# Jing Kong

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 248 papers | 27,585 citations | 76 h-index | 164 g-index |
| 275 ext. papers | 31,884 ext. citations | 12.8 avg, IF | 7.03 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 248 | A Local Atomic Mechanism for Monoclinic-Tetragonal Phase Boundary Creation in Li-Doped NaKNbO Ferroelectric Solid Solution.. *Inorganic Chemistry*, **2022**, 61, 4335-4349 | 5.1 | 1 |
| 247 | Healing of donor defect states in monolayer molybdenum disulfide using oxygen-incorporated chemical vapour deposition. *Nature Electronics*, **2022**, 5, 28-36 | 28.4 | 7 |
| 246 | Electronic Band Tuning and Multivalley Raman Scattering in Monolayer Transition Metal Dichalcogenides at High Pressures.. *ACS Nano*, **2022**, | 16.7 | 3 |
| 245 | Graphene-Lined Porous Gelatin Glycidyl Methacrylate Hydrogels: Implications for Tissue Engineering.. *ACS Applied Nano Materials*, **2021**, 4, 12650-12662 | 5.6 | 3 |
| 244 | High Lift Micro-Aerial-Robot Powered by Low Voltage and Long Endurance Dielectric Elastomer Actuators. *Advanced Materials*, **2021**, e2106757 | 24 | 11 |
| 243 | Toward an Intelligent Synthesis: Monitoring and Intervening in the Catalytic Growth of Carbon Nanotubes. *Journal of the American Chemical Society*, **2021**, 143, 17607-17614 | 16.4 | 1 |
| 242 | Revealing the Br□sted-Evans-Polanyi relation in halide-activated fast MoS growth toward millimeter-sized 2D crystals. *Science Advances*, **2021**, 7, eabj3274 | 14.3 | 1 |
| 241 | Efficient and Stable Mesoscopic Perovskite Solar Cells Using a Dopant-Free D□A Copolymer Hole-Transporting Layer. *Solar Rrl*, **2021**, 5, 2000801 | 7.1 | 3 |
| 240 | Direct Prediction of Phonon Density of States With Euclidean Neural Networks. *Advanced Science*, **2021**, 8, e2004214 | 13.6 | 9 |
| 239 | A Structural Study of 0.06LiNbO3-0.94K0.5Na0.5NbO3 from Neutron Total Scattering Analysis. *Crystals*, **2021**, 11, 395 | 2.3 | 1 |
| 238 | Monolayer Hexagonal Boron Nitride: An Efficient Electron Blocking Layer in Organic Photovoltaics. *Advanced Functional Materials*, **2021**, 31, 2101238 | 15.6 | 0 |
| 237 | Synthesis of High-Performance Monolayer Molybdenum Disulfide at Low Temperature.. *Small Methods*, **2021**, 5, e2000720 | 12.8 | 3 |
| 236 | Local structural mechanism for phase transition and ferroelectric polarization in the mixed oxide K0.5Na0.5NbO3. *Physical Review B*, **2021**, 103, | 3.3 | 3 |
| 235 | Toward MXene interconnects. *Matter*, **2021**, 4, 1447-1449 | 12.7 | 2 |
| 234 | SynCells: A 60 □60 □m Electronic Platform with Remote Actuation for Sensing Applications in Constrained Environments. *ACS Nano*, **2021**, 15, 8803-8812 | 16.7 | 2 |
| 233 | Resonance-Enhanced Excitation of Interlayer Vibrations in Atomically Thin Black Phosphorus. *Nano Letters*, **2021**, 21, 4809-4815 | 11.5 | 2 |
| 232 | Ultralow contact resistance between semimetal and monolayer semiconductors. *Nature*, **2021**, 593, 211-217 | 50.4 | 154 |

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| 231 | Graphene coatings to enhance tribological performance of steel. *Mechanics of Advanced Materials and Structures*, **2021**, 28, 657-664 | 1.8 | 5 |
| 230 | Multi-Level Electro-Thermal Switching of Optical Phase-Change Materials Using Graphene. *Advanced Photonics Research*, **2021**, 2, 2000034 | 1.9 | 24 |
| 229 | Hard, transparent, sp3-containing 2D phase formed from few-layer graphene under compression. *Carbon*, **2021**, 173, 744-757 | 10.4 | 15 |
| 228 | An optical slot-antenna-coupled cavity (SAC) framework towards tunable free-space graphene photonic surfaces. *Nano Research*, **2021**, 14, 1364-1373 | 10 | 0 |
| 227 | Atomically precise single-crystal structures of electrically conducting 2D metal-organic frameworks. *Nature Materials*, **2021**, 20, 222-228 | 27 | 104 |
| 226 | Large Single Crystals of Two-Dimensional π-Conjugated Metal-Organic Frameworks via Biphasic Solution-Solid Growth. *ACS Central Science*, **2021**, 7, 104-109 | 16.8 | 16 |
| 225 | Giant enhancement of third-harmonic generation in graphene-metal heterostructures. *Nature Nanotechnology*, **2021**, 16, 318-324 | 28.7 | 9 |
| 224 | Suppression of Photovoltaic Losses in Efficient Tandem Organic Solar Cells (15.2%) with Efficient Transporting Layers and Light Management Approach. *Energy Technology*, **2021**, 9, 2000751 | 3.5 | 2 |
| 223 | Colossal switchable photocurrents in topological Janus transition metal dichalcogenides. *Npj Computational Materials*, **2021**, 7, | 10.9 | 8 |
| 222 | Understanding the Optimal Cooperativity of Human Glucokinase: Kinetic Resonance in Nonequilibrium Conformational Fluctuations. *Journal of Physical Chemistry Letters*, **2021**, 12, 2900-2904 | 6.4 | |
| 221 | Spectroscopic Signatures of Interlayer Coupling in Janus MoSSe/MoS Heterostructures. *ACS Nano*, **2021**, 15, 14394-14403 | 16.7 | 6 |
