

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

96 papers	2,591 citations	25 h-index	49 g-index
104 ext. papers	2,755 ext. citations	3.6 avg, IF	4.48 L-index

#	Paper	IF	Citations
96	Bowing parameter of the band-gap energy of GaN <sub>x</sub> As <sub>1-x</sub> . <i>Applied Physics Letters</i> , <b>1997</b> , 70, 1608-1610	3.4	352
95	Mechanism for low-temperature photoluminescence in GaNAs/GaAs structures grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 501-503	3.4	227
94	GaNAs/GaAs multiple quantum wells grown by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2442-2444	3.4	184
93	Direct determination of electron effective mass in GaNAs/GaAs quantum wells. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 1843	3.4	156
92	N incorporation in InP and band gap bowing of InN <sub>x</sub> P <sub>1-x</sub> . <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 1934-1936	2.5	93
91	N incorporation in GaP and band gap bowing of GaN <sub>x</sub> P <sub>1-x</sub> . <i>Applied Physics Letters</i> , <b>1996</b> , 69, 3710-3712	3.4	90
90	Mechanism for rapid thermal annealing improvements in undoped GaN <sub>x</sub> As <sub>1-x</sub> /GaAs structures grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2325-2327	3.4	87
89	Effect of band anticrossing on the optical transitions in GaAs <sub>1-x</sub> N <sub>x</sub> /GaAs multiple quantum wells. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	80
88	Room-temperature defect-engineered spin filter based on a non-magnetic semiconductor. <i>Nature Materials</i> , <b>2009</b> , 8, 198-202	27	78
87	Time-resolved studies of photoluminescence in GaN <sub>x</sub> P <sub>1-x</sub> alloys: Evidence for indirect-direct band gap crossover. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 52-54	3.4	77
86	Highly carbon-doped p-type Ga <sub>0.5</sub> In <sub>0.5</sub> As and Ga <sub>0.5</sub> In <sub>0.5</sub> P by carbon tetrachloride in gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1991</b> , 59, 2865-2867	3.4	64
85	Band anticrossing in GaP <sub>1-x</sub> N <sub>x</sub> alloys. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	62
84	Formation of nonradiative defects in molecular beam epitaxial GaN <sub>x</sub> As <sub>1-x</sub> studied by optically detected magnetic resonance. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3089-3091	3.4	59
83	Radiative recombination mechanism in GaN <sub>x</sub> P <sub>1-x</sub> alloys. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1740-1742	3.4	59
82	Effect of growth temperature on photoluminescence of GaNAs/GaAs quantum well structures. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 3781-3783	3.4	55
81	Dominant recombination centers in Ga(In)NAs alloys: Ga interstitials. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 241904	3.4	54
80	Hydrogen-induced improvements in optical quality of GaNAs alloys. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 3662-3664	3.4	45

79	Determination of V/III ratios on phosphide surfaces during gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1991</b> , 58, 254-256	3-4	37
78	GaNAsP: An intermediate band semiconductor grown by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 112105	3-4	32
77	Temperature dependence of the GaN <sub>x</sub> P <sub>1-x</sub> band gap and effect of band crossover. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 3984-3986	3-4	31
76	Efficient room-temperature nuclear spin hyperpolarization of a defect atom in a semiconductor. <i>Nature Communications</i> , <b>2013</b> , 4, 1751	17-4	29
75	Mechanism for radiative recombination and defect properties of GaP/GaNP core/shell nanowires. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 163106	3-4	27
74	Effects of arsenic in gas-source molecular beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1998</b> , 16, 1297		26
73	Electron spin filtering by thin GaNAs/GaAs multiquantum wells. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 052104	3-4	25
72	Impact ionization coefficients in (100) GaInP. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 3507-3509	3-4	25
71	Multiple dislocation loops in linearly graded In <sub>x</sub> Ga <sub>1-x</sub> As (000.53) on GaAs and In <sub>x</sub> Ga <sub>1-x</sub> P (000.32) on GaP. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 500-502	3-4	24
70	Structural properties of a GaN <sub>x</sub> P <sub>1-x</sub> alloy: Raman studies. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 3959-3961	3-4	23
69	Strain-compensated InAsP/GaInP multiple quantum wells for 1.3 $\mu$ m waveguide modulators. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 90-92	3-4	23
68	Growth and characterization of In <sub>Nx</sub> As <sub>y</sub> P <sub>1-x-y</sub> /InP strained quantum well structures. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 1161-1163	3-4	20
67	Deep center photoluminescence study of low-temperature InP grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 2443-2445	3-4	20
66	Photoluminescence properties of GaNP/GaP multiple quantum wells grown by gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2180-2182	3-4	18
65	Microstructures of GaN <sub>1-x</sub> P <sub>x</sub> layers grown on (0001) GaN substrates by gas source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 3192-3197	2-5	18
64	Ultraviolet emission from a multi-layer graphene/MgZnO/ZnO light-emitting diode. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 051120	3-4	17
63	High resolution x-ray diffraction studies of AlGaP grown by gas-source molecular-beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1995</b> , 13, 754		17
62	Growth and fabrication of InGaNP-based yellow-red light emitting diodes. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 191107	3-4	16

