

Meiyong Liao

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209
papers

11,080
citations

52
h-index

101
g-index

227
ext. papers

12,192
ext. citations

6.7
avg, IF

6.46
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 209 | A comprehensive review of semiconductor ultraviolet photodetectors: from thin film to one-dimensional nanostructures. <i>Sensors</i> , 2013 , 13, 10482-518 | 3.8 | 511 |
| 208 | Single-Crystalline ZnS Nanobelts as Ultraviolet-Light Sensors. <i>Advanced Materials</i> , 2009 , 21, 2034-2039 | 24 | 479 |
| 207 | A comprehensive review of one-dimensional metal-oxide nanostructure photodetectors. <i>Sensors</i> , 2009 , 9, 6504-29 | 3.8 | 421 |
| 206 | An optimized ultraviolet-A light photodetector with wide-range photoresponse based on ZnS/ZnO biaxial nanobelt. <i>Advanced Materials</i> , 2012 , 24, 2305-9 | 24 | 375 |
| 205 | One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. <i>Chemical Society Reviews</i> , 2011 , 40, 2986-3004 | 58.5 | 321 |
| 204 | Centimeter-long V2O5 nanowires: from synthesis to field-emission, electrochemical, electrical transport, and photoconductive properties. <i>Advanced Materials</i> , 2010 , 22, 2547-52 | 24 | 312 |
| 203 | Single-crystalline CdS nanobelts for excellent field-emitters and ultrahigh quantum-efficiency photodetectors. <i>Advanced Materials</i> , 2010 , 22, 3161-5 | 24 | 311 |
| 202 | Giant Improvement of the Performance of ZnO Nanowire Photodetectors by Au Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 19835-19839 | 3.8 | 281 |
| 201 | ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2009 , 34, 190-223 | 10.1 | 274 |
| 200 | Electrical Transport Properties of Large, Individual NiCo2O4 Nanoplates. <i>Advanced Functional Materials</i> , 2012 , 22, 998-1004 | 15.6 | 261 |
| 199 | New Ultraviolet Photodetector Based on Individual Nb2O5 Nanobelts. <i>Advanced Functional Materials</i> , 2011 , 21, 3907-3915 | 15.6 | 257 |
| 198 | Fabrication of high-quality In2Se3 nanowire arrays toward high-performance visible-light photodetectors. <i>ACS Nano</i> , 2010 , 4, 1596-602 | 16.7 | 253 |
| 197 | Efficient Assembly of Bridged BiGa2O3 Nanowires for Solar-Blind Photodetection. <i>Advanced Functional Materials</i> , 2010 , 20, 3972-3978 | 15.6 | 245 |
| 196 | Ultrahigh external quantum efficiency from thin SnO2 nanowire ultraviolet photodetectors. <i>Small</i> , 2011 , 7, 1012-7 | 11 | 235 |
| 195 | Flexible ultraviolet photodetectors with broad photoresponse based on branched ZnS-ZnO heterostructure nanofilms. <i>Advanced Materials</i> , 2014 , 26, 3088-93 | 24 | 229 |
| 194 | Ultrahigh-performance solar-blind photodetectors based on individual single-crystalline InGaO nanobelts. <i>Advanced Materials</i> , 2010 , 22, 5145-9 | 24 | 217 |
| 193 | ZnO hollow spheres with double-yolk egg structure for high-performance photocatalysts and photodetectors. <i>Advanced Materials</i> , 2012 , 24, 3421-5 | 24 | 211 |