| 220 | Designing artificial two-dimensional landscapes via atomic-layer substitution. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118, | 11.5 | 9 |
| 219 | Bottom-Up Synthesized All-Thermal-Catalyst Aerogels for Heat-Regenerative Air Filtration. *Nano Letters*, **2021**, 21, 8160-8165 | 11.5 | 0 |
| 218 | Frank-van der Merwe growth in bilayer graphene. *Matter*, **2021**, | 12.7 | 7 |
| 217 | Far-field excitation of single graphene plasmon cavities with ultracompressed mode volumes. *Science*, **2020**, 368, 1219-1223 | 33.3 | 48 |
| 216 | Effect of different types of graphene coatings on friction and wear performance of aluminum alloy. *Mechanics of Advanced Materials and Structures*, **2020**, 1-9 | 1.8 | 6 |
| 215 | Synergistic Roll-to-Roll Transfer and Doping of CVD-Graphene Using Parylene for Ambient-Stable and Ultra-Lightweight Photovoltaics. *Advanced Functional Materials*, **2020**, 30, 2001924 | 15.6 | 32 |
| 214 | Room Temperature Terahertz Electroabsorption Modulation by Excitons in Monolayer Transition Metal Dichalcogenides. *Nano Letters*, **2020**, 20, 5214-5220 | 11.5 | 2 |

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| 213 | Deep-Learning-Enabled Fast Optical Identification and Characterization of 2D Materials. *Advanced Materials*, **2020**, 32, e2000953 | 24 | 21 |
| 212 | MoS2-carbon nanotube heterostructure as efficient hole transporters and conductors in perovskite solar cells. *Applied Physics Express*, **2020**, 13, 075009 | 2.4 | 7 |
| 211 | Efficient, Flexible, and Ultra-Lightweight Inverted PbS Quantum Dots Solar Cells on All-CVD-Growth of Parylene/Graphene/oCVD PEDOT Substrate with High Power-per-Weight. *Advanced Materials Interfaces*, **2020**, 7, 2000498 | 4.6 | 11 |
| 210 | Transient absorption of transition metal dichalcogenide monolayers studied by a photodope-pump-probe technique. *Physical Review B*, **2020**, 102, | 3.3 | 6 |
| 209 | Graphdiyne Coupled with g-C3N4/NiFe-Layered Double Hydroxide, a Layered Nanohybrid for Highly Efficient Photoelectrochemical Water Oxidation. *Advanced Materials Interfaces*, **2020**, 7, 1902083 | 4.6 | 14 |
| 208 | Fluidic Flow Assisted Deterministic Folding of Van der Waals Materials. *Advanced Functional Materials*, **2020**, 30, 1908691 | 15.6 | 4 |
| 207 | Blood-triggered generation of platinum nanoparticle functions as an anti-cancer agent. *Nature Communications*, **2020**, 11, 567 | 17.4 | 34 |
| 206 | One-dimensional van der Waals heterostructures. *Science*, **2020**, 367, 537-542 | 33.3 | 119 |
| 205 | Ferroelectric memory field-effect transistors using CVD monolayer MoS2 as resistive switching channel. *Applied Physics Letters*, **2020**, 116, 033501 | 3.4 | 14 |
| 204 | Two-dimensional halide perovskite lateral epitaxial heterostructures. *Nature*, **2020**, 580, 614-620 | 50.4 | 142 |
| 203 | Heavy Water Additive in Formamidinium: A Novel Approach to Enhance Perovskite Solar Cell Efficiency. *Advanced Materials*, **2020**, 32, e1907864 | 24 | 34 |
| 202 | Strain-Correlated Localized Exciton Energy in Atomically Thin Semiconductors. *ACS Photonics*, **2020**, 7, 1135-1140 | 6.3 | 14 |
| 201 | A novel and green sulfur fertilizer from CS to promote reproductive growth of plants. *Environmental Pollution*, **2020**, 263, 114448 | 9.3 | 5 |
| 200 | Ultrasensitive micro/nanocrack-based graphene nanowall strain sensors derived from the substrate□ Poisson□ ratio effect. *Journal of Materials Chemistry A*, **2020**, 8, 10310-10317 | 13 | 15 |
| 199 | Color Contrast of Single-Layer Graphene under White Light Illumination Induced by Broadband Photon Management. *ACS Applied Materials & Interfaces*, **2020**, 12, 3827-3835 | 9.5 | 0 |
| 198 | High-yield monolayer graphene grids for near-atomic resolution cryoelectron microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1009-1014 | 11.5 | 37 |
| 197 | Sustainable Synthesis of Biomass-Derived Carbon Electrodes with Hybrid Energy-Storage Behaviors for Use in High-Performance Na-Ion Capacitors. *ACS Applied Energy Materials*, **2020**, 3, 2478-2489 | 6.1 | 17 |
| 196 | Unconventional ferroelectricity in moir□ heterostructures. *Nature*, **2020**, 588, 71-76 | 50.4 | 56 |

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| 195 | Understanding Disorder in 2D Materials: The Case of Carbon Doping of Silicene. *Nano Letters*, **2020**, 20, 6336-6343 | 11.5 | 3 |
| 194 | Anharmonicity and Universal Response of Linear Carbon Chain Mechanical Properties under Hydrostatic Pressure. *Physical Review Letters*, **2020**, 125, 105501 | 7.4 | 10 |
| 193 | Enhancement of van der Waals Interlayer Coupling through Polar Janus MoSSe. *Journal of the American Chemical Society*, **2020**, 142, 17499-17507 | 16.4 | 23 |
| 192 | Additive manufacturing assisted van der Waals integration of 3D/3D hierarchically functional nanostructures. *Communications Materials*, **2020**, 1, | 6 | 4 |
| 191 | Chirality-Dependent Second Harmonic Generation of MoS Nanoscroll with Enhanced Efficiency. *ACS Nano*, **2020**, 14, 13333-13342 | 16.7 | 11 |
