

# Meiyong Liao

## List of Publications by Year in descending order

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223  
papers

13,311  
citations

25034

57  
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23533

111  
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228  
all docs

228  
docs citations

228  
times ranked

13461  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-pressure MOCVD growth of InGaN thick films toward the photovoltaic applications. <i>Fundamental Research</i> , 2023, 3, 403-408.	3.3	3
2	Effect of a seed layer on microstructure and electrical properties of Ga <sub>2</sub> O <sub>3</sub> films on variously oriented Si substrates. <i>Vacuum</i> , 2022, 195, 110671.	3.5	20
3	Elastic strain engineered nanomechanical GaN resonators with thermoelastic dissipation dilution up to 600‰K. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	1
4	Stress effect on the resonance properties of single-crystal diamond cantilever resonators for microscopy applications. <i>Ultramicroscopy</i> , 2022, 234, 113464.	1.9	5
5	n-Type Diamond Metal-Semiconductor Field-Effect Transistor With High Operation Temperature of 300‰C. <i>IEEE Electron Device Letters</i> , 2022, 43, 588-591.	3.9	4
6	Radiation effect of X-ray with 1 kGy dose on the electrical properties of MESFET based on hydrogen-terminated diamond surface conductivity. <i>Functional Diamond</i> , 2022, 2, 40-45.	3.8	1
7	Tailoring the magnetic properties of galfenol film grown on single-crystal diamond. <i>Journal of Alloys and Compounds</i> , 2021, 858, 157683.	5.5	9
8	Insight into traps at Al <sub>2</sub> O <sub>3</sub> /p-GaN metal-oxide-semiconductor interface fabricated on free-standing GaN substrate. <i>Journal of Alloys and Compounds</i> , 2021, 853, 157356.	5.5	9
9	Position-sensitive solar-blind deep-ultraviolet detectors. <i>Scientia Sinica: Physica, Mechanica Et Astronomica</i> , 2021, 51, 027321.	0.4	0
10	Enhanced UV detection performance of a CdZnTe-based photodetector through surface polishing treatments. <i>Journal of Materials Chemistry C</i> , 2021, 9, 3601-3607.	5.5	11
11	Bio-inspired Multi-Mode Pain-Perceptual System (MMPPS) with Noxious Stimuli Warning, Damage Localization, and Enhanced Damage Protection. <i>Advanced Science</i> , 2021, 8, 2004208.	11.2	17
12	Resistance random access memory performance of MgZnO-based device with varying film thickness by an asymmetric electrode of Au/ITO. <i>Materialia</i> , 2021, 15, 101001.	2.7	2
13	Thermal mismatch induced stress characterization by dynamic resonance based on diamond MEMS. <i>Applied Physics Express</i> , 2021, 14, 045501.	2.4	3
14	Exceptional Point and Cross-Relaxation Effect in a Hybrid Quantum System. <i>PRX Quantum</i> , 2021, 2, .	9.2	43
15	Multi-Mode Pain-Perceptual System: Bio-inspired Multi-Mode Pain-Perceptual System (MMPPS) with Noxious Stimuli Warning, Damage Localization, and Enhanced Damage Protection ( <i>Adv. Sci.</i> 10/2021). <i>Advanced Science</i> , 2021, 8, 2170055.	11.2	1
16	An adjustable multi-color detector based on regulating TiO <sub>2</sub> surface adsorption and multi-junction synergy. <i>Nano Research</i> , 2021, 14, 3423-3430.	10.4	9
17	Temperature dependence of Young's modulus of single-crystal diamond determined by dynamic resonance. <i>Diamond and Related Materials</i> , 2021, 116, 108403.	3.9	17
18	Integrated TbDyFe Film on a Single-Crystal Diamond Microelectromechanical Resonator for Magnetic Sensing. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100352.	2.4	2