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| 192 | An Efficient Way to Assemble ZnS Nanobelts as Ultraviolet-Light Sensors with Enhanced Photocurrent and Stability. <i>Advanced Functional Materials</i> , 2010 , 20, 500-508 | 15.6 | 206 |
| 191 | High-Performance Blue/Ultraviolet-Light-Sensitive ZnSe-Nanobelt Photodetectors. <i>Advanced Materials</i> , 2009 , 21, 5016-5021 | 24 | 199 |
| 190 | ZnO hollow-sphere nanofilm-based high-performance and low-cost photodetector. <i>Small</i> , 2011 , 7, 2449-53 | 18.6 | 186 |
| 189 | Deep-ultraviolet solar-blind photoconductivity of individual gallium oxide nanobelts. <i>Nanoscale</i> , 2011 , 3, 1120-6 | 7.7 | 172 |
| 188 | High-performance NiCo ₂ O ₄ nanofilm photodetectors fabricated by an interfacial self-assembly strategy. <i>Advanced Materials</i> , 2011 , 23, 1988-92 | 24 | 159 |
| 187 | High detectivity solar-blind high-temperature deep-ultraviolet photodetector based on multi-layered (100) facet-oriented GaN nanobelts. <i>Small</i> , 2014 , 10, 1848-56 | 11 | 149 |
| 186 | Electrical transport and high-performance photoconductivity in individual ZrS ₂ nanobelts. <i>Advanced Materials</i> , 2010 , 22, 4151-6 | 24 | 145 |
| 185 | Electrochemical-coupling layer-by-layer (ECC-LbL) assembly. <i>Journal of the American Chemical Society</i> , 2011 , 133, 7348-51 | 16.4 | 131 |
| 184 | Stacking-order-dependent optoelectronic properties of bilayer nanofilm photodetectors made from hollow ZnS and ZnO microspheres. <i>Advanced Materials</i> , 2012 , 24, 5872-7 | 24 | 125 |
| 183 | Recent advances in solution-processed inorganic nanofilm photodetectors. <i>Chemical Society Reviews</i> , 2014 , 43, 1400-22 | 58.5 | 121 |
| 182 | Single-crystalline Sb ₂ Te ₃ nanowires for high-performance field emitters and photodetectors. <i>Advanced Materials</i> , 2010 , 22, 4530-3 | 24 | 118 |
| 181 | A skin-inspired tactile sensor for smart prosthetics. <i>Science Robotics</i> , 2018 , 3, | 18.6 | 117 |
| 180 | High-performance metal-semiconductor-metal deep-ultraviolet photodetectors based on homoepitaxial diamond thin film. <i>Applied Physics Letters</i> , 2006 , 89, 113509 | 3.4 | 100 |
| 179 | WO ₃ nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. <i>Journal of Materials Chemistry</i> , 2011 , 21, 6525 | | 97 |
| 178 | Block-copolymer-nanowires with nanosized domain segregation and high charge mobilities as stacked p/n heterojunction arrays for repeatable photocurrent switching. <i>Journal of the American Chemical Society</i> , 2009 , 131, 18030-1 | 16.4 | 90 |
| 177 | New UV-A Photodetector Based on Individual Potassium Niobate Nanowires with High Performance. <i>Advanced Optical Materials</i> , 2014 , 2, 771-778 | 8.1 | 88 |
| 176 | Hexagonal-like NbO ₂ nanoplates-based photodetectors and photocatalyst with high performances. <i>Scientific Reports</i> , 2015 , 5, 7716 | 4.9 | 88 |
| 175 | Thermally stable visible-blind diamond photodiode using tungsten carbide Schottky contact. <i>Applied Physics Letters</i> , 2005 , 87, 022105 | 3.4 | 86 |