| 190 | Epitaxial Growth and Determination of Band Alignment of Bi2Te3□WSe2 Vertical van der Waals Heterojunctions **2020**, 2, 1351-1359 | | 5 |
| 189 | Novel Core-Shell (□MnO/CeO)@CeO Composite Catalyst with a Synergistic Effect for Efficient Formaldehyde Oxidation. *ACS Applied Materials & Interfaces*, **2020**, 12, 40285-40295 | 9.5 | 23 |
| 188 | Multifunctional PVDF/CNT/GO mixed matrix membranes for ultrafiltration and fouling detection. *Journal of Hazardous Materials*, **2020**, 384, 120978 | 12.8 | 41 |
| 187 | Modelling electrical conduction in nanostructure assemblies through complex networks. *Nature Materials*, **2020**, 19, 745-751 | 27 | 14 |
| 186 | Polymer-Coated Mesoporous Carbon as Enzyme Platform for Oxidation of Bisphenol A in Organic Solvents. *ACS Omega*, **2019**, 4, 16409-16417 | 3.9 | 3 |
| 185 | Metal-Level Thermally Conductive yet Soft Graphene Thermal Interface Materials. *ACS Nano*, **2019**, 13, 11561-11571 | 16.7 | 117 |
| 184 | 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 |
| 183 | A graphene/ZnO electron transfer layer together with perovskite passivation enables highly efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 679-686 | 13 | 103 |
| 182 | Two-dimensional MoS-enabled flexible rectenna for Wi-Fi-band wireless energy harvesting. *Nature*, **2019**, 566, 368-372 | 50.4 | 164 |
| 181 | Asymmetric hot-carrier thermalization and broadband photoresponse in graphene-2D semiconductor lateral heterojunctions. *Science Advances*, **2019**, 5, eaav1493 | 14.3 | 27 |
| 180 | Engineering single-atom dynamics with electron irradiation. *Science Advances*, **2019**, 5, eaav2252 | 14.3 | 39 |
| 179 | Light Management in Organic Photovoltaics Processed in Ambient Conditions Using ZnO Nanowire and Antireflection Layer with Nanocone Array. *Small*, **2019**, 15, e1900508 | 11 | 24 |
| 178 | Controllable Perovskite Crystallization via Antisolvent Technique Using Chloride Additives for Highly Efficient Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803587 | 21.8 | 174 |

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| 177 | Intercalation-conversion hybrid cathodes enabling Li–S full-cell architectures with jointly superior gravimetric and volumetric energy densities. *Nature Energy*, **2019**, 4, 374-382 | 62.3 | 282 |
| 176 | Paraffin-enabled graphene transfer. *Nature Communications*, **2019**, 10, 867 | 17.4 | 122 |
| 175 | Additive manufacturing of patterned 2D semiconductor through recyclable masked growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3437-3442 | 11.5 | 25 |
| 174 | Efficient Semitransparent $CsPbI_3$ Quantum Dots Photovoltaics Using a Graphene Electrode. *Small Methods*, **2019**, 3, 1900449 | 12.8 | 35 |
| 173 | Phonon Polaritons in Monolayers of Hexagonal Boron Nitride. *Advanced Materials*, **2019**, 31, e1806603 | 24 | 44 |
| 172 | Effects of gamma radiation sterilization on the structural and biological properties of decellularized corneal xenografts. *Acta Biomaterialia*, **2019**, 96, 330-344 | 10.8 | 31 |
| 171 | A relatively wide-bandgap and air-stable donor polymer for fabrication of efficient semitransparent and tandem organic photovoltaics. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 22037-22043 | 11.5 | 16 |
| 170 | Efficient and Stable Mesoscopic Perovskite Solar Cells Using PDTITT as a New Hole Transporting Layer. *Advanced Functional Materials*, **2019**, 29, 1905887 | 15.6 | 19 |
| 169 | Direct Observation of Symmetry-Dependent Electron-Phonon Coupling in Black Phosphorus. *Journal of the American Chemical Society*, **2019**, 141, 18994-19001 | 16.4 | 10 |
| 168 | Investigation about tribological behavior of ABS and PC-ABS polymers coated with graphene. *Tribology International*, **2019**, 134, 335-340 | 4.9 | 21 |
| 167 | Tuning, optimization, and perovskite solar cell device integration of ultrathin poly(3,4-ethylene dioxythiophene) films via a single-step all-dry process. *Science Advances*, **2019**, 5, eaay0414 | 14.3 | 42 |
| 166 | Observation of charge transfer in mixed-dimensional heterostructures formed by transition metal dichalcogenide monolayers and PbS quantum dots. *Physical Review B*, **2019**, 100, | 3.3 | 4 |
| 165 | Self-Assembled, Ultrahigh Refractive Index Pseudo-Periodic Sn Nanostructures for Broad-Band Infrared Photon Management in Single Layer Graphene. *ACS Photonics*, **2019**, 6, 50-58 | 6.3 | 2 |
| 164 | Giant intrinsic photoresponse in pristine graphene. *Nature Nanotechnology*, **2019**, 14, 145-150 | 28.7 | 36 |
| 163 | Revealing molecular-level surface redox sites of controllably oxidized black phosphorus nanosheets. *Nature Materials*, **2019**, 18, 156-162 | 27 | 150 |
| 162 | Graphene–Perovskite Schottky Barrier Solar Cells. *Advanced Sustainable Systems*, **2018**, 2, 1700106 | 5.9 | 11 |
| 161 | Probing the ultimate plasmon confinement limits with a van der Waals heterostructure. *Science*, **2018**, 360, 291-295 | 33.3 | 179 |