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19	Highly efficient diamond electromechanical transducer based on released metal-oxide-semiconductor structure. Applied Physics Letters, 2021, 119, .	3.3	3
20	Progress in semiconductor diamond photodetectors and MEMS sensors. Functional Diamond, 2021, 1, 29-46.	3.8	128
21	Polarization-induced hole doping for long-wavelength In-rich InGaN solar cells. Applied Physics Letters, 2021, 119, .	3.3	6
22	A simple method for preparing a TiO <sub>2</sub> -based back-gate controlled N-channel MSM-IGFET UV photodetector. Journal of Materials Chemistry C, 2020, 8, 1781-1787.	5.5	5
23	Enhanced magnetic sensing performance of diamond MEMS magnetic sensor with boron-doped FeGa film. Carbon, 2020, 170, 294-301.	10.3	18
24	Effect of Deep-Defects Excitation on Mechanical Energy Dissipation of Single-Crystal Diamond. Physical Review Letters, 2020, 125, 206802.	7.8	14
25	Strain-enhanced high <i>Q</i> -factor GaN micro-electromechanical resonator. Science and Technology of Advanced Materials, 2020, 21, 515-523.	6.1	11
26	Layered boron nitride enabling high-performance AlGaIn/GaN high electron mobility transistor. Journal of Alloys and Compounds, 2020, 829, 154542.	5.5	19
27	Electrical readout/characterization of single crystal diamond (SCD) cantilever resonators. Diamond and Related Materials, 2020, 103, 107711.	3.9	2
28	Enhancing Delta <i>E</i> Effect at High Temperatures of Galfenol/Ti/Single-Crystal Diamond Resonators for Magnetic Sensing. ACS Applied Materials & Interfaces, 2020, 12, 23155-23164.	8.0	24
29	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.	8.7	19
30	Precise characterization of atomic-scale corrosion of single crystal diamond in H <sub>2</sub> plasma based on MEMS/NEMS. Corrosion Science, 2020, 170, 108651.	6.6	6
31	Generating robust two-dimensional hole gas at the interface between boron nitride and diamond. Japanese Journal of Applied Physics, 2020, 59, 090910.	1.5	3
32	Vertical-Type Ni/GaN UV Photodetectors Fabricated on Free-Standing GaN Substrates. Applied Sciences (Switzerland), 2019, 9, 2895.	2.5	18
33	Boosting the doping efficiency of Mg in <i>p</i> -GaIn grown on the free-standing GaN substrates. Applied Physics Letters, 2019, 115, .	3.3	22
34	3D Solar-Blind Ga <sub>2</sub> O <sub>3</sub> Photodetector Array Realized Via Origami Method. Advanced Functional Materials, 2019, 29, 1906040.	14.9	120
35	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC <sub>x</sub> OH, a Direct Band Gap Semiconductor. ACS Nano, 2019, 13, 1195-1203.	14.6	30
36	Single-crystal diamond microelectromechanical resonator integrated with a magneto-strictive galfenol film for magnetic sensing. Carbon, 2019, 152, 788-795.	10.3	26

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37	Silicon-compatible Mg <sub>2</sub> Si/Si n-p photodiodes with high room temperature infrared responsivity. <i>Materials Science in Semiconductor Processing</i> , 2019, 102, 104577.	4.0	12
38	MOCVD Growth and Investigation of InGaN/GaN Heterostructure Grown on AlGaN/GaN-on-Si Template. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1746.	2.5	4
39	Energy-efficient Metal-Insulator-Metal Semiconductor Field-Effect Transistors Based on 2D Carrier Gases. <i>Advanced Electronic Materials</i> , 2019, 5, 1800832.	5.1	39
40	Single Crystal Diamond Micromechanical and Nanomechanical Resonators. <i>Topics in Applied Physics</i> , 2019, , 91-121.	0.8	2
41	Galfenol-Ti-Diamond Multilayer MEMS Resonator for Magnetic Sensor Working up to 773 K. , 2019, , .		1
42	Threshold Voltage Instability of Diamond Metal-Oxide-Semiconductor Field-Effect Transistors Based on 2D Hole Gas. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900538.	1.8	2
43	Hydrothermal crystallization of VO <sub>4</sub> <sup>3-</sup> stabilized t-Gd(P,V)O <sub>4</sub> :Eu <sup>3+</sup> nanocrystals for remarkably improved and color tailorable luminescence. <i>Chemical Engineering Journal</i> , 2019, 357, 84-93.	12.7	17
44	High-quality SiN <sub>x</sub> /p-GaN metal-insulator-semiconductor interface with low-density trap states. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 085105.	2.8	9
45	Ultrahigh Performance On-Chip Single Crystal Diamond NEMS/MEMS with Electrically Tailored Self-Sensing Enhancing Actuation. <i>Advanced Materials Technologies</i> , 2019, 4, 1800325.	5.8	25
46	High-performance visible to near-infrared photodetectors by using (Cd,Zn)Te single crystal. <i>Optics Express</i> , 2019, 27, 8935.	3.4	14
47	A density functional study of the effect of hydrogen on electronic properties and band discontinuity at anatase TiO <sub>2</sub> /diamond interface. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	8
48	Suppression in the electrical hysteresis by using CaF <sub>2</sub> dielectric layer for p-GaN MIS capacitors. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	17
49	Annealing effects on hydrogenated diamond NOR logic circuits. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	15
50	Pico-thermogravimetric material properties analysis using diamond cantilever beam. <i>Sensors and Actuators A: Physical</i> , 2018, 271, 356-363.	4.1	3
51	Interface trap characterization of Al <sub>2</sub> O <sub>3</sub> /GaN vertical-type MOS capacitors on GaN substrate with surface treatments. <i>Journal of Alloys and Compounds</i> , 2018, 767, 600-605.	5.5	26
52	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.	1.8	15
53	Reducing intrinsic energy dissipation in diamond-on-diamond mechanical resonators toward one million quality factor. <i>Physical Review Materials</i> , 2018, 2, .	2.4	17
54	A skin-inspired tactile sensor for smart prosthetics. <i>Science Robotics</i> , 2018, 3, .	17.6	195

