# Jamie H Warner

## List of Publications by Year in Descending Order

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**Version:** 2024-04-20

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

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|---|---|---|---|
| 335 papers | 14,543 citations | 58 h-index | 105 g-index |
| 348 ext. papers | 16,464 ext. citations | 10.8 avg, IF | 6.81 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 335 | Atomic Sharpness of Jagged Edges of Two-Dimensional WS2 Grown by Chemical Vapor Deposition. *Materials Today Nano*, **2022**, 100183 | 9.7 | 1 |
| 334 | Elucidating the Formation and Structural Evolution of Platinum Single-Site Catalysts for the Hydrogen Evolution Reaction.. *ACS Catalysis*, **2022**, 12, 3173-3180 | 13.1 | 2 |
| 333 | Ultrathin Lateral 2D Photodetectors Using Transition-Metal Dichalcogenides PtSe2WS2PtSe2 by Direct Laser Patterning. *ACS Applied Electronic Materials*, **2022**, 4, 1029-1038 | 4 | 1 |
| 332 | GaS:WS Heterojunctions for Ultrathin Two-Dimensional Photodetectors with Large Linear Dynamic Range across Broad Wavelengths. *ACS Nano*, **2021**, | 16.7 | 7 |
| 331 | Atomic Structure of Dislocations and Grain Boundaries in Two-Dimensional PtSe. *ACS Nano*, **2021**, 15, 16748-16759 | 16.7 | 2 |
| 330 | Thick BaTiO Epitaxial Films Integrated on Si by RF Sputtering for Electro-Optic Modulators in Si Photonics. *ACS Applied Materials & Interfaces*, **2021**, 13, 51230-51244 | 9.5 | 3 |
| 329 | Atomistic Mechanics of Torn Back Folded Edges of Triangular Voids in Monolayer WS. *Small*, **2021**, 17, e2104238 | 11 | |
| 328 | Nanoscale Bilayer Mechanical Lithography Using Water as Developer. *Nano Letters*, **2021**, 21, 3827-3834 | 11.5 | 1 |
| 327 | Atomically Precise Control of Carbon Insertion into hBN Monolayer Point Vacancies using a Focused Electron Beam Guide. *Small*, **2021**, 17, e2100693 | 11 | 3 |
| 326 | Intrinsic Li Distribution in Layered Transition-Metal Oxides Using Low-Dose Scanning Transmission Electron Microscopy and Spectroscopy. *Chemistry of Materials*, **2021**, 33, 4638-4650 | 9.6 | 2 |
| 325 | Wet-CO Pretreatment Process for Reducing Residual Lithium in High-Nickel Layered Oxides for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 27096-27105 | 9.5 | 7 |
| 324 | In-Depth Analysis of the Degradation Mechanisms of High-Nickel, Low/No-Cobalt Layered Oxide Cathodes for Lithium-Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2100858 | 21.8 | 24 |
| 323 | Atomic Study on Defects in 2D PtSe2 Monolayers Using Electron Microscopy. *Microscopy and Microanalysis*, **2021**, 27, 644-645 | 0.5 | |
| 322 | Recent Progress in Using Graphene as an Ultrathin Transparent Support for Transmission Electron Microscopy. *Small Structures*, **2021**, 2, 2000049 | 8.7 | 8 |
| 321 | A System-Agnostic, Adaptable and Extensible Animal Support Cradle System for Cardio-Respiratory-Synchronised, and Other, Multi-Modal Imaging of Small Animals. *Tomography*, **2021**, 7, 39-54 | 3.1 | 0 |
| 320 | Unraveling the Intricacies of Residual Lithium in High-Ni Cathodes for Lithium-Ion Batteries. *ACS Energy Letters*, **2021**, 6, 941-948 | 20.1 | 27 |
