Meiyong Liao

List of Publications by Year
in descending order

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223 papers	13,311 citations	25034 57 h-index	23533 111 g-index
228 all docs	228 docs citations	228 times ranked	13461 citing authors

#	Article	IF	Citations
1	A Comprehensive Review of Semiconductor Ultraviolet Photodetectors: From Thin Film to One-Dimensional Nanostructures. Sensors, 2013, 13, 10482-10518.	3.8	675
2	Singleâ€Crystalline ZnS Nanobelts as Ultravioletâ€Light Sensors. Advanced Materials, 2009, 21, 2034-2039.	21.0	537
3	A Comprehensive Review of One-Dimensional Metal-Oxide Nanostructure Photodetectors. Sensors, 2009, 9, 6504-6529.	3.8	491
4	An Optimized Ultravioletâ€A Light Photodetector with Wideâ€Range Photoresponse Based on ZnS/ZnO Biaxial Nanobelt. Advanced Materials, 2012, 24, 2305-2309.	21.0	426
5	Centimeterâ€Long V₂O₅ Nanowires: From Synthesis to Fieldâ€Emission, Electrochemical, Electrical Transport, and Photoconductive Properties. Advanced Materials, 2010, 22, 2547-2552.	21.0	359
6	One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. Chemical Society Reviews, 2011, 40, 2986.	38.1	352
7	Singleâ€Crystalline CdS Nanobelts for Excellent Fieldâ€Emitters and Ultrahigh Quantumâ€Efficiency Photodetectors. Advanced Materials, 2010, 22, 3161-3165.	21.0	342
8	Giant Improvement of the Performance of ZnO Nanowire Photodetectors by Au Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 19835-19839.	3.1	319
9	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
10	Electrical Transport Properties of Large, Individual NiCo₂O₄ Nanoplates. Advanced Functional Materials, 2012, 22, 998-1004.	14.9	297
11	Efficient Assembly of Bridged Î²â€Ga₂O₃ Nanowires for Solarâ€Blind Photodetection. Advanced Functional Materials, 2010, 20, 3972-3978.	14.9	292
12	Fabrication of High-Quality In₂Se₃ Nanowire Arrays toward High-Performance Visible-Light Photodetectors. ACS Nano, 2010, 4, 1596-1602.	14.6	289
13	New Ultraviolet Photodetector Based on Individual Nb₂O₅ Nanobelts. Advanced Functional Materials, 2011, 21, 3907-3915.	14.9	285
14	Ultrahigh External Quantum Efficiency from Thin SnO₂ Nanowire Ultraviolet Photodetectors. Small, 2011, 7, 1012-1017.	10.0	278
15	Flexible Ultraviolet Photodetectors with Broad Photoresponse Based on Branched ZnSâ€ZnO Heterostructure Nanofilms. Advanced Materials, 2014, 26, 3088-3093.	21.0	251
16	Ultrahighâ€Performance Solarâ€Blind Photodetectors Based on Individual Singleâ€crystalline In₂Ge₂O₇ Nanobelts. Advanced Materials, 2010, 22, 5145-5149.	21.0	249
17	ZnO Hollow Spheres with Doubleâ€Yolk Egg Structure for Highâ€Performance Photocatalysts and Photodetectors. Advanced Materials, 2012, 24, 3421-3425.	21.0	223
18	An Efficient Way to Assemble ZnS Nanobelts as Ultravioletâ€Light Sensors with Enhanced Photocurrent and Stability. Advanced Functional Materials, 2010, 20, 500-508.	14.9	222

