

Brian J Skromme

List of Publications by Year in descending order

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86
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186209

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86
all docs

86
docs citations

86
times ranked

1451
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of passivating ionic films on the photoluminescence properties of GaAs. Applied Physics Letters, 1987, 51, 2022-2024.	1.5	220
2	Band bending, Fermi level pinning, and surface fixed charge on chemically prepared GaAs surfaces. Applied Physics Letters, 1989, 54, 555-557.	1.5	95
3	Characterization of high-purity Si-doped molecular beam epitaxial GaAs. Journal of Applied Physics, 1985, 58, 4685-4702.	1.1	94
4	Electrical characteristics of schottky barriers on 4H-SiC: The effects of barrier height nonuniformity. Journal of Electronic Materials, 2000, 29, 376-383.	1.0	94
5	Growth of high-quality GaAs using trimethylgallium and diethylarsine. Applied Physics Letters, 1987, 50, 1194-1196.	1.5	92
6	Photoluminescence identification of the C and Be acceptor levels in InP. Journal of Electronic Materials, 1984, 13, 463-491.	1.0	76
7	Optical spectroscopy of Si-related donor and acceptor levels in Si-doped GaN grown by hydride vapor phase epitaxy. Applied Physics Letters, 1998, 73, 1188-1190.	1.5	76
8	Band-edge exciton states in AlN single crystals and epitaxial layers. Applied Physics Letters, 2004, 85, 4334.	1.5	70
9	Strain determination in heteroepitaxial GaN. Applied Physics Letters, 1997, 71, 829-831.	1.5	68
10	Low-temperature luminescence of exciton and defect states in heteroepitaxial GaN grown by hydride vapor phase epitaxy. Applied Physics Letters, 1999, 74, 2358-2360.	1.5	67
11	Surface recombination and sulfide passivation of GaN. Journal of Electronic Materials, 2000, 29, 325-331.	1.0	64
12	InGaAs/InP superlattice mixing induced by Zn or Si diffusion. Applied Physics Letters, 1988, 53, 1051-1053.	1.5	63
13	Growth and characterization of pseudomorphic single crystal zinc blende MnS. Applied Physics Letters, 1995, 67, 2690-2692.	1.5	59
14	Residual donors and acceptors in high-purity GaAs and InP grown by hydride VPE. Journal of Electronic Materials, 1983, 12, 433-457.	1.0	58
15	Effects of thermal strain on the optical properties of heteroepitaxial ZnTe. Physical Review B, 1992, 46, 3872-3885.	1.1	51
16	Correlation between morphological defects, electron beam-induced current imaging, and the electrical properties of 4H-SiC Schottky diodes. Journal of Applied Physics, 2005, 97, 013540.	1.1	48
17	Design and optimization of junction termination extension (JTE) for 4H-SiC high voltage Schottky diodes. Solid-State Electronics, 2005, 49, 945-955.	0.8	47
18	Excited-state-donor-to-acceptor transitions in the photoluminescence spectrum of GaAs and InP. Physical Review B, 1984, 29, 1982-1992.	1.1	43

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19	Photoluminescence characterization of ZnSe doped with Ga by bulk and planar doping techniques in molecular-beam epitaxy. Journal of Applied Physics, 1989, 65, 3999-4005.	1.1	43
20	Planar doping with gallium of molecular beam epitaxial ZnSe. Applied Physics Letters, 1988, 53, 2065-2067.	1.5	42
21	An analytical evaluation of GaAs grown with commercial and repurified trimethylgallium. Journal of Electronic Materials, 1982, 11, 1115-1137.	1.0	41
22	Arsenic doped ZnSe grown by molecular-beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1990, 8, 187.	1.6	38
23	Identification of the residual acceptors in undoped high purity InP. Applied Physics Letters, 1984, 44, 319-321.	1.5	36
24	Surface stoichiometry effects on ZnSe/GaAs heteroepitaxy. Journal of Crystal Growth, 1991, 111, 741-746.	0.7	33
25	Impact ionization of excitons and shallow donors in InP. Physical Review B, 1983, 28, 4602-4607.	1.1	32
26	Reactive MBE Growth of GaN and GaN:H on GaN/SiC Substrates. Materials Research Society Symposia Proceedings, 1996, 449, 215.	0.1	32
27	Photoluminescence, Reflectance, and Magnetospectroscopy of Shallow Excitons in GaN. Materials Research Society Symposia Proceedings, 1996, 449, 713.	0.1	31
28	Optical and magneto-optical characterization of heteroepitaxial gallium nitride. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 117-125.	1.7	30
29	Quantum well state of self-forming SiC inclusions in 4H-SiC determined by ballistic electron emission microscopy. Physical Review B, 2004, 69, .	1.1	30
30	Optical spectroscopy of bulk GaN crystals grown from a Na-Ga melt. Applied Physics Letters, 2002, 81, 3765-3767.	1.5	28
31	Band-to-acceptor transitions in the low-temperature-luminescence spectrum of Li-doped p-type ZnSe grown by molecular-beam epitaxy. Physical Review B, 1993, 47, 2107-2121.	1.1	26
32	Applications Of High Power Electronic Switches In The Electric Power Utility Industry And The Needs For High Power Switching Devices. Materials Research Society Symposia Proceedings, 1997, 483, 3.	0.1	25
33	Atomic layer epitaxy of device quality GaAs. Applied Physics Letters, 1989, 55, 2769-2771.	1.5	24
34	Properties of the shallow O-related acceptor level in ZnSe. Journal of Applied Physics, 1995, 78, 5109-5119.	1.1	24
35	Optical characterization of bulk GaN grown by a Na-Ga melt technique. Journal of Crystal Growth, 2002, 246, 299-306.	0.7	23
36	Vertical transport in semiconductor superlattices probed by miniband-to-acceptor magnetoluminescence. Physical Review Letters, 1990, 65, 2050-2053.	2.9	21