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| 174 | Flexible SnO ₂ hollow nanosphere film based high-performance ultraviolet photodetector. <i>Chemical Communications</i> , 2013 , 49, 3739-41 | 5.8 | 85 |
| 173 | Suspended single-crystal diamond nanowires for high-performance nanoelectromechanical switches. <i>Advanced Materials</i> , 2010 , 22, 5393-7 | 24 | 85 |
| 172 | Low on-resistance diamond field effect transistor with high-k ZrO ₂ as dielectric. <i>Scientific Reports</i> , 2014 , 4, 6395 | 4.9 | 82 |
| 171 | In-doped Ga ₂ O ₃ nanobelt based photodetector with high sensitivity and wide-range photoresponse. <i>Journal of Materials Chemistry</i> , 2012 , 22, 17984 | | 81 |
| 170 | Normally-off HfO ₂ -gated diamond field effect transistors. <i>Applied Physics Letters</i> , 2013 , 103, 092905 | 3.4 | 81 |
| 169 | Visible-blind deep-ultraviolet Schottky photodetector with a photocurrent gain based on individual Zn ₂ GeO ₄ nanowire. <i>Applied Physics Letters</i> , 2010 , 97, 161102 | 3.4 | 81 |
| 168 | Single Schottky-barrier photodiode with interdigitated-finger geometry: Application to diamond. <i>Applied Physics Letters</i> , 2007 , 90, 123507 | 3.4 | 78 |
| 167 | 3D Solar-Blind Ga ₂ O ₃ Photodetector Array Realized Via Origami Method. <i>Advanced Functional Materials</i> , 2019 , 29, 1906040 | 15.6 | 67 |
| 166 | Band offsets of Al ₂ O ₃ and HfO ₂ oxides deposited by atomic layer deposition technique on hydrogenated diamond. <i>Applied Physics Letters</i> , 2012 , 101, 252108 | 3.4 | 66 |
| 165 | Light intensity dependence of photocurrent gain in single-crystal diamond detectors. <i>Physical Review B</i> , 2010 , 81, | 3.3 | 66 |
| 164 | Persistent positive and transient absolute negative photoconductivity observed in diamond photodetectors. <i>Physical Review B</i> , 2008 , 78, | 3.3 | 66 |
| 163 | Progress in semiconductor diamond photodetectors and MEMS sensors. <i>Functional Diamond</i> , 2021 , 1, 29-46 | | 63 |
| 162 | Thermally stable solar-blind diamond UV photodetector. <i>Diamond and Related Materials</i> , 2006 , 15, 1962-1966 | 3.966 | 60 |
| 161 | Photosensing performance of branched CdS/ZnO heterostructures as revealed by in situ TEM and photodetector tests. <i>Nanoscale</i> , 2014 , 6, 8084-90 | 7.7 | 59 |
| 160 | Interfacial band configuration and electrical properties of LaAlO ₃ /Al ₂ O ₃ /hydrogenated-diamond metal-oxide-semiconductor field effect transistors. <i>Journal of Applied Physics</i> , 2013 , 114, 084108 | 2.5 | 56 |
| 159 | Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 090115 | 1.4 | 54 |
| 158 | High-performance metal-semiconductor-metal InGaN photodetectors using CaF ₂ as the insulator. <i>Applied Physics Letters</i> , 2011 , 98, 103502 | 3.4 | 52 |
| 157 | High-temperature ultraviolet detection based on InGaN Schottky photodiodes. <i>Applied Physics Letters</i> , 2011 , 99, 031115 | 3.4 | 51 |

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| 156 | Enhanced performance of InGaN solar cell by using a super-thin AlN interlayer. <i>Applied Physics Letters</i> , 2011 , 99, 161109 | 3.4 | 50 |
| 155 | An Interface Engineered Multicolor Photodetector Based on n-Si(111)/TiO ₂ Nanorod Array Heterojunction. <i>Advanced Functional Materials</i> , 2016 , 26, 1400-1410 | 15.6 | 49 |
| 154 | Carbon-Based Materials: Growth, Properties, MEMS/NEMS Technologies, and MEM/NEM Switches. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2011 , 36, 66-101 | 10.1 | 48 |
| 153 | Morphology-tunable In ₂ Se ₃ nanostructures with enhanced electrical and photoelectrical performances via sulfur doping. <i>Journal of Materials Chemistry</i> , 2010 , 20, 6630 | | 48 |
| 152 | Enhancement-mode hydrogenated diamond metal-oxide-semiconductor field-effect transistors with Y ₂ O ₃ oxide insulator grown by electron beam evaporator. <i>Applied Physics Letters</i> , 2017 , 110, 203502 | 3.4 | 47 |
| 151 | Enhanced UV-visible light photodetectors with a TiO ₂ /Si heterojunction using band engineering. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 12848-12856 | 7.1 | 44 |
| 150 | Work function measurement of transition metal nitride and carbide thin films. <i>Vacuum</i> , 2006 , 80, 832-835 | 5.7 | 44 |
| 149 | Single-crystalline nanotubes of IIB-VI semiconductors. <i>Applied Physics Letters</i> , 2005 , 87, 113107 | 3.4 | 42 |
| 148 | Band gap tunable Zn ₂ SnO ₄ nanocubes through thermal effect and their outstanding ultraviolet light photoresponse. <i>Scientific Reports</i> , 2014 , 4, 6847 | 4.9 | 40 |
| 147 | Electrical characteristics of hydrogen-terminated diamond metal-oxide-semiconductor with atomic layer deposited HfO ₂ as gate dielectric. <i>Applied Physics Letters</i> , 2013 , 102, 112910 | 3.4 | 37 |
| 146 | Arbitrary multicolor photodetection by hetero-integrated semiconductor nanostructures. <i>Scientific Reports</i> , 2013 , 3, 2368 | 4.9 | 37 |
| 145 | Initial leakage current paths in the vertical-type GaN-on-GaN Schottky barrier diodes. <i>Applied Physics Letters</i> , 2017 , 111, 122102 | 3.4 | 36 |
| 144 | Integration of high-dielectric constant Ta ₂ O ₅ oxides on diamond for power devices. <i>Applied Physics Letters</i> , 2012 , 101, 232907 | 3.4 | 36 |
| 143 | Photovoltaic Schottky ultraviolet detectors fabricated on boron-doped homoepitaxial diamond layer. <i>Applied Physics Letters</i> , 2006 , 88, 033504 | 3.4 | 36 |
| 142 | A multilevel intermediate-band solar cell by InGaN/GaN quantum dots with a strain-modulated structure. <i>Advanced Materials</i> , 2014 , 26, 1414-20 | 24 | 35 |
| 141 | Thermal Stability of Diamond Photodiodes Using Tungsten Carbide as Schottky Contact. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 7832-7838 | 1.4 | 34 |
| 140 | MEMS/NEMS based on mono-, nano-, and ultrananocrystalline diamond films. <i>MRS Bulletin</i> , 2014 , 39, 511-516 | 3.2 | 33 |
| 139 | In situ switching layer-by-layer assembly: one-pot rapid layer assembly via alternation of reductive and oxidative electropolymerization. <i>Chemical Communications</i> , 2013 , 49, 6879-81 | 5.8 | 33 |