| 319 | Large-Scale Uniform-Patterned Arrays of Ultrathin All-2D Vertical Stacked Photodetector Devices. *ACS Applied Materials & Interfaces*, **2021**, 13, 34696-34704 | 9.5 | 2 |

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| 318 | Rational Design of Coating Ions via Advantageous Surface Reconstruction in High-Nickel Layered Oxide Cathodes for Lithium-Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2101112 | 21.8 | 11 |
| 317 | Microscopic Mechanism of Van der Waals Heteroepitaxy in the Formation of MoS/hBN Vertical Heterostructures. *ACS Omega*, **2020**, 5, 31692-31699 | 3.9 | 3 |
| 316 | In-Situ Atomic Level Studies of Unusual Phase Transformations in Metal-chalcogenide 2D Crystals. *Microscopy and Microanalysis*, **2020**, 26, 1084-1085 | 0.5 | |
| 315 | Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D Pd2Se3 Monolayers. *Microscopy and Microanalysis*, **2020**, 26, 1636-1640 | 0.5 | |
| 314 | 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 | 16.7 | 5 |
| 313 | Transparent ultrathin all-two-dimensional lateral Gr:WS2:Gr photodetector arrays on flexible substrates and their strain induced failure mechanisms. *Materials Today Advances*, **2020**, 6, 100067 | 7.4 | 1 |
| 312 | Synthesis and Applications of Wide Bandgap 2D Layered Semiconductors Reaching the Green and Blue Wavelengths. *ACS Applied Electronic Materials*, **2020**, 2, 1777-1814 | 4 | 18 |
| 311 | 2D layered noble metal dichalcogenides (Pt, Pd, Se, S) for electronics and energy applications. *Materials Today Advances*, **2020**, 7, 100076 | 7.4 | 31 |
| 310 | Direct observation and catalytic role of mediator atom in 2D materials. *Science Advances*, **2020**, 6, eaba4942 | 14.3 | 5 |
| 309 | In situ atomic level studies of thermally controlled interlayer stacking shifts in 2D transition metal dichalcogenide bilayers. *Journal of Materials Research*, **2020**, 35, 1407-1416 | 2.5 | |
| 308 | Precursor Design for High Density Single Pt Atom Sites on MoS2: Enhanced Stability at Elevated Temperatures and Reduced 3D Clustering. *Chemistry of Materials*, **2020**, 32, 2541-2551 | 9.6 | 6 |
| 307 | Photoresponse-Bias Modulation of a High-Performance MoS Photodetector with a Unique Vertically Stacked 2H-MoS/1T@2H-MoS Structure. *ACS Applied Materials & Interfaces*, **2020**, 12, 33325-33335 | 9.5 | 31 |
| 306 | Atomic structure and defect dynamics of monolayer lead iodide nanodisks with epitaxial alignment on graphene. *Nature Communications*, **2020**, 11, 823 | 17.4 | 20 |
| 305 | Spatially Bandgap-Graded MoSSe Homojunctions for Self-Powered Visible-Near-Infrared Phototransistors. *Nano-Micro Letters*, **2020**, 12, 26 | 19.5 | 15 |
| 304 | Controlling Defects in Continuous 2D GaS Films for High-Performance Wavelength-Tunable UV-Discriminating Photodetectors. *Advanced Materials*, **2020**, 32, e1906958 | 24 | 24 |
| 303 | Direct Imaging of Individual Molecular Binding to Clean Nanopore Edges in 2D Monolayer MoS. *ACS Nano*, **2020**, 14, 153-165 | 16.7 | 9 |
| 302 | Controlling Photoluminescence Enhancement and Energy Transfer in WS :hBN:WS Vertical Stacks by Precise Interlayer Distances. *Small*, **2020**, 16, e1905985 | 11 | 19 |