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37	Deep-center photoluminescence in nitrogen-doped ZnSe. <i>Physical Review B</i> , 1995, 52, 17184-17190.	1.1	21
38	Systematic investigation of shallow acceptor levels in ZnSe. <i>Journal of Crystal Growth</i> , 1994, 138, 310-317.	0.7	20
39	Arsenic-doped ZnTe grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 1991, 59, 688-690.	1.5	19
40	Intersecting basal plane and prismatic stacking fault structures and their formation mechanisms in GaN. <i>Journal of Applied Physics</i> , 2005, 98, 063510.	1.1	19
41	Hall effect analysis of high purity p-type GaAs grown by metalorganic chemical vapor deposition. <i>Journal of Electronic Materials</i> , 1991, 20, 671-679.	1.0	18
42	Properties of the As-related shallow acceptor level in heteroepitaxial ZnSe grown by molecular-beam epitaxy. <i>Physical Review B</i> , 1993, 48, 10885-10892.	1.1	18
43	Neutron transmutation doping of high purity GaAs. <i>Journal of Electronic Materials</i> , 1985, 14, 477-511.	1.0	17
44	on GaAs grown by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 1996, 159, 94-98.	0.7	16
45	Structural defects and luminescence features in heteroepitaxial GaN grown on on-axis and misoriented substrates. <i>Journal of Applied Physics</i> , 2005, 97, 116101.	1.1	16
46	High purity GaAs grown by the hydride vpe process. <i>Journal of Electronic Materials</i> , 1983, 12, 681-699.	1.0	15
47	Photoluminescence characterization of molecular beam epitaxial GaAs grown using cracked AsH_3 . <i>Applied Physics Letters</i> , 1984, 44, 240-242.	1.5	15
48	Extrinsic photoluminescence in coupled-well GaAs/AlGaAs superlattices. <i>Solid State Communications</i> , 1988, 66, 543-547.	0.9	15
49	Effects of C incorporation on the luminescence properties of ZnSe grown by metalorganic chemical vapor deposition. <i>Journal of Crystal Growth</i> , 1994, 138, 338-345.	0.7	15
50	Effect of inclined quantum wells on macroscopic capacitance-voltage response of Schottky contacts: Cubic inclusions in hexagonal SiC. <i>Applied Physics Letters</i> , 2005, 86, 222109.	1.5	15
51	Reduction of defects and inhomogeneous strain in heteroepitaxial ZnSe. <i>Applied Physics Letters</i> , 1988, 53, 2217-2219.	1.5	14
52	Identification of donors in GaAs by resonantly excited high-field magnetospectroscopy. <i>IEEE Journal of Quantum Electronics</i> , 1989, 25, 1035-1045.	1.0	14
53	GaAs -InP heteroepitaxial waveguides grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 1988, 53, 1242-1244.	1.5	13
54	Heteroepitaxial CdTe(111) grown by MBE on nominally flat and misoriented Si(001) substrates: characterization by electron microscopy and optical methods. <i>Journal of Crystal Growth</i> , 1996, 159, 58-63.	0.7	13