- 138 Demonstration of diamond field effect transistors by AlN/diamond heterostructure. *Physica Status Solidi - Rapid Research Letters*, **2011**, 5, 125-127 2.5 33
- 137 Bicrystalline ZnS Microbelts. *Crystal Growth and Design*, **2009**, 9, 2790-2793 3.5 33
- 136 Logic Circuits With Hydrogenated Diamond Field-Effect Transistors. *IEEE Electron Device Letters*, **2017**, 38, 922-925 4.4 32
- 135 Control of normally on/off characteristics in hydrogenated diamond metal-insulator-semiconductor field-effect transistors. *Journal of Applied Physics*, **2015**, 118, 115704 2.5 31
- 134 P-Channel InGaN/GaN heterostructure metal-oxide-semiconductor field effect transistor based on polarization-induced two-dimensional hole gas. *Scientific Reports*, **2016**, 6, 23683 4.9 30
- 133 Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. *Japanese Journal of Applied Physics*, **2012**, 51, 090115 1.4 30
- 132 Design and fabrication of high-performance diamond triple-gate field-effect transistors. *Scientific Reports*, **2016**, 6, 34757 4.9 29
- 131 Crystallographic structure and composition of vanadium nitride films deposited by direct sputtering of a compound target. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 146-150 2.9 29
- 130 Diamond nucleation by energetic pure carbon bombardment. *Physical Review B*, **2005**, 72, 3.3 29
- 129 One dimensional ternary CuBiS based semiconductor nanowires: synthesis, optical and electrical properties. *Journal of Materials Chemistry*, **2012**, 22, 17813 27
- 128 Energy-Efficient Metal/Insulator/Metal-Semiconductor Field-Effect Transistors Based on 2D Carrier Gases. *Advanced Electronic Materials*, **2019**, 5, 1800832 6.4 26
- 127 Development of AlN/diamond heterojunction field effect transistors. *Diamond and Related Materials*, **2012**, 24, 206-209 3.5 26
- 126 Ultrahigh quantum efficiency of CuO nanoparticle decorated In₂Ge₂O₇ nanobelt deep-ultraviolet photodetectors. *Nanoscale*, **2012**, 4, 6318-24 7.7 26
- 125 Nearly ideal vertical GaN Schottky barrier diodes with ultralow turn-on voltage and on-resistance. *Applied Physics Express*, **2017**, 10, 051001 2.4 25
- 124 Deposition of TiO₂/Al₂O₃ bilayer on hydrogenated diamond for electronic devices: Capacitors, field-effect transistors, and logic inverters. *Journal of Applied Physics*, **2017**, 121, 224502 2.5 25
- 123 Diamond logic inverter with enhancement-mode metal-insulator-semiconductor field effect transistor. *Applied Physics Letters*, **2014**, 105, 082110 3.4 25
- 122 Batch production of single-crystal diamond bridges and cantilevers for microelectromechanical systems. *Journal of Micromechanics and Microengineering*, **2010**, 20, 085002 2 25
- 121 Sb(2)O(3) nanobelt networks for excellent visible-light-range photodetectors. *Nanotechnology*, **2011**, 22, 165704 3.4 25