| 160 | Growing highly pure semiconducting carbon nanotubes by electrotwisting the helicity. *Nature Catalysis*, **2018**, 1, 326-331 | 36.5 | 42 |

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| 159 | Chemiresistive Graphene Sensors for Ammonia Detection. *ACS Applied Materials & Interfaces*, **2018**, 10, 16169-16176 | 9.5 | 67 |
| 158 | Tuning Electronic Structure of Single Layer MoS through Defect and Interface Engineering. *ACS Nano*, **2018**, 12, 2569-2579 | 16.7 | 133 |
| 157 | Repeated roll-to-roll transfer of two-dimensional materials by electrochemical delamination. *Nanoscale*, **2018**, 10, 5522-5531 | 7.7 | 22 |
| 156 | Graphene-Enhanced Raman Scattering (GERS): Chemical Effect **2018**, 415-449 | | 5 |
| 155 | Selectivity of Nanoporous MnO2 and TiO2 Membranes for Residual Contaminants in Treated Wastewater. *Chemical Engineering and Technology*, **2018**, 41, 413-420 | 2 | 8 |
| 154 | Low-Temperature Copper Bonding Strategy with Graphene Interlayer. *ACS Nano*, **2018**, 12, 2395-2402 | 16.7 | 36 |
| 153 | Suppression of Tumor Energy Supply by Liposomal Nanoparticle-Mediated Inhibition of Aerobic Glycolysis. *ACS Applied Materials & Interfaces*, **2018**, 10, 2347-2353 | 9.5 | 22 |
| 152 | Fast water transport in graphene nanofluidic channels. *Nature Nanotechnology*, **2018**, 13, 238-245 | 28.7 | 139 |
| 151 | Large Photothermal Effect in Sub-40 nm h-BN Nanostructures Patterned Via High-Resolution Ion Beam. *Small*, **2018**, 14, e1800072 | 11 | 10 |
| 150 | Phase-Modulated Degenerate Parametric Amplification Microscopy. *Nano Letters*, **2018**, 18, 5001-5006 | 11.5 | 13 |
| 149 | Generating Sub-nanometer Pores in Single-Layer MoS by Heavy-Ion Bombardment for Gas Separation: A Theoretical Perspective. *ACS Applied Materials & Interfaces*, **2018**, 10, 28909-28917 | 9.5 | 22 |
| 148 | Raman Enhancement of Blood Constituent Proteins Using Graphene. *ACS Photonics*, **2018**, 5, 2978-2982 | 6.3 | 18 |
| 147 | Exploring Low Internal Reorganization Energies for Silicene Nanoclusters. *Physical Review Applied*, **2018**, 9, | 4.3 | 5 |
| 146 | MoS2 Phase-junction-based Schottky Diodes for RF Electronics **2018**, | | 5 |
| 145 | Carbon nanotube-based flexible electrothermal film heaters with a high heating rate. *Royal Society Open Science*, **2018**, 5, 172072 | 3.3 | 30 |
| 144 | Ambient-pressure CVD of graphene on low-index Ni surfaces using methane: A combined experimental and first-principles study. *Physical Review Materials*, **2018**, 2, | 3.2 | 10 |
| 143 | Observation of Exciton-Exciton Interaction Mediated Valley Depolarization in Monolayer MoSe. *Nano Letters*, **2018**, 18, 223-228 | 11.5 | 27 |
| 142 | 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 |

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| 141 | Facile Fabrication of Large-Area Atomically Thin Membranes by Direct Synthesis of Graphene with Nanoscale Porosity. *Advanced Materials*, **2018**, 30, e1804977 | 24 | 35 |
| 140 | In Situ-Generated Volatile Precursor for CVD Growth of a Semimetallic 2D Dichalcogenide. *ACS Applied Materials & Interfaces*, **2018**, 10, 34401-34408 | 9.5 | 15 |
| 139 | Efficient and tumor-specific knockdown of MTDH gene attenuates paclitaxel resistance of breast cancer cells both in vivo and in vitro. *Breast Cancer Research*, **2018**, 20, 113 | 8.3 | 20 |
| 138 | Synthetic Lateral Metal-Semiconductor Heterostructures of Transition Metal Disulfides. *Journal of the American Chemical Society*, **2018**, 140, 12354-12358 | 16.4 | 60 |
| 137 | CVD Technology for 2-D Materials. *IEEE Transactions on Electron Devices*, **2018**, 65, 4040-4052 | 2.9 | 23 |
| 136 | Surface Engineering of TiO2 ETL for Highly Efficient and Hysteresis-Less Planar Perovskite Solar Cell (21.4%) with Enhanced Open-Circuit Voltage and Stability. *Advanced Energy Materials*, **2018**, 8, 1800794 | 21.8 | 193 |
| 135 | Photothermal Effect: Large Photothermal Effect in Sub-40 nm h-BN Nanostructures Patterned Via High-Resolution Ion Beam (Small 22/2018). *Small*, **2018**, 14, 1870101 | 11 | 1 |
| 134 | Concurrent Synthesis of High-Performance Monolayer Transition Metal Disulfides. *Advanced Functional Materials*, **2017**, 27, 1605896 | 15.6 | 31 |
| 133 | Large, valley-exclusive Bloch-Siegert shift in monolayer WS. *Science*, **2017**, 355, 1066-1069 | 33.3 | 61 |
| 132 | Hot Electron Transistor with van der Waals Base-Collector Heterojunction and High-Performance GaN Emitter. *Nano Letters*, **2017**, 17, 3089-3096 | 11.5 | 55 |
| 131 | Epitaxial growth of large-area and highly crystalline anisotropic ReSe2 atomic layer. *Nano Research*, **2017**, 10, 2732-2742 | 10 | 47 |
| 130 | Remote epitaxy through graphene enables two-dimensional material-based layer transfer. *Nature*, **2017**, 544, 340-343 | 50.4 | 273 |
| 129 | Electrothermal Control of Graphene Plasmon-Phonon Polaritons. *Advanced Materials*, **2017**, 29, 1700566 | 24 | 20 |