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55	Correlated structural and optical characterization of ammonothermally grown bulk GaN. Applied Physics Letters, 2004, 84, 3289-3291.	1.5	12
56	Electrical characterization of gallium planar-doped ZnSe grown by molecular-beam epitaxy. Journal of Applied Physics, 1989, 66, 4295-4300.	1.1	11
57	Luminescence as a Diagnostic of Wide-Gap II-VI Compound Semiconductor Materials. Annual Review of Materials Research, 1995, 25, 601-646.	5.5	10
58	New shallow acceptor levels in GaAs. Journal of Electronic Materials, 1986, 15, 345-348.	1.0	9
59	Effects of Different Defect Types on the Performance of Devices Fabricated on a 4H-SiC Homoepitaxial Layer. Materials Research Society Symposia Proceedings, 2006, 911, 3.	0.1	9
60	Spectroscopic studies of the influence of oxygen partial pressure on the incorporation of residual silicon impurities in vapor-phase epitaxial gallium arsenide. Journal of Applied Physics, 1989, 66, 3772-3786.	1.1	8
61	ZnSe/ZnCdSe quantum well light emitting diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 692.	1.6	8
62	Characteristics of GaAs, AlGaAs, and InGaAs materials grown by metalorganic chemical vapor deposition using an on-demand hydride gas generator. Applied Physics Letters, 1992, 60, 1483-1485.	1.5	7
63	Heteroepitaxy of GaAs on InP by molecular-beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1989, 7, 354.	1.6	6
64	Optical Activation Behavior of Ion Implanted Acceptor Species in GaN. Materials Research Society Symposia Proceedings, 1999, 595, 1.	0.1	5
65	Highly resolved excitonic spectra in GaAs/AlGaAs superlattices grown by organometallic chemical vapor deposition. Applied Physics Letters, 1988, 52, 990-992.	1.5	4
66	Optical characterization of ZnMnSSe quaternary alloys for visible light emitting devices. Journal of Crystal Growth, 1996, 159, 50-53.	0.7	4
67	Optical investigation of strain and defects in (100) CdTe/Ge/Si and ZnTe/Ge/Si grown by molecular beam epitaxy. Applied Physics Letters, 1997, 71, 350-352.	1.5	4
68	Magnetoluminescence and Resonant Electronic Raman Scattering Investigation of Donors and Excitons in Hydride Vpe and Mocvd GaN. Materials Research Society Symposia Proceedings, 1997, 482, 581.	0.1	4
69	Characterization of Ion Implanted GaN. Materials Research Society Symposia Proceedings, 2000, 639, 11391.	0.1	3
70	Deep centre photoluminescence in nitrogen doped ZnSe. Physica Scripta, 1994, T54, 20-23.	1.2	2
71	Cubic inclusions in 4H-SiC studied with ballistic electron-emission microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1351-1355.	0.9	2
72	Optical Spectroscopy of Polytypic Quantum Wells in SiC. AIP Conference Proceedings, 2005, , .	0.3	2

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73	Reduction of Low-Temperature Nonlinearities in Pseudomorphic AlGaAs/InGaAs HEMTs Due to Si-Related DX Centers. IEEE Transactions on Electron Devices, 2010, 57, 749-754.	1.6	2
74	IVA-4 dramatic enhancement in the gain of AlGaAs/GaAs heterostructure bipolar transistors by surface passivation. IEEE Transactions on Electron Devices, 1987, 34, 2370-2370.	1.6	1
75	Optical Characterization of Compound Semiconductors. , 1995, , 678-771.		1
76	Ion beam mixing in strained layer structures. Nuclear Instruments & Methods in Physics Research B, 1996, 118, 704-708.	0.6	1
77	Effects of Structural Defects on Diode Properties in 4H-SiC. Materials Research Society Symposia Proceedings, 2002, 742, 341.	0.1	1
78	Photoluminescence studies of type-II CdSe/CdTe superlattices. Applied Physics Letters, 2012, 101, 061915.	1.5	1
79	Teaching Series and Parallel Connections. IEEE Transactions on Education, 2021, , 1-10.	2.0	1
80	Effects of Growth Conditions on the Optical Properties of Heteroepitaxial ZnTe Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 1991, 221, 235.	0.1	0
81	Spectroscopic Investigation of Li and P-Doped ZnSe Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 1992, 281, 567.	0.1	0
82	Evolution of Subgrain Boundaries in Heteroepitaxial GaN/AlN/6H-SiC Grown by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2002, 743, L6.3.1.	0.1	0
83	Optical Characterization of Bulk GaN Grown from a Na/Ga Flux. Materials Research Society Symposia Proceedings, 2002, 743, L3.36.1.	0.1	0
84	Structural Defect-Related Photoluminescence in GaN. Materials Research Society Symposia Proceedings, 2003, 798, 592.	0.1	0
85	Optical Reflectance of Bulk AlN Crystals and AlN Epitaxial Films. AIP Conference Proceedings, 2005, , .	0.3	0
86	Imaging of the Electric Fields and Charge Associated with Modulation-Doped 4H/3C/4H Polytypic Quantum Wells in SiC. AIP Conference Proceedings, 2005, , .	0.3	0