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55	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, .	2.5	16
56	Nearly ideal vertical GaN Schottky barrier diodes with ultralow turn-on voltage and on-resistance. Applied Physics Express, 2017, 10, 051001.	2.4	36
57	Enhancement-mode hydrogenated diamond metal-oxide-semiconductor field-effect transistors with Y2O3 oxide insulator grown by electron beam evaporator. Applied Physics Letters, 2017, 110, .	3.3	64
58	Logic Circuits With Hydrogenated Diamond Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 922-925.	3.9	49
59	Deposition of TiO2/Al2O3 bilayer on hydrogenated diamond for electronic devices: Capacitors, field-effect transistors, and logic inverters. Journal of Applied Physics, 2017, 121, .	2.5	42
60	Effect of Sputter Deposition Atmosphere of AlN on the Electrical Properties of Hydrogen-terminated Diamond Field Effect Transistor with AlN/Al <sub>2</sub> O <sub>3</sub> Stack Gate. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700463.	1.8	1
61	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.	2.2	3
62	Reducing energy dissipation and surface effect of diamond nanoelectromechanical resonators by annealing in oxygen ambient. Carbon, 2017, 124, 281-287.	10.3	11
63	Initial leakage current paths in the vertical-type GaN-on-GaN Schottky barrier diodes. Applied Physics Letters, 2017, 111, .	3.3	55
64	Enhanced UV-visible light photodetectors with a TiO <sub>2</sub> /Si heterojunction using band engineering. Journal of Materials Chemistry C, 2017, 5, 12848-12856.	5.5	61
65	Interfacial energy barrier height of Al2O3/H-terminated (111) diamond heterointerface investigated by X-ray photoelectron spectroscopy. Applied Physics Letters, 2017, 111, .	3.3	7
66	Improvement of the quality factor of single crystal diamond mechanical resonators. Japanese Journal of Applied Physics, 2017, 56, 024101.	1.5	26
67	Pico-thermogravimetric material properties analysis using diamond cantilever beam. , 2017, , .		0
68	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.	0.5	3
69	An Interface Engineered Multicolor Photodetector Based on n-Si(111)/TiO <sub>2</sub> Nanorod Array Heterojunction. Advanced Functional Materials, 2016, 26, 1400-1410.	14.9	64
70	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, .	2.5	7
71	Assembly of a high-dielectric constant thin TiOx layer directly on H-terminated semiconductor diamond. Applied Physics Letters, 2016, 108, .	3.3	26
72	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, .	2.5	25

