materials</i> , 2017, 29, 1702917.	11.1	111
39	Surface Morphology Dependent Photoluminescence from Colloidal Silicon Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19064-19067.	1.2	101
40	Conductance enlargement in picoscale electroburnt graphene nanojunctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 2658-2663.	3.3	98
41	Graphene-porphyrin single-molecule transistors. <i>Nanoscale</i> , 2015, 7, 13181-13185.	2.8	97
42	Atomic Structure and Spectroscopy of Single Metal (Cr, V) Substitutional Dopants in Monolayer MoS <sub>2</sub> . <i>ACS Nano</i> , 2016, 10, 10227-10236.	7.3	96
43	Redox-Dependent Franck-Condon Blockade and Avalanche Transport in a Graphene-Fullerene Single-Molecule Transistor. <i>Nano Letters</i> , 2016, 16, 170-176.	4.5	93
44	Reverse Micelle Synthesis of Co <sup>2+</sup> /Al LDHs: Control of Particle Size and Magnetic Properties. <i>Chemistry of Materials</i> , 2011, 23, 171-180.	3.2	92
45	Synthesis and Self-Assembly of Triangular and Hexagonal CdS Nanocrystals. <i>Advanced Materials</i> , 2005, 17, 2997-3001.	11.1	91
46	Revealing Defect-State Photoluminescence in Monolayer WS <sub>2</sub> by Cryogenic Laser Processing. <i>ACS Nano</i> , 2016, 10, 5847-5855.	7.3	91
47	Noncovalent Binding of Carbon Nanotubes by Porphyrin Oligomers. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 2313-2316.	7.2	90
48	Investigating the Graphitization Mechanism of SiO <sub>2</sub> Nanoparticles in Chemical Vapor Deposition. <i>ACS Nano</i> , 2009, 3, 4098-4104.	7.3	89
49	Growth of carbon nanotubes via twisted graphene nanoribbons. <i>Nature Communications</i> , 2013, 4, 2548.	5.8	89
50	Large Dendritic Monolayer MoS <sub>2</sub> Grown by Atmospheric Pressure Chemical Vapor Deposition for Electrocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4630-4639.	4.0	88
51	Unraveling the Intricacies of Residual Lithium in High-Ni Cathodes for Lithium-Ion Batteries. <i>ACS Energy Letters</i> , 2021, 6, 941-948.	8.8	86
52	Synthesis and separation of dyes via Ni-reduced graphene oxide nanostructures. <i>Journal of Materials Chemistry</i> , 2012, 22, 1876-1883.	6.7	83
53	Investigating the Diameter-Dependent Stability of Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2009, 3, 1557-1563.	7.3	82
54	In-Depth Analysis of the Degradation Mechanisms of High-Nickel, Low/No-Cobalt Layered Oxide Cathodes for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2100858.	10.2	79

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55	High Photoresponsivity in Ultrathin 2D Lateral Graphene:WS <sub>2</sub> :Graphene Photodetectors Using Direct CVD Growth. ACS Applied Materials & Interfaces, 2019, 11, 6421-6430.	4.0	78
56	Atomic Structure of Interconnected Few-Layer Graphene Domains. ACS Nano, 2011, 5, 6610-6618.	7.3	77
57	Photoresponse-Bias Modulation of a High-Performance MoS <sub>2</sub> Photodetector with a Unique Vertically Stacked 2H-MoS <sub>2</sub> /1T@2H-MoS <sub>2</sub> Structure. ACS Applied Materials & Interfaces, 2020, 12, 33325-33335.	4.0	76
58	Atomic Structure of Graphene Subnanometer Pores. ACS Nano, 2015, 9, 11599-11607.	7.3	75
59	Hydrogen-free graphene edges. Nature Communications, 2014, 5, 3040.	5.8	74
60	Transfer of photosynthetic NADP <sup>+</sup> /NADPH recycling activity to a porous metal oxide for highly specific, electrochemically-driven organic synthesis. Chemical Science, 2017, 8, 4579-4586.	3.7	74
61	Shedding light on the crystallographic etching of multi-layer graphene at the atomic scale. Nano Research, 2009, 2, 695-705.	5.8	72
62	Ultralow Secondary Electron Emission of Graphene. ACS Nano, 2011, 5, 1047-1055.	7.3	72
63	Quantum Interference in Graphene Nanoconstrictions. Nano Letters, 2016, 16, 4210-4216.	4.5	70
64	Atomically Flat Zigzag Edges in Monolayer MoS <sub>2</sub> by Thermal Annealing. Nano Letters, 2017, 17, 5502-5507.	4.5	70
65	Substrate control for large area continuous films of monolayer MoS <sub>2</sub> by atmospheric pressure chemical vapor deposition. Nanotechnology, 2016, 27, 085604.	1.3	69
66	Reversible Loss of Bernal Stacking during the Deformation of Few-Layer Graphene in Nanocomposites. ACS Nano, 2013, 7, 7287-7294.	7.3	68
67	Stability and Dynamics of the Tetravacancy in Graphene. Nano Letters, 2014, 14, 1634-1642.	4.5	68
68	Temperature Dependence of the Reconstruction of Zigzag Edges in Graphene. ACS Nano, 2015, 9, 4786-4795.	7.3	68
69	Nanoscale control of graphene electrodes. Physical Chemistry Chemical Physics, 2014, 16, 20398-20401.	1.3	67
70	The Molecular Structure of Polymer~Fullerene Composite Solar Cells and Its Influence on Device Performance. Macromolecules, 2010, 43, 2343-2348.	2.2	65
71	The catalytic potential of high- $\epsilon$ dielectrics for graphene formation. Applied Physics Letters, 2011, 98, .	1.5	63
72	Photoinduced Schottky Barrier Lowering in 2D Monolayer WS <sub>2</sub> Photodetectors. Advanced Optical Materials, 2016, 4, 1573-1581.	3.6	62