| 301 | Atomic structure of defects in transitional metal dichalcogenides using transmission electron microscopy **2020**, 167-197 | | 2 |

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| 300 | Self-Assembly of Bowlic Supramolecules on Graphene Imaged at the Individual Molecular Level using Heavy Atom Tagging. *Small*, **2020**, 16, e2002860 | 11 | 5 |
| 299 | Single-Step Chemical Vapor Deposition Growth of Platinum Nanocrystal: Monolayer MoS2 Dendrite Hybrid Materials for Efficient Electrocatalysis. *Chemistry of Materials*, **2020**, 32, 8243-8256 | 9.6 | 13 |
| 298 | Electromagnetically Transparent Graphene Respiratory Sensors for Multimodal Small Animal Imaging. *Advanced Healthcare Materials*, **2020**, 9, e2001222 | 10.1 | 3 |
| 297 | 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 | 6.1 | 4 |
| 296 | Phase Variations and Layer Epitaxy of 2D PdSe Grown on 2D Monolayers by Direct Selenization of Molecular Pd Precursors. *ACS Nano*, **2020**, 14, 11677-11690 | 16.7 | 5 |
| 295 | Atomically Sharp Dual Grain Boundaries in 2D WS Bilayers. *Small*, **2019**, 15, e1902590 | 11 | 8 |
| 294 | Strong Opto-Structural Coupling in Low Dimensional GeSe Films. *Nano Letters*, **2019**, 19, 7377-7384 | 11.5 | 4 |
| 293 | Atomic Structure and Dynamics of Epitaxial Platinum Bilayers on Graphene. *ACS Nano*, **2019**, 13, 12162-12170 | 16.7 | 12 |
| 292 | Broadband transparent optical phase change materials for high-performance nonvolatile photonics. *Nature Communications*, **2019**, 10, 4279 | 17.4 | 152 |
| 291 | Waterproof molecular monolayers stabilize 2D materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 20844-20849 | 11.5 | 24 |
| 290 | In situ high temperature atomic level dynamics of large inversion domain formations in monolayer MoS. *Nanoscale*, **2019**, 11, 1901-1913 | 7.7 | 14 |
| 289 | Atomic Scale Imaging of Reversible Ring Cyclization in Graphene Nanoconstrictions. *ACS Nano*, **2019**, 13, 2379-2388 | 16.7 | 2 |
| 288 | High Photoresponsivity in Ultrathin 2D Lateral Graphene:WS:Graphene Photodetectors Using Direct CVD Growth. *ACS Applied Materials & Interfaces*, **2019**, 11, 6421-6430 | 9.5 | 52 |
| 287 | Thermal Degradation of Monolayer MoS2 on SrTiO3 Supports. *Journal of Physical Chemistry C*, **2019**, 123, 3876-3885 | 3.8 | 10 |
| 286 | Metal Atom Markers for Imaging Epitaxial Molecular Self-Assembly on Graphene by Scanning Transmission Electron Microscopy. *ACS Nano*, **2019**, 13, 7252-7260 | 16.7 | 8 |
| 285 | Atomic Structure and Dynamics of Defects and Grain Boundaries in 2D PdSe Monolayers. *ACS Nano*, **2019**, 13, 8256-8264 | 16.7 | 24 |
| 284 | Atomic structural catalogue of defects and vertical stacking in 2H/3R mixed polytype multilayer WS pyramids. *Nanoscale*, **2019**, 11, 10859-10871 | 7.7 | 2 |
| 283 | Increasing the electrochemical activity of basal plane sites in porous 3D edge rich MoS2 thin films for the hydrogen evolution reaction. *Materials Today Energy*, **2019**, 13, 134-144 | 7 | 19 |

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| 282 | Anisotropic Fracture Dynamics Due to Local Lattice Distortions. *ACS Nano*, **2019**, 13, 5693-5702 | 16.7 | 11 |