| 128 | Distortion of DNA Origami on Graphene Imaged with Advanced TEM Techniques. *Small*, **2017**, 13, 1700876 | 13 | 12 |
| 127 | Observation of Exciton Redshift-Blueshift Crossover in Monolayer WS. *Nano Letters*, **2017**, 17, 4210-4216 | 11.5 | 68 |
| 126 | Sensitive Phonon-Based Probe for Structure Identification of 1TPMoTe. *Journal of the American Chemical Society*, **2017**, 139, 8396-8399 | 16.4 | 30 |
| 125 | Temporal and spatial valley dynamics in two-dimensional semiconductors probed via Kerr rotation. *Physical Review B*, **2017**, 95, | 3.3 | 18 |
| 124 | Role of Molecular Sieves in the CVD Synthesis of Large-Area 2D MoTe2. *Advanced Functional Materials*, **2017**, 27, 1603491 | 15.6 | 46 |

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| 123 | M13 Virus Aerogels as a Scaffold for Functional Inorganic Materials. *Advanced Functional Materials*, **2017**, 27, 1603203 | 15.6 | 24 |
| 122 | Chalcogenide glass-on-graphene photonics. *Nature Photonics*, **2017**, 11, 798-805 | 33.9 | 125 |
| 121 | A MoTe-based light-emitting diode and photodetector for silicon photonic integrated circuits. *Nature Nanotechnology*, **2017**, 12, 1124-1129 | 28.7 | 229 |
| 120 | Revealing the Bonding of Nitrogen Impurities in Monolayer Graphene. *Microscopy and Microanalysis* , **2017**, 23, 1750-1751 | 0.5 | 1 |
| 119 | Monolayer Tungsten Disulfide (WS ) via Chlorine-Driven Chemical Vapor Transport. *Small*, **2017**, 13, 1701232 | 13.3 | 19 |
| 118 | Raman evidence for pressure-induced formation of diamondene. *Nature Communications*, **2017**, 8, 96 | 17.4 | 94 |
| 117 | Electrical Homogeneity of Large-Area Chemical Vapor Deposited Multilayer Hexagonal Boron Nitride Sheets. *ACS Applied Materials & Interfaces*, **2017**, 9, 39895-39900 | 9.5 | 15 |
| 116 | Nanoporous Atomically Thin Graphene Membranes for Desalting and Dialysis Applications. *Advanced Materials*, **2017**, 29, 1700277 | 24 | 85 |
| 115 | Quenching of photoluminescence of Rhodamine 6G molecules on functionalized graphene. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 2347-2350 | 1.3 | 6 |
| 114 | Ultrasmall Mode Volumes in Plasmonic Cavities of Nanoparticle-On-Mirror Structures. *Small*, **2016**, 12, 5190-5199 | 11 | 39 |
| 113 | In-Plane Optical Anisotropy of Layered Gallium Telluride. *ACS Nano*, **2016**, 10, 8964-72 | 16.7 | 140 |
| 112 | Design, Modeling, and Fabrication of Chemical Vapor Deposition Grown MoS Circuits with E-Mode FETs for Large-Area Electronics. *Nano Letters*, **2016**, 16, 6349-6356 | 11.5 | 102 |
| 111 | Synthesis of High-Quality Large-Area Homogenous 1TPMoTe from Chemical Vapor Deposition. *Advanced Materials*, **2016**, 28, 9526-9531 | 24 | 88 |
| 110 | Visibly-Transparent Organic Solar Cells on Flexible Substrates with All-Graphene Electrodes. *Advanced Energy Materials*, **2016**, 6, 1600847 | 21.8 | 108 |
| 109 | MoS Field-Effect Transistor with Sub-10 nm Channel Length. *Nano Letters*, **2016**, 16, 7798-7806 | 11.5 | 283 |
| 108 | High Luminescence Efficiency in MoS2 Grown by Chemical Vapor Deposition. *ACS Nano*, **2016**, 10, 6535-41 | 16.7 | 115 |
| 107 | A Rational Strategy for Graphene Transfer on Substrates with Rough Features. *Advanced Materials*, **2016**, 28, 2382-92 | 24 | 63 |
| 106 | Low-Frequency Interlayer Raman Modes to Probe Interface of Twisted Bilayer MoS2. *Nano Letters*, **2016**, 16, 1435-44 | 11.5 | 130 |

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| 105 | The hierarchical porosity of a three-dimensional graphene electrode for binder-free and high performance supercapacitors. *RSC Advances*, **2016**, 6, 8384-8394 | 3.7 | 20 |
| 104 | Tuning ultrafast electron thermalization pathways in a van der Waals heterostructure. *Nature Physics*, **2016**, 12, 455-459 | 16.2 | 96 |
| 103 | Anisotropic Electron-Photon and Electron-Phonon Interactions in Black Phosphorus. *Nano Letters*, **2016**, 16, 2260-7 | 11.5 | 266 |
| 102 | Porous Cu Nanowire Aerosponges from One-Step Assembly and their Applications in Heat Dissipation. *Advanced Materials*, **2016**, 28, 1413-9 | 24 | 85 |
| 101 | Parallel Stitching of 2D Materials. *Advanced Materials*, **2016**, 28, 2322-9 | 24 | 161 |
| 100 | Enhancing the Sensitivity of Percolative Graphene Films for Flexible and Transparent Pressure Sensor Arrays. *Advanced Functional Materials*, **2016**, 26, 5061-5067 | 15.6 | 72 |
| 99 | Coupling-Enhanced Broadband Mid-infrared Light Absorption in Graphene Plasmonic Nanostructures. *ACS Nano*, **2016**, 10, 11172-11178 | 16.7 | 46 |
| 98 | Observation of Intervalley Biexcitonic Optical Stark Effect in Monolayer WS. *Nano Letters*, **2016**, 16, 7421-7426 | 11.5 | 35 |
| 97 | Pre-Patterned CVD Graphene: Insights on ALD deposition parameters and their influence on Al2O3 and graphene layers. *MRS Advances*, **2016**, 1, 1401-1409 | 0.7 | 2 |
