Meiyong Liao

List of Publications by Year in Descending Order

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	Elastic strain engineered nanomechanical GaN resonators with thermoelastic dissipation dilution up to 600 K. *Journal of Applied Physics*, **2022**, 131, 054502	2.5	
208	Stress effect on the resonance properties of single-crystal diamond cantilever resonators for microscopy applications.. *Ultramicroscopy*, **2022**, 234, 113464	3.1	0
207	n-Type Diamond Metal-Semiconductor Field-Effect Transistor With High Operation Temperature of 300℃. *IEEE Electron Device Letters*, **2022**, 43, 588-591	4.4	
206	Radiation effect of X-ray with 1 kGy dose on the electrical properties of MESFET based on hydrogen-terminated diamond surface conductivity. *Functional Diamond*, **2022**, 2, 40-45		
205	Polarization-induced hole doping for long-wavelength In-rich InGaN solar cells. *Applied Physics Letters*, **2021**, 119, 202103	3.4	1
204	Effect of a seed layer on microstructure and electrical properties of Ga2O3 films on variously oriented Si substrates. *Vacuum*, **2021**, 195, 110671	3.7	2
203	Resistance random access memory performance of MgZnO-based device with varying film thickness by an asymmetric electrode of Au/ITO. *Materialia*, **2021**, 15, 101001	3.2	0
202	Thermal mismatch induced stress characterization by dynamic resonance based on diamond MEMS. *Applied Physics Express*, **2021**, 14, 045501	2.4	0
201	Exceptional Point and Cross-Relaxation Effect in a Hybrid Quantum System. *PRX Quantum*, **2021**, 2,	6.1	10
200	An adjustable multi-color detector based on regulating TiO2 surface adsorption and multi-junction synergy. *Nano Research*, **2021**, 14, 3423-3430	10	2
199	Temperature dependence of Young's modulus of single-crystal diamond determined by dynamic resonance. *Diamond and Related Materials*, **2021**, 116, 108403	3.5	7
198	Integrated TbDyFe Film on a Single-Crystal Diamond Microelectromechanical Resonator for Magnetic Sensing. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100352	2.5	1
197	Tailoring the magnetic properties of galfenol film grown on single-crystal diamond. *Journal of Alloys and Compounds*, **2021**, 858, 157683	5.7	3
196	Insight into traps at Al2O3/p-GaN metal-oxide-semiconductor interface fabricated on free-standing GaN substrate. *Journal of Alloys and Compounds*, **2021**, 853, 157356	5.7	2
195	Enhanced UV detection performance of a CdZnTe-based photodetector through surface polishing treatments. *Journal of Materials Chemistry C*, **2021**, 9, 3601-3607	7.1	2
194	Bio-Inspired Multi-Mode Pain-Perceptual System (MMPPS) with Noxious Stimuli Warning, Damage Localization, and Enhanced Damage Protection. *Advanced Science*, **2021**, 8, 2004208	13.6	4
193	Highly efficient diamond electromechanical transducer based on released metal–oxide–semiconductor structure. *Applied Physics Letters*, **2021**, 119, 073504	3.4	1

192	Progress in semiconductor diamond photodetectors and MEMS sensors. *Functional Diamond*, **2021**, 1, 29-46		63
191	Effect of Deep-Defects Excitation on Mechanical Energy Dissipation of Single-Crystal Diamond. *Physical Review Letters*, **2020**, 125, 206802	7.4	6
190	Strain-enhanced high -factor GaN micro-electromechanical resonator. *Science and Technology of Advanced Materials*, **2020**, 21, 515-523	7.1	4
189	Layered boron nitride enabling high-performance AlGaN/GaN high electron mobility transistor. *Journal of Alloys and Compounds*, **2020**, 829, 154542	5.7	14
188	Electrical readout/characterization of single crystal diamond (SCD) cantilever resonators. *Diamond and Related Materials*, **2020**, 103, 107711	3.5	1
187	Enhancing Delta Effect at High Temperatures of Galfenol/Ti/Single-Crystal Diamond Resonators for Magnetic Sensing. *ACS Applied Materials & Interfaces*, **2020**, 12, 23155-23164	9.5	9
186	Coupling of magneto-strictive FeGa film with single-crystal diamond MEMS resonator for high-reliability magnetic sensing at high temperatures. *Materials Research Letters*, **2020**, 8, 180-186	7.4	9
185	Generating robust two-dimensional hole gas at the interface between boron nitride and diamond. *Japanese Journal of Applied Physics*, **2020**, 59, 090910	1.4	
