

Zlatko Sitar

List of Publications by Year in descending order

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265
papers

8,015
citations

43973

48
h-index

66788

78
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267
all docs

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docs citations

267
times ranked

4786
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrawide-bandgap Semiconductors: Research Opportunities and Challenges. <i>Advanced Electronic Materials</i> , 2018, 4, 1600501.	2.6	839
2	Growth of cubic phase gallium nitride by modified molecular-beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989, 7, 701-705.	0.9	354
3	The 2020 UV emitter roadmap. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 503001.	1.3	289
4	Progress on n-type doping of AlGaIn alloys on AlN single crystal substrates for UV optoelectronic applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2031-2033.	0.8	153
5	On the origin of the 265-nm absorption band in AlN bulk crystals. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	137
6	High internal quantum efficiency in AlGaIn multiple quantum wells grown on bulk AlN substrates. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	135
7	Surface kinetics in AlN growth: A universal model for the control of surface morphology in III-nitrides. <i>Journal of Crystal Growth</i> , 2016, 438, 81-89.	0.7	127
8	Seeded growth of AlN bulk crystals in m- and c-orientation. <i>Journal of Crystal Growth</i> , 2009, 312, 58-63.	0.7	126
9	Seeded growth of AlN bulk single crystals by sublimation. <i>Journal of Crystal Growth</i> , 2002, 241, 416-420.	0.7	118
10	Deep-Ultraviolet Light-Emitting Diodes Fabricated on AlN Substrates Prepared by Hydride Vapor Phase Epitaxy. <i>Applied Physics Express</i> , 2012, 5, 122101.	1.1	114
11	Growth and Characterization of AlN and AlGaIn Epitaxial Films on AlN Single Crystal Substrates. <i>Journal of the Electrochemical Society</i> , 2011, 158, H530.	1.3	112
12	Performance and Reliability of Deep-Ultraviolet Light-Emitting Diodes Fabricated on AlN Substrates Prepared by Hydride Vapor Phase Epitaxy. <i>Applied Physics Express</i> , 2013, 6, 092103.	1.1	112
13	The role of surface kinetics on composition and quality of AlGaIn. <i>Journal of Crystal Growth</i> , 2016, 451, 65-71.	0.7	112
14	Surface preparation and homoepitaxial deposition of AlN on (0001)-oriented AlN substrates by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	110
15	Doping and compensation in Al-rich AlGaIn grown on single crystal AlN and sapphire by MOCVD. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	107
16	Lasing and longitudinal cavity modes in photo-pumped deep ultraviolet AlGaIn heterostructures. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	104
17	Influence of gallium supersaturation on the properties of GaN grown by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	102
18	On compensation in Si-doped AlN. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	97

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19	Polarity Control in Group-III Nitrides beyond Pragmatism. <i>Physical Review Applied</i> , 2016, 5, .	1.5	94
20	The growth and optical properties of large, high-quality AlN single crystals. <i>Journal of Applied Physics</i> , 2004, 96, 5870-5876.	1.1	92
21	Atomically Thin MoS ₂ Narrowband and Broadband Light Superabsorbers. <i>ACS Nano</i> , 2016, 10, 7493-7499.	7.3	82
22	Vacancy compensation and related donor-acceptor pair recombination in bulk AlN. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	80
23	Seeded growth of AlN on N- and Al-polar AlN seeds by physical vapor transport. <i>Journal of Crystal Growth</i> , 2006, 286, 205-208.	0.7	79
24	The effect of polarity and surface states on the Fermi level at III-nitride surfaces. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	75
25	Seeded growth of AlN single crystals by physical vapor transport. <i>Journal of Crystal Growth</i> , 2006, 287, 372-375.	0.7	70
26	Electron emission characteristics of GaN pyramid arrays grown via organometallic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 1998, 84, 5238-5242.	1.1	69
27	Growth of Ga- and N- polar gallium nitride layers by metalorganic vapor phase epitaxy on sapphire wafers. <i>Journal of Crystal Growth</i> , 2006, 287, 586-590.	0.7	69
28	Optically pumped UV lasers grown on bulk AlN substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 822-825.	0.8	69
29	Correlation between mobility collapse and carbon impurities in Si-doped GaN grown by low pressure metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	68
30	X-Ray Photoelectron Spectroscopy Characterization of Aluminum Nitride Surface Oxides: Thermal and Hydrothermal Evolution. <i>Journal of Electronic Materials</i> , 2007, 36, 414-419.	1.0	61
31	MgO epitaxy on GaN (0002) surfaces by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2006, 88, 212906.	1.5	60
32	Polarity control and growth of lateral polarity structures in AlN. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	60
33	The mechanism for polarity inversion of GaN via a thin AlN layer: Direct experimental evidence. <i>Applied Physics Letters</i> , 2007, 91, 203115.	1.5	59
34	Comparative study of etching high crystalline quality AlN and GaN. <i>Journal of Crystal Growth</i> , 2013, 366, 20-25.	0.7	59
35	The role of the carbon-silicon complex in eliminating deep ultraviolet absorption in AlN. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	59
36	Charge neutrality levels, barrier heights, and band offsets at polar AlGaIn. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	59