| 96 | Transition from Diffusion-Controlled Intercalation into Extrinsically Pseudocapacitive Charge Storage of MoS2 by Nanoscale Heterostructuring. *Advanced Energy Materials*, **2016**, 6, 1501115 | 21.8 | 133 |
| 95 | Omnidirectionally Stretchable and Transparent Graphene Electrodes. *ACS Nano*, **2016**, 10, 9446-9455 | 16.7 | 75 |
| 94 | Reversibly Compressible, Highly Elastic, and Durable Graphene Aerogels for Energy Storage Devices under Limiting Conditions. *Advanced Functional Materials*, **2015**, 25, 1053-1062 | 15.6 | 121 |
| 93 | Facile graphene transfer directly to target substrates with a reusable metal catalyst. *Nanoscale*, **2015**, 7, 14807-12 | 7.7 | 24 |
| 92 | Symmetry Engineering of Graphene Plasmonic Crystals. *Nano Letters*, **2015**, 15, 5001-9 | 11.5 | 8 |
| 91 | Lighting up the Raman signal of molecules in the vicinity of graphene related materials. *Accounts of Chemical Research*, **2015**, 48, 1862-70 | 24.3 | 115 |
| 90 | Nanofiltration across Defect-Sealed Nanoporous Monolayer Graphene. *Nano Letters*, **2015**, 15, 3254-60 | 11.5 | 229 |
| 89 | Low-Frequency Interlayer Breathing Modes in Few-Layer Black Phosphorus. *Nano Letters*, **2015**, 15, 4080-8 | 11.5 | 154 |
| 88 | Leveraging Nanocavity Harmonics for Control of Optical Processes in 2D Semiconductors. *Nano Letters*, **2015**, 15, 3578-84 | 11.5 | 152 |

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| 87 | Molecular selectivity of graphene-enhanced Raman scattering. *Nano Letters*, **2015**, 15, 2892-901 | 11.5 | 136 |
| 86 | Synthesis of large-area multilayer hexagonal boron nitride for high material performance. *Nature Communications*, **2015**, 6, 8662 | 17.4 | 298 |
| 85 | Graphene-Based Thermopile for Thermal Imaging Applications. *Nano Letters*, **2015**, 15, 7211-6 | 11.5 | 57 |
| 84 | Large-Area Synthesis of High-Quality Uniform Few-Layer MoTe2. *Journal of the American Chemical Society*, **2015**, 137, 11892-5 | 16.4 | 248 |
| 83 | Valley-selective optical Stark effect in monolayer WS2. *Nature Materials*, **2015**, 14, 290-4 | 27 | 338 |
| 82 | Advances in molecular quantum chemistry contained in the Q-Chem 4 program package. *Molecular Physics*, **2015**, 113, 184-215 | 1.7 | 2068 |
| 81 | Intervalley biexcitons and many-body effects in monolayer MoS2. *Physical Review B*, **2015**, 92, | 3.3 | 130 |
| 80 | X-Ray Spectroscopic Investigation of Chlorinated Graphene: Surface Structure and Electronic Effects. *Advanced Functional Materials*, **2015**, 25, 4163-4169 | 15.6 | 32 |
| 79 | Assessment of exhaust emissions from carbon nanotube production and particle collection by sampling filters. *Journal of the Air and Waste Management Association*, **2015**, 65, 1376-85 | 2.4 | 3 |
| 78 | A review of large-area bilayer graphene synthesis by chemical vapor deposition. *Nanoscale*, **2015**, 7, 20335-751 | 7.7 | 58 |
| 77 | Challenges and opportunities for graphene as transparent conductors in optoelectronics. *Nano Today*, **2015**, 10, 681-700 | 17.9 | 58 |
| 76 | Energy Storage: Reversibly Compressible, Highly Elastic, and Durable Graphene Aerogels for Energy Storage Devices under Limiting Conditions (Adv. Funct. Mater. 7/2015). *Advanced Functional Materials*, **2015**, 25, 1159-1159 | 15.6 | 2 |
| 75 | Nanostructured Conductive SnOx (x **2015**, | | 1 |
| 74 | Selective ionic transport through tunable subnanometer pores in single-layer graphene membranes. *Nano Letters*, **2014**, 14, 1234-41 | 11.5 | 569 |
| 73 | An Alternative Hole Transport Layer for Both ITO- and Graphene-Based Organic Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1301280 | 21.8 | 25 |
| 72 | Role of the seeding promoter in MoS2 growth by chemical vapor deposition. *Nano Letters*, **2014**, 14, 464-172 | 11.5 | 534 |
| 71 | Electronic transport and device prospects of monolayer molybdenum disulphide grown by chemical vapour deposition. *Nature Communications*, **2014**, 5, 3087 | 17.4 | 327 |
| 70 | Direct measurement of the Raman enhancement factor of rhodamine 6G on graphene under resonant excitation. *Nano Research*, **2014**, 7, 1271-1279 | 10 | 20 |

| | | | |
|---|---|---|---|
| 69 | Broadband optical properties of large-area monolayer CVD molybdenum disulfide. *Physical Review B*, **2014**, 90, | 3.3 | 88 |
| 68 | Single-layer graphene on silicon nitride micromembrane resonators. *Journal of Applied Physics*, **2014**, 115, 054513 | 2.5 | 25 |
| 67 | A Current□Voltage Model for Graphene Electrolyte-Gated Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2014**, 61, 3971-3977 | 2.9 | 26 |
| 66 | Trion-induced negative photoconductivity in monolayer MoS2. *Physical Review Letters*, **2014**, 113, 166801 | 7.4 | 180 |
| 65 | Probing the interlayer coupling of twisted bilayer MoS2 using photoluminescence spectroscopy. *Nano Letters*, **2014**, 14, 5500-8 | 11.5 | 168 |
| 64 | Flexible graphene electrode-based organic photovoltaics with record-high efficiency. *Nano Letters*, **2014**, 14, 5148-54 | 11.5 | 179 |