184	Precise characterization of atomic-scale corrosion of single crystal diamond in H2 plasma based on MEMS/NEMS. *Corrosion Science*, **2020**, 170, 108651	6.8	2
183	A simple method for preparing a TiO2-based back-gate controlled N-channel MSM□GFET UV photodetector. *Journal of Materials Chemistry C*, **2020**, 8, 1781-1787	7.1	3
182	Enhanced magnetic sensing performance of diamond MEMS magnetic sensor with boron-doped FeGa film. *Carbon*, **2020**, 170, 294-301	10.4	7
181	3D Solar-Blind Ga2O3 Photodetector Array Realized Via Origami Method. *Advanced Functional Materials*, **2019**, 29, 1906040	15.6	67
180	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC OH, a Direct Band Gap Semiconductor. *ACS Nano*, **2019**, 13, 1195-1203	16.7	24
179	Single-crystal diamond microelectromechanical resonator integrated with a magneto-strictive galfenol film for magnetic sensing. *Carbon*, **2019**, 152, 788-795	10.4	15
178	Silicon-compatible Mg2Si/Si n-p photodiodes with high room temperature infrared responsivity. *Materials Science in Semiconductor Processing*, **2019**, 102, 104577	4.3	7
177	MOCVD Growth and Investigation of InGaN/GaN Heterostructure Grown on AlGaN/GaN-on-Si Template. *Applied Sciences (Switzerland)*, **2019**, 9, 1746	2.6	2
176	Energy-Efficient Metal□nsulator□Metal-Semiconductor Field-Effect Transistors Based on 2D Carrier Gases. *Advanced Electronic Materials*, **2019**, 5, 1800832	6.4	26
175	Single Crystal Diamond Micromechanical and Nanomechanical Resonators. *Topics in Applied Physics*, **2019**, 91-121	0.5	1

174	Vertical-Type Ni/GaN UV Photodetectors Fabricated on Free-Standing GaN Substrates. *Applied Sciences (Switzerland)*, **2019**, 9, 2895	2.6	10
173	Boosting the doping efficiency of Mg in p-GaN grown on the free-standing GaN substrates. *Applied Physics Letters*, **2019**, 115, 172103	3.4	14
172	High-performance visible to near-infrared photodetectors by using (Cd,Zn)Te single crystal. *Optics Express*, **2019**, 27, 8935-8942	3.3	8
171	Threshold Voltage Instability of Diamond Metal□Oxide□Semiconductor Field-Effect Transistors Based on 2D Hole Gas. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900538	1.6	1
170	Hydrothermal crystallization of VO43□stabilized t-Gd(P,V)O4:Eu3+ nanocrystals for remarkably improved and color tailorable luminescence. *Chemical Engineering Journal*, **2019**, 357, 84-93	14.7	11
169	High-quality SiN x /p-GaN metal-insulator-semiconductor interface with low-density trap states. *Journal Physics D: Applied Physics*, **2019**, 52, 085105	3	3
168	Ultrahigh Performance On-Chip Single Crystal Diamond NEMS/MEMS with Electrically Tailored Self-Sensing Enhancing Actuation. *Advanced Materials Technologies*, **2019**, 4, 1800325	6.8	18
167	A density functional study of the effect of hydrogen on electronic properties and band discontinuity at anatase TiO2/diamond interface. *Journal of Applied Physics*, **2018**, 123, 161599	2.5	6
166	Suppression in the electrical hysteresis by using CaF2 dielectric layer for p-GaN MIS capacitors. *Journal of Applied Physics*, **2018**, 123, 161423	2.5	12
165	Annealing effects on hydrogenated diamond NOR logic circuits. *Applied Physics Letters*, **2018**, 112, 153501	3.4	13
164	Pico-thermogravimetric material properties analysis using diamond cantilever beam. *Sensors and Actuators A: Physical*, **2018**, 271, 356-363	3.9	2
163	Interface trap characterization of Al2O3/GaN vertical-type MOS capacitors on GaN substrate with surface treatments. *Journal of Alloys and Compounds*, **2018**, 767, 600-605	5.7	24
162	Effect of Boron Incorporation on Structural and Optical Properties of AlN Layers Grown by Metal-Organic Vapor Phase Epitaxy. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800282	1.6	10
161	Reducing intrinsic energy dissipation in diamond-on-diamond mechanical resonators toward one million quality factor. *Physical Review Materials*, **2018**, 2,	3.2	11
160	A skin-inspired tactile sensor for smart prosthetics. *Science Robotics*, **2018**, 3,	18.6	117