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37	Structural Defects in GaN Epilayers Grown by Gas Source Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 1989, 162, 537.	0.1	57
38	Energy distribution of field emitted electrons from diamond coated molybdenum tips. Applied Physics Letters, 1997, 70, 1596-1598.	1.5	56
39	Stimulated emission and optical gain in AlGaIn heterostructures grown on bulk AlN substrates. Journal of Applied Physics, 2014, 115, .	1.1	56
40	Bias voltage dependent field-emission energy distribution analysis of wide band-gap field emitters. Journal of Applied Physics, 1997, 82, 5763-5772.	1.1	55
41	Advances in Bulk Crystal Growth of AlN and GaN. MRS Bulletin, 2009, 34, 259-265.	1.7	55
42	Design and performance of an electron cyclotron resonance plasma source for standard molecular beam epitaxy equipment. Review of Scientific Instruments, 1990, 61, 2407-2411.	0.6	54
43	AlGaIn devices and growth of device structures. Journal of Materials Science, 2015, 50, 3267-3307.	1.7	52
44	Strain in Si doped GaN and the Fermi level effect. Applied Physics Letters, 2011, 98, 202101.	1.5	51
45	Optical signature of Mg-doped GaN: Transfer processes. Physical Review B, 2012, 86, .	1.1	51
46	Fabrication of vertical Schottky barrier diodes on n-type freestanding AlN substrates grown by hydride vapor phase epitaxy. Applied Physics Express, 2015, 8, 061003.	1.1	51
47	Compensation effects in GaN:Mg probed by Raman spectroscopy and photoluminescence measurements. Journal of Applied Physics, 2013, 113, .	1.1	49
48	Point defect reduction in wide bandgap semiconductors by defect quasi Fermi level control. Journal of Applied Physics, 2016, 120, .	1.1	48
49	Fermi level control of compensating point defects during metalorganic chemical vapor deposition growth of Si-doped AlGaIn. Applied Physics Letters, 2014, 105, 222101.	1.5	47
50	Point defect reduction in MOCVD (Al)GaIn by chemical potential control and a comprehensive model of C incorporation in GaN. Journal of Applied Physics, 2017, 122, .	1.1	47
51	6 kW/cm ² UVC laser threshold in optically pumped lasers achieved by controlling point defect formation. Applied Physics Express, 2018, 11, 082101.	1.1	46
52	Temperature dependent photoluminescence of lateral polarity junctions of metal organic chemical vapor deposition grown GaN. Journal of Applied Physics, 2011, 110, .	1.1	45
53	Ge doped GaN with controllable high carrier concentration for plasmonic applications. Applied Physics Letters, 2013, 103, .	1.5	45
54	Thermal conductivity of single-crystalline AlN. Applied Physics Express, 2018, 11, 071001.	1.1	42