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19	Highâ€Performance Blue/Ultravioletâ€Lightâ€Sensitive ZnSeâ€Nanobelt Photodetectors. Advanced Materials, 2009, 21, 5016-5021.	21.0	217
20	Deep-ultraviolet solar-blind photoconductivity of individual gallium oxide nanobelts. Nanoscale, 2011, 3, 1120.	5.6	210
21	ZnO Hollowâ€Sphere Nanofilmâ€Based Highâ€Performance and Lowâ€Cost Photodetector. Small, 2011, 7, 2449-2453.	10.0	209
22	A skin-inspired tactile sensor for smart prosthetics. Science Robotics, 2018, 3, .	17.6	195
23	High Detectivity Solarâ€Blind Highâ€Temperature Deepâ€Ultraviolet Photodetector Based on Multiâ€Layered (l00) Facetâ€Oriented Î²â€Ga₂O₃ Nanobelts. Small, 2014, 10, 1848-1856.	10.0	185
24	Highâ€Performance NiCo₂O₄ Nanofilm Photodetectors Fabricated by an Interfacial Selfâ€Assembly Strategy. Advanced Materials, 2011, 23, 1988-1992.	21.0	181
25	Electrical Transport and Highâ€Performance Photoconductivity in Individual ZrS₂ Nanobelts. Advanced Materials, 2010, 22, 4151-4156.	21.0	169
26	Singleâ€Crystalline Sb₂Se₃ Nanowires for Highâ€Performance Field Emitters and Photodetectors. Advanced Materials, 2010, 22, 4530-4533.	21.0	147
27	Electrochemical-Coupling Layer-by-Layer (ECCâ€“LbL) Assembly. Journal of the American Chemical Society, 2011, 133, 7348-7351.	13.7	144
28	Recent advances in solution-processed inorganic nanofilm photodetectors. Chemical Society Reviews, 2014, 43, 1400-1422.	38.1	142
29	Stackingâ€Orderâ€Dependent Optoelectronic Properties of Bilayer Nanofilm Photodetectors Made From Hollow ZnS and ZnO Microspheres. Advanced Materials, 2012, 24, 5872-5877.	21.0	134
30	Progress in semiconductor diamond photodetectors and MEMS sensors. Functional Diamond, 2021, 1, 29-46.	3.8	128
31	High-performance metal-semiconductor-metal deep-ultraviolet photodetectors based on homoepitaxial diamond thin film. Applied Physics Letters, 2006, 89, 113509.	3.3	121
32	3D Solarâ€Blind Ga₂O₃ Photodetector Array Realized Via Origami Method. Advanced Functional Materials, 2019, 29, 1906040.	14.9	120
33	Low on-resistance diamond field effect transistor with high-k ZrO2 as dielectric. Scientific Reports, 2014, 4, 6395.	3.3	107
34	Normally-off HfO2-gated diamond field effect transistors. Applied Physics Letters, 2013, 103, .	3.3	105
35	Hexagonal-like Nb2O5 Nanoplates-Based Photodetectors and Photocatalyst with High Performances. Scientific Reports, 2015, 5, 7716.	3.3	105
36	WO3 nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. Journal of Materials Chemistry, 2011, 21, 6525.	6.7	103

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37	Suspended Singleâ€Crystal Diamond Nanowires for Highâ€Performance Nanoelectromechanical Switches. Advanced Materials, 2010, 22, 5393-5397.	21.0	101
38	New UVâ€A Photodetector Based on Individual Potassium Niobate Nanowires with High Performance. Advanced Optical Materials, 2014, 2, 771-778.	7.3	97
39	Single Schottky-barrier photodiode with interdigitated-finger geometry: Application to diamond. Applied Physics Letters, 2007, 90, 123507.	3.3	96
40	Thermally stable visible-blind diamond photodiode using tungsten carbide Schottky contact. Applied Physics Letters, 2005, 87, 022105.	3.3	94
41	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
42	Flexible SnO2 hollow nanosphere film based high-performance ultraviolet photodetector. Chemical Communications, 2013, 49, 3739.	4.1	93
43	In-doped Ga2O3 nanobelt based photodetector with high sensitivity and wide-range photoresponse. Journal of Materials Chemistry, 2012, 22, 17984.	6.7	92
44	Visible-blind deep-ultraviolet Schottky photodetector with a photocurrent gain based on individual Zn2GeO4 nanowire. Applied Physics Letters, 2010, 97, .	3.3	89
45	Light intensity dependence of photocurrent gain in single-crystal diamond detectors. Physical Review B, 2010, 81, .	3.2	81
46	Band offsets of Al2O3 and HfO2 oxides deposited by atomic layer deposition technique on hydrogenated diamond. Applied Physics Letters, 2012, 101, .	3.3	76
47	Persistent positive and transient absolute negative photoconductivity observed in diamond photodetectors. Physical Review B, 2008, 78, .	3.2	75
48	Thermally stable solar-blind diamond UV photodetector. Diamond and Related Materials, 2006, 15, 1962-1966.	3.9	69
49	Photosensing performance of branched CdS/ZnO heterostructures as revealed by in situ TEM and photodetector tests. Nanoscale, 2014, 6, 8084.	5.6	64
50	An Interface Engineered Multicolor Photodetector Based on nâ€Si(111)/TiO₂ Nanorod Array Heterojunction. Advanced Functional Materials, 2016, 26, 1400-1410.	14.9	64
51	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
52	Enhanced performance of InGaN solar cell by using a super-thin AlN interlayer. Applied Physics Letters, 2011, 99, .	3.3	62
53	Work function measurement of transition metal nitride and carbide thin films. Vacuum, 2006, 80, 832-835.	3.5	61
54	High-temperature ultraviolet detection based on InGaN Schottky photodiodes. Applied Physics Letters, 2011, 99, .	3.3	61