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73	Atomic electrostatic maps of 1D channels in 2D semiconductors using 4D scanning transmission electron microscopy. <i>Nature Communications</i> , 2019, 10, 1127.	5.8	62
74	Resolving strain in carbon nanotubes at the atomic level. <i>Nature Materials</i> , 2011, 10, 958-962.	13.3	61
75	Doping Graphene Transistors Using Vertical Stacked Monolayer WS <sub>2</sub> Heterostructures Grown by Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 1644-1652.	4.0	61
76	Field-Effect Control of Graphene-Fullerene Thermoelectric Nanodevices. <i>Nano Letters</i> , 2017, 17, 7055-7061.	4.5	61
77	Synthesis of Adenine-Modified Reduced Graphene Oxide Nanosheets. <i>Inorganic Chemistry</i> , 2012, 51, 2954-2960.	1.9	60
78	Growth of Large Single-Crystalline Monolayer Hexagonal Boron Nitride by Oxide-Assisted Chemical Vapor Deposition. <i>Chemistry of Materials</i> , 2017, 29, 6252-6260.	3.2	60
79	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4948-4952.	7.2	60
80	Atomic Structure of ABC Rhombohedral Stacked Trilayer Graphene. <i>ACS Nano</i> , 2012, 6, 5680-5686.	7.3	59
81	Rippling Graphene at the Nanoscale through Dislocation Addition. <i>Nano Letters</i> , 2013, 13, 4937-4944.	4.5	59
82	Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 15005-15014.	4.0	59
83	Energy Transfer Dynamics of Nanocrystal-Polymer Composites. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9001-9005.	1.2	58
84	Thin single-wall BN-nanotubes formed inside carbon nanotubes. <i>Scientific Reports</i> , 2013, 3, 1385.	1.6	58
85	Rational Design of Coating Ions via Advantageous Surface Reconstruction in High-Nickel Layered Oxide Cathodes for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2101112.	10.2	58
86	Rotating Fullerene Chains in Carbon Nanopeapods. <i>Nano Letters</i> , 2008, 8, 2328-2335.	4.5	57
87	Biexciton Formation in Bilayer Tungsten Disulfide. <i>ACS Nano</i> , 2016, 10, 2176-2183.	7.3	57
88	Addressing the isomer cataloguing problem for nanopores in two-dimensional materials. <i>Nature Materials</i> , 2019, 18, 129-135.	13.3	57
89	Facile Fabrication of Large-Area Atomically Thin Membranes by Direct Synthesis of Graphene with Nanoscale Porosity. <i>Advanced Materials</i> , 2018, 30, e1804977.	11.1	56
90	High-Performance WS <sub>2</sub> Monolayer Light-Emitting Tunneling Devices Using 2D Materials Grown by Chemical Vapor Deposition. <i>ACS Nano</i> , 2019, 13, 4530-4537.	7.3	56

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91	Growth and characterization of high-density mats of single-walled carbon nanotubes for interconnects. Applied Physics Letters, 2008, 93, 163111.	1.5	55
92	Resilient High Catalytic Performance of Platinum Nanocatalysts with Porous Graphene Envelope. ACS Nano, 2015, 9, 5947-5957.	7.3	55
93	2D layered noble metal dichalcogenides (Pt, Pd, Se, S) for electronics and energy applications. Materials Today Advances, 2020, 7, 100076.	2.5	55
94	Inorganic surface passivation of PbS nanocrystals resulting in strong photoluminescent emission. Nanotechnology, 2003, 14, 991-997.	1.3	54
95	Crack-Free Growth and Transfer of Continuous Monolayer Graphene Grown on Melted Copper. Chemistry of Materials, 2014, 26, 4984-4991.	3.2	54
96	Two-dimensional materials under electron irradiation. MRS Bulletin, 2015, 40, 29-37.	1.7	54
97	Atomic structure and formation mechanism of sub-nanometer pores in 2D monolayer MoS <sub>2</sub> . Nanoscale, 2017, 9, 6417-6426.	2.8	54
98	Determining the Optimized Interlayer Separation Distance in Vertical Stacked 2D WS <sub>2</sub> :hBN:MoS <sub>2</sub> Heterostructures for Exciton Energy Transfer. Small, 2018, 14, e1703727.	5.2	54
99	Ultralong 1D Vacancy Channels for Rapid Atomic Migration during 2D Void Formation in Monolayer MoS <sub>2</sub> . ACS Nano, 2018, 12, 7721-7730.	7.3	54
100	High-quality functionalized few-layer graphene: facile fabrication and doping with nitrogen as a metal-free catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 15444-15450.	5.2	53
101	Electrically tunable organic-inorganic hybrid polaritons with monolayer WS <sub>2</sub> . Nature Communications, 2017, 8, 14097.	5.8	53
102	Controlling Defects in Continuous 2D GaS Films for High-Performance Wavelength-Tunable UV-Visible Discriminating Photodetectors. Advanced Materials, 2020, 32, e1906958.	11.1	53
103	Low temperature phase selective synthesis of Cu <sub>2</sub> ZnSnS <sub>4</sub> quantum dots. Chemical Communications, 2013, 49, 3745.	2.2	52
104	Synthesis of water-soluble photoluminescent germanium nanocrystals. Nanotechnology, 2006, 17, 3745-3749.	1.3	51
105	Aligned Rectangular Few-Layer Graphene Domains on Copper Surfaces. Chemistry of Materials, 2011, 23, 4543-4547.	3.2	51
106	Layer-Dependent Modulation of Tungsten Disulfide Photoluminescence by Lateral Electric Fields. ACS Nano, 2015, 9, 2740-2748.	7.3	50
107	Synthesis and Applications of Wide Bandgap 2D Layered Semiconductors Reaching the Green and Blue Wavelengths. ACS Applied Electronic Materials, 2020, 2, 1777-1814.	2.0	50
108	Single-wall-carbon-nanotube/single-carbon-chain molecular junctions. Physical Review B, 2010, 81, .	1.1	49

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109	CVD-Grown Horizontally Aligned Single-Walled Carbon Nanotubes: Synthesis Routes and Growth Mechanisms. <i>Small</i> , 2012, 8, 1973-1992.	5.2	49
110	Highly Electron Transparent Graphene for Field Emission Triode Gates. <i>Advanced Functional Materials</i> , 2014, 24, 1218-1227.	7.8	49
111	Hydrogen Addition for Centimeter-Sized Monolayer Tungsten Disulfide Continuous Films by Ambient Pressure Chemical Vapor Deposition. <i>Chemistry of Materials</i> , 2017, 29, 4904-4911.	3.2	49
112	High-performance magnesium metal batteries <i>via</i> switching the passivation film into a solid electrolyte interphase. <i>Energy and Environmental Science</i> , 2021, 14, 4391-4399.	15.6	49
113	Dynamics of Paramagnetic Metallofullerenes in Carbon Nanotube Peapods. <i>Nano Letters</i> , 2008, 8, 1005-1010.	4.5	48
114	Examining Co-Based Nanocrystals on Graphene Using Low-Voltage Aberration-Corrected Transmission Electron Microscopy. <i>ACS Nano</i> , 2010, 4, 470-476.	7.3	48
115	Distinguishing Lead and Molecule States in Graphene-Based Single-Electron Transistors. <i>ACS Nano</i> , 2017, 11, 5325-5331.	7.3	48
116	Bioinspired Peony-Like $\text{Ni}(\text{OH})_2$ Nanostructures with Enhanced Electrochemical Activity and Superhydrophobicity. <i>ChemPhysChem</i> , 2010, 11, 489-494.	1.0	47
117	Hydrogen-Assisted Growth of Large-Area Continuous Films of $\text{MoS}_2$ on Monolayer Graphene. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 7304-7314.	4.0	47
118	The development of a 200kV monochromated field emission electron source. <i>Ultramicroscopy</i> , 2014, 140, 37-43.	0.8	46
119	Geometrically Enhanced Thermoelectric Effects in Graphene Nanoconstrictions. <i>Nano Letters</i> , 2018, 18, 7719-7725.	4.5	46
120	Stability and Spectroscopy of Single Nitrogen Dopants in Graphene at Elevated Temperatures. <i>ACS Nano</i> , 2014, 8, 11806-11815.	7.3	45
121	$\text{MoS}_2$ Liquid Cell Electron Microscopy Through Clean and Fast Polymer-Free $\text{MoS}_2$ Transfer. <i>Nano Letters</i> , 2019, 19, 1788-1795.	4.5	45
122	Atomic Resolution Imaging of the Edges of Catalytically Etched Suspended Few-Layer Graphene. <i>ACS Nano</i> , 2011, 5, 1975-1983.	7.3	44
123	The Role of the Bridging Atom in Stabilizing Odd Numbered Graphene Vacancies. <i>Nano Letters</i> , 2014, 14, 3972-3980.	4.5	44
124	Atomic Resolution Defocused Electron Ptychography at Low Dose with a Fast, Direct Electron Detector. <i>Scientific Reports</i> , 2019, 9, 3919.	1.6	44
125	Direct Laser Patterning and Phase Transformation of 2D $\text{PdSe}_2$ Films for On-Demand Device Fabrication. <i>ACS Nano</i> , 2019, 13, 14162-14171.	7.3	44
126	Synthesis of anisotropic PbS nanoparticles using heterocyclic dithiocarbamate complexes. <i>Dalton Transactions</i> , 2012, 41, 8297.	1.6	43