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| 120 | Compound-target sputtering for niobium carbide thin-film deposition. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004 , 22, L24 | | 25 |
| 119 | Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC OH, a Direct Band Gap Semiconductor. <i>ACS Nano</i> , 2019 , 13, 1195-1203 | 16.7 | 24 |
| 118 | Interface trap characterization of Al ₂ O ₃ /GaN vertical-type MOS capacitors on GaN substrate with surface treatments. <i>Journal of Alloys and Compounds</i> , 2018 , 767, 600-605 | 5.7 | 24 |
| 117 | Diamond field effect transistors with a high-dielectric constant Ta ₂ O ₅ as gate material. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 245102 | 3 | 22 |
| 116 | Growth mechanism of c-axis-oriented AlN on (111) diamond substrates by metal-organic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2010 , 312, 1325-1328 | 1.6 | 21 |
| 115 | Formation and Control of Stoichiometric Hafnium Nitride Thin Films by Direct Sputtering of Hafnium Nitride Target. <i>Japanese Journal of Applied Physics</i> , 2003 , 42, L778-L780 | 1.4 | 21 |
| 114 | Large deep-ultraviolet photocurrent in metal-semiconductor-metal structures fabricated on as-grown boron-doped diamond. <i>Applied Physics Letters</i> , 2005 , 87, 113507 | 3.4 | 21 |
| 113 | Geometry-induced high performance ultraviolet photodetectors in kinked SnO ₂ nanowires. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 8300-8306 | 7.1 | 20 |
| 112 | InGaN-based thin film solar cells: Epitaxy, structural design, and photovoltaic properties. <i>Journal of Applied Physics</i> , 2015 , 117, 105706 | 2.5 | 20 |
| 111 | SnO ₂ nanoribbons: excellent field-emitters. <i>CrystEngComm</i> , 2011 , 13, 2289 | 3.3 | 20 |
| 110 | Growth mechanism of c-axis-oriented AlN on (0 0 1) diamond substrates by metal-organic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2010 , 312, 368-372 | 1.6 | 20 |
| 109 | Assembly of a high-dielectric constant thin TiO _x layer directly on H-terminated semiconductor diamond. <i>Applied Physics Letters</i> , 2016 , 108, 012105 | 3.4 | 20 |
| 108 | Electrical properties of atomic layer deposited HfO ₂ /Al ₂ O ₃ multilayer on diamond. <i>Diamond and Related Materials</i> , 2015 , 54, 55-58 | 3.5 | 19 |
| 107 | Electrochemical synthesis of transparent, amorphous, C-rich, photoactive, and low-doped film with an interconnected structure. <i>Small</i> , 2013 , 9, 2064-8 | 11 | 19 |
| 106 | Deposition of vanadium carbide thin films using compound target sputtering and their field emission. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005 , 23, 1379-1383 | 2.9 | 19 |
| 105 | Ultrahigh Performance On-Chip Single Crystal Diamond NEMS/MEMS with Electrically Tailored Self-Sensing Enhancing Actuation. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800325 | 6.8 | 18 |
| 104 | Energy dissipation in micron- and submicron-thick single crystal diamond mechanical resonators. <i>Applied Physics Letters</i> , 2014 , 105, 251904 | 3.4 | 17 |
| 103 | Integration of (PbZr _{0.52} Ti _{0.48} O ₃) on single crystal diamond as metal-ferroelectric-insulator-semiconductor capacitor. <i>Applied Physics Letters</i> , 2009 , 94, 242901 | 3.4 | 17 |