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55	Enhanced UV-visible light photodetectors with a TiO₂/Si heterojunction using band engineering. Journal of Materials Chemistry C, 2017, 5, 12848-12856.	5.5	61
56	Interfacial band configuration and electrical properties of LaAlO3/Al2O3/hydrogenated-diamond metal-oxide-semiconductor field effect transistors. Journal of Applied Physics, 2013, 114, .	2.5	60
57	Band Gap Tunable Zn2SnO4 Nanocubes through Thermal Effect and Their Outstanding Ultraviolet Light Photoresponse. Scientific Reports, 2014, 4, 6847.	3.3	60
58	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. Japanese Journal of Applied Physics, 2012, 51, 090115.	1.5	60
59	High-performance metal-semiconductor-metal InGaN photodetectors using CaF2 as the insulator. Applied Physics Letters, 2011, 98, 103502.	3.3	56
60	Carbon-Based Materials: Growth, Properties, MEMS/NEMS Technologies, and MEM/NEM Switches. Critical Reviews in Solid State and Materials Sciences, 2011, 36, 66-101.	12.3	55
61	Initial leakage current paths in the vertical-type GaN-on-GaN Schottky barrier diodes. Applied Physics Letters, 2017, 111, .	3.3	55
62	Morphology-tunable In2Se3 nanostructures with enhanced electrical and photoelectrical performances via sulfur doping. Journal of Materials Chemistry, 2010, 20, 6630.	6.7	54
63	Logic Circuits With Hydrogenated Diamond Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 922-925.	3.9	49
64	Single-crystalline nanotubes of IIB-VI semiconductors. Applied Physics Letters, 2005, 87, 113107.	3.3	46
65	MEMS/NEMS based on mono-, nano-, and ultrananocrystalline diamond films. MRS Bulletin, 2014, 39, 511-516.	3.5	45
66	Photovoltaic Schottky ultraviolet detectors fabricated on boron-doped homoepitaxial diamond layer. Applied Physics Letters, 2006, 88, 033504.	3.3	43
67	Comprehensive Investigation of Single Crystal Diamond Deep-Ultraviolet Detectors. Japanese Journal of Applied Physics, 2012, 51, 090115.	1.5	43
68	Exceptional Point and Cross-Relaxation Effect in a Hybrid Quantum System. PRX Quantum, 2021, 2, .	9.2	43
69	Electrical characteristics of hydrogen-terminated diamond metal-oxide-semiconductor with atomic layer deposited HfO2 as gate dielectric. Applied Physics Letters, 2013, 102, .	3.3	42
70	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
71	Integration of high-dielectric constant Ta2O5 oxides on diamond for power devices. Applied Physics Letters, 2012, 101, .	3.3	41
72	Arbitrary Multicolor Photodetection by Hetero-integrated Semiconductor Nanostructures. Scientific Reports, 2013, 3, 2368.	3.3	41