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127	A graphene-based large area surface-conduction electron emission display. <i>Carbon</i> , 2013, 56, 255-263.	5.4	43
128	Crystallization and Self-Assembly of Calcium Carbonate Architectures. <i>Crystal Growth and Design</i> , 2008, 8, 4583-4588.	1.4	42
129	Extended Klein Edges in Graphene. <i>ACS Nano</i> , 2014, 8, 12272-12279.	7.3	41
130	Oligomeric aminoborane precursors for the chemical vapour deposition growth of few-layer hexagonal boron nitride. <i>CrystEngComm</i> , 2017, 19, 285-294.	1.3	41
131	Self-Assembly of Ligand-Free PbS Nanocrystals into Nanorods and Their Nanosculpturing by Electron-Beam Irradiation. <i>Advanced Materials</i> , 2008, 20, 784-787.	11.1	40
132	Amino-acid-assisted synthesis and size-dependent magnetic behaviors of hematite nanocubes. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	40
133	Scaling Limits of Graphene Nanoelectrodes. <i>Nano Letters</i> , 2017, 17, 3688-3693.	4.5	40
134	Interlocking Friction Governs the Mechanical Fracture of Bilayer MoS <sub>2</sub> . <i>ACS Nano</i> , 2018, 12, 3600-3608.	7.3	40
135	Synthesis of Surface Grown Pt Nanoparticles on Edge-Enriched MoS <sub>2</sub> Porous Thin Films for Enhancing Electrochemical Performance. <i>Chemistry of Materials</i> , 2019, 31, 387-397.	3.2	40
136	Fabrication, Pressure Testing, and Nanopore Formation of Single-Layer Graphene Membranes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14312-14321.	1.5	39
137	One-Dimensional Confined Motion of Single Metal Atoms inside Double-Walled Carbon Nanotubes. <i>Physical Review Letters</i> , 2009, 102, 195504.	2.9	38
138	Bond Length and Charge Density Variations within Extended Arm Chair Defects in Graphene. <i>ACS Nano</i> , 2013, 7, 9860-9866.	7.3	38
139	Controlled formation of closed-edge nanopores in graphene. <i>Nanoscale</i> , 2015, 7, 11602-11610.	2.8	38
140	Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D Pd <sub>2</sub> Se <sub>3</sub> Monolayers. <i>ACS Nano</i> , 2019, 13, 8256-8264.	7.3	38
141	Inflating Graphene with Atomic Scale Blisters. <i>Nano Letters</i> , 2014, 14, 908-914.	4.5	37
142	Partial Dislocations in Graphene and Their Atomic Level Migration Dynamics. <i>Nano Letters</i> , 2015, 15, 5950-5955.	4.5	37
143	Utilizing Interlayer Excitons in Bilayer WS <sub>2</sub> for Increased Photovoltaic Response in Ultrathin Graphene Vertical Cross-Bar Photodetecting Tunneling Transistors. <i>ACS Nano</i> , 2018, 12, 4669-4677.	7.3	37
144	Shape control of PbS nanocrystals using multiple surfactants. <i>Nanotechnology</i> , 2008, 19, 305605.	1.3	36

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145	Examining the Edges of Multi-Layer Graphene Sheets. Chemistry of Materials, 2009, 21, 2418-2421.	3.2	36
146	Thermally Induced Dynamics of Dislocations in Graphene at Atomic Resolution. ACS Nano, 2015, 9, 10066-10075.	7.3	36
147	Simultaneous Identification of Low and High Atomic Number Atoms in Monolayer 2D Materials Using 4D Scanning Transmission Electron Microscopy. Nano Letters, 2019, 19, 6482-6491.	4.5	36
148	Electron spin coherence in metallofullerenes: Y, Sc, and $\text{La@C}_{82}$ . Physical Review B, 2010, 82, .	11	35
149	Surface energy-mediated construction of anisotropic semiconductor wires with selective crystallographic polarity. Scientific Reports, 2014, 4, 5680.	1.6	35
150	Photoluminescent Arrays of Nanopatterned Monolayer MoS <sub>2</sub> . Advanced Functional Materials, 2017, 27, 1703688.	7.8	35
151	Chemical Vapor Deposition Growth of Two-Dimensional Monolayer Gallium Sulfide Crystals Using Hydrogen Reduction of Ga <sub>2</sub> S <sub>3</sub> . ACS Omega, 2018, 3, 7897-7903.	1.6	35
152	Epitaxial and atomically thin graphene-metal hybrid catalyst films: the dual role of graphene as the support and the chemically-transparent protective cap. Energy and Environmental Science, 2018, 11, 1610-1616.	15.6	34
153	Epitaxial Growth of Monolayer MoS <sub>2</sub> on SrTiO <sub>3</sub> Single Crystal Substrates for Applications in Nanoelectronics. ACS Applied Nano Materials, 2018, 1, 6976-6988.	2.4	34
154	Surfactant directed synthesis of calcium aluminum layered double hydroxides nanoplatelets. Journal of Materials Chemistry, 2012, 22, 7751.	6.7	33
155	Atomic Level Spatial Variations of Energy States along Graphene Edges. Nano Letters, 2014, 14, 6155-6159.	4.5	33
156	3-Aryl-3-(trifluoromethyl)diazirines as Versatile Photoactivated $\text{C}_60$ Molecules for the Improved Covalent Modification of Graphitic and Carbon Nanotube Surfaces. Chemistry of Materials, 2011, 23, 3740-3751.	3.2	32
157	Atomic Structure and Dynamics of Defects in 2D MoS <sub>2</sub> Bilayers. ACS Omega, 2017, 2, 3315-3324.	1.6	32
158	High-Performance All 2D-Layered Tin Disulfide: Graphene Photodetecting Transistors with Thickness-Controlled Interface Dynamics. ACS Applied Materials & Interfaces, 2018, 10, 13002-13010.	4.0	32
159	Waterproof molecular monolayers stabilize 2D materials. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20844-20849.	3.3	32
160	Symmetry-Controlled Reversible Photovoltaic Current Flow in Ultrathin All 2D Vertically Stacked Graphene/MoS <sub>2</sub> /WS <sub>2</sub> /Graphene Devices. ACS Applied Materials & Interfaces, 2019, 11, 2234-2242.	4.0	32
161	Two-Dimensional Coalescence Dynamics of Encapsulated Metallofullerenes in Carbon Nanotubes. ACS Nano, 2011, 5, 10084-10089.	7.3	31
162	Electroluminescence Dynamics across Grain Boundary Regions of Monolayer Tungsten Disulfide. ACS Nano, 2016, 10, 1093-1100.	7.3	31