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55	Modulated precursor flow epitaxial growth of AlN layers on native AlN substrates by metal-organic chemical vapor deposition. <i>Applied Physics Letters</i> , 2008, 93, 022103.	1.5	41
56	Point-Defect Nature of the Ultraviolet Absorption Band in AlN. <i>Physical Review Applied</i> , 2018, 9, .	1.5	41
57	Strain relaxation by pitting in AlN thin films deposited by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	39
58	Simultaneous growth of a GaN n lateral polarity junction by polar selective doping. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	38
59	Direct determination of the silicon donor ionization energy in homoepitaxial AlN from photoluminescence two-electron transitions. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	38
60	Defect-free Ni/GaN Schottky barrier behavior with high temperature stability. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	38
61	Characterization of dislocation arrays in AlN single crystals grown by PVT. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1545-1547.	0.8	37
62	Ni/Au Schottky diodes on Al _x Ga _{1-x} N (0.7< x <1) grown on AlN single crystal substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2407-2409.	0.8	37
63	Different optical absorption edges in AlN bulk crystals grown in m- and c-orientations. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	35
64	Optical identification of silicon as a shallow donor in MOVPE grown homoepitaxial AlN. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 511-515.	0.7	34
65	Structure of Ultrathin Native Oxides on III ⁺ Nitride Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10607-10611.	4.0	34
66	The role of chemical potential in compensation control in Si:AlGaIn. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	34
67	Two field-emission states of single-walled carbon nanotubes. <i>Applied Physics Letters</i> , 2001, 78, 2058-2060.	1.5	33
68	Study of fusion bonding of diamond to silicon for silicon-on-diamond technology. <i>Applied Physics Letters</i> , 2002, 81, 3275-3277.	1.5	33
69	Multiple Epsilon-Near-Zero Resonances in Multilayered Cadmium Oxide: Designing Metamaterial-Like Optical Properties in Monolithic Materials. <i>ACS Photonics</i> , 2019, 6, 1139-1145.	3.2	33
70	High gain, large area, and solar blind avalanche photodiodes based on Al-rich AlGaIn grown on AlN substrates. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	33
71	Current-voltage characteristics of n lateral polarity junctions in GaN. <i>Applied Physics Letters</i> , 2006, 89, 052117.	1.5	32
72	Schottky contact formation on polar and non-polar AlN. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	32

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73	Fabrication and structural properties of AlN submicron periodic lateral polar structures and waveguides for UV-C applications. Applied Physics Letters, 2016, 108, .	1.5	32
74	Direct Observation of Inversion Domain Boundaries of GaN on Sapphire at Sub-Ångstrom Resolution. Advanced Materials, 2008, 20, 2162-2165.	11.1	31
75	Fabrication of a GaN lateral polarity junction by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2009, 311, 3044-3048.	0.7	31
76	X-ray characterization of composition and relaxation of Al _x Ga _{1-x} N (x=0.1) layers grown on GaN/sapphire templates by low pressure organometallic vapor phase epitaxy. Journal of Applied Physics, 2010, 108, .	1.1	30
77	Polarity determination of polar and semipolar (112̂2)̂%InN and GaN layers by valence band photoemission spectroscopy. Journal of Applied Physics, 2013, 114, .	1.1	30
78	Homoepitaxial AlN thin films deposited on m-plane (111̂00) AlN substrates by metalorganic chemical vapor deposition. Journal of Applied Physics, 2014, 116, 133517.	1.1	30
79	Growth of Bulk AlN and GaN Single Crystals by Sublimation. Materials Research Society Symposia Proceedings, 1996, 449, 41.	0.1	29
80	Characterization of Threading Dislocations in PVT-Grown AlN Substrates via x-Ray Topography and Ray Tracing Simulation. Journal of Electronic Materials, 2014, 43, 838-842.	1.0	29
81	Sapphire decomposition and inversion domains in N-polar aluminum nitride. Applied Physics Letters, 2014, 104, .	1.5	29
82	High Mg activation in implanted GaN by high temperature and ultrahigh pressure annealing. Applied Physics Letters, 2021, 118, .	1.5	28
83	Band offsets and growth mode of molecular beam epitaxy grown MgO (111) on GaN (0002) by x-ray photoelectron spectroscopy. Journal of Applied Physics, 2007, 102, 074104.	1.1	27
84	Excitonic emission dynamics in homoepitaxial AlN films studied using polarized and spatio-time-resolved cathodoluminescence measurements. Applied Physics Letters, 2013, 103, .	1.5	27
85	Recovery kinetics in high temperature annealed AlN heteroepitaxial films. Journal of Applied Physics, 2020, 127, .	1.1	27
86	Refractive index of III-metal-polar and N-polar AlGaIn waveguides grown by metal organic chemical vapor deposition. Applied Physics Letters, 2013, 102, .	1.5	26
87	The influence of point defects on the thermal conductivity of AlN crystals. Journal of Applied Physics, 2018, 123, 185107.	1.1	26
88	Optical metastability in bulk GaN single crystals. Applied Physics Letters, 1997, 71, 455-457.	1.5	25
89	Fermi Level Control of Point Defects During Growth of Mg-Doped GaN. Journal of Electronic Materials, 2013, 42, 815-819.	1.0	25
90	Thermal conductivity of GaN single crystals: Influence of impurities incorporated in different growth processes. Journal of Applied Physics, 2018, 124, .	1.1	25