| 281 | High-Performance WS Monolayer Light-Emitting Tunneling Devices Using 2D Materials Grown by Chemical Vapor Deposition. *ACS Nano*, **2019**, 13, 4530-4537 | 16.7 | 34 |
| 280 | Grain Boundaries as Electrical Conduction Channels in Polycrystalline Monolayer WS. *ACS Applied Materials & Interfaces*, **2019**, 11, 10189-10197 | 9.5 | 12 |
| 279 | Atomic electrostatic maps of 1D channels in 2D semiconductors using 4D scanning transmission electron microscopy. *Nature Communications*, **2019**, 10, 1127 | 17.4 | 33 |
| 278 | Atomic Resolution Defocused Electron Ptychography at Low Dose with a Fast, Direct Electron Detector. *Scientific Reports*, **2019**, 9, 3919 | 4.9 | 25 |
| 277 | MoS Liquid Cell Electron Microscopy Through Clean and Fast Polymer-Free MoS Transfer. *Nano Letters*, **2019**, 19, 1788-1795 | 11.5 | 24 |
| 276 | 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 | 11.5 | 17 |
| 275 | 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 | 5.6 | 12 |
| 274 | Postgrowth Substitutional Tin Doping of 2D WS Crystals Using Chemical Vapor Deposition. *ACS Applied Materials & Interfaces*, **2019**, 11, 24279-24288 | 9.5 | 13 |
| 273 | Striated 2D Lattice with Sub-nm 1D Etch Channels by Controlled Thermally Induced Phase Transformations of PdSe. *Advanced Materials*, **2019**, 31, e1904251 | 24 | 24 |
| 272 | Contiguous and Atomically Thin Pt Film with Supra-Bulk Behavior Through Graphene-Imposed Epitaxy. *Advanced Functional Materials*, **2019**, 29, 1902274 | 15.6 | 13 |
| 271 | 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 | 9.5 | 7 |
| 270 | Biomass-Derived Nickel Phosphide Nanoparticles as a Robust Catalyst for Hydrogen Production by Catalytic Decomposition of C2H2 or Dry Reforming of CH4. *ACS Applied Energy Materials*, **2019**, 2, 8649-8658 | 6.1 | 3 |
| 269 | In-Situ Atomic-Scale Dynamics of Thermally Driven Phase Transition of 2D Few-Layered 1T PtSe2 into Ultrathin 2D Nonlayered PtSe Crystals. *Chemistry of Materials*, **2019**, 31, 9895-9903 | 9.6 | 15 |
| 268 | Ultrathin All-2D Lateral Graphene/GaS/Graphene UV Photodetectors by Direct CVD Growth. *ACS Applied Materials & Interfaces*, **2019**, 11, 48172-48178 | 9.5 | 19 |
| 267 | Direct Laser Patterning and Phase Transformation of 2D PdSe Films for On-Demand Device Fabrication. *ACS Nano*, **2019**, 13, 14162-14171 | 16.7 | 29 |
| 266 | Spatially Controlled Fabrication and Mechanisms of Atomically Thin Nanowell Patterns in Bilayer WS Using High Temperature Electron Microscopy. *ACS Nano*, **2019**, 13, 14486-14499 | 16.7 | 10 |
| 265 | Self-Limiting Growth of High-Quality 2D Monolayer MoS2 by Direct Sulfurization Using Precursor-Soluble Substrates for Advanced Field-Effect Transistors and Photodetectors. *ACS Applied Nano Materials*, **2019**, 2, 369-378 | 5.6 | 20 |

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| 264 | Symmetry-Controlled Reversible Photovoltaic Current Flow in Ultrathin All 2D Vertically Stacked Graphene/MoS/WS/Graphene Devices. *ACS Applied Materials & Interfaces*, **2019**, 11, 2234-2242 | 9.5 | 23 |