#	ARTICLE	IF	CITATIONS
163	Striated 2D Lattice with Sub- $\mu\text{m}$ 1D Etch Channels by Controlled Thermally Induced Phase Transformations of PdSe <sub>2</sub> . <i>Advanced Materials</i> , 2019, 31, e1904251.	11.1	31
164	Increasing the electrochemical activity of basal plane sites in porous 3D edge rich MoS <sub>2</sub> thin films for the hydrogen evolution reaction. <i>Materials Today Energy</i> , 2019, 13, 134-144.	2.5	31
165	Atomic structure and defect dynamics of monolayer lead iodide nanodisks with epitaxial alignment on graphene. <i>Nature Communications</i> , 2020, 11, 823.	5.8	31
166	Torsional Deformations in Subnanometer MoS Interconnecting Wires. <i>Nano Letters</i> , 2016, 16, 1210-1217.	4.5	30
167	Atomic Structure and Dynamics of Self-Limiting Sub-Nanometer Pores in Monolayer WS <sub>2</sub> . <i>ACS Nano</i> , 2018, 12, 11638-11647.	7.3	30
168	High-Performance Two-Dimensional Schottky Diodes Utilizing Chemical Vapour Deposition-Grown Graphene-MoS <sub>2</sub> Heterojunctions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37258-37266.	4.0	30
169	Ultrathin All-2D Lateral Graphene/GaS/Graphene UV Photodetectors by Direct CVD Growth. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 48172-48178.	4.0	30
170	The formation of stacked-cup carbon nanotubes using chemical vapor deposition from ethanol over silica. <i>Carbon</i> , 2010, 48, 3175-3181.	5.4	29
171	Electron Paramagnetic Resonance Investigation of Purified Catalyst-free Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2010, 4, 7708-7716.	7.3	29
172	High-Performance Field Effect Transistors from Solution Processed Carbon Nanotubes. <i>ACS Nano</i> , 2010, 4, 6659-6664.	7.3	29
173	Structural Distortions in Few-Layer Graphene Creases. <i>ACS Nano</i> , 2011, 5, 9984-9991.	7.3	29
174	Detailed formation processes of stable dislocations in graphene. <i>Nanoscale</i> , 2014, 6, 14836-14844.	2.8	29
175	Atomic Structure and Dynamics of Epitaxial 2D Crystalline Gold on Graphene at Elevated Temperatures. <i>ACS Nano</i> , 2016, 10, 10418-10427.	7.3	29
176	Controlling PbS nanocrystal aggregation in conducting polymers. <i>Nanotechnology</i> , 2005, 16, 2381-2384.	1.3	28
177	Sensitivity of Graphene Edge States to Surface Adatom Interactions. <i>Nano Letters</i> , 2013, 13, 4820-4826.	4.5	28
178	Wired Up: Interconnecting Two-Dimensional Materials with One-Dimensional Atomic Chains. <i>ACS Nano</i> , 2014, 8, 11907-11912.	7.3	27
179	Mixed multilayered vertical heterostructures utilizing strained monolayer WS <sub>2</sub> . <i>Nanoscale</i> , 2016, 8, 2639-2647.	2.8	27
180	<i>In Situ</i> Atomic-Scale Studies of the Formation of Epitaxial Pt Nanocrystals on Monolayer Molybdenum Disulfide. <i>ACS Nano</i> , 2017, 11, 9057-9067.	7.3	27

#	ARTICLE	IF	CITATIONS
181	Hollow Electron Ptychographic Diffractive Imaging. <i>Physical Review Letters</i> , 2018, 121, 146101.	2.9	27
182	Preferential Pt Nanocluster Seeding at Grain Boundary Dislocations in Polycrystalline Monolayer MoS <sub>2</sub> . <i>ACS Nano</i> , 2018, 12, 5626-5636.	7.3	27
183	Self-Limiting Growth of High-Quality 2D Monolayer MoS <sub>2</sub> by Direct Sulfurization Using Precursor-Soluble Substrates for Advanced Field-Effect Transistors and Photodetectors. <i>ACS Applied Nano Materials</i> , 2019, 2, 369-378.	2.4	27
184	Examining the stability of folded graphene edges against electron beam induced sputtering with atomic resolution. <i>Nanotechnology</i> , 2010, 21, 325702.	1.3	26
185	Motion of Light Adatoms and Molecules on the Surface of Few-Layer Graphene. <i>ACS Nano</i> , 2011, 5, 9428-9441.	7.3	26
186	Enhanced spectroscopic gas sensors using <i>in-situ</i> grown carbon nanotubes. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	26
187	Controlling Photoluminescence Enhancement and Energy Transfer in WS <sub>2</sub> :hBN:WS <sub>2</sub> Vertical Stacks by Precise Interlayer Distances. <i>Small</i> , 2020, 16, e1905985.	5.2	26
188	Capturing the Motion of Molecular Nanomaterials Encapsulated within Carbon Nanotubes with Ultrahigh Temporal Resolution. <i>ACS Nano</i> , 2009, 3, 3037-3044.	7.3	25
189	On the catalytic hydrogenation of graphite for graphene nanoribbon fabrication. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 2540-2544.	0.7	25
190	Dynamic Behavior of Single Fe Atoms Embedded in Graphene. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21998-22003.	1.5	25
191	In-Situ Atomic-Scale Dynamics of Thermally Driven Phase Transition of 2D Few-Layered 1T PtSe <sub>2</sub> into Ultrathin 2D Nonlayered PtSe Crystals. <i>Chemistry of Materials</i> , 2019, 31, 9895-9903.	3.2	25
192	In situ observations of self-repairing single-walled carbon nanotubes. <i>Physical Review B</i> , 2010, 81, .	1.1	24
193	Shape and property control of Mn doped ZnSe quantum dots: from branched to spherical. <i>Journal of Materials Chemistry</i> , 2012, 22, 417-424.	6.7	24
194	Mechanisms of monovacancy diffusion in graphene. <i>Chemical Physics Letters</i> , 2016, 648, 161-165.	1.2	24
195	Postgrowth Substitutional Tin Doping of 2D WS <sub>2</sub> Crystals Using Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24279-24288.	4.0	24
196	Atomic Scale Growth Dynamics of Nanocrystals within Carbon Nanotubes. <i>ACS Nano</i> , 2011, 5, 1410-1417.	7.3	23
197	<i>In Situ</i> High Temperature Atomic Level Studies of Large Closed Grain Boundary Loops in Graphene. <i>ACS Nano</i> , 2016, 10, 9165-9173.	7.3	23
198	Single-Step Chemical Vapor Deposition Growth of Platinum Nanocrystal: Monolayer MoS <sub>2</sub> Dendrite Hybrid Materials for Efficient Electrocatalysis. <i>Chemistry of Materials</i> , 2020, 32, 8243-8256.	3.2	23