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73	A Multilevel Intermediateâ€Band Solar Cell by InGaN/GaN Quantum Dots with a Strainâ€Modulated Structure. Advanced Materials, 2014, 26, 1414-1420.	21.0	40
74	Demonstration of diamond field effect transistors by AlN/diamond heterostructure. Physica Status Solidi - Rapid Research Letters, 2011, 5, 125-127.	2.4	39
75	Energyâ€Efficient Metalâ€“Insulatorâ€“Metalâ€Semiconductor Fieldâ€Effect Transistors Based on 2D Carrier Gases. Advanced Electronic Materials, 2019, 5, 1800832.	5.1	39
76	Thermal Stability of Diamond Photodiodes Using Tungsten Carbide as Schottky Contact. Japanese Journal of Applied Physics, 2005, 44, 7832-7838.	1.5	38
77	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
78	Design and fabrication of high-performance diamond triple-gate field-effect transistors. Scientific Reports, 2016, 6, 34757.	3.3	37
79	Batch production of single-crystal diamond bridges and cantilevers for microelectromechanical systems. Journal of Micromechanics and Microengineering, 2010, 20, 085002.	2.6	36
80	Nearly ideal vertical GaN Schottky barrier diodes with ultralow turn-on voltage and on-resistance. Applied Physics Express, 2017, 10, 051001.	2.4	36
81	In situ switching layer-by-layer assembly: one-pot rapid layer assembly via alternation of reductive and oxidative electropolymerization. Chemical Communications, 2013, 49, 6879.	4.1	35
82	Control of normally on/off characteristics in hydrogenated diamond metal-insulator-semiconductor field-effect transistors. Journal of Applied Physics, 2015, 118, .	2.5	35
83	Diamond nucleation by energetic pure carbon bombardment. Physical Review B, 2005, 72, .	3.2	33
84	Bicrystalline ZnS Microbelts. Crystal Growth and Design, 2009, 9, 2790-2793.	3.0	33
85	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
86	Ultrahigh quantum efficiency of CuO nanoparticle decorated In2Ge2O7 nanobelt deep-ultraviolet photodetectors. Nanoscale, 2012, 4, 6318.	5.6	32
87	Development of AlN/diamond heterojunction field effect transistors. Diamond and Related Materials, 2012, 24, 206-209.	3.9	31
88	Diamond field effect transistors with a high-dielectric constant Ta₂O₅as gate material. Journal Physics D: Applied Physics, 2014, 47, 245102.	2.8	31
89	Geometry-induced high performance ultraviolet photodetectors in kinked SnO₂nanowires. Journal of Materials Chemistry C, 2015, 3, 8300-8306.	5.5	31
90	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

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91	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC_xOH, a Direct Band Gap Semiconductor. ACS Nano, 2019, 13, 1195-1203.	14.6	30
92	Sb2O3nanobelt networks for excellent visible-light-range photodetectors. Nanotechnology, 2011, 22, 165704.	2.6	29
93	Diamond logic inverter with enhancement-mode metal-insulator-semiconductor field effect transistor. Applied Physics Letters, 2014, 105, .	3.3	29
94	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
95	One dimensional ternary Cuâ€“Biâ€“S based semiconductor nanowires: synthesis, optical and electrical properties. Journal of Materials Chemistry, 2012, 22, 17813.	6.7	27
96	Energy dissipation in micron- and submicron-thick single crystal diamond mechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	26
97	InGaN-based thin film solar cells: Epitaxy, structural design, and photovoltaic properties. Journal of Applied Physics, 2015, 117, .	2.5	26
98	Assembly of a high-dielectric constant thin TiOx layer directly on H-terminated semiconductor diamond. Applied Physics Letters, 2016, 108, .	3.3	26
99	Improvement of the quality factor of single crystal diamond mechanical resonators. Japanese Journal of Applied Physics, 2017, 56, 024101.	1.5	26
100	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.	5.5	26
101	Single-crystal diamond microelectromechanical resonator integrated with a magneto-strictive galfenol film for magnetic sensing. Carbon, 2019, 152, 788-795.	10.3	26
102	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
103	Ultrahigh Performance Onâ€Chip Single Crystal Diamond NEMS/MEMS with Electrically Tailored Selfâ€Sensing Enhancing Actuation. Advanced Materials Technologies, 2019, 4, 1800325.	5.8	25
104	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
105	Enhancing Delta E 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
106	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
107	SnO2 nanoribbons: excellent field-emitters. CrystEngComm, 2011, 13, 2289.	2.6	23
108	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