| 263 | Synthesis of Surface Grown Pt Nanoparticles on Edge-Enriched MoS2 Porous Thin Films for Enhancing Electrochemical Performance. *Chemistry of Materials*, **2019**, 31, 387-397 | 9.6 | 30 |
| 262 | Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. *Angewandte Chemie*, **2019**, 131, 5002-5006 | 3.6 | 3 |
| 261 | Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. *Angewandte Chemie - International Edition*, **2019**, 58, 4948-4952 | 16.4 | 37 |
| 260 | Addressing the isomer cataloguing problem for nanopores in two-dimensional materials. *Nature Materials*, **2019**, 18, 129-135 | 27 | 37 |
| 259 | Direct Imaging of Photoswitching Molecular Conformations Using Individual Metal Atom Markers. *ACS Nano*, **2019**, 13, 87-96 | 16.7 | 16 |
| 258 | Revealing Strain-Induced Effects in Ultrathin Heterostructures at the Nanoscale. *Nano Letters*, **2018**, 18, 2467-2474 | 11.5 | 17 |
| 257 | Utilizing Interlayer Excitons in Bilayer WS for Increased Photovoltaic Response in Ultrathin Graphene Vertical Cross-Bar Photodetecting Tunneling Transistors. *ACS Nano*, **2018**, 12, 4669-4677 | 16.7 | 25 |
| 256 | 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 | 35.4 | 20 |
| 255 | High-Performance All 2D-Layered Tin Disulfide: Graphene Photodetecting Transistors with Thickness-Controlled Interface Dynamics. *ACS Applied Materials & Interfaces*, **2018**, 10, 13002-13010 | 9.5 | 23 |
| 254 | Determining the Optimized Interlayer Separation Distance in Vertical Stacked 2D WS :hBN:MoS Heterostructures for Exciton Energy Transfer. *Small*, **2018**, 14, e1703727 | 11 | 40 |
| 253 | Hydrogen-Assisted Growth of Large-Area Continuous Films of MoS on Monolayer Graphene. *ACS Applied Materials & Interfaces*, **2018**, 10, 7304-7314 | 9.5 | 36 |
| 252 | Atomic Resolution Imaging of Nanoscale Chemical Expansion in PrCeO during In Situ Heating. *ACS Nano*, **2018**, 12, 1359-1372 | 16.7 | 5 |
| 251 | Large Dendritic Monolayer MoS Grown by Atmospheric Pressure Chemical Vapor Deposition for Electrocatalysis. *ACS Applied Materials & Interfaces*, **2018**, 10, 4630-4639 | 9.5 | 60 |
| 250 | Interlocking Friction Governs the Mechanical Fracture of Bilayer MoS. *ACS Nano*, **2018**, 12, 3600-3608 | 16.7 | 30 |
| 249 | Blister-based-laser-induced-forward-transfer: a non-contact, dry laser-based transfer method for nanomaterials. *Nanotechnology*, **2018**, 29, 385301 | 3.4 | 6 |
| 248 | Chemical Vapor Deposition Growth of Two-Dimensional Monolayer Gallium Sulfide Crystals Using Hydrogen Reduction of GaS. *ACS Omega*, **2018**, 3, 7897-7903 | 3.9 | 24 |
| 247 | Ultralong 1D Vacancy Channels for Rapid Atomic Migration during 2D Void Formation in Monolayer MoS. *ACS Nano*, **2018**, 12, 7721-7730 | 16.7 | 38 |

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| 246 | Low-Frequency Noise in Graphene Tunnel Junctions. *ACS Nano*, **2018**, 12, 9451-9460 | 16.7 | 15 |
| 245 | Nanoporous Silicon-Assisted Patterning of Monolayer MoS2 with Thermally Controlled Porosity: A Scalable Method for Diverse Applications. *ACS Applied Nano Materials*, **2018**, 1, 3548-3556 | 5.6 | 1 |