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73	Electrical hysteresis in p-GaN metal-oxide-semiconductor capacitor with atomic-layer-deposited Al <sub>2</sub> O <sub>3</sub> as gate dielectric. Applied Physics Express, 2016, 9, 121002.	2.4	19
74	P-Channel InGaN/GaN heterostructure metal-oxide-semiconductor field effect transistor based on polarization-induced two-dimensional hole gas. Scientific Reports, 2016, 6, 23683.	3.3	37
75	Design and fabrication of high-performance diamond triple-gate field-effect transistors. Scientific Reports, 2016, 6, 34757.	3.3	37
76	Numerical Simulation on Thermal-Electrical Characteristics and Electrode Patterns of GaN LEDs with Graphene/NiO Hybrid Electrode. Chinese Physics Letters, 2016, 33, 078501.	3.3	2
77	Control of normally on/off characteristics in hydrogenated diamond metal-insulator-semiconductor field-effect transistors. Journal of Applied Physics, 2015, 118, .	2.5	35
78	Wide-Bandgap Semiconductors: Nanostructures, Defects, and Applications. Journal of Nanomaterials, 2015, 2015, 1-2.	2.7	0
79	InGaN-based thin film solar cells: Epitaxy, structural design, and photovoltaic properties. Journal of Applied Physics, 2015, 117, .	2.5	26
80	Hexagonal-like Nb <sub>2</sub> O <sub>5</sub> Nanoplates-Based Photodetectors and Photocatalyst with High Performances. Scientific Reports, 2015, 5, 7716.	3.3	105
81	Geometry-induced high performance ultraviolet photodetectors in kinked SnO <sub>2</sub> nanowires. Journal of Materials Chemistry C, 2015, 3, 8300-8306.	5.5	31
82	Impedance analysis of Al <sub>2</sub> O <sub>3</sub> /H-terminated diamond metal-oxide-semiconductor structures. Applied Physics Letters, 2015, 106, 083506.	3.3	16
83	One-Step Self-Assembly Fabrication of High Quality Ni <sub>x</sub> Mg <sub>1-x</sub> O Bowl-Shaped Array Film and Its Enhanced Photocurrent by Mg <sup>2+</sup> Doping. Advanced Functional Materials, 2015, 25, 3256-3263.	14.9	13
84	Electrical properties of atomic layer deposited HfO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> multilayer on diamond. Diamond and Related Materials, 2015, 54, 55-58.	3.9	21
85	Energy dissipation in micron- and submicron-thick single crystal diamond mechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	26
86	Diamond FETs using heterojunction and high-k dielectrics. , 2014, , .		0
87	Diamond field effect transistors with a high-dielectric constant Ta <sub>2</sub> O <sub>5</sub> as gate material. Journal Physics D: Applied Physics, 2014, 47, 245102.	2.8	31
88	A Multilevel Intermediate-Band Solar Cell by InGaN/GaN Quantum Dots with a Strain-Modulated Structure. Advanced Materials, 2014, 26, 1414-1420.	21.0	40
89	High Detectivity Solar-Blind High-Temperature Deep-Ultraviolet Photodetector Based on Multi-Layered (<i>I</i>>00) Facet-Oriented <i>I</i> <sup>2</sup> <i>I</i>-Ga <sub>2</sub> O <sub>3</sub> Nanobelts. Small, 2014, 10, 1848-1856.	10.0	185
90	Diamond logic inverter with enhancement-mode metal-insulator-semiconductor field effect transistor. Applied Physics Letters, 2014, 105, .	3.3	29

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91	Flexible Ultraviolet Photodetectors with Broad Photoresponse Based on Branched ZnS/ZnO Heterostructure Nanofilms. <i>Advanced Materials</i> , 2014, 26, 3088-3093.	21.0	251
92	Photosensing performance of branched CdS/ZnO heterostructures as revealed by in situ TEM and photodetector tests. <i>Nanoscale</i> , 2014, 6, 8084.	5.6	64
93	New UV-Photodetector Based on Individual Potassium Niobate Nanowires with High Performance. <i>Advanced Optical Materials</i> , 2014, 2, 771-778.	7.3	97
94	Recent advances in solution-processed inorganic nanofilm photodetectors. <i>Chemical Society Reviews</i> , 2014, 43, 1400-1422.	38.1	142
95	Photodetectors: Flexible Ultraviolet Photodetectors with Broad Photoresponse Based on Branched ZnS-ZnO Heterostructure Nanofilms ( <i>Adv. Mater.</i> 19/2014). <i>Advanced Materials</i> , 2014, 26, 3087-3087.	21.0	1
96	MEMS/NEMS based on mono-, nano-, and ultrananocrystalline diamond films. <i>MRS Bulletin</i> , 2014, 39, 511-516.	3.5	45
97	Band Gap Tunable Zn <sub>2</sub> SnO <sub>4</sub> Nanocubes through Thermal Effect and Their Outstanding Ultraviolet Light Photoresponse. <i>Scientific Reports</i> , 2014, 4, 6847.	3.3	60
98	Low on-resistance diamond field effect transistor with high-k ZrO <sub>2</sub> as dielectric. <i>Scientific Reports</i> , 2014, 4, 6395.	3.3	107
99	Electrochemical Synthesis of Transparent, Amorphous, C <sub>60</sub> -Rich, Photoactive, and Low-Doped Film with an Interconnected Structure. <i>Small</i> , 2013, 9, 2064-2068.	10.0	21
100	Interfacial electronic band alignment of Ta <sub>2</sub> O <sub>5</sub> /hydrogen-terminated diamond heterojunction determined by X-ray photoelectron spectroscopy. <i>Diamond and Related Materials</i> , 2013, 38, 24-27.	3.9	11
101	Flexible SnO <sub>2</sub> hollow nanosphere film based high-performance ultraviolet photodetector. <i>Chemical Communications</i> , 2013, 49, 3739.	4.1	93
102	Electrical characteristics of hydrogen-terminated diamond metal-oxide-semiconductor with atomic layer deposited HfO <sub>2</sub> as gate dielectric. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	42
103	Arbitrary Multicolor Photodetection by Hetero-integrated Semiconductor Nanostructures. <i>Scientific Reports</i> , 2013, 3, 2368.	3.3	41
104	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.	4.1	35
105	High-detectivity nanowire photodetectors governed by bulk photocurrent dynamics with thermally stable carbide contacts. <i>Nanotechnology</i> , 2013, 24, 495701.	2.6	18
106	Interfacial band configuration and electrical properties of LaAlO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> /hydrogenated-diamond metal-oxide-semiconductor field effect transistors. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	60
107	A Comprehensive Review of Semiconductor Ultraviolet Photodetectors: From Thin Film to One-Dimensional Nanostructures. <i>Sensors</i> , 2013, 13, 10482-10518.	3.8	675
108	Impact of Mg concentration on energy-band-depth profile of Mg-doped InN epilayers analyzed by hard X-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	8