#	ARTICLE	IF	CITATIONS
199	Wet-CO <sub>2</sub> Pretreatment Process for Reducing Residual Lithium in High-Nickel Layered Oxides for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 27096-27105.	4.0	23
200	Ultrahigh secondary electron emission of carbon nanotubes. Applied Physics Letters, 2010, 96, .	1.5	22
201	Three-terminal graphene single-electron transistor fabricated using feedback-controlled electroburning. Applied Physics Letters, 2015, 107, .	1.5	22
202	Revealing Strain-Induced Effects in Ultrathin Heterostructures at the Nanoscale. Nano Letters, 2018, 18, 2467-2474.	4.5	22
203	2D-Layer-Dependent Behavior in Lateral Au/WS <sub>2</sub> /Graphene Photodiode Devices with Optical Modulation of Schottky Barriers. ACS Applied Nano Materials, 2018, 1, 6874-6881.	2.4	22
204	Atomically sharp interlayer stacking shifts at anti-phase grain boundaries in overlapping MoS <sub>2</sub> secondary layers. Nanoscale, 2018, 10, 16692-16702.	2.8	22
205	Low-Frequency Noise in Graphene Tunnel Junctions. ACS Nano, 2018, 12, 9451-9460.	7.3	22
206	Contiguous and Atomically Thin Pt Film with Supra-Bulk Behavior Through Graphene-Imposed Epitaxy. Advanced Functional Materials, 2019, 29, 1902274.	7.8	22
207	Direct Imaging of Photoswitching Molecular Conformations Using Individual Metal Atom Markers. ACS Nano, 2019, 13, 87-96.	7.3	22
208	Spatially Bandgap-Graded MoS <sub>2</sub> (1-x)Se <sub>2x</sub> Homojunctions for Self-Powered Visible-Near-Infrared Phototransistors. Nano-Micro Letters, 2020, 12, 26.	14.4	22
209	Uniformity of large-area bilayer graphene grown by chemical vapor deposition. Nanotechnology, 2015, 26, 395601.	1.3	21
210	Atomic Level Distributed Strain within Graphene Divacancies from Bond Rotations. ACS Nano, 2015, 9, 8599-8608.	7.3	21
211	Transfer Printed Silver Nanowire Transparent Conductors for Pb/ZnO Heterojunction Quantum Dot Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 6417-6421.	4.0	21
212	Morphology Control of Two-Dimensional Tin Disulfide on Transition Metal Dichalcogenides Using Chemical Vapor Deposition for Nanoelectronic Applications. ACS Applied Nano Materials, 2019, 2, 4222-4231.	2.4	21
213	Utilizing boron nitride sheets as thin supports for high resolution imaging of nanocrystals. Nanotechnology, 2011, 22, 195603.	1.3	20
214	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdS-carbon nanotube-MoS <sub>2</sub> composite. Chemical Communications, 2016, 52, 13596-13599.	2.2	20
215	Elongated Silicon-Carbon Bonds at Graphene Edges. ACS Nano, 2016, 10, 142-149.	7.3	20
216	Epitaxial Templating of Two-Dimensional Metal Chloride Nanocrystals on Monolayer Molybdenum Disulfide. ACS Nano, 2017, 11, 6404-6415.	7.3	20

#	ARTICLE	IF	CITATIONS
217	Thick BaTiO <sub>3</sub> Epitaxial Films Integrated on Si by RF Sputtering for Electro-Optic Modulators in Si Photonics. ACS Applied Materials & Interfaces, 2021, 13, 51230-51244.	4.0	20
218	GaS:WS <sub>2</sub> Heterojunctions for Ultrathin Two-Dimensional Photodetectors with Large Linear Dynamic Range across Broad Wavelengths. ACS Nano, 2021, 15, 19570-19580.	7.3	20
219	Monodisperse PbS nanocrystals synthesized in a conducting polymer. Materials Letters, 2006, 60, 2375-2378.	1.3	19
220	Grating of single Lu@C82 molecules using supramolecular network. Chemical Communications, 2008, 4616.	2.2	19
221	The influence of the number of graphene layers on the atomic resolution images obtained from aberration-corrected high resolution transmission electron microscopy. Nanotechnology, 2010, 21, 255707.	1.3	19
222	Orientation dependent interlayer stacking structure in bilayer MoS <sub>2</sub> domains. Nanoscale, 2017, 9, 13060-13068.	2.8	19
223	In situ high temperature atomic level dynamics of large inversion domain formations in monolayer MoS <sub>2</sub> . Nanoscale, 2019, 11, 1901-1913.	2.8	19
224	Anisotropic Fracture Dynamics Due to Local Lattice Distortions. ACS Nano, 2019, 13, 5693-5702.	7.3	19
225	Direct Imaging of Individual Molecular Binding to Clean Nanopore Edges in 2D Monolayer MoS <sub>2</sub> . ACS Nano, 2020, 14, 153-165.	7.3	19
226	Recent Progress in Using Graphene as an Ultrathin Transparent Support for Transmission Electron Microscopy. Small Structures, 2021, 2, 2000049.	6.9	19
227	Temperature dependence of atomic vibrations in mono-layer graphene. Journal of Applied Physics, 2015, 118, .	1.1	18
228	Elucidating the Formation and Structural Evolution of Platinum Single-Site Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2022, 12, 3173-3180.	5.5	18
229	Direct Imaging and Chemical Identification of the Encapsulated Metal Atoms in Bimetallic Endofullerene Peapods. ACS Nano, 2010, 4, 3943-3948.	7.3	17
230	Controlling intermolecular spin interactions of La@C82 in empty fullerene matrices. Physical Chemistry Chemical Physics, 2010, 12, 1618.	1.3	17
231	In situ observations of fullerene fusion and ejection in carbon nanotubes. Nanoscale, 2010, 2, 2077.	2.8	17
232	Inhomogeneous Strain Release during Bending of WS <sub>2</sub> on Flexible Substrates. ACS Applied Materials & Interfaces, 2018, 10, 39177-39186.	4.0	17
233	Thermal Degradation of Monolayer MoS <sub>2</sub> on SrTiO <sub>3</sub> Supports. Journal of Physical Chemistry C, 2019, 123, 3876-3885.	1.5	17
234	Grain Boundaries as Electrical Conduction Channels in Polycrystalline Monolayer WS <sub>2</sub> . ACS Applied Materials & Interfaces, 2019, 11, 10189-10197.	4.0	17