| 244 | Geometrically Enhanced Thermoelectric Effects in Graphene Nanoconstrictions. *Nano Letters*, **2018**, 18, 7719-7725 | 11.5 | 30 |
| 243 | Epitaxial Growth of Monolayer MoS2 on SrTiO3 Single Crystal Substrates for Applications in Nanoelectronics. *ACS Applied Nano Materials*, **2018**, 1, 6976-6988 | 5.6 | 21 |
| 242 | 2D-Layer-Dependent Behavior in Lateral Au/WS2/Graphene Photodiode Devices with Optical Modulation of Schottky Barriers. *ACS Applied Nano Materials*, **2018**, 1, 6874-6881 | 5.6 | 14 |
| 241 | Nanoporous Graphene: Facile Fabrication of Large-Area Atomically Thin Membranes by Direct Synthesis of Graphene with Nanoscale Porosity (Adv. Mater. 49/2018). *Advanced Materials*, **2018**, 30, 1870376 | 24 | 1 |
| 240 | Facile Fabrication of Large-Area Atomically Thin Membranes by Direct Synthesis of Graphene with Nanoscale Porosity. *Advanced Materials*, **2018**, 30, e1804977 | 24 | 35 |
| 239 | Hollow Electron Ptychographic Diffractive Imaging. *Physical Review Letters*, **2018**, 121, 146101 | 7.4 | 14 |
| 238 | In Situ Atomic-Level Studies of Gd Atom Release and Migration on Graphene from a Metallofullerene Precursor. *ACS Nano*, **2018**, 12, 10439-10451 | 16.7 | 6 |
| 237 | Atomic Structure and Dynamics of Self-Limiting Sub-Nanometer Pores in Monolayer WS. *ACS Nano*, **2018**, 12, 11638-11647 | 16.7 | 24 |
| 236 | Inhomogeneous Strain Release during Bending of WS on Flexible Substrates. *ACS Applied Materials & Interfaces*, **2018**, 10, 39177-39186 | 9.5 | 9 |
| 235 | High-Performance Two-Dimensional Schottky Diodes Utilizing Chemical Vapour Deposition-Grown Graphene-MoS Heterojunctions. *ACS Applied Materials & Interfaces*, **2018**, 10, 37258-37266 | 9.5 | 17 |
| 234 | Atomically sharp interlayer stacking shifts at anti-phase grain boundaries in overlapping MoS secondary layers. *Nanoscale*, **2018**, 10, 16692-16702 | 7.7 | 17 |
| 233 | Preferential Pt Nanocluster Seeding at Grain Boundary Dislocations in Polycrystalline Monolayer MoS. *ACS Nano*, **2018**, 12, 5626-5636 | 16.7 | 23 |
| 232 | Atomic structure of defects and dopants in 2D layered transition metal dichalcogenides. *Chemical Society Reviews*, **2018**, 47, 6764-6794 | 58.5 | 106 |
| 231 | Graphene as a flexible template for controlling magnetic interactions between metal atoms. *Journal of Physics Condensed Matter*, **2017**, 29, 085001 | 1.8 | 1 |
| 230 | Electrically tunable organic-inorganic hybrid polaritons with monolayer WS. *Nature Communications* , **2017**, 8, 14097 | 17.4 | 44 |
| 229 | Oligomeric aminoborane precursors for the chemical vapour deposition growth of few-layer hexagonal boron nitride. *CrystEngComm*, **2017**, 19, 285-294 | 3.3 | 34 |

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|---|---|---|---|
| 228 | Atomic Structure and Dynamics of Single Platinum Atom Interactions with Monolayer MoS. *ACS Nano*, **2017**, 11, 3392-3403 | 16.7 | 94 |
| 227 | MoS monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. *Nature Chemistry*, **2017**, 9, 810-816 | 17.6 | 489 |
| 226 | Distinguishing Lead and Molecule States in Graphene-Based Single-Electron Transistors. *ACS Nano*, **2017**, 11, 5325-5331 | 16.7 | 36 |