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109	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, .	2.5	17
110	Normally-off HfO <sub>2</sub> -gated diamond field effect transistors. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	105
111	Temperature and Light Intensity Dependence of Photocurrent Transport Mechanisms in InGaN p-n Homojunction Solar Cells. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JF04.	1.5	8
112	Interfacial chemical bonding state and band alignment of CaF <sub>2</sub> /hydrogen-terminated diamond heterojunction. <i>Journal of Applied Physics</i> , 2013, 113, 123706.	2.5	7
113	Development of Diamond-based Optical and Electronic Devices. <i>Journal of Smart Processing</i> , 2013, 2, 224-229.	0.1	0
114	Integration of high-dielectric constant Ta <sub>2</sub> O <sub>5</sub> oxides on diamond for power devices. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	41
115	Chemical Vapor Deposition of <sup>12</sup> C Isotopically Enriched Polycrystalline Diamond. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 090104.	1.5	13
116	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 090115.	1.5	43
117	Band offsets of Al <sub>2</sub> O <sub>3</sub> and HfO <sub>2</sub> oxides deposited by atomic layer deposition technique on hydrogenated diamond. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	76
118	Nanoelectromechanical switch fabricated from single crystal diamond: Experiments and modeling. <i>Diamond and Related Materials</i> , 2012, 24, 69-73.	3.9	13
119	In-doped Ga <sub>2</sub> O <sub>3</sub> nanobelt based photodetector with high sensitivity and wide-range photoresponse. <i>Journal of Materials Chemistry</i> , 2012, 22, 17984.	6.7	92
120	Development of AlN/diamond heterojunction field effect transistors. <i>Diamond and Related Materials</i> , 2012, 24, 206-209.	3.9	31
121	Stacking-Order-Dependent Optoelectronic Properties of Bilayer Nanofilm Photodetectors Made From Hollow ZnS and ZnO Microspheres. <i>Advanced Materials</i> , 2012, 24, 5872-5877.	21.0	134
122	Amorphous silicon diamond based heterojunctions with high rectification ratio. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 2110-2113.	3.1	12
123	Ultrahigh quantum efficiency of CuO nanoparticle decorated In <sub>2</sub> Ge <sub>2</sub> O <sub>7</sub> nanobelt deep-ultraviolet photodetectors. <i>Nanoscale</i> , 2012, 4, 6318.	5.6	32
124	One dimensional ternary Cu-Bi-S based semiconductor nanowires: synthesis, optical and electrical properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 17813.	6.7	27
125	Localized mid-gap-states limited reverse current of diamond Schottky diodes. <i>Journal of Applied Physics</i> , 2012, 111, 104503.	2.5	12
126	InGaN photodiodes using CaF <sub>2</sub> insulator for high-temperature UV detection. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 953-956.	0.8	2