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91	Quasi-phase-matched second harmonic generation of UV light using AlN waveguides. Applied Physics Letters, 2019, 114, .	1.5	25
92	High n -type conductivity and carrier concentration in Si-implanted homoepitaxial AlN. Applied Physics Letters, 2021, 118, .	1.5	25
93	Status of the growth and fabrication of AlGaIn-based UV laser diodes for near and mid-UV wavelength. Journal of Materials Research, 2021, 36, 4638-4664.	1.2	25
94	Sharp bound and free exciton lines from homoepitaxial AlN. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1520-1522.	0.8	24
95	Impact of gallium supersaturation on the growth of n -polar GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2078-2080.	0.8	24
96	Control of passivation and compensation in Mg-doped GaN by defect quasi Fermi level control. Journal of Applied Physics, 2020, 127, .	1.1	24
97	The polarization field in Al-rich AlGaIn multiple quantum wells. Japanese Journal of Applied Physics, 2019, 58, SCCC10.	0.8	23
98	High temperature and low pressure chemical vapor deposition of silicon nitride on AlGaIn: Band offsets and passivation studies. Journal of Applied Physics, 2016, 119, .	1.1	22
99	High free carrier concentration in p -GaN grown on AlN substrates. Applied Physics Letters, 2017, 111, .	1.5	22
100	Issues and Examples Regarding Growth of AlN, GaN and Al _x Ga _{1-x} N Thin Films via OMVPE and Gas Source MBE. Materials Research Society Symposia Proceedings, 1995, 395, 3.	0.1	21
101	Optical nonlinear and electro-optical coefficients in bulk aluminium nitride single crystals. Physica Status Solidi (B): Basic Research, 2017, 254, 1700077.	0.7	21
102	A thermodynamic supersaturation model for the growth of aluminum gallium nitride by metalorganic chemical vapor deposition. Journal of Applied Physics, 2018, 124, .	1.1	21
103	Exciton transitions and oxygen as a donor in m -plane AlN homoepitaxial films. Journal of Applied Physics, 2014, 115, .	1.1	20
104	N- and P- type Doping in Al-rich AlGaIn and AlN. ECS Transactions, 2018, 86, 25-30.	0.3	20
105	Shallow Si donor in ion-implanted homoepitaxial AlN. Applied Physics Letters, 2020, 116, .	1.5	20
106	Implementation of the GaN lateral polarity junction in a MESFET utilizing polar doping selectivity. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 45-48.	0.8	19
107	Very slow decay of a defect related emission band at 2.4 eV in AlN: Signatures of the Si related shallow DX state. Journal of Applied Physics, 2016, 119, .	1.1	19
108	Nonlinear analysis of vanadium- and titanium-based contacts to Al-rich n -AlGaIn. Japanese Journal of Applied Physics, 2017, 56, 100302.	0.8	19