#	ARTICLE	IF	CITATIONS
235	Evidence for energy relaxation via a radiative cascade in surface-passivated PbS quantum dots. <i>Nanotechnology</i> , 2004, 15, 1328-1337.	1.3	16
236	Non-linear photoluminescence from purified aqueous PbS nanocrystals. <i>Materials Letters</i> , 2006, 60, 3332-3334.	1.3	16
237	Enhanced $\pi$ - $\pi$ interactions between a C60 fullerene and a buckle bend on a double-walled carbon nanotube. <i>Nano Research</i> , 2010, 3, 92-97.	5.8	16
238	Elastic Distortions of Carbon Nanotubes Induced by Chiral Fullerene Chains.. <i>ACS Nano</i> , 2010, 4, 4011-4016.	7.3	16
239	Optimizing substrate surface and catalyst conditions for high yield chemical vapor deposition grown epitaxially aligned single-walled carbon nanotubes. <i>Carbon</i> , 2011, 49, 5029-5037.	5.4	16
240	Electrical Breakdown of Suspended Mono- and Few-Layer Tungsten Disulfide <i>via</i> Sulfur Depletion Identified by <i>in Situ</i> Atomic Imaging. <i>ACS Nano</i> , 2017, 11, 9435-9444.	7.3	16
241	Wafer-Scalable Single-Layer Amorphous Molybdenum Trioxide. <i>ACS Nano</i> , 2022, 16, 3756-3767.	7.3	16
242	Controlled formation of 3D CdS nanocrystal superlattices in solution. <i>Nanotechnology</i> , 2006, 17, 3035-3038.	1.3	15
243	A bimetallic endohedral fullerene: PrSc@C80. <i>Chemical Communications</i> , 2009, , 4082.	2.2	15
244	Structural transformations of carbon chains inside nanotubes. <i>Physical Review B</i> , 2010, 81, .	1.1	15
245	Rotating Anisotropic Crystalline Silicon Nanoclusters in Graphene. <i>ACS Nano</i> , 2015, 9, 9497-9506.	7.3	15
246	Electron-Driven Metal Oxide Effusion and Graphene Gasification at Room Temperature. <i>ACS Nano</i> , 2016, 10, 6323-6330.	7.3	15
247	Atomic Structure and Dynamics of Epitaxial Platinum Bilayers on Graphene. <i>ACS Nano</i> , 2019, 13, 12162-12170.	7.3	15
248	In-situ deposition of sparse vertically aligned carbon nanofibres on catalytically activated stainless steel mesh for field emission applications. <i>Diamond and Related Materials</i> , 2012, 23, 66-71.	1.8	14
249	Blister-based-laser-induced-forward-transfer: a non-contact, dry laser-based transfer method for nanomaterials. <i>Nanotechnology</i> , 2018, 29, 385301.	1.3	14
250	Spatially Controlled Fabrication and Mechanisms of Atomically Thin Nanowell Patterns in Bilayer WS <sub>2</sub> Using <i>in Situ</i> High Temperature Electron Microscopy. <i>ACS Nano</i> , 2019, 13, 14486-14499.	7.3	14
251	Methods for Obtaining Graphene. , 2013, , 129-228.		13
252	Atomically Sharp Dual Grain Boundaries in 2D WS <sub>2</sub> Bilayers. <i>Small</i> , 2019, 15, e1902590.	5.2	13

#	ARTICLE	IF	CITATIONS
253	Metal Atom Markers for Imaging Epitaxial Molecular Self-Assembly on Graphene by Scanning Transmission Electron Microscopy. ACS Nano, 2019, 13, 7252-7260.	7.3	13
254	Atomically Precise Control of Carbon Insertion into hBN Monolayer Point Vacancies using a Focused Electron Beam Guide. Small, 2021, 17, e2100693.	5.2	13
255	Solution-phase synthesis of germanium nanoclusters using sulfur. Nanotechnology, 2006, 17, 5613-5619.	1.3	12
256	Superstructures of PbS nanocrystals in a conjugated polymer and the aligning role of oxidation. Nanotechnology, 2009, 20, 445608.	1.3	12
257	Spatially Dependent Lattice Deformations for Dislocations at the Edges of Graphene. ACS Nano, 2015, 9, 656-662.	7.3	12
258	Three dimensional hybrid multi-layered graphene-CNT catalyst supports via rapid thermal annealing of nickel acetate. Journal of Materials Chemistry A, 2017, 5, 10457-10469.	5.2	12
259	Point defects in turbostratic stacked bilayer graphene. Nanoscale, 2017, 9, 13725-13730.	2.8	12
260	Atomic Structure of Dislocations and Grain Boundaries in Two-Dimensional PtSe <sub>2</sub> . ACS Nano, 2021, 15, 16748-16759.	7.3	12
261	Investigation of the role of cadmium sulfide in the surface passivation of lead sulfide quantum dots. Journal of Crystal Growth, 2004, 270, 380-383.	0.7	11
262	Carbon nanotubes for interconnects in VLSI integrated circuits. Physica Status Solidi (B): Basic Research, 2008, 245, 2303-2307.	0.7	11
263	Quantum confined Stark effect and corresponding lifetime reduction in a single In <sub>x</sub> Ga <sub>1-x</sub> N quantum disk. Applied Physics Letters, 2009, 95, .	1.5	11
264	PbTe Nanocrystal Arrays on Graphene and the Structural Influence of Capping Ligands. Chemistry of Materials, 2014, 26, 1567-1575.	3.2	11
265	Interactions of Pb and Te atoms with graphene. Dalton Transactions, 2014, 43, 7442-7448.	1.6	11
266	<i>In Situ</i> Atomic Level Dynamics of Heterogeneous Nucleation and Growth of Graphene from Inorganic Nanoparticle Seeds. ACS Nano, 2016, 10, 9397-9410.	7.3	11
267	Hyperfine and Spin-Orbit Coupling Effects on Decay of Spin-Valley States in a Carbon Nanotube. Physical Review Letters, 2017, 118, 177701.	2.9	11
268	Strong Opto-Structural Coupling in Low Dimensional GeSe <sub>3</sub> Films. Nano Letters, 2019, 19, 7377-7384.	4.5	11
269	Biomass-Derived Nickel Phosphide Nanoparticles as a Robust Catalyst for Hydrogen Production by Catalytic Decomposition of C <sub>2</sub> H <sub>2</sub> or Dry Reforming of CH <sub>4</sub> . ACS Applied Energy Materials, 2019, 2, 8649-8658.	2.5	11
270	Separating fluorescent species of aqueous PbS semiconductor nanocrystals using micro-emulsions. Nanotechnology, 2005, 16, 479-483.	1.3	10