159	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. *Journal of Applied Physics*, **2017**, 121, 025702	2.5	12
158	Nearly ideal vertical GaN Schottky barrier diodes with ultralow turn-on voltage and on-resistance. *Applied Physics Express*, **2017**, 10, 051001	2.4	25
157	Enhancement-mode hydrogenated diamond metal-oxide-semiconductor field-effect transistors with Y2O3 oxide insulator grown by electron beam evaporator. *Applied Physics Letters*, **2017**, 110, 203502	3.4	47

156	Logic Circuits With Hydrogenated Diamond Field-Effect Transistors. *IEEE Electron Device Letters*, **2017**, 38, 922-925	4.4	32
155	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
154	Effect of Sputter Deposition Atmosphere of AlN on the Electrical Properties of Hydrogen-Terminated Diamond Field Effect Transistor with AlN/Al2O3 Stack Gate. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1700463	1.6	1
153	Enhancing the performance of dye-sensitized solar cells by ZnO nanorods/ZnO nanoparticles composite photoanode. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 17414-17420	2.1	3
152	Reducing energy dissipation and surface effect of diamond nanoelectromechanical resonators by annealing in oxygen ambient. *Carbon*, **2017**, 124, 281-287	10.4	6
151	Initial leakage current paths in the vertical-type GaN-on-GaN Schottky barrier diodes. *Applied Physics Letters*, **2017**, 111, 122102	3.4	36
150	Enhanced UV-visible light photodetectors with a TiO2/Si heterojunction using band engineering. *Journal of Materials Chemistry C*, **2017**, 5, 12848-12856	7.1	44
149	Interfacial energy barrier height of Al2O3/H-terminated (111) diamond heterointerface investigated by X-ray photoelectron spectroscopy. *Applied Physics Letters*, **2017**, 111, 141605	3.4	6
148	Improvement of the quality factor of single crystal diamond mechanical resonators. *Japanese Journal of Applied Physics*, **2017**, 56, 024101	1.4	16
147	Interface electronic structure and the Schottky barrier at Al-diamond interface: hybrid density functional theory HSE06 investigation. *Wuli Xuebao/Acta Physica Sinica*, **2017**, 66, 088102	0.6	1
146	Electrical hysteresis in p-GaN metal□xide□emiconductor capacitor with atomic-layer-deposited Al2O3as gate dielectric. *Applied Physics Express*, **2016**, 9, 121002	2.4	12
145	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
144	Design and fabrication of high-performance diamond triple-gate field-effect transistors. *Scientific Reports*, **2016**, 6, 34757	4.9	29
143	Numerical Simulation on Thermal-Electrical Characteristics and Electrode Patterns of GaN LEDs with Graphene/NiO x Hybrid Electrode. *Chinese Physics Letters*, **2016**, 33, 078501	1.8	1
142	An Interface Engineered Multicolor Photodetector Based on n-Si(111)/TiO2 Nanorod Array Heterojunction. *Advanced Functional Materials*, **2016**, 26, 1400-1410	15.6	49
141	Investigation on the interfacial chemical state and band alignment for the sputtering-deposited CaF2/p-GaN heterojunction by angle-resolved X-ray photoelectron spectroscopy. *Journal of Applied Physics*, **2016**, 120, 185305	2.5	7
140	Assembly of a high-dielectric constant thin TiOx layer directly on H-terminated semiconductor diamond. *Applied Physics Letters*, **2016**, 108, 012105	3.4	20
139	High-k ZrO2/Al2O3 bilayer on hydrogenated diamond: Band configuration, breakdown field, and electrical properties of field-effect transistors. *Journal of Applied Physics*, **2016**, 120, 124504	2.5	15

138	Geometry-induced high performance ultraviolet photodetectors in kinked SnO2 nanowires. *Journal of Materials Chemistry C*, **2015**, 3, 8300-8306	7.1	20
137	Impedance analysis of Al2O3/H-terminated diamond metal-oxide-semiconductor structures. *Applied Physics Letters*, **2015**, 106, 083506	3.4	16
136	One-Step Self-Assembly Fabrication of High Quality NixMg1-xO Bowl-Shaped Array Film and Its Enhanced Photocurrent by Mg,2+ Doping. *Advanced Functional Materials*, **2015**, 25, 3256-3263	15.6	11
135	Electrical properties of atomic layer deposited HfO2/Al2O3 multilayer on diamond. *Diamond and Related Materials*, **2015**, 54, 55-58	3.5	19
134	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