| 63 | Electrophoretic and field-effect graphene for all-electrical DNA array technology. *Nature Communications*, **2014**, 5, 4866 | 17.4 | 90 |
| 62 | Sculpting carbon bonds for allotropic transformation through solid-state re-engineering of -sp2 carbon. *Nature Communications*, **2014**, 5, 4941 | 17.4 | 6 |
| 61 | Dielectric screening of excitons and trions in single-layer MoS2. *Nano Letters*, **2014**, 14, 5569-76 | 11.5 | 399 |
| 60 | Large-area monolayer hexagonal boron nitride on Pt foil. *ACS Nano*, **2014**, 8, 8520-8 | 16.7 | 160 |
| 59 | A facile methodology for the production of in situ inorganic nanowire hydrogels/aerogels. *Nano Letters*, **2014**, 14, 1810-7 | 11.5 | 80 |
| 58 | Raman enhancement effect on two-dimensional layered materials: graphene, h-BN and MoS2. *Nano Letters*, **2014**, 14, 3033-40 | 11.5 | 351 |
| 57 | Real-time, sensitive electrical detection of Cryptosporidium parvum oocysts based on chemical vapor deposition-grown graphene. *Applied Physics Letters*, **2014**, 104, 063705 | 3.4 | 3 |
| 56 | Semiconducting-to-metallic photoconductivity crossover and temperature-dependent Drude weight in graphene. *Physical Review Letters*, **2014**, 113, 056602 | 7.4 | 95 |
| 55 | Impact of chlorine functionalization on high-mobility chemical vapor deposition grown graphene. *ACS Nano*, **2013**, 7, 7262-70 | 16.7 | 98 |
| 54 | pH sensing properties of graphene solution-gated field-effect transistors. *Journal of Applied Physics* , **2013**, 114, 084505 | 2.5 | 76 |
| 53 | Direct transfer of graphene onto flexible substrates. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 17762-7 | 11.5 | 148 |
| 52 | The effect of copper pre-cleaning on graphene synthesis. *Nanotechnology*, **2013**, 24, 365602 | 3.4 | 102 |

| | | | |
|---|---|---|---|
| 51 | Demonstration of a Subthreshold FPGA Using Monolithically Integrated Graphene Interconnects. *IEEE Transactions on Electron Devices*, **2013**, 60, 383-390 | 2.9 | 14 |
| 50 | Synthesis and transfer of single-layer transition metal disulfides on diverse surfaces. *Nano Letters*, **2013**, 13, 1852-7 | 11.5 | 524 |
| 49 | Observation of suppressed terahertz absorption in photoexcited graphene. *Applied Physics Letters*, **2013**, 102, 113111 | 3.4 | 59 |
| 48 | Anomalous Behaviors of Graphene Transparent Conductors in Graphene–Silicon Heterojunction Solar Cells. *Advanced Energy Materials*, **2013**, 3, 1029-1034 | 21.8 | 90 |
| 47 | Intrinsic structural defects in monolayer molybdenum disulfide. *Nano Letters*, **2013**, 13, 2615-22 | 11.5 | 1418 |
| 46 | Two-dimensional materials for ubiquitous electronics **2013**, | | 1 |
| 45 | Doping of bi-layer graphene by gradually polarizing a ferroelectric polymer. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2649-2652 | 1.3 | 3 |
| 44 | Using gate-modulated Raman scattering and electron-phonon interactions to probe single-layer graphene: A different approach to assign phonon combination modes. *Physical Review B*, **2012**, 86, | 3.3 | 17 |
| 43 | Raman spectroscopy of isotopically labeled two-layer graphene. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2500-2502 | 1.3 | 3 |
| 42 | Synthesis of monolayer hexagonal boron nitride on Cu foil using chemical vapor deposition. *Nano Letters*, **2012**, 12, 161-6 | 11.5 | 902 |
| 41 | van der Waals epitaxy of $MoS_2$ layers using graphene as growth templates. *Nano Letters*, **2012**, 12, 2784-91 | 11.5 | 788 |
| 40 | Large Variations of the Raman Signal in the Spectra of Twisted Bilayer Graphene on a BN Substrate. *Journal of Physical Chemistry Letters*, **2012**, 3, 796-9 | 6.4 | 30 |
| 39 | A facile tool for the characterization of two-dimensional materials grown by chemical vapor deposition. *Nano Research*, **2012**, 5, 504-511 | 10 | 24 |
| 38 | Compact Virtual-Source Current–Voltage Model for Top- and Back-Gated Graphene Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2011**, 58, 1523-1533 | 2.9 | 59 |
| 37 | Impact of Graphene Interface Quality on Contact Resistance and RF Device Performance. *IEEE Electron Device Letters*, **2011**, 32, 1008-1010 | 4.4 | 111 |
| 36 | Breakdown Current Density of CVD-Grown Multilayer Graphene Interconnects. *IEEE Electron Device Letters*, **2011**, 32, 557-559 | 4.4 | 56 |
| 35 | Effect of rare earth Ce on the microstructure, physical properties and thermal stability of a new lead-free solder. *Journal of Mining and Metallurgy, Section B: Metallurgy*, **2011**, 47, 11-21 | 1 | 22 |
| 34 | Chiral angle dependence of resonance window widths in (2n+m) families of single-walled carbon nanotubes. *Applied Physics Letters*, **2010**, 96, 103118 | 3.4 | 8 |

| | | | |
|---|---|---|---|
| 33 | Study of transport properties in graphene monolayer flakes on SiO2 substrates. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C6D11-C6D14 | 1.3 | 3 |
| 32 | Single-Walled Carbon Nanotubes Probing the Denaturation of Lysozyme. *Journal of Physical Chemistry C*, **2010**, 114, 7717-7720 | 3.8 | 11 |