#	ARTICLE	IF	CITATIONS
271	Negative Electro-conductance in Suspended 2D WS <sub>2</sub> Nanoscale Devices. ACS Applied Materials & Interfaces, 2016, 8, 32963-32970.	4.0	10
272	Direct manufacturing of ultrathin graphite on three-dimensional nanoscale features. Scientific Reports, 2016, 6, 22700.	1.6	10
273	Snapshot 3D Electron Imaging of Structural Dynamics. Scientific Reports, 2017, 7, 10839.	1.6	10
274	Photocurrent Direction Control and Increased Photovoltaic Effects in All-2D Ultrathin Vertical Heterostructures Using Asymmetric h-BN Tunneling Barriers. ACS Applied Materials & Interfaces, 2019, 11, 40274-40282.	4.0	10
275	Phase Variations and Layer Epitaxy of 2D PdSe <sub>2</sub> Grown on 2D Monolayers by Direct Selenization of Molecular Pd Precursors. ACS Nano, 2020, 14, 11677-11690.	7.3	10
276	Carrier dynamics of In <sub>x</sub> Ga <sub>1-x</sub> N quantum disks embedded in GaN nanocolumns. Journal of Applied Physics, 2011, 109, 063515.	1.1	9
277	Applications of Graphene. , 2013, , 333-437.		9
278	Properties of Graphene. , 2013, , 61-127.		9
279	Optically enhanced charge transfer between C <sub>60</sub> and single-wall carbon nanotubes in hybrid electronic devices. Nanoscale, 2014, 6, 572-580.	2.8	9
280	Formation of Klein Edge Doublets from Graphene Monolayers. ACS Nano, 2015, 9, 8916-8922.	7.3	9
281	<i>In Situ</i> Atomic-Level Studies of Gd Atom Release and Migration on Graphene from a Metallofullerene Precursor. ACS Nano, 2018, 12, 10439-10451.	7.3	9
282	Mapping 1D Confined Electromagnetic Edge States in 2D Monolayer Semiconducting MoS <sub>2</sub> Using 4D-STEM. ACS Nano, 2022, 16, 6657-6665.	7.3	9
283	Atomic-Level Dynamics of Point Vacancies and the Induced Stretched Defects in 2D Monolayer PtSe <sub>2</sub> . Nano Letters, 2022, 22, 3289-3297.	4.5	9
284	La@C <sub>82</sub> as a spin-active filling of SWCNTs: ESR study of magnetic and photophysical properties. Physica Status Solidi (B): Basic Research, 2008, 245, 2042-2046.	0.7	8
285	Exchange interactions of spin-active metallofullerenes in solid-state carbon networks. Physical Review B, 2010, 81, .	1.1	8
286	Characterisation Techniques. , 2013, , 229-332.		8
287	Atomic Resolution Imaging of Nanoscale Chemical Expansion in Pr <sub>x</sub> Ce <sub>1-x</sub> O <sub>2</sub> during <i>In Situ</i> Heating. ACS Nano, 2018, 12, 1359-1372.	7.3	8
288	Self-Assembly of Bowlic Supramolecules on Graphene Imaged at the Individual Molecular Level using Heavy Atom Tagging. Small, 2020, 16, e2002860.	5.2	8

#	ARTICLE	IF	CITATIONS
289	Precursor Design for High Density Single Pt Atom Sites on MoS <sub>2</sub> : Enhanced Stability at Elevated Temperatures and Reduced 3D Clustering. Chemistry of Materials, 2020, 32, 2541-2551.	3.2	8
290	Carbon nanotube nanoelectronic devices compatible with transmission electron microscopy. Nanotechnology, 2011, 22, 245305.	1.3	7
291	A Metal-Free Oxygenated Covalent Triazine 2-D Photocatalyst Works Effectively from the Ultraviolet to Near-Infrared Spectrum for Water Oxidation Apart from Water Reduction. ACS Applied Energy Materials, 2020, 3, 8960-8968.	2.5	7
292	Operational Limits and Failure Mechanisms in All-2D van der Waals Vertical Heterostructure Devices with Long-Lived Persistent Electroluminescence. ACS Nano, 2020, 14, 15533-15543.	7.3	7
293	Transparent ultrathin all-two-dimensional lateral Gr:WS <sub>2</sub> :Gr photodetector arrays on flexible substrates and their strain induced failure mechanisms. Materials Today Advances, 2020, 6, 100067.	2.5	7
294	Direct observation and catalytic role of mediator atom in 2D materials. Science Advances, 2020, 6, eaba4942.	4.7	7
295	Intrinsic Li Distribution in Layered Transition-Metal Oxides Using Low-Dose Scanning Transmission Electron Microscopy and Spectroscopy. Chemistry of Materials, 2021, 33, 4638-4650.	3.2	7
296	Optical studies on a single GaN nanocolumn containing a single In <sub>x</sub> Ga <sub>1-x</sub> N quantum disk. Applied Physics Letters, 2011, 98, 251908.	1.5	6
297	In situ observations of Pt nanoparticles coalescing inside carbon nanotubes. RSC Advances, 2014, 4, 49442-49445.	1.7	6
298	Characterization of Graphene and Transition Metal Dichalcogenide at the Atomic Scale. Journal of the Physical Society of Japan, 2015, 84, 121005.	0.7	6
299	Direct observation of mixed-parity excited states in surface-passivated PbS nanocrystals. Nanotechnology, 2004, 15, 1351-1355.	1.3	5
300	Pointwise Plucking of Suspended Carbon Nanotubes. Nano Letters, 2012, 12, 3663-3667.	4.5	5
301	The Identification of Inner Tube Defects in Double-Wall Carbon Nanotubes. Small, 2012, 8, 3810-3815.	5.2	5
302	Aberration measurement of the probe-forming system of an electron microscope using two-dimensional materials. Ultramicroscopy, 2017, 182, 195-204.	0.8	5
303	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. Angewandte Chemie, 2019, 131, 5002-5006.	1.6	5
304	Microscopic Mechanism of Van der Waals Heteroepitaxy in the Formation of MoS <sub>2</sub> /hBN Vertical Heterostructures. ACS Omega, 2020, 5, 31692-31699.	1.6	5
305	Atomically sharp jagged edges of chemical vapor deposition-grown WS <sub>2</sub> for electrocatalysis. Materials Today Nano, 2022, 18, 100183.	2.3	5
306	The synthesis of silicon nanoparticles for biomedical applications (Invited Paper). , 2005, , .		4