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127	An Optimized Ultraviolet-A Light Photodetector with Wide-Range Photoresponse Based on ZnS/ZnO Biaxial Nanobelt. <i>Advanced Materials</i> , 2012, 24, 2305-2309.	21.0	426
128	ZnO Hollow Spheres with Double-Yolk Egg Structure for High-Performance Photocatalysts and Photodetectors. <i>Advanced Materials</i> , 2012, 24, 3421-3425.	21.0	223
129	An Optimized Ultraviolet-A Light Photodetector with Wide-Range Photoresponse Based on ZnS/ZnO Biaxial Nanobelt (Adv. Mater. 17/2012). <i>Advanced Materials</i> , 2012, 24, 2304-2304.	21.0	2
130	Electrical Transport Properties of Large, Individual NiCo <sub>2</sub> O <sub>4</sub> Nanoplates. <i>Advanced Functional Materials</i> , 2012, 22, 998-1004.	14.9	297
131	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 090115.	1.5	60
132	Deep-ultraviolet solar-blind photoconductivity of individual gallium oxide nanobelts. <i>Nanoscale</i> , 2011, 3, 1120.	5.6	210
133	WO <sub>3</sub> nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. <i>Journal of Materials Chemistry</i> , 2011, 21, 6525.	6.7	103
134	Enhanced performance of InGaN solar cell by using a super-thin AlN interlayer. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	62
135	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.	12.3	55
136	SnO <sub>2</sub> nanoribbons: excellent field-emitters. <i>CrystEngComm</i> , 2011, 13, 2289.	2.6	23
137	High-temperature ultraviolet detection based on InGaN Schottky photodiodes. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	61
138	Electrochemical-Coupling Layer-by-Layer (ECC-LbL) Assembly. <i>Journal of the American Chemical Society</i> , 2011, 133, 7348-7351.	13.7	144
139	One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. <i>Chemical Society Reviews</i> , 2011, 40, 2986.	38.1	352
140	Demonstration of diamond field effect transistors by AlN/diamond heterostructure. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 125-127.	2.4	39
141	Ultrahigh External Quantum Efficiency from Thin SnO <sub>2</sub> Nanowire Ultraviolet Photodetectors. <i>Small</i> , 2011, 7, 1012-1017.	10.0	278
142	ZnO Hollow Sphere Nanofilm-Based High-Performance and Low-Cost Photodetector. <i>Small</i> , 2011, 7, 2449-2453.	10.0	209
143	New Ultraviolet Photodetector Based on Individual Nb <sub>2</sub> O <sub>5</sub> Nanobelts. <i>Advanced Functional Materials</i> , 2011, 21, 3907-3915.	14.9	285
144	High-Performance NiCo <sub>2</sub> O <sub>4</sub> Nanofilm Photodetectors Fabricated by an Interfacial Self-Assembly Strategy. <i>Advanced Materials</i> , 2011, 23, 1988-1992.	21.0	181

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145	Nanoelectromechanical switches based on diamond-on-diamond. , 2011, , .		0
146	Bridging wide bandgap nanowires for ultraviolet light detection. , 2011, , .		0
147	Sb <sub>2</sub> O <sub>3</sub> nanobelt networks for excellent visible-light-range photodetectors. Nanotechnology, 2011, 22, 165704.	2.6	29
148	High-performance metal-semiconductor-metal InGaN photodetectors using CaF <sub>2</sub> as the insulator. Applied Physics Letters, 2011, 98, 103502.	3.3	56
149	An Efficient Way to Assemble ZnS Nanobelts as Ultraviolet Light Sensors with Enhanced Photocurrent and Stability. Advanced Functional Materials, 2010, 20, 500-508.	14.9	222
150	Efficient Assembly of Bridged Ga <sub>2</sub> O <sub>3</sub> Nanowires for Solar Blind Photodetection. Advanced Functional Materials, 2010, 20, 3972-3978.	14.9	292
151	Centimeter-Long V <sub>2</sub> O <sub>5</sub> Nanowires: From Synthesis to Field Emission, Electrochemical, Electrical Transport, and Photoconductive Properties. Advanced Materials, 2010, 22, 2547-2552.	21.0	359
152	Single-Crystalline CdS Nanobelts for Excellent Field Emitters and Ultrahigh Quantum Efficiency Photodetectors. Advanced Materials, 2010, 22, 3161-3165.	21.0	342
153	Electrical Transport and High-Performance Photoconductivity in Individual ZrS <sub>2</sub> Nanobelts. Advanced Materials, 2010, 22, 4151-4156.	21.0	169
154	Single-Crystalline Sb <sub>2</sub> Se <sub>3</sub> Nanowires for High-Performance Field Emitters and Photodetectors. Advanced Materials, 2010, 22, 4530-4533.	21.0	147
155	Ultrahigh-Performance Solar Blind Photodetectors Based on Individual Single-Crystalline In <sub>2</sub> Ge <sub>2</sub> O <sub>7</sub> Nanobelts. Advanced Materials, 2010, 22, 5145-5149.	21.0	249
156	Suspended Single-Crystal Diamond Nanowires for High-Performance Nanoelectromechanical Switches. Advanced Materials, 2010, 22, 5393-5397.	21.0	101
157	Growth mechanism of c-axis-oriented AlN on (1 1 1) diamond substrates by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2010, 312, 1325-1328.	1.5	23
158	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.	1.5	24
159	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.	0.8	3
160	Piezoelectric Pb(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )O <sub>3</sub> thin films on single crystal diamond: Structural, electrical, dielectric, and field-effect-transistor properties. Journal of Applied Physics, 2010, 107, 024101.	2.5	11
161	Single-crystalline ZnS nanobelts with sharp ultraviolet (UV) emission at room temperature as UV-light sensors. , 2010, , .		0
162	Light intensity dependence of photocurrent gain in single-crystal diamond detectors. Physical Review B, 2010, 81, .	3.2	81