| 31 | Work function engineering of graphene electrode via chemical doping. *ACS Nano*, **2010**, 4, 2689-94 | 16.7 | 444 |
| 30 | Can graphene be used as a substrate for Raman enhancement?. *Nano Letters*, **2010**, 10, 553-61 | 11.5 | 771 |
| 29 | The influence of strong electron and hole doping on the Raman intensity of chemical vapor-deposition graphene. *ACS Nano*, **2010**, 4, 6055-63 | 16.7 | 211 |
| 28 | Low-Swing Signaling on Monolithically Integrated Global Graphene Interconnects. *IEEE Transactions on Electron Devices*, **2010**, 57, 3418-3425 | 2.9 | 17 |
| 27 | Current on/off ratio enhancement of field effect transistors with bundled carbon nanotubes. *Journal of Applied Physics*, **2009**, 106, 104505 | 2.5 | 17 |
| 26 | Loop formation in graphitic nanoribbon edges using furnace heating or Joule heating. *Journal of Vacuum Science & Technology B*, **2009**, 27, 1996 | | 24 |
| 25 | Growth of large-area single- and Bi-layer graphene by controlled carbon precipitation on polycrystalline Ni surfaces. *Nano Research*, **2009**, 2, 509-516 | 10 | 417 |
| 24 | All graphene electromechanical switch fabricated by chemical vapor deposition. *Applied Physics Letters*, **2009**, 95, 183105 | 3.4 | 126 |
| 23 | Large area, few-layer graphene films on arbitrary substrates by chemical vapor deposition. *Nano Letters*, **2009**, 9, 30-5 | 11.5 | 4737 |
| 22 | Large Variety of Behaviors for the Raman G? Mode of Single Walled Carbon Nanotubes upon Electrochemical Gating Arising from Different (n,m) of Individual Nanotubes. *Journal of Physical Chemistry C*, **2009**, 113, 1751-1757 | 3.8 | 14 |
| 21 | High-speed graphene interconnects monolithically integrated with CMOS ring oscillators operating at 1.3GHz **2009**, | | 5 |
| 20 | Graphene-on-Insulator Transistors Made Using C on Ni Chemical-Vapor Deposition. *IEEE Electron Device Letters*, **2009**, 30, 745-747 | 4.4 | 88 |
| 19 | Geometrical approach for the study of G? band in the Raman spectrum of monolayer graphene, bilayer graphene, and bulk graphite. *Physical Review B*, **2008**, 77, | 3.3 | 145 |
| 18 | Transferring and Identification of Single- and Few-Layer Graphene on Arbitrary Substrates. *Journal of Physical Chemistry C*, **2008**, 112, 17741-17744 | 3.8 | 433 |
| 17 | Chirality-dependent frequency shift of radial breathing mode in metallic carbon nanotubes. *Physical Review B*, **2008**, 78, | 3.3 | 32 |
| 16 | Curvature-induced optical phonon frequency shift in metallic carbon nanotubes. *Physical Review B*, **2008**, 77, | 3.3 | 52 |

| | | | |
|---|---|---|---|
| 15 | Raman spectroscopy of double-walled carbon nanotubes treated with H2SO4. *Physical Review B*, **2007**, 76, | 3.3 | 34 |
| 14 | Length characterization of DNA-wrapped carbon nanotubes using Raman spectroscopy. *Applied Physics Letters*, **2007**, 90, 131109 | 3.4 | 38 |
| 13 | In-situ TEM Study of Bismuth Nanostructures. *Materials Research Society Symposia Proceedings*, **2007**, 1044, 1 | | |
| 12 | Growth Mechanism of Long and Horizontally Aligned Carbon Nanotubes by Chemical Vapor Deposition. *Journal of Physical Chemistry C*, **2007**, 111, 7292-7297 | 3.8 | 62 |
| 11 | Spinning and Processing Continuous Yarns from 4-Inch Wafer Scale Super-Aligned Carbon Nanotube Arrays. *Advanced Materials*, **2006**, 18, 1505-1510 | 24 | 512 |
| 10 | Raman characterization of electronic transition energies of metallic single-wall carbon nanotubes. *Physical Review B*, **2006**, 74, | 3.3 | 32 |
| 9 | The equivalence of the electric and magnetic surface current approaches in microstrip antenna studies. *IEEE Transactions on Antennas and Propagation*, **1980**, 28, 569-571 | | 14 |
| 8 | Theory for microwave thermal emission from a layer of cloud or rain. *IEEE Transactions on Antennas and Propagation*, **1977**, 25, 650-657 | | 31 |
| 7 | Field of an antenna submerged in a dissipative dielectric medium. *IEEE Transactions on Antennas and Propagation*, **1977**, 25, 887-889 | | 8 |
| 6 | Geophysical subsurface probing of a two-layered uniaxial medium with a horizontal magnetic dipole. *IEEE Transactions on Antennas and Propagation*, **1977**, 25, 766-769 | | 4 |
| 5 | Application of the radio-frequency interferometry method to a stratifield anisotropic medium. *IEEE Transactions on Antennas and Propagation*, **1975**, 23, 725-728 | | 4 |
| 4 | Electromagnetic fields due to a horizontal electric dipole antenna laid on the surface of a two-layer medium. *IEEE Transactions on Antennas and Propagation*, **1974**, 22, 709-711 | | 11 |
| 3 | Multifrequency excitation of a wire antenna for an invariant radiation pattern. *IEEE Transactions on Antennas and Propagation*, **1972**, 20, 784-785 | | |
| 2 | Resonance of axial and non-axial symmetric modes in circular microstrip disk antenna | | 3 |
| 1 | High Yield Monolayer Graphene Grids for Near-Atomic Resolution Cryo-Electron Microscopy | | 1 |