

Brian J Skromme

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3284440/publications.pdf>

Version: 2024-02-01

86
papers

2,355
citations

186209

28
h-index

223716

46
g-index

86
all docs

86
docs citations

86
times ranked

1451
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Teaching Series and Parallel Connections. IEEE Transactions on Education, 2021, , 1-10. | 2.0 | 1 |
| 2 | Photoluminescence studies of type-II CdSe/CdTe superlattices. Applied Physics Letters, 2012, 101, 061915. | 1.5 | 1 |
| 3 | 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 |
| 4 | 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 |
| 5 | 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 |
| 6 | Optical Reflectance of Bulk AlN Crystals and AlN Epitaxial Films. AIP Conference Proceedings, 2005, , . | 0.3 | 0 |
| 7 | 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 |
| 8 | Optical Spectroscopy of Polytypic Quantum Wells in SiC. AIP Conference Proceedings, 2005, , . | 0.3 | 2 |
| 9 | Effect of inclined quantum wells on macroscopic capacitance-voltage response of Schottky contacts: Cubic inclusions in hexagonal SiC. Applied Physics Letters, 2005, 86, 222109. | 1.5 | 15 |
| 10 | 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 |
| 11 | Intersecting basal plane and prismatic stacking fault structures and their formation mechanisms in GaN. Journal of Applied Physics, 2005, 98, 063510. | 1.1 | 19 |
| 12 | Structural defects and luminescence features in heteroepitaxial GaN grown on on-axis and misoriented substrates. Journal of Applied Physics, 2005, 97, 116101. | 1.1 | 16 |
| 13 | 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 |
| 14 | Correlated structural and optical characterization of ammonothermally grown bulk GaN. Applied Physics Letters, 2004, 84, 3289-3291. | 1.5 | 12 |
| 15 | 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 |
| 16 | Band-edge exciton states in AlN single crystals and epitaxial layers. Applied Physics Letters, 2004, 85, 4334. | 1.5 | 70 |
| 17 | Structural Defect-Related Photoluminescence in GaN. Materials Research Society Symposia Proceedings, 2003, 798, 592. | 0.1 | 0 |
| 18 | Optical spectroscopy of bulk GaN crystals grown from a Na-Ga melt. Applied Physics Letters, 2002, 81, 3765-3767. | 1.5 | 28 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Effects of Structural Defects on Diode Properties in 4H-SiC. Materials Research Society Symposia Proceedings, 2002, 742, 341. | 0.1 | 1 |
| 20 | 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 |
| 21 | Optical Characterization of Bulk GaN Grown from a Na/Ga Flux. Materials Research Society Symposia Proceedings, 2002, 743, L3.36.1. | 0.1 | 0 |
| 22 | Optical characterization of bulk GaN grown by a Na-Ga melt technique. Journal of Crystal Growth, 2002, 246, 299-306. | 0.7 | 23 |
| 23 | Characterization of Ion Implanted GaN. Materials Research Society Symposia Proceedings, 2000, 639, 11391. | 0.1 | 3 |
| 24 | Surface recombination and sulfide passivation of GaN. Journal of Electronic Materials, 2000, 29, 325-331. | 1.0 | 64 |
| 25 | 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 |
| 26 | 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 |
| 27 | Optical Activation Behavior of Ion Implanted Acceptor Species in GaN. Materials Research Society Symposia Proceedings, 1999, 595, 1. | 0.1 | 5 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | Strain determination in heteroepitaxial GaN. Applied Physics Letters, 1997, 71, 829-831. | 1.5 | 68 |
| 33 | 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 |
| 34 | Reactive MBE Growth of GaN and GaN:H on GaN/SiC Substrates. Materials Research Society Symposia Proceedings, 1996, 449, 215. | 0.1 | 32 |
| 35 | Photoluminescence, Reflectance, and Magnetospectroscopy of Shallow Excitons in GaN. Materials Research Society Symposia Proceedings, 1996, 449, 713. | 0.1 | 31 |
| 36 | Ion beam mixing in strained layer structures. Nuclear Instruments & Methods in Physics Research B, 1996, 118, 704-708. | 0.6 | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Heteroepitaxial CdTe(111) grown by MBE on nominally flat and misoriented Si(001) substrates: characterization by electron microscopy and optical methods. Journal of Crystal Growth, 1996, 159, 58-63. | 0.7 | 13 |
| 38 | Optical characterization of ZnMnSse quaternary alloys for visible light emitting devices. Journal of Crystal Growth, 1996, 159, 50-53. | 0.7 | 4 |
| 39 | on GaAs grown by molecular beam epitaxy. Journal of Crystal Growth, 1996, 159, 94-98. | 0.7 | 16 |
| 40 | Deep-center photoluminescence in nitrogen-doped ZnSe. Physical Review B, 1995, 52, 17184-17190. | 1.1 | 21 |
| 41 | Growth and characterization of pseudomorphic single crystal zinc blende MnS. Applied Physics Letters, 1995, 67, 2690-2692. | 1.5 | 59 |
| 42 | Properties of the shallow O-related acceptor level in ZnSe. Journal of Applied Physics, 1995, 78, 5109-5119. | 1.1 | 24 |
| 43 | Optical Characterization of Compound Semiconductors. , 1995, , 678-771. | | 1 |
| 44 | Luminescence as a Diagnostic of Wide-Gap II-VI Compound Semiconductor Materials. Annual Review of Materials Research, 1995, 25, 601-646. | 5.5 | 10 |
| 45 | Effects of C incorporation on the luminescence properties of ZnSe grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 1994, 138, 338-345. | 0.7 | 15 |