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| 102 | Growth and stress evolution of hafnium nitride films sputtered from a compound target. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004 , 22, 214-220 | 2.9 | 17 |
| 101 | Impedance analysis of Al ₂ O ₃ /H-terminated diamond metal-oxide-semiconductor structures. <i>Applied Physics Letters</i> , 2015 , 106, 083506 | 3.4 | 16 |
| 100 | Improvement of the quality factor of single crystal diamond mechanical resonators. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 024101 | 1.4 | 16 |
| 99 | Systematic investigation of surface and bulk electronic structure of undoped In-polar InN epilayers by hard X-ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , 2013 , 114, 033505 | 2.5 | 16 |
| 98 | MnSi~1.73 grown on silicon with mass-analyzed low energy dual ion beam epitaxy technique. <i>Journal of Crystal Growth</i> , 2001 , 226, 517-520 | 1.6 | 16 |
| 97 | Single-crystal diamond microelectromechanical resonator integrated with a magneto-strictive galfenol film for magnetic sensing. <i>Carbon</i> , 2019 , 152, 788-795 | 10.4 | 15 |
| 96 | High-detectivity nanowire photodetectors governed by bulk photocurrent dynamics with thermally stable carbide contacts. <i>Nanotechnology</i> , 2013 , 24, 495701 | 3.4 | 15 |
| 95 | Nanodiamond formation by hot-filament chemical vapor deposition on carbon ions bombarded Si. <i>Journal of Crystal Growth</i> , 2002 , 236, 85-89 | 1.6 | 15 |
| 94 | Field-emission current from diamond film deposited on molybdenum. <i>Journal of Applied Physics</i> , 1998 , 84, 1081-1084 | 2.5 | 15 |
| 93 | High-k ZrO ₂ /Al ₂ O ₃ bilayer on hydrogenated diamond: Band configuration, breakdown field, and electrical properties of field-effect transistors. <i>Journal of Applied Physics</i> , 2016 , 120, 124504 | 2.5 | 15 |
| 92 | Layered boron nitride enabling high-performance AlGaN/GaN high electron mobility transistor. <i>Journal of Alloys and Compounds</i> , 2020 , 829, 154542 | 5.7 | 14 |
| 91 | Boosting the doping efficiency of Mg in p-GaN grown on the free-standing GaN substrates. <i>Applied Physics Letters</i> , 2019 , 115, 172103 | 3.4 | 14 |
| 90 | Schottky-barrier photodiode using p-diamond epilayer grown on p+-diamond substrates. <i>Diamond and Related Materials</i> , 2009 , 18, 296-298 | 3.5 | 14 |
| 89 | Crystallographic and electrical characterization of tungsten carbide thin films for Schottky contact of diamond photodiode. <i>Journal of Vacuum Science & Technology B</i> , 2006 , 24, 185 | | 14 |
| 88 | Annealing effects on hydrogenated diamond NOR logic circuits. <i>Applied Physics Letters</i> , 2018 , 112, 153501 | 3.4 | 13 |
| 87 | Electrical characterization of Schottky diodes based on boron doped homoepitaxial diamond films by conducting probe atomic force microscopy. <i>Superlattices and Microstructures</i> , 2006 , 40, 343-349 | 2.8 | 13 |
| 86 | Effect of off-cut angle of hydrogen-terminated diamond(111) substrate on the quality of AlN towards high-density AlN/diamond(111) interface hole channel. <i>Journal of Applied Physics</i> , 2017 , 121, 025702 | 2.5 | 12 |
| 85 | Suppression in the electrical hysteresis by using CaF ₂ dielectric layer for p-GaN MIS capacitors. <i>Journal of Applied Physics</i> , 2018 , 123, 161423 | 2.5 | 12 |