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109	Boosting the doping efficiency of Mg in p-GaN grown on the free-standing GaN substrates. Applied Physics Letters, 2019, 115, .	3.3	22
110	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
111	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
112	Electrochemical Synthesis of Transparent, Amorphous, C₆₀â€Rich, Photoactive, and Lowâ€Doped Film with an Interconnected Structure. Small, 2013, 9, 2064-2068.	10.0	21
113	Electrical properties of atomic layer deposited HfO2/Al2O3 multilayer on diamond. Diamond and Related Materials, 2015, 54, 55-58.	3.9	21
114	Effect of a seed layer on microstructure and electrical properties of Ga2O3 films on variously oriented Si substrates. Vacuum, 2022, 195, 110671.	3.5	20
115	MnSiâˆ¼1.73 grown on silicon with mass-analyzed low energy dual ion beam epitaxy technique. Journal of Crystal Growth, 2001, 226, 517-520.	1.5	19
116	Electrical hysteresis in p-GaN metalâ€“oxideâ€“semiconductor capacitor with atomic-layer-deposited Al₂O₃ as gate dielectric. Applied Physics Express, 2016, 9, 121002.	2.4	19
117	Layered boron nitride enabling high-performance AlGaN/GaN high electron mobility transistor. Journal of Alloys and Compounds, 2020, 829, 154542.	5.5	19
118	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
119	High-detectivity nanowire photodetectors governed by bulk photocurrent dynamics with thermally stable carbide contacts. Nanotechnology, 2013, 24, 495701.	2.6	18
120	Vertical-Type Ni/GaN UV Photodetectors Fabricated on Free-Standing GaN Substrates. Applied Sciences (Switzerland), 2019, 9, 2895.	2.5	18
121	Enhanced magnetic sensing performance of diamond MEMS magnetic sensor with boron-doped FeGa film. Carbon, 2020, 170, 294-301.	10.3	18
122	Nanodiamond formation by hot-filament chemical vapor deposition on carbon ions bombarded Si. Journal of Crystal Growth, 2002, 236, 85-89.	1.5	17
123	Integration of (PbZr0.52Ti0.48O3) on single crystal diamond as metal-ferroelectric-insulator-semiconductor capacitor. Applied Physics Letters, 2009, 94, .	3.3	17
124	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, .	2.5	17
125	Suppression in the electrical hysteresis by using CaF2 dielectric layer for p-GaN MIS capacitors. Journal of Applied Physics, 2018, 123, .	2.5	17
126	Hydrothermal crystallization of VO43â˜' stabilized t-Gd(P,V)O4:Eu3+ nanocrystals for remarkably improved and color tailorable luminescence. Chemical Engineering Journal, 2019, 357, 84-93.	12.7	17

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127	Bioâ€Inspired Multiâ€Mode Painâ€Perceptual System (MMPPS) with Noxious Stimuli Warning, Damage Localization, and Enhanced Damage Protection. Advanced Science, 2021, 8, 2004208.	11.2	17
128	Temperature dependence of Young's modulus of single-crystal diamond determined by dynamic resonance. Diamond and Related Materials, 2021, 116, 108403.	3.9	17
129	Reducing intrinsic energy dissipation in diamond-on-diamond mechanical resonators toward one million quality factor. Physical Review Materials, 2018, 2, .	2.4	17
130	Field-emission current from diamond film deposited on molybdenum. Journal of Applied Physics, 1998, 84, 1081-1084.	2.5	16
131	Impedance analysis of Al2O3/H-terminated diamond metal-oxide-semiconductor structures. Applied Physics Letters, 2015, 106, 083506.	3.3	16
132	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
133	Annealing effects on hydrogenated diamond NOR logic circuits. Applied Physics Letters, 2018, 112, .	3.3	15
134	Effect of Boron Incorporation on Structural and Optical Properties of AlN Layers Grown by Metalâ€Organic Vapor Phase Epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800282.	1.8	15
135	Crystallographic and electrical characterization of tungsten carbide thin films for Schottky contact of diamond photodiode. Journal of Vacuum Science & Technology B, 2006, 24, 185.	1.3	14
136	Schottky-barrier photodiode using p-diamond epilayer grown on p+-diamond substrates. Diamond and Related Materials, 2009, 18, 296-298.	3.9	14
137	Effect of Deep-Defects Excitation on Mechanical Energy Dissipation of Single-Crystal Diamond. Physical Review Letters, 2020, 125, 206802.	7.8	14
138	High-performance visible to near-infrared photodetectors by using (Cd,Zn)Te single crystal. Optics Express, 2019, 27, 8935.	3.4	14
139	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.	3.1	13
140	Submicron metal-semiconductor-metal diamond photodiodes toward improving the responsivity. Applied Physics Letters, 2007, 91, 163510.	3.3	13
141	Chemical Vapor Deposition of ¹²C Isotopically Enriched Polycrystalline Diamond. Japanese Journal of Applied Physics, 2012, 51, 090104.	1.5	13
142	Nanoelectromechanical switch fabricated from single crystal diamond: Experiments and modeling. Diamond and Related Materials, 2012, 24, 69-73.	3.9	13
143	Oneâ€Step Selfâ€Assembly Fabrication of High Quality Ni_xMg_{1â€x}O Bowlâ€Shaped Array Film and Its Enhanced Photocurrent by Mg,²⁺ Doping. Advanced Functional Materials, 2015, 25, 3256-3263.	14.9	13
144	(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