#	ARTICLE	IF	CITATIONS
307	Mechanical response of few-layer graphene films on copper foils. Scripta Materialia, 2012, 67, 273-276.	2.6	4
308	Electromagnetically Transparent Graphene Respiratory Sensors for Multimodal Small Animal Imaging. Advanced Healthcare Materials, 2020, 9, 2001222.	3.9	4
309	Ultrathin Lateral 2D Photodetectors Using Transition-Metal Dichalcogenides PtSe <sub>2</sub> “WS <sub>2</sub> “PtSe <sub>2</sub> by Direct Laser Patterning. ACS Applied Electronic Materials, 2022, 4, 1029-1038.	2.0	4
310	The synthesis of silicon and germanium quantum dots for biomedical applications. , 2006, , .		3
311	Unravelling the Mechanisms Behind Mixed Catalysts for the High Yield Production of Single-Walled Carbon Nanotubes. ACS Nano, 2009, 3, 3839-3844.	7.3	3
312	Tracking down the catalytic hydrogenation of multilayer graphene. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2731-2734.	0.8	3
313	Response to “Comment on “Ultrahigh secondary electron emission of carbon nanotubes” [Appl. Phys. Lett. 98, 066101 (2011)]. Applied Physics Letters, 2011, 98, .	1.5	3
314	Optical studies of GaN nanocolumns containing InGaN quantum disks and the effect of strain relaxation on the carrier distribution. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 712-714.	0.8	3
315	Nanoporous Silicon-Assisted Patterning of Monolayer MoS <sub>2</sub> with Thermally Controlled Porosity: A Scalable Method for Diverse Applications. ACS Applied Nano Materials, 2018, 1, 3548-3556.	2.4	3
316	Atomic Scale Imaging of Reversible Ring Cyclization in Graphene Nanoconstrictions. ACS Nano, 2019, 13, 2379-2388.	7.3	3
317	Atomic structural catalogue of defects and vertical stacking in 2H/3R mixed polytype multilayer WS <sub>2</sub> pyramids. Nanoscale, 2019, 11, 10859-10871.	2.8	3
318	Atomic structure of defects in transitional metal dichalcogenides using transmission electron microscopy. , 2020, , 167-197.		3
319	Atomistic Mechanics of Torn Back Folded Edges of Triangular Voids in Monolayer WS <sub>2</sub> . Small, 2021, 17, e2104238.	5.2	3
320	Atomic-Scale Insights into the Lateral and Vertical Epitaxial Growth in Two-Dimensional Pd <sub>2</sub> Se <sub>3</sub> “MoS <sub>2</sub> Heterostructures. ACS Nano, 2022, 16, 10260-10272.	7.3	3
321	Graphene for improved femtosecond laser based pluripotent stem cell transfection. Journal of Biophotonics, 2014, 7, 351-362.	1.1	2
322	Nanoscale Bilayer Mechanical Lithography Using Water as Developer. Nano Letters, 2021, 21, 3827-3834.	4.5	2
323	Large-Scale Uniform-Patterned Arrays of Ultrathin All-2D Vertical Stacked Photodetector Devices. ACS Applied Materials & Interfaces, 2021, 13, 34696-34704.	4.0	2
324	Photonics of silicon nanocrystals. , 2005, 6038, 254.		1

#	ARTICLE	IF	CITATIONS
325	Electron Exit Wave Reconstruction From a Single Defocused Image Using a Gaussian Basis. <i>Microscopy and Microanalysis</i> , 2015, 21, 745-746.	0.2	1
326	Alloyed Nanoparticles: Low-Temperature Chemical Vapor Deposition Synthesis of Pt-Co Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis ( <i>Adv. Mater.</i> 33/2016). <i>Advanced Materials</i> , 2016, 28, 7292-7292.	11.1	1
327	Graphene as a flexible template for controlling magnetic interactions between metal atoms. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 085001.	0.7	1
328	Nanoporous Graphene: Facile Fabrication of Large-Area Atomically Thin Membranes by Direct Synthesis of Graphene with Nanoscale Porosity ( <i>Adv. Mater.</i> 49/2018). <i>Advanced Materials</i> , 2018, 30, 1870376.	11.1	1
329	A System-Agnostic, Adaptable and Extensible Animal Support Cradle System for Cardio-Respiratory-Synchronised, and Other, Multi-Modal Imaging of Small Animals. <i>Tomography</i> , 2021, 7, 39-54.	0.8	1
330	Publisher's Note: Single-wall-carbon-nanotube/single-carbon-chain molecular junctions [ <i>Phys. Rev. B</i> 81, 085439 (2010)]. <i>Physical Review B</i> , 2010, 81, .	1.1	0
331	Internal Field Shielding and the Quantum Confined Stark Effect in a Single In <sub>x</sub> Ga <sub>1-x</sub> N Quantum Disk. , 2011, , .		0
332	In-situ Observations of Restructuring Carbon Nanotubes via Low-voltage Aberration-corrected Transmission Electron Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1284, 101.	0.1	0
333	Optical studies on In <sub>x</sub> Ga <sub>1-x</sub> N quantum disks. <i>Proceedings of SPIE</i> , 2011, , .	0.8	0
334	Carbon Nanomaterials: Synthesis, Properties and Applications. <i>Nanoscience and Technology</i> , 2012, , 23-46.	1.5	0
335	Applications of Aberration Corrected TEM and Exit Wavefunction Reconstruction to Materials Science. <i>Microscopy and Microanalysis</i> , 2014, 20, 930-931.	0.2	0
336	Atomic Resolution Study of Defects in Graphene. <i>Microscopy and Microanalysis</i> , 2014, 20, 1766-1767.	0.2	0
337	Detailed Atomic Structure of Defects in 2D Materials: From Graphene to Transition Metal Dichalcogenides. <i>Microscopy and Microanalysis</i> , 2015, 21, 573-574.	0.2	0
338	Suppressed Hysteretic Field Emission from Polymer Encapsulated Silver Nanowires. <i>IEEE Nanotechnology Magazine</i> , 2016, , 1-1.	1.1	0
339	Porous Graphene Layers on Pt Catalyst for Long-Term Stability of Fuel Cell Electrode. <i>ECS Transactions</i> , 2016, 75, 837-840.	0.3	0
340	In-Situ Atomic Level Studies of Unusual Phase Transformations in Metal-chalcogenide 2D Crystals. <i>Microscopy and Microanalysis</i> , 2020, 26, 1084-1085.	0.2	0
341	Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D Pd <sub>2</sub> Se <sub>3</sub> Monolayers. <i>Microscopy and Microanalysis</i> , 2020, 26, 1636-1640.	0.2	0
342	In situ atomic level studies of thermally controlled interlayer stacking shifts in 2D transition metal dichalcogenide bilayers. <i>Journal of Materials Research</i> , 2020, 35, 1407-1416.	1.2	0

#	ARTICLE	IF	CITATIONS
343	Atomic Study on Defects in 2D PtSe <sub>2</sub> Monolayers Using Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2021, 27, 644-645.	0.2	0