133	Wide-Bandgap Semiconductors: Nanostructures, Defects, and Applications. *Journal of Nanomaterials*, **2015**, 2015, 1-2	3.2	
132	InGaN-based thin film solar cells: Epitaxy, structural design, and photovoltaic properties. *Journal of Applied Physics*, **2015**, 117, 105706	2.5	20
131	Hexagonal-like Nb□□nanoplates-based photodetectors and photocatalyst with high performances. *Scientific Reports*, **2015**, 5, 7716	4.9	88
130	Band gap tunable Zn2SnO4 nanocubes through thermal effect and their outstanding ultraviolet light photoresponse. *Scientific Reports*, **2014**, 4, 6847	4.9	40
129	Low on-resistance diamond field effect transistor with high-k ZrO2 as dielectric. *Scientific Reports*, **2014**, 4, 6395	4.9	82
128	Flexible ultraviolet photodetectors with broad photoresponse based on branched ZnS-ZnO heterostructure nanofilms. *Advanced Materials*, **2014**, 26, 3088-93	24	229
127	Photosensing performance of branched CdS/ZnO heterostructures as revealed by in situ TEM and photodetector tests. *Nanoscale*, **2014**, 6, 8084-90	7.7	59
126	New UV-A Photodetector Based on Individual Potassium Niobate Nanowires with High Performance. *Advanced Optical Materials*, **2014**, 2, 771-778	8.1	88
125	Recent advances in solution-processed inorganic nanofilm photodetectors. *Chemical Society Reviews*, **2014**, 43, 1400-22	58.5	121
124	Photodetectors: Flexible Ultraviolet Photodetectors with Broad Photoresponse Based on Branched ZnS-ZnO Heterostructure Nanofilms (Adv. Mater. 19/2014). *Advanced Materials*, **2014**, 26, 3087-3087	24	1
123	MEMS/NEMS based on mono-, nano-, and ultrananocrystalline diamond films. *MRS Bulletin*, **2014**, 39, 511-516	3.2	33
122	Energy dissipation in micron- and submicron-thick single crystal diamond mechanical resonators. *Applied Physics Letters*, **2014**, 105, 251904	3.4	17
121	Diamond field effect transistors with a high-dielectric constant Ta2O5as gate material. *Journal Physics D: Applied Physics*, **2014**, 47, 245102	3	22

120	A multilevel intermediate-band solar cell by InGaN/GaN quantum dots with a strain-modulated structure. *Advanced Materials*, **2014**, 26, 1414-20	24	35
119	High detectivity solar-blind high-temperature deep-ultraviolet photodetector based on multi-layered (l00) facet-oriented □Ga□□ nanobelts. *Small*, **2014**, 10, 1848-56	11	149
118	Diamond logic inverter with enhancement-mode metal-insulator-semiconductor field effect transistor. *Applied Physics Letters*, **2014**, 105, 082110	3.4	25
117	Electrochemical synthesis of transparent, amorphous, C□-rich, photoactive, and low-doped film with an interconnected structure. *Small*, **2013**, 9, 2064-8	11	19
116	Interfacial electronic band alignment of Ta2O5/hydrogen-terminated diamond heterojunction determined by X-ray photoelectron spectroscopy. *Diamond and Related Materials*, **2013**, 38, 24-27	3.5	8
115	Flexible SnO(2) hollow nanosphere film based high-performance ultraviolet photodetector. *Chemical Communications*, **2013**, 49, 3739-41	5.8	85
114	Electrical characteristics of hydrogen-terminated diamond metal-oxide-semiconductor with atomic layer deposited HfO2 as gate dielectric. *Applied Physics Letters*, **2013**, 102, 112910	3.4	37
113	Arbitrary multicolor photodetection by hetero-integrated semiconductor nanostructures. *Scientific Reports*, **2013**, 3, 2368	4.9	37
112	In situ switching layer-by-layer assembly: one-pot rapid layer assembly via alternation of reductive and oxidative electropolymerization. *Chemical Communications*, **2013**, 49, 6879-81	5.8	33
111	High-detectivity nanowire photodetectors governed by bulk photocurrent dynamics with thermally stable carbide contacts. *Nanotechnology*, **2013**, 24, 495701	3.4	15
110	Interfacial band configuration and electrical properties of LaAlO3/Al2O3/hydrogenated-diamond metal-oxide-semiconductor field effect transistors. *Journal of Applied Physics*, **2013**, 114, 084108	2.5	56
109	A comprehensive review of semiconductor ultraviolet photodetectors: from thin film to one-dimensional nanostructures. *Sensors*, **2013**, 13, 10482-518	3.8	511