| 225 | Transfer of photosynthetic NADP/NADPH recycling activity to a porous metal oxide for highly specific, electrochemically-driven organic synthesis. *Chemical Science*, **2017**, 8, 4579-4586 | 9.4 | 52 |
| 224 | Hydrogen Addition for Centimeter-Sized Monolayer Tungsten Disulfide Continuous Films by Ambient Pressure Chemical Vapor Deposition. *Chemistry of Materials*, **2017**, 29, 4904-4911 | 9.6 | 36 |
| 223 | 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 | 13 | 10 |
| 222 | Scaling Limits of Graphene Nanoelectrodes. *Nano Letters*, **2017**, 17, 3688-3693 | 11.5 | 35 |
| 221 | Atomic structure and formation mechanism of sub-nanometer pores in 2D monolayer MoS. *Nanoscale*, **2017**, 9, 6417-6426 | 7.7 | 41 |
| 220 | Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. *ACS Applied Materials & Interfaces*, **2017**, 9, 15005-15014 | 9.5 | 48 |
| 219 | Fabrication, Pressure Testing, and Nanopore Formation of Single-Layer Graphene Membranes. *Journal of Physical Chemistry C*, **2017**, 121, 14312-14321 | 3.8 | 26 |
| 218 | Epitaxial Templating of Two-Dimensional Metal Chloride Nanocrystals on Monolayer Molybdenum Disulfide. *ACS Nano*, **2017**, 11, 6404-6415 | 16.7 | 17 |
| 217 | Edge-Enriched 2D MoS2 Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. *ACS Catalysis*, **2017**, 7, 877-886 | 13.1 | 86 |
| 216 | Field-Effect Control of Graphene-Fullerene Thermoelectric Nanodevices. *Nano Letters*, **2017**, 17, 7055-7061 | 11.5 | 41 |
| 215 | Photoluminescent Arrays of Nanopatterned Monolayer MoS2. *Advanced Functional Materials*, **2017**, 27, 1703688 | 15.6 | 28 |
| 214 | Lateral Graphene-Contacted Vertically Stacked WS /MoS Hybrid Photodetectors with Large Gain. *Advanced Materials*, **2017**, 29, 1702917 | 24 | 87 |
| 213 | Orientation dependent interlayer stacking structure in bilayer MoS domains. *Nanoscale*, **2017**, 9, 13060-13068 | 7.7 | 14 |
| 212 | Point defects in turbostratic stacked bilayer graphene. *Nanoscale*, **2017**, 9, 13725-13730 | 7.7 | 8 |
| 211 | Electrical Breakdown of Suspended Mono- and Few-Layer Tungsten Disulfide via Sulfur Depletion Identified by in Situ Atomic Imaging. *ACS Nano*, **2017**, 11, 9435-9444 | 16.7 | 14 |

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| 210 | Snapshot 3D Electron Imaging of Structural Dynamics. *Scientific Reports*, **2017**, 7, 10839 | 4.9 | 9 |
| 209 | Growth of Large Single-Crystalline Monolayer Hexagonal Boron Nitride by Oxide-Assisted Chemical Vapor Deposition. *Chemistry of Materials*, **2017**, 29, 6252-6260 | 9.6 | 46 |
| 208 | Atomically Flat Zigzag Edges in Monolayer MoS by Thermal Annealing. *Nano Letters*, **2017**, 17, 5502-5507 | 11.5 | 58 |
| 207 | In Situ Atomic-Scale Studies of the Formation of Epitaxial Pt Nanocrystals on Monolayer Molybdenum Disulfide. *ACS Nano*, **2017**, 11, 9057-9067 | 16.7 | 21 |
| 206 | Atomic Structure and Dynamics of Defects in 2D MoS Bilayers. *ACS Omega*, **2017**, 2, 3315-3324 | 3.9 | 26 |
| 205 | Aberration measurement of the probe-forming system of an electron microscope using two-dimensional materials. *Ultramicroscopy*, **2017**, 182, 195-204 | 3.1 | 3 |