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109	Design of AlGaIn-based quantum structures for low threshold UVC lasers. Journal of Applied Physics, 2019, 126, 223101.	1.1	19
110	AlN Bulk Crystal Growth by Physical Vapor Transport. , 2010, , 821-843.		19
111	Surface water reactivity of polycrystalline MgO and CaO films investigated using x-ray photoelectron spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 1507-1510.	0.9	18
112	High reflectivity III-nitride UV-C distributed Bragg reflectors for vertical cavity emitting lasers. Journal of Applied Physics, 2016, 120, .	1.1	18
113	Polarity control of GaN thin films grown by metalorganic vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2117-2120.	0.8	17
114	The effect of illumination power density on carbon defect configuration in silicon doped GaN. Journal of Applied Physics, 2016, 120, .	1.1	17
115	On Ni/Au Alloyed Contacts to Mg-Doped GaN. Journal of Electronic Materials, 2018, 47, 305-311.	1.0	17
116	In situ mass spectrometry during diamond chemical vapor deposition using a low pressure flat flame. Journal of Materials Research, 1997, 12, 2733-2742.	1.2	16
117	Growth of AlN crystals on AlN/SiC seeds by AlN powder sublimation in nitrogen atmosphere. MRS Internet Journal of Nitride Semiconductor Research, 2004, 9, 1.	1.0	16
118	Raman, photoluminescence and absorption studies on high quality AlN single crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2774-2778.	0.8	16
119	Free-Standing Lithium Niobate Microring Resonators for Hybrid Integrated Optics. IEEE Photonics Technology Letters, 2010, 22, 251-253.	1.3	16
120	UV second harmonic generation in AlN waveguides with modal phase matching. Optical Materials Express, 2016, 6, 2014.	1.6	16
121	Electron emission mechanism from cubic boron nitride-coated molybdenum emitters. Applied Physics Letters, 1998, 72, 2909-2911.	1.5	15
122	Fabrication and characterization of lateral polar GaN structures for second harmonic generation. Proceedings of SPIE, 2013, , .	0.8	15
123	Growth and characterization of Al _x Ga _{1-x} N lateral polarity structures. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1039-1042.	0.8	15
124	Model for the deep defect-related emission bands between 1.4 and 2.4 eV in AlN. Physica Status Solidi (B): Basic Research, 2017, 254, 1600714.	0.7	15
125	Complexes and compensation in degenerately donor doped GaN. Applied Physics Letters, 2020, 117, .	1.5	15
126	Oxygen and silicon point defects in Al _x Ga _{1-x} N. Physical Review Materials, 2019, 3, .	0.65	15

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127	The influence of substrate polarity on the structural quality of InN layers grown by high-pressure chemical vapor deposition. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	14
128	Surfactant assisted growth of MgO films on GaN. <i>Applied Physics Letters</i> , 2012, 101, 092904.	1.5	14
129	Defect quasi Fermi level control-based CN reduction in GaN: Evidence for the role of minority carriers. <i>Applied Physics Letters</i> , 2017, 111, 152101.	1.5	14
130	The role of transient surface morphology on composition control in AlGaIn layers and wells. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	14
131	Observation of carrier concentration dependent spintronic terahertz emission from $\text{InGaIn}/\text{GaIn}/\text{NiFe}$ heterostructures. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	14
132	The nature of the DX state in Ge-doped AlGaIn. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	14
133	Strain Recovery and Defect Characterization in Mg-implanted Homoepitaxial GaN on High-Quality GaN Substrates. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900705.	0.7	14
134	Self-compensation in heavily Ge doped AlGaIn: A comparison to Si doping. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	14
135	Hot electron transport in AlN. <i>Journal of Applied Physics</i> , 2000, 88, 5865-5869.	1.1	13
136	Ammonothermal synthesis of aluminum nitride crystals on group III-nitride templates. <i>Journal of Electronic Materials</i> , 2006, 35, 1104-1111.	1.0	13
137	Epitaxial calcium oxide films deposited on gallium nitride surfaces. <i>Journal of Vacuum Science & Technology B</i> , 2007, 25, 1029.	1.3	13
138	Dependence on pressure of the refractive indices of wurtzite ZnO, GaN, and AlN. <i>Physical Review B</i> , 2014, 90, .	1.1	13
139	Growth of AlN bulk crystals from the vapor phase. <i>Materials Research Society Symposia Proceedings</i> , 2001, 693, 780.	0.1	12
140	Frequency and Duty Cycle Dependence on the Pulsed Bias-Enhanced Nucleation of Highly Oriented Diamond on (100) Silicon. <i>Physica Status Solidi A</i> , 2001, 186, 331-337.	1.7	12
141	X-ray characterization techniques for the assessment of surface damage in crystalline wafers: A model study in AlN. <i>Journal of Applied Physics</i> , 2013, 113, 123508.	1.1	12
142	Role of oxygen diffusion in the dislocation reduction of epitaxial AlN on sapphire during high-temperature annealing. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	12
143	Doping and compensation in heavily Mg doped Al-rich AlGaIn films. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	12
144	Electron energy distribution of diamond-coated field emitters. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1998, 16, 716.	1.6	11