108	Impact of Mg concentration on energy-band-depth profile of Mg-doped InN epilayers analyzed by hard X-ray photoelectron spectroscopy. *Applied Physics Letters*, **2013**, 103, 162110	3.4	7
107	Systematic investigation of surface and bulk electronic structure of undoped In-polar InN epilayers by hard X-ray photoelectron spectroscopy. *Journal of Applied Physics*, **2013**, 114, 033505	2.5	16
106	Normally-off HfO2-gated diamond field effect transistors. *Applied Physics Letters*, **2013**, 103, 092905	3.4	81
105	Temperature and Light Intensity Dependence of Photocurrent Transport Mechanisms in InGaN p□□ Homojunction Solar Cells. *Japanese Journal of Applied Physics*, **2013**, 52, 08JF04	1.4	7
104	Interfacial chemical bonding state and band alignment of CaF2/hydrogen-terminated diamond heterojunction. *Journal of Applied Physics*, **2013**, 113, 123706	2.5	6
103	Development of Diamond-based Optical and Electronic Devices. *Journal of Smart Processing*, **2013**, 2, 224-229	0.2	

102	Electrical Transport Properties of Large, Individual NiCo2O4 Nanoplates. *Advanced Functional Materials*, **2012**, 22, 998-1004	15.6	261
101	Band offsets of Al2O3 and HfO2 oxides deposited by atomic layer deposition technique on hydrogenated diamond. *Applied Physics Letters*, **2012**, 101, 252108	3.4	66
100	Nanoelectromechanical switch fabricated from single crystal diamond: Experiments and modeling. *Diamond and Related Materials*, **2012**, 24, 69-73	3.5	10
99	In-doped Ga2O3 nanobelt based photodetector with high sensitivity and wide-range photoresponse. *Journal of Materials Chemistry*, **2012**, 22, 17984		81
98	Development of AlN/diamond heterojunction field effect transistors. *Diamond and Related Materials*, **2012**, 24, 206-209	3.5	26
97	Stacking-order-dependent optoelectronic properties of bilayer nanofilm photodetectors made from hollow ZnS and ZnO microspheres. *Advanced Materials*, **2012**, 24, 5872-7	24	125
96	Amorphous silicon diamond based heterojunctions with high rectification ratio. *Journal of Non-Crystalline Solids*, **2012**, 358, 2110-2113	3.9	10
95	Ultrahigh quantum efficiency of CuO nanoparticle decorated In2Ge2O7 nanobelt deep-ultraviolet photodetectors. *Nanoscale*, **2012**, 4, 6318-24	7.7	26
94	One dimensional ternary CuBiS based semiconductor nanowires: synthesis, optical and electrical properties. *Journal of Materials Chemistry*, **2012**, 22, 17813		27
93	Localized mid-gap-states limited reverse current of diamond Schottky diodes. *Journal of Applied Physics*, **2012**, 111, 104503	2.5	11
92	InGaN photodiodes using CaF2 insulator for high-temperature UV detection. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 953-956		2
91	An optimized ultraviolet-A light photodetector with wide-range photoresponse based on ZnS/ZnO biaxial nanobelt. *Advanced Materials*, **2012**, 24, 2305-9	24	375
90	ZnO hollow spheres with double-yolk egg structure for high-performance photocatalysts and photodetectors. *Advanced Materials*, **2012**, 24, 3421-5	24	211
89	An Optimized Ultraviolet-A Light Photodetector with Wide-Range Photoresponse Based on ZnS/ZnO Biaxial Nanobelt (Adv. Mater. 17/2012). *Advanced Materials*, **2012**, 24, 2304-2304	24	2
88	Integration of high-dielectric constant Ta2O5 oxides on diamond for power devices. *Applied Physics Letters*, **2012**, 101, 232907	3.4	36
87	Chemical Vapor Deposition of ^{12}C Isotopically Enriched Polycrystalline Diamond. *Japanese Journal of Applied Physics*, **2012**, 51, 090104	1.4	8
86	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. *Japanese Journal of Applied Physics*, **2012**, 51, 090115	1.4	30
85	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. *Japanese Journal of Applied Physics*, **2012**, 51, 090115	1.4	54

84	Enhanced performance of InGaN solar cell by using a super-thin AlN interlayer. *Applied Physics Letters*, **2011**, 99, 161109	3.4	50
83	Carbon-Based Materials: Growth, Properties, MEMS/NEMS Technologies, and MEM/NEM Switches. *Critical Reviews in Solid State and Materials Sciences*, **2011**, 36, 66-101	10.1	48
82	SnO2 nanoribbons: excellent field-emitters. *CrystEngComm*, **2011**, 13, 2289	3.3	20