#	ARTICLE	IF	CITATIONS
163	Improved ferroelectric properties of Pb(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )O <sub>3</sub> thin film on single crystal diamond using CaF <sub>2</sub> layer. Applied Physics Letters, 2010, 96, .	3.3	12
164	Batch production of single-crystal diamond bridges and cantilevers for microelectromechanical systems. Journal of Micromechanics and Microengineering, 2010, 20, 085002.	2.6	36
165	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.	3.9	7
166	Morphology-tunable In <sub>2</sub> Se <sub>3</sub> nanostructures with enhanced electrical and photoelectrical performances via sulfur doping. Journal of Materials Chemistry, 2010, 20, 6630.	6.7	54
167	Fabrication of High-Quality In <sub>2</sub> Se <sub>3</sub> Nanowire Arrays toward High-Performance Visible-Light Photodetectors. ACS Nano, 2010, 4, 1596-1602.	14.6	289
168	Fabrication and electrical properties of SrTiO <sub>3</sub> /diamond junctions. Diamond and Related Materials, 2010, 19, 319-323.	3.9	3
169	Mechanism of photoconductivity gain and persistent photoconductivity for diamond photodetector. Diamond and Related Materials, 2010, 19, 205-207.	3.9	9
170	Giant Improvement of the Performance of ZnO Nanowire Photodetectors by Au Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 19835-19839.	3.1	319
171	Visible-blind deep-ultraviolet Schottky photodetector with a photocurrent gain based on individual Zn <sub>2</sub> GeO <sub>4</sub> nanowire. Applied Physics Letters, 2010, 97, .	3.3	89
172	Current Progress of Pressure Sensors for Harsh Environments Based on Wide-Bandgap Semiconductors. Recent Patents on Materials Science, 2010, 3, 96-105.	0.5	1
173	Current Progress of Pressure Sensors for Harsh Environments Based on Wide-Bandgap Semiconductors. Recent Patents on Materials Science, 2010, 3, 96-105.	0.5	0
174	Schottky photodiode using submicron thick diamond epilayer for flame sensing. Nano-Micro Letters, 2010, 1, .	27.0	0
175	Integration of (PbZr <sub>0.52</sub> Ti <sub>0.48</sub> O <sub>3</sub> ) on single crystal diamond as metal-ferroelectric-insulator-semiconductor capacitor. Applied Physics Letters, 2009, 94, .	3.3	17
176	Single-Crystalline ZnS Nanobelts as Ultraviolet-Light Sensors. Advanced Materials, 2009, 21, 2034-2039.	21.0	537
177	High-Performance Blue/Ultraviolet-Light-Sensitive ZnSe Nanobelt Photodetectors. Advanced Materials, 2009, 21, 5016-5021.	21.0	217
178	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. Critical Reviews in Solid State and Materials Sciences, 2009, 34, 190-223.	12.3	306
179	Bicrystalline ZnS Microbelts. Crystal Growth and Design, 2009, 9, 2790-2793.	3.0	33
180	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, 18030-18031.	13.7	93

#	ARTICLE	IF	CITATIONS
181	A Comprehensive Review of One-Dimensional Metal-Oxide Nanostructure Photodetectors. <i>Sensors</i> , 2009, 9, 6504-6529.	3.8	491
182	Schottky-barrier photodiode using p-diamond epilayer grown on p+-diamond substrates. <i>Diamond and Related Materials</i> , 2009, 18, 296-298.	3.9	14
183	Persistent positive and transient absolute negative photoconductivity observed in diamond photodetectors. <i>Physical Review B</i> , 2008, 78, .	3.2	75
184	Vertical-type Schottky-barrier photodiode using p-diamond epilayer grown on heavily boron-doped p+-diamond substrate. <i>Diamond and Related Materials</i> , 2008, 17, 1916-1921.	3.9	7
185	Single Schottky-barrier photodiode with interdigitated-finger geometry: Application to diamond. <i>Applied Physics Letters</i> , 2007, 90, 123507.	3.3	96
186	Submicron metal-semiconductor-metal diamond photodiodes toward improving the responsivity. <i>Applied Physics Letters</i> , 2007, 91, 163510.	3.3	13
187	Mechanism of photoconductivity gain for p-diamond Schottky photodiode. <i>Diamond and Related Materials</i> , 2007, 16, 949-952.	3.9	4
188	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.	3.9	10
189	Thermally stable solar-blind diamond UV photodetector. <i>Diamond and Related Materials</i> , 2006, 15, 1962-1966.	3.9	69
190	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.	3.1	13
191	Development of a compact angle-resolved secondary ion mass spectrometer for Ar+ sputtering. <i>Vacuum</i> , 2006, 80, 768-770.	3.5	3
192	Work function measurement of transition metal nitride and carbide thin films. <i>Vacuum</i> , 2006, 80, 832-835.	3.5	61
193	Crystallographic and electrical characterization of tungsten carbide thin films for Schottky contact of diamond photodiode. <i>Journal of Vacuum Science &amp; Technology B</i> , 2006, 24, 185.	1.3	14
194	High-performance metal-semiconductor-metal deep-ultraviolet photodetectors based on homoepitaxial diamond thin film. <i>Applied Physics Letters</i> , 2006, 89, 113509.	3.3	121
195	Photovoltaic Schottky ultraviolet detectors fabricated on boron-doped homoepitaxial diamond layer. <i>Applied Physics Letters</i> , 2006, 88, 033504.	3.3	43
196	Development of Thermally Stable, Solar-Blind Deep-Ultraviolet Diamond Photosensor. <i>Materials Transactions</i> , 2005, 46, 1965-1968.	1.2	6
197	Thermal Stability of Diamond Photodiodes Using Tungsten Carbide as Schottky Contact. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 7832-7838.	1.5	38
198	Thermally stable visible-blind diamond photodiode using tungsten carbide Schottky contact. <i>Applied Physics Letters</i> , 2005, 87, 022105.	3.3	94