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| 84 | Electrical hysteresis in p-GaN metaloxide semiconductor capacitor with atomic-layer-deposited Al ₂ O ₃ as gate dielectric. <i>Applied Physics Express</i> , 2016 , 9, 121002 | 2.4 | 12 |
| 83 | Improved ferroelectric properties of Pb(Zr _{0.52} Ti _{0.48})O ₃ thin film on single crystal diamond using CaF ₂ layer. <i>Applied Physics Letters</i> , 2010 , 96, 012910 | 3.4 | 12 |
| 82 | One-Step Self-Assembly Fabrication of High Quality Ni _x Mg _{1-x} O Bowl-Shaped Array Film and Its Enhanced Photocurrent by Mg ₂₊ Doping. <i>Advanced Functional Materials</i> , 2015 , 25, 3256-3263 | 15.6 | 11 |
| 81 | Localized mid-gap-states limited reverse current of diamond Schottky diodes. <i>Journal of Applied Physics</i> , 2012 , 111, 104503 | 2.5 | 11 |
| 80 | Piezoelectric Pb(Zr _{0.52} Ti _{0.48})O ₃ thin films on single crystal diamond: Structural, electrical, dielectric, and field-effect-transistor properties. <i>Journal of Applied Physics</i> , 2010 , 107, 024101 | 2.5 | 11 |
| 79 | Submicron metal-semiconductor-metal diamond photodiodes toward improving the responsivity. <i>Applied Physics Letters</i> , 2007 , 91, 163510 | 3.4 | 11 |
| 78 | Anomalous temperature dependence of photoluminescence from a-C:H film deposited by energetic hydrocarbon ion beam. <i>Solid State Communications</i> , 2002 , 121, 287-290 | 1.6 | 11 |
| 77 | Reducing intrinsic energy dissipation in diamond-on-diamond mechanical resonators toward one million quality factor. <i>Physical Review Materials</i> , 2018 , 2, | 3.2 | 11 |
| 76 | Hydrothermal crystallization of VO ₄ ³⁻ stabilized t-Gd(P,V)O ₄ :Eu ³⁺ nanocrystals for remarkably improved and color tailorable luminescence. <i>Chemical Engineering Journal</i> , 2019 , 357, 84-93 | 14.7 | 11 |
| 75 | Effect of Boron Incorporation on Structural and Optical Properties of AlN Layers Grown by Metal-Organic Vapor Phase Epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1800282 | 1.6 | 10 |
| 74 | Vertical-Type Ni/GaN UV Photodetectors Fabricated on Free-Standing GaN Substrates. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 2895 | 2.6 | 10 |
| 73 | Nanoelectromechanical switch fabricated from single crystal diamond: Experiments and modeling. <i>Diamond and Related Materials</i> , 2012 , 24, 69-73 | 3.5 | 10 |
| 72 | Amorphous silicon diamond based heterojunctions with high rectification ratio. <i>Journal of Non-Crystalline Solids</i> , 2012 , 358, 2110-2113 | 3.9 | 10 |
| 71 | Local photoconductivity on diamond metal-semiconductor-metal photodetectors measured by conducting probe atomic force microscopy. <i>Diamond and Related Materials</i> , 2007 , 16, 1074-1077 | 3.5 | 10 |
| 70 | (Ga,Mn,As) compounds grown on semi-insulating GaAs with mass-analyzed low energy dual ion beam deposition. <i>Journal of Crystal Growth</i> , 2002 , 234, 359-363 | 1.6 | 10 |
| 69 | Exceptional Point and Cross-Relaxation Effect in a Hybrid Quantum System. <i>PRX Quantum</i> , 2021 , 2, | 6.1 | 10 |
| 68 | Enhancing Delta Effect at High Temperatures of Galfenol/Ti/Single-Crystal Diamond Resonators for Magnetic Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 23155-23164 | 9.5 | 9 |
| 67 | Coupling of magneto-strictive FeGa film with single-crystal diamond MEMS resonator for high-reliability magnetic sensing at high temperatures. <i>Materials Research Letters</i> , 2020 , 8, 180-186 | 7.4 | 9 |

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| 66 | Nucleation of diamond by pure carbon ion bombardment— transmission electron microscopy study. <i>Applied Physics Letters</i> , 2005 , 87, 063103 | 3-4 | 9 |
| 65 | Interfacial electronic band alignment of Ta ₂ O ₅ /hydrogen-terminated diamond heterojunction determined by X-ray photoelectron spectroscopy. <i>Diamond and Related Materials</i> , 2013 , 38, 24-27 | 3-5 | 8 |
| 64 | Chemical Vapor Deposition of ¹² C Isotopically Enriched Polycrystalline Diamond. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 090104 | 1-4 | 8 |
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