81	High-temperature ultraviolet detection based on InGaN Schottky photodiodes. *Applied Physics Letters*, **2011**, 99, 031115	3.4	51
80	Electrochemical-coupling layer-by-layer (ECC-LbL) assembly. *Journal of the American Chemical Society*, **2011**, 133, 7348-51	16.4	131
79	One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. *Chemical Society Reviews*, **2011**, 40, 2986-3004	58.5	321
78	Demonstration of diamond field effect transistors by AlN/diamond heterostructure. *Physica Status Solidi - Rapid Research Letters*, **2011**, 5, 125-127	2.5	33
77	Ultrahigh external quantum efficiency from thin SnO2 nanowire ultraviolet photodetectors. *Small*, **2011**, 7, 1012-7	11	235
76	ZnO hollow-sphere nanofilm-based high-performance and low-cost photodetector. *Small*, **2011**, 7, 2449-53	11	186
75	New Ultraviolet Photodetector Based on Individual Nb2O5 Nanobelts. *Advanced Functional Materials*, **2011**, 21, 3907-3915	15.6	257
74	High-performance NiCo(2) O(4) nanofilm photodetectors fabricated by an interfacial self-assembly strategy. *Advanced Materials*, **2011**, 23, 1988-92	24	159
73	Deep-ultraviolet solar-blind photoconductivity of individual gallium oxide nanobelts. *Nanoscale*, **2011**, 3, 1120-6	7.7	172
72	WO3 nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. *Journal of Materials Chemistry*, **2011**, 21, 6525		97
71	Sb(2)O(3) nanobelt networks for excellent visible-light-range photodetectors. *Nanotechnology*, **2011**, 22, 165704	3.4	25
70	High-performance metal-semiconductor-metal InGaN photodetectors using CaF2 as the insulator. *Applied Physics Letters*, **2011**, 98, 103502	3.4	52
69	Piezoelectric Pb(Zr0.52Ti0.48)O3 thin films on single crystal diamond: Structural, electrical, dielectric, and field-effect-transistor properties. *Journal of Applied Physics*, **2010**, 107, 024101	2.5	11
68	Light intensity dependence of photocurrent gain in single-crystal diamond detectors. *Physical Review B*, **2010**, 81,	3.3	66
67	Improved ferroelectric properties of Pb(Zr0.52,Ti0.48)O3 thin film on single crystal diamond using CaF2 layer. *Applied Physics Letters*, **2010**, 96, 012910	3.4	12

66	Batch production of single-crystal diamond bridges and cantilevers for microelectromechanical systems. *Journal of Micromechanics and Microengineering*, **2010**, 20, 085002	2	25
65	Microstructure of AlN with two-domain structure on (001) diamond substrate grown by metal-organic vapor phase epitaxy. *Diamond and Related Materials*, **2010**, 19, 131-133	3.5	7
64	Morphology-tunable In2Se3 nanostructures with enhanced electrical and photoelectrical performances via sulfur doping. *Journal of Materials Chemistry*, **2010**, 20, 6630		48
63	Fabrication of high-quality In2Se3 nanowire arrays toward high-performance visible-light photodetectors. *ACS Nano*, **2010**, 4, 1596-602	16.7	253
62	Fabrication and electrical properties of SrTiO3/diamond junctions. *Diamond and Related Materials*, **2010**, 19, 319-323	3.5	2
61	Mechanism of photoconductivity gain and persistent photoconductivity for diamond photodetector. *Diamond and Related Materials*, **2010**, 19, 205-207	3.5	6
60	Giant Improvement of the Performance of ZnO Nanowire Photodetectors by Au Nanoparticles. *Journal of Physical Chemistry C*, **2010**, 114, 19835-19839	3.8	281
59	Visible-blind deep-ultraviolet Schottky photodetector with a photocurrent gain based on individual Zn2GeO4 nanowire. *Applied Physics Letters*, **2010**, 97, 161102	3.4	81
58	An Efficient Way to Assemble ZnS Nanobelts as Ultraviolet-Light Sensors with Enhanced Photocurrent and Stability. *Advanced Functional Materials*, **2010**, 20, 500-508	15.6	206
57	Efficient Assembly of Bridged β-Ga2O3 Nanowires for Solar-Blind Photodetection. *Advanced Functional Materials*, **2010**, 20, 3972-3978	15.6	245
56	Centimeter-long V2O5 nanowires: from synthesis to field-emission, electrochemical, electrical transport, and photoconductive properties. *Advanced Materials*, **2010**, 22, 2547-52	24	312
55	Single-crystalline CdS nanobelts for excellent field-emitters and ultrahigh quantum-efficiency photodetectors. *Advanced Materials*, **2010**, 22, 3161-5	24	311