| 204 | Hyperfine and Spin-Orbit Coupling Effects on Decay of Spin-Valley States in a Carbon Nanotube. *Physical Review Letters*, **2017**, 118, 177701 | 7.4 | 7 |
| 203 | Alloyed Nanoparticles: Low-Temperature Chemical Vapor Deposition Synthesis of Pt□o Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis (Adv. Mater. 33/2016). *Advanced Materials*, **2016**, 28, 7292-7292 | 24 | 1 |
| 202 | In Situ Atomic Level Dynamics of Heterogeneous Nucleation and Growth of Graphene from Inorganic Nanoparticle Seeds. *ACS Nano*, **2016**, 10, 9397-9410 | 16.7 | 8 |
| 201 | Ultrathin 2D Photodetectors Utilizing Chemical Vapor Deposition Grown WS2 With Graphene Electrodes. *ACS Nano*, **2016**, 10, 7866-73 | 16.7 | 201 |
| 200 | Photoinduced Schottky Barrier Lowering in 2D Monolayer WS2 Photodetectors. *Advanced Optical Materials*, **2016**, 4, 1573-1581 | 8.1 | 47 |
| 199 | Atomic Structure and Spectroscopy of Single Metal (Cr, V) Substitutional Dopants in Monolayer MoS. *ACS Nano*, **2016**, 10, 10227-10236 | 16.7 | 77 |
| 198 | Atomic Structure and Dynamics of Epitaxial 2D Crystalline Gold on Graphene at Elevated Temperatures. *ACS Nano*, **2016**, 10, 10418-10427 | 16.7 | 23 |
| 197 | Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdS-carbon nanotube-MoS composite. *Chemical Communications*, **2016**, 52, 13596-13599 | 5.8 | 16 |
| 196 | Suppressed Hysteretic Field Emission From Polymer Encapsulated Silver Nanowires. *IEEE Nanotechnology Magazine*, **2016**, 1-1 | 2.6 | |
| 195 | Porous Graphene Layers on Pt Catalyst for Long-Term Stability of Fuel Cell Electrode. *ECS Transactions*, **2016**, 75, 837-840 | 1 | |
| 194 | Direct manufacturing of ultrathin graphite on three-dimensional nanoscale features. *Scientific Reports*, **2016**, 6, 22700 | 4.9 | 7 |
| 193 | Quantum Interference in Graphene Nanoconstrictions. *Nano Letters*, **2016**, 16, 4210-6 | 11.5 | 48 |

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| 192 | Revealing Defect-State Photoluminescence in Monolayer WS2 by Cryogenic Laser Processing. *ACS Nano*, **2016**, 10, 5847-55 | 16.7 | 72 |
| 191 | Substrate control for large area continuous films of monolayer MoS2 by atmospheric pressure chemical vapor deposition. *Nanotechnology*, **2016**, 27, 085604 | 3.4 | 53 |
| 190 | Doping Graphene Transistors Using Vertical Stacked Monolayer WS2 Heterostructures Grown by Chemical Vapor Deposition. *ACS Applied Materials & Interfaces*, **2016**, 8, 1644-52 | 9.5 | 47 |
| 189 | Biexciton Formation in Bilayer Tungsten Disulfide. *ACS Nano*, **2016**, 10, 2176-83 | 16.7 | 46 |
| 188 | Mixed multilayered vertical heterostructures utilizing strained monolayer WS2. *Nanoscale*, **2016**, 8, 2639-47 | 7.7 | 24 |
| 187 | Torsional Deformations in Subnanometer MoS Interconnecting Wires. *Nano Letters*, **2016**, 16, 1210-7 | 11.5 | 27 |
| 186 | Electroluminescence Dynamics across Grain Boundary Regions of Monolayer Tungsten Disulfide. *ACS Nano*, **2016**, 10, 1093-100 | 16.7 | 26 |
| 185 | Elongated Silicon-Carbon Bonds at Graphene Edges. *ACS Nano*, **2016**, 10, 142-9 | 16.7 | 15 |
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