| 46 | Systematic investigation of shallow acceptor levels in ZnSe. Journal of Crystal Growth, 1994, 138, 310-317. | 0.7 | 20 |
| 47 | Deep centre photoluminescence in nitrogen doped ZnSe. Physica Scripta, 1994, T54, 20-23. | 1.2 | 2 |
| 48 | Properties of the As-related shallow acceptor level in heteroepitaxial ZnSe grown by molecular-beam epitaxy. Physical Review B, 1993, 48, 10885-10892. | 1.1 | 18 |
| 49 | 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 |
| 50 | Effects of thermal strain on the optical properties of heteroepitaxial ZnTe. Physical Review B, 1992, 46, 3872-3885. | 1.1 | 51 |
| 51 | 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 |
| 52 | Spectroscopic Investigation of Li and P-Doped ZnSe Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 1992, 281, 567. | 0.1 | 0 |
| 53 | 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 |
| 54 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | 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 |
| 56 | Surface stoichiometry effects on ZnSe/GaAs heteroepitaxy. <i>Journal of Crystal Growth</i> , 1991, 111, 741-746. | 0.7 | 33 |
| 57 | Arsenic-doped p-type ZnTe grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 1991, 59, 688-690. | 1.5 | 19 |
| 58 | Vertical transport in semiconductor superlattices probed by miniband-to-acceptor magnetoluminescence. <i>Physical Review Letters</i> , 1990, 65, 2050-2053. | 2.9 | 21 |
| 59 | Arsenic doped ZnSe grown by molecular-beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1990, 8, 187. | 1.6 | 38 |
| 60 | Band bending, Fermi level pinning, and surface fixed charge on chemically prepared GaAs surfaces. <i>Applied Physics Letters</i> , 1989, 54, 555-557. | 1.5 | 95 |
| 61 | Spectroscopic studies of the influence of oxygen partial pressure on the incorporation of residual silicon impurities in vapor-phase epitaxial gallium arsenide. <i>Journal of Applied Physics</i> , 1989, 66, 3772-3786. | 1.1 | 8 |
| 62 | Photoluminescence characterization of ZnSe doped with Ga by bulk and planar doping techniques in molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 1989, 65, 3999-4005. | 1.1 | 43 |
| 63 | Atomic layer epitaxy of device quality GaAs. <i>Applied Physics Letters</i> , 1989, 55, 2769-2771. | 1.5 | 24 |
| 64 | Heteroepitaxy of GaAs on InP by molecular-beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1989, 7, 354. | 1.6 | 6 |
| 65 | 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 |
| 66 | Electrical characterization of gallium planar-doped ZnSe grown by molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 1989, 66, 4295-4300. | 1.1 | 11 |
| 67 | Extrinsic photoluminescence in coupled-well GaAs/AlGaAs superlattices. <i>Solid State Communications</i> , 1988, 66, 543-547. | 0.9 | 15 |
| 68 | InGaAs/InP superlattice mixing induced by Zn or Si diffusion. <i>Applied Physics Letters</i> , 1988, 53, 1051-1053. | 1.5 | 63 |
| 69 | GaAs on InP heteroepitaxial waveguides grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 1988, 53, 1242-1244. | 1.5 | 13 |
| 70 | Reduction of defects and inhomogeneous strain in heteroepitaxial ZnSe. <i>Applied Physics Letters</i> , 1988, 53, 2217-2219. | 1.5 | 14 |
| 71 | Highly resolved excitonic spectra in GaAs/AlGaAs superlattices grown by organometallic chemical vapor deposition. <i>Applied Physics Letters</i> , 1988, 52, 990-992. | 1.5 | 4 |
| 72 | Planar doping with gallium of molecular beam epitaxial ZnSe. <i>Applied Physics Letters</i> , 1988, 53, 2065-2067. | 1.5 | 42 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Effects of passivating ionic films on the photoluminescence properties of GaAs. Applied Physics Letters, 1987, 51, 2022-2024. | 1.5 | 220 |
| 74 | Growth of high-quality GaAs using trimethylgallium and diethylarsine. Applied Physics Letters, 1987, 50, 1194-1196. | 1.5 | 92 |
| 75 | 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 |
| 76 | New shallow acceptor levels in GaAs. Journal of Electronic Materials, 1986, 15, 345-348. | 1.0 | 9 |
| 77 | Neutron transmutation doping of high purity GaAs. Journal of Electronic Materials, 1985, 14, 477-511. | 1.0 | 17 |
| 78 | Characterization of high-purity Si-doped molecular beam epitaxial GaAs. Journal of Applied Physics, 1985, 58, 4685-4702. | 1.1 | 94 |
| 79 | Excited-state-donor-to-acceptor transitions in the photoluminescence spectrum of GaAs and InP. Physical Review B, 1984, 29, 1982-1992. | 1.1 | 43 |
| 80 | Identification of the residual acceptors in undoped high purity InP. Applied Physics Letters, 1984, 44, 319-321. | 1.5 | 36 |
| 81 | Photoluminescence characterization of molecular beam epitaxial GaAs grown using cracked AsH ₃ . Applied Physics Letters, 1984, 44, 240-242. | 1.5 | 15 |
| 82 | Photoluminescence identification of the C and Be acceptor levels in InP. Journal of Electronic Materials, 1984, 13, 463-491. | 1.0 | 76 |
| 83 | 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 |
| 84 | High purity GaAs grown by the hydride vpe process. Journal of Electronic Materials, 1983, 12, 681-699. | 1.0 | 15 |
| 85 | Impact ionization of excitons and shallow donors in InP. Physical Review B, 1983, 28, 4602-4607. | 1.1 | 32 |
| 86 | An analytical evaluation of GaAs grown with commercial and repurified trimethylgallium. Journal of Electronic Materials, 1982, 11, 1115-1137. | 1.0 | 41 |