54	Electrical transport and high-performance photoconductivity in individual ZrS(2) nanobelts. *Advanced Materials*, **2010**, 22, 4151-6	24	145
53	Single-crystalline Sb2Se3 nanowires for high-performance field emitters and photodetectors. *Advanced Materials*, **2010**, 22, 4530-3	24	118
52	Ultrahigh-performance solar-blind photodetectors based on individual single-crystalline In2Ge2O7 nanobelts. *Advanced Materials*, **2010**, 22, 5145-9	24	217
51	Suspended single-crystal diamond nanowires for high-performance nanoelectromechanical switches. *Advanced Materials*, **2010**, 22, 5393-7	24	85
50	Growth mechanism of c-axis-oriented AlN on (111) diamond substrates by metal-organic vapor phase epitaxy. *Journal of Crystal Growth*, **2010**, 312, 1325-1328	1.6	21
49	Growth mechanism of c-axis-oriented AlN on (0 0 1) diamond substrates by metal-organic vapor phase epitaxy. *Journal of Crystal Growth*, **2010**, 312, 368-372	1.6	20

48	Analysis of polar direction of AlN grown on (0001) sapphire and 6H-SiC substrates by high-temperature metal-organic vapor phase epitaxy using coaxial impact collision ion scattering spectroscopy. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2365-2367		3
47	Integration of (PbZr0.52Ti0.48O3) on single crystal diamond as metal-ferroelectric-insulator-semiconductor capacitor. *Applied Physics Letters*, **2009**, 94, 242901	3.4	17
46	Single-Crystalline ZnS Nanobelts as Ultraviolet-Light Sensors. *Advanced Materials*, **2009**, 21, 2034-2039	24	479
45	High-Performance Blue/Ultraviolet-Light-Sensitive ZnSe-Nanobelt Photodetectors. *Advanced Materials*, **2009**, 21, 5016-5021	24	199
44	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. *Critical Reviews in Solid State and Materials Sciences*, **2009**, 34, 190-223	10.1	274
43	Bicrystalline ZnS Microbelts. *Crystal Growth and Design*, **2009**, 9, 2790-2793	3.5	33
42	Block-copolymer-nanowires with nanosized domain segregation and high charge mobilities as stacked p/n heterojunction arrays for repeatable photocurrent switching. *Journal of the American Chemical Society*, **2009**, 131, 18030-1	16.4	90
41	A comprehensive review of one-dimensional metal-oxide nanostructure photodetectors. *Sensors*, **2009**, 9, 6504-29	3.8	421
40	Schottky-barrier photodiode using p-diamond epilayer grown on p+-diamond substrates. *Diamond and Related Materials*, **2009**, 18, 296-298	3.5	14
39	Ultraviolet Detectors Based on Ultraviolet/Ozone Modified Hydrogenated Diamond Surfaces. *Applied Physics Express*, **2009**, 2, 065501	2.4	5
38	Persistent positive and transient absolute negative photoconductivity observed in diamond photodetectors. *Physical Review B*, **2008**, 78,	3.3	66
37	Vertical-type Schottky-barrier photodiode using p-diamond epilayer grown on heavily boron-doped p+-diamond substrate. *Diamond and Related Materials*, **2008**, 17, 1916-1921	3.5	6
36	Local photoconductivity on diamond metal-semiconductor-metal photodetectors measured by conducting probe atomic force microscopy. *Diamond and Related Materials*, **2007**, 16, 1074-1077	3.5	10
35	Single Schottky-barrier photodiode with interdigitated-finger geometry: Application to diamond. *Applied Physics Letters*, **2007**, 90, 123507	3.4	78
34	Submicron metal-semiconductor-metal diamond photodiodes toward improving the responsivity. *Applied Physics Letters*, **2007**, 91, 163510	3.4	11
33	Mechanism of photoconductivity gain for p-diamond Schottky photodiode. *Diamond and Related Materials*, **2007**, 16, 949-952	3.5	4
32	Crystallographic and electrical characterization of tungsten carbide thin films for Schottky contact of diamond photodiode. *Journal of Vacuum Science & Technology B*, **2006**, 24, 185		14
31	High-performance metal-semiconductor-metal deep-ultraviolet photodetectors based on homoepitaxial diamond thin film. *Applied Physics Letters*, **2006**, 89, 113509	3.4	100

30	Photovoltaic Schottky ultraviolet detectors fabricated on boron-doped homoepitaxial diamond layer. *Applied Physics Letters*, **2006**, 88, 033504	3.4	36