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145	Improved ferroelectric properties of Pb(Zr0.52,Ti0.48)O3 thin film on single crystal diamond using CaF2 layer. Applied Physics Letters, 2010, 96, .	3.3	12
146	Amorphous silicon diamond based heterojunctions with high rectification ratio. Journal of Non-Crystalline Solids, 2012, 358, 2110-2113.	3.1	12
147	Localized mid-gap-states limited reverse current of diamond Schottky diodes. Journal of Applied Physics, 2012, 111, 104503.	2.5	12
148	Silicon-compatible Mg2Si/Si n-p photodiodes with high room temperature infrared responsivity. Materials Science in Semiconductor Processing, 2019, 102, 104577.	4.0	12
149	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
150	Nucleation of diamond by pure carbon ion bombardmentâ€"a transmission electron microscopy study. Applied Physics Letters, 2005, 87, 063103.	3.3	11
151	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
152	Interfacial electronic band alignment of Ta2O5/hydrogen-terminated diamond heterojunction determined by X-ray photoelectron spectroscopy. Diamond and Related Materials, 2013, 38, 24-27.	3.9	11
153	Reducing energy dissipation and surface effect of diamond nanoelectromechanical resonators by annealing in oxygen ambient. Carbon, 2017, 124, 281-287.	10.3	11
154	Strain-enhanced high Q-factor GaN micro-electromechanical resonator. Science and Technology of Advanced Materials, 2020, 21, 515-523.	6.1	11
155	Enhanced UV detection performance of a CdZnTe-based photodetector through surface polishing treatments. Journal of Materials Chemistry C, 2021, 9, 3601-3607.	5.5	11
156	Local photoconductivity on diamond metal-semiconductor-metal photodetectors measured by conducting probe atomic force microscopy. Diamond and Related Materials, 2007, 16, 1074-1077.	3.9	10
157	Ion bombardment as the initial stage of diamond film growth. Journal of Applied Physics, 2001, 89, 1983.	2.5	9
158	Tungsten carbide Schottky contact to diamond toward thermally stable photodiode. Diamond and Related Materials, 2005, 14, 2003-2006.	3.9	9
159	Mechanism of photoconductivity gain and persistent photoconductivity for diamond photodetector. Diamond and Related Materials, 2010, 19, 205-207.	3.9	9
160	High-quality SiN_x/p-GaN metal-insulator-semiconductor interface with low-density trap states. Journal Physics D: Applied Physics, 2019, 52, 085105.	2.8	9
161	Tailoring the magnetic properties of galfenol film grown on single-crystal diamond. Journal of Alloys and Compounds, 2021, 858, 157683.	5.5	9
162	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.	5.5	9

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163	An adjustable multi-color detector based on regulating TiO2 surface adsorption and multi-junction synergy. Nano Research, 2021, 14, 3423-3430.	10.4	9
164	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, .	3.3	8
165	Temperature and Light Intensity Dependence of Photocurrent Transport Mechanisms in InGaN pâ€“iâ€“n Homojunction Solar Cells. Japanese Journal of Applied Physics, 2013, 52, 08JF04.	1.5	8
166	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, .	2.5	8
167	Field electron emission from nanostructured heterogeneous HfNxOy films. Applied Physics Letters, 2003, 83, 1626-1628.	3.3	7
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