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145	Influence of relative wafer rotation on the electrical properties of the bonded SiC/SiC interface. Applied Physics Letters, 2004, 84, 3993-3995.	1.5	11
146	Transmission electron microscopy studies of the bonded SiC-SiC interface. Journal of Materials Science, 2005, 40, 4369-4371.	1.7	11
147	Critical examination of growth rate for magnesium oxide (MgO) thin films deposited by molecular beam epitaxy with a molecular oxygen flux. Journal of Materials Research, 2010, 25, 670-679.	1.2	11
148	Properties of AlN based lateral polarity structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 261-264.	0.8	11
149	Optical characterization of Al- and N-polar AlN waveguides for integrated optics. Applied Physics Express, 2015, 8, 042603.	1.1	11
150	In-plane optical polarization and dynamic properties of the near-band-edge emission of an m-plane freestanding AlN substrate and a homoepitaxial film. Applied Physics Letters, 2019, 115, 151903.	1.5	11
151	Field emission energy distribution analysis of wide-band-gap field emitters. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 689.	1.6	10
152	Polarity and morphology in seeded growth of bulk AlN on SiC. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2036-2039.	0.8	10
153	Comparative study of textured diamond films by thermal conductivity measurements. Applied Physics A: Materials Science and Processing, 2006, 85, 331-335.	1.1	10
154	Spectroscopic measurements of the surface stoichiometry of chemical vapor deposited GaN. Applied Physics Letters, 2011, 98, 082110.	1.5	10
155	Point defect management in GaN by Fermi-level control during growth. Proceedings of SPIE, 2014, , .	0.8	10
156	Optical signatures of silicon and oxygen related DX centers in AlN. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600749.	0.8	10
157	Second-Harmonic Generation of Blue Light in GaN Waveguides. Applied Sciences (Switzerland), 2018, 8, 1218.	1.3	10
158	Study on avalanche breakdown and Poole-Frenkel emission in Al-rich AlGaIn grown on single crystal AlN. Applied Physics Letters, 2021, 119, .	1.5	10
159	Experimental observation of electron velocity overshoot in AlN. Applied Physics Letters, 2002, 81, 5189-5191.	1.5	9
160	Selective Etching of GaN from AlGaIn/GaN and AlN/GaN Structures. MRS Internet Journal of Nitride Semiconductor Research, 2004, 9, 1.	1.0	9
161	Seeded growth of AlN crystals on nonpolar seeds via physical vapor transport. Journal of Electronic Materials, 2006, 35, 1513-1517.	1.0	9
162	Spectroscopic analysis of the epitaxial CaO (111)-GaIn (0002) interface. Applied Physics Letters, 2008, 92, 082907.	1.5	9

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163	Surface preparation of non-polar single-crystalline AlN substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 454-457.	0.8	9
164	Smooth cubic commensurate oxides on gallium nitride. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	9
165	A conduction model for contacts to Si-doped AlGa _N grown on sapphire and single-crystalline AlN. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	9
166	Slow decay of a defect-related emission band at 2.05 eV in AlN: Signatures of oxygen-related DX states. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600338.	0.7	9
167	Chemical treatment effects on Schottky contacts to metalorganic chemical vapor deposited n-type N-polar GaN. <i>Journal of Applied Physics</i> , 2020, 128, 064501.	1.1	9
168	Pinning of energy transitions of defects, complexes, and surface states in AlGa _N alloys. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	9
169	Large-Area, Solar-Blind, Sub-250 nm Detection AlGa _N Avalanche Photodiodes Grown on AlN Substrates. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	1.2	9
170	Record >10 MV/cm mesa breakdown fields in Al _{0.85} Ga _{0.15} N/Al _{0.6} Ga _{0.4} N high electron mobility transistors on native AlN substrates. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	9
171	Dielectric, pyroelectric and structural properties of LiTaO ₃ thin films grown on silicon by a modified molecular beam epitaxy. <i>Ferroelectrics</i> , 1997, 201, 245-253.	0.3	8
172	Growth of highly resistive Ga-polar GaN by LP-MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2260-2263.	0.8	8
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