A A Allerman

List of Publications by Year
in descending order

39 papers	2,702 citations	257450 24 h-index	434195 31 g-index
39 all docs	39 docs citations	39 times ranked	1746 citing authors

#	Article	IF	Citations
1	InGaAsN solar cells with 1.0 eV band gap, lattice matched to GaAs. Applied Physics Letters, 1999, 74, 729-731.	3.3	511
2	Effect of threading dislocations on the Bragg peakwidths of GaN, AlGaN, and AlN heterolayers. Applied Physics Letters, 2005, 86, 241904.	3.3	250
3	Junction and carrier temperature measurements in deep-ultraviolet light-emitting diodes using three different methods. Applied Physics Letters, 2005, 86, 031907.	3.3	182
4	Band structure ofInxGa1â^'xAs1â^'yNyalloys and effects of pressure. Physical Review B, 1999, 60, 4430-4433.	3.2	172
5	Time-resolved photoluminescence studies of InxGa1â^'xAs1â^'yNy. Applied Physics Letters, 2000, 76, 188-190.	3.3	162
6	Room-temperature direct current operation of 290 nm light-emitting diodes with milliwatt power levels. Applied Physics Letters, 2004, 84, 3394-3396.	3.3	155
7	Minority carrier diffusion, defects, and localization in InGaAsN, with 2% nitrogen. Applied Physics Letters, 2000, 77, 400-402.	3.3	153
8	Strain relaxation in AlGaN multilayer structures by inclined dislocations. Journal of Applied Physics, 2009, 105, .	2.5	133
9	Improved brightness of 380 nm GaN light emitting diodes through intentional delay of the nucleation island coalescence. Applied Physics Letters, 2002, 81, 1940-1942.	3.3	126
10	Reviewâ€"Ultra-Wide-Bandgap AlGaN Power Electronic Devices. ECS Journal of Solid State Science and Technology, 2017, 6, Q3061-Q3066.	1.8	104
11	Minority carrier diffusion and defects in InGaAsN grown by molecular beam epitaxy. Applied Physics Letters, 2002, 80, 1379-1381.	3.3	89
12	Deep levels in p-type InGaAsN lattice matched to GaAs. Applied Physics Letters, 1999, 74, 2830-2832.	3.3	83
13	InAsSbâ€based midâ€infrared lasers (3.8â€"3.9 Î¼m) and lightâ€emitting diodes with AlAsSb claddings and semimetal electron injection, grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1996, 69, 465-467.	3.3	74
14	Laser gain and threshold properties in compressive-strained and lattice-matched GaInNAs/GaAs quantum wells. Applied Physics Letters, 1999, 75, 2891-2893.	3.3	67
15	Relaxation of compressively-strained AlGaN by inclined threading dislocations. Applied Physics Letters, 2005, 87, 121112.	3.3	63
16	Hydrogen configurations, formation energies, and migration barriers in GaN. Journal of Applied Physics, 2003, 94, 2311-2318.	2.5	46
17	Midinfrared lasers and light-emitting diodes with InAsSb/InAsP strained-layer superlattice active regions. Applied Physics Letters, 1997, 70, 3188-3190.	3.3	45
18	Minimizing threading dislocations by redirection during cantilever epitaxial growth of GaN. Applied Physics Letters, 2002, 81, 2758-2760.	3.3	44

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19	Deep levels and their impact on generation current in Sn-doped InGaAsN. Journal of Applied Physics, 2001, 90, 3405-3408.	2.5	40
20	In situ measurements of GaN nucleation layer decompostion. Applied Physics Letters, 2003, 82, 1170-1172.	3.3	40
21	Deep-level defects in InGaAsN grown by molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 4777-4779.	3.3	39
22	The influence of Al composition on point defect incorporation in AlGaN. Applied Physics Letters, 2012, 100, 043509.	3.3	38
23	High slope efficiency, â€œcascadedâ€•midinfrared lasers with type I InAsSb quantum wells. Applied Physics Letters, 1998, 72, 2093-2095.	3.3	29
24	Photoluminescence-linewidth-derived reduced exciton mass forInyGa1âˆ’yAs1âˆ’xNxalloys. Physical Review B, 2000, 62, 7144-7149.	3.2	27
25	The metalorganic chemical vapor deposition growth of AlAsSb and InAsSb/InAs using novel source materials for Infrared Emitters. Journal of Electronic Materials, 1997, 26, 903-909.	2.2	15
26	The growth of InAsSb/InAsP strained-layer superlattices for use in infrared emitters. Journal of Electronic Materials, 1997, 26, 1225-1230.	2.2	8
27	Junction Temperature Measurements in Deep-UV Light-Emitting Diodes. Materials Research Society Symposia Proceedings, 2004, 831, 299.	0.1	2
28	Advances in AlGaN-based Deep UV LEDs. Materials Research Society Symposia Proceedings, 2004, 831, 67.	0.1	2
29	The Role of Nitrogen-Induced Localization and Defects in InGaAsN (? 2% N): Comparison of InGaAsN Grown by Molecular Beam Epitaxy and Metal-Organic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2001, 692, 1.	0.1	1
30	Cantilever Epitaxy of GaN on Sapphire: Further Reductions in Dislocation Density. Materials Research Society Symposia Proceedings, 2002, 743, L1.8.1.	0.1	1
31	Reduction in the Number of Mg Acceptors with Al Concentration in Al x Ga1âˆ’x N. Journal of Electronic Materials, 2015, 44, 4139-4143.	2.2	1
32	Novel Mid-Infrared Lasers with Compressively Strained InAsSb Active Regions. Materials Research Society Symposia Proceedings, 1996, 450, 23.	0.1	0
33	Preparation of AlAsSb and Mid-Infrared (3â€“5Î¼m) Lasers By Metal-Organic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1996, 450, 43.	0.1	0
34	Recent Progress in the Growth of Mid-ir Emitters by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1997, 484, 19.	0.1	0
35	Time-Resolved Photoluminescence Studies of InxGa1âˆ’xAs1âˆ’yNy. Materials Research Society Symposia Proceedings, 1999, 607, 153.	0.1	0
36	Characterization of Dark-Block Defects in Cantilever Epitaxial GaN on Sapphire. Materials Research Society Symposia Proceedings, 2002, 743, L3.15.1.	0.1	0

#	Article	IF	Citations
37	Characterization of Minority-Carrier Hole Transport in Nitride-Based Light-Emitting Diodes with Optical and Electrical Time-Resolved Techniques. Materials Research Society Symposia Proceedings, 2004, 831, 108.	0.1	0
38	The Mg impurity in nitride alloys. , 2014, , .		0
39	Comparison of deep level spectra of MBE- and MOCVD-grown InGaAsN. Materials Research Society Symposia Proceedings, 2002, 719, 1331.	0.1	0