#	ARTICLE	IF	CITATIONS
199	Nucleation of diamond by pure carbon ion bombardment—a transmission electron microscopy study. Applied Physics Letters, 2005, 87, 063103.	3.3	11
200	Diamond nucleation by energetic pure carbon bombardment. Physical Review B, 2005, 72, .	3.2	33
201	Large deep-ultraviolet photocurrent in metal-semiconductor-metal structures fabricated on as-grown boron-doped diamond. Applied Physics Letters, 2005, 87, 113507.	3.3	28
202	Single-crystalline nanotubes of IIB-VI semiconductors. Applied Physics Letters, 2005, 87, 113107.	3.3	46
203	Tungsten carbide Schottky contact to diamond toward thermally stable photodiode. Diamond and Related Materials, 2005, 14, 2003-2006.	3.9	9
204	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.	2.1	21
205	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.	2.1	30
206	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.	2.1	21
207	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.	1.6	32
208	Field electron emission from nanostructured heterogeneous HfN <sub>x</sub> O <sub>y</sub> films. Applied Physics Letters, 2003, 83, 1626-1628.	3.3	7
209	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.	1.5	22
210	Violet/blue photoluminescence from CeO <sub>2</sub> thin film. Science Bulletin, 2003, 48, 1198.	1.7	3
211	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.	2.1	0
212	Violet/blue emission from hydrogenated amorphous carbon films deposited from energetic CH <sub>3</sub> <sup>+</sup> ions and ion bombardment. Journal of Applied Physics, 2002, 91, 1891-1893.	2.5	5
213	Anomalous temperature dependence of photoluminescence from a-C:H film deposited by energetic hydrocarbon ion beam. Solid State Communications, 2002, 121, 287-290.	1.9	11
214	(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.	1.5	12
215	Nanodiamond formation by hot-filament chemical vapor deposition on carbon ions bombarded Si. Journal of Crystal Growth, 2002, 236, 85-89.	1.5	17
216	Violet/Blue Emission from Hydrogenated Amorphous Carbon Film Prepared by Mass-Selected Ion-Beam Technique. Physica Status Solidi A, 2001, 184, R4-R5.	1.7	2

#	ARTICLE	IF	CITATIONS
217	MnSi <sup>1/4</sup> 1.73 grown on silicon with mass-analyzed low energy dual ion beam epitaxy technique. Journal of Crystal Growth, 2001, 226, 517-520.	1.5	19
218	Carbonization process of Si(100) by ion-beam bombardment. Journal of Crystal Growth, 2001, 233, 446-450.	1.5	2
219	Ion bombardment as the initial stage of diamond film growth. Journal of Applied Physics, 2001, 89, 1983.	2.5	9
220	Field-emission current from diamond film deposited on molybdenum. Journal of Applied Physics, 1998, 84, 1081-1084.	2.5	16
221	Measurement of field emission characteristics from transition metal nitride and carbide thin films. , 0, , .		0
222	Field electron emission from amorphous AlN and Cr doped AlN Films. , 0, , .		0
223	Ultraviolet Detectors Based on Ultravioletâ€œOzone Modified Hydrogenated Diamond Surfaces. Applied Physics Express, 0, 2, 065501.	2.4	6