29	Thermally stable solar-blind diamond UV photodetector. *Diamond and Related Materials*, **2006**, 15, 1962-1966	3.5	60
28	Electrical characterization of Schottky diodes based on boron doped homoepitaxial diamond films by conducting probe atomic force microscopy. *Superlattices and Microstructures*, **2006**, 40, 343-349	2.8	13
27	Development of a compact angle-resolved secondary ion mass spectrometer for Ar+ sputtering. *Vacuum*, **2006**, 80, 768-770	3.7	2
26	Work function measurement of transition metal nitride and carbide thin films. *Vacuum*, **2006**, 80, 832-835	3.7	44
25	Tungsten carbide Schottky contact to diamond toward thermally stable photodiode. *Diamond and Related Materials*, **2005**, 14, 2003-2006	3.5	8
24	Deposition of vanadium carbide thin films using compound target sputtering and their field emission. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 1379-1383	2.9	19
23	Development of Thermally Stable, Solar-Blind Deep-Ultraviolet Diamond Photosensor. *Materials Transactions*, **2005**, 46, 1965-1968	1.3	5
22	Thermal Stability of Diamond Photodiodes Using Tungsten Carbide as Schottky Contact. *Japanese Journal of Applied Physics*, **2005**, 44, 7832-7838	1.4	34
21	Thermally stable visible-blind diamond photodiode using tungsten carbide Schottky contact. *Applied Physics Letters*, **2005**, 87, 022105	3.4	86
20	Nucleation of diamond by pure carbon ion bombardment□ transmission electron microscopy study. *Applied Physics Letters*, **2005**, 87, 063103	3.4	9
19	Diamond nucleation by energetic pure carbon bombardment. *Physical Review B*, **2005**, 72,	3.3	29
18	Large deep-ultraviolet photocurrent in metal-semiconductor-metal structures fabricated on as-grown boron-doped diamond. *Applied Physics Letters*, **2005**, 87, 113507	3.4	21
17	Single-crystalline nanotubes of IIB-VI semiconductors. *Applied Physics Letters*, **2005**, 87, 113107	3.4	42
16	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
15	Growth and stress evolution of hafnium nitride films sputtered from a compound target. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 214-220	2.9	17
14	Compound-target sputtering for niobium carbide thin-film deposition. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, L24		25
13	Formation and Control of Stoichiometric Hafnium Nitride Thin Films by Direct Sputtering of Hafnium Nitride Target. *Japanese Journal of Applied Physics*, **2003**, 42, L778-L780	1.4	21

12	Field electron emission from nanostructured heterogeneous HfNxOy films. *Applied Physics Letters*, **2003**, 83, 1626-1628	3.4	5
11	Violet/blue photoluminescence from CeO2 thin film. *Science Bulletin*, **2003**, 48, 1198		3
10	Anomalous temperature dependence of photoluminescence from a-C:H film deposited by energetic hydrocarbon ion beam. *Solid State Communications*, **2002**, 121, 287-290	1.6	11
9	(Ga,Mn,As) compounds grown on semi-insulating GaAs with mass-analyzed low energy dual ion beam deposition. *Journal of Crystal Growth*, **2002**, 234, 359-363	1.6	10
8	Nanodiamond formation by hot-filament chemical vapor deposition on carbon ions bombarded Si. *Journal of Crystal Growth*, **2002**, 236, 85-89	1.6	15
7	Surface morphology of ion-beam deposited carbon films under high temperature. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2002**, 20, 2072	2.9	
6	Violet/blue emission from hydrogenated amorphous carbon films deposited from energetic CH3+ ions and ion bombardment. *Journal of Applied Physics*, **2002**, 91, 1891-1893	2.5	5
5	Violet/Blue Emission from Hydrogenated Amorphous Carbon Film Prepared by Mass-Selected Ion-Beam Technique. *Physica Status Solidi A*, **2001**, 184, R4-R5		2
4	MnSi~1.73 grown on silicon with mass-analyzed low energy dual ion beam epitaxy technique. *Journal of Crystal Growth*, **2001**, 226, 517-520	1.6	16
3	Carbonization process of Si(1 0 0) by ion-beam bombardment. *Journal of Crystal Growth*, **2001**, 233, 446-450	1.6	2
2	Ion bombardment as the initial stage of diamond film growth. *Journal of Applied Physics*, **2001**, 89, 1983	2.5	5
1	Field-emission current from diamond film deposited on molybdenum. *Journal of Applied Physics*, **1998**, 84, 1081-1084	2.5	15