61	High-resolution x-ray diffraction of InAlAs/InP superlattices grown by gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1991</b> , 58, 1530-1532	3-4	16
60	Studies of band alignment and two-dimensional electron gas in InGaP/InGaAs heterostructures. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 061103	3-4	15
59	Electronic properties of low-temperature InP. <i>Journal of Electronic Materials</i> , <b>1993</b> , 22, 1487-1490	1-9	15
58	Optically detected magnetic resonance studies of low-temperature InP. <i>Journal of Electronic Materials</i> , <b>1993</b> , 22, 1491-1494	1-9	15
57	Strong room-temperature optical and spin polarization in InAs/GaAs quantum dot structures. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 203110	3-4	14
56	Formation of Ga interstitials in (Al,In) <sub>y</sub> Ga <sub>1-y</sub> N <sub>x</sub> P <sub>1-x</sub> alloys and their role in carrier recombination. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 2827-2829	3-4	14
55	Photoluminescence upconversion in GaInNP/InGaAs heterostructures grown by gas source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 073515	2-5	13
54	Modeling of band gap properties of GaInNP alloys lattice matched to GaAs. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 031907	3-4	12
53	Tensile strain relaxation in GaN <sub>x</sub> P <sub>1-x</sub> (x=0.1) grown by chemical beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 2952		11
52	A scanning tunneling microscopy study of atomic-scale clustering in InAsP/InP heterostructures. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2135-2137	3-4	11
51	A kinetic model for tris(dimethylamino) arsine decomposition on GaAs(100) surfaces. <i>Journal of Electronic Materials</i> , <b>1999</b> , 28, 43-49	1-9	11
50	Efficient room-temperature spin detector based on GaNAs. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 07C303	2-5	9
49	The influence of dopant type and carrier concentration on the effective mass and Seebeck coefficient of GaN <sub>x</sub> As <sub>1-x</sub> thin films. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 072114	3-4	9
48	Electrical and deep-level characterization of GaP <sub>1-x</sub> N <sub>x</sub> grown by gas-source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 103707	2-5	9
47	Optical detection of quantum oscillations in InP/InGaAs quantum structures. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 809-811	3-4	9
46	Feasibility of enhancing the thermoelectric power factor in GaN <sub>x</sub> As <sub>1-x</sub> . <i>Physical Review B</i> , <b>2012</b> , 86,	3-3	8
45	Gas-source molecular beam epitaxial growth and characterization of InN <sub>x</sub> P <sub>1-x</sub> on InP. <i>Journal of Electronic Materials</i> , <b>1997</b> , 26, 252-256	1-9	8
44	Amber GaNP-based light-emitting diodes directly grown on GaP(100) substrates. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2006</b> , 24, 2202		8

43	Radiative recombination of GaInNP alloys lattice matched to GaAs. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 011919	3-4	8
42	Photoluminescence of nitrogen-doped ZnO. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 611-613		8
41	The effect of nitrogen on self-assembled GaInNAs quantum dots grown on GaAs. <i>Physica Status Solidi (B): Basic Research</i> , <b>2003</b> , 240, 310-313	1-3	8
40	Effects of weak ordering of InGaPN. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 211914	3-4	8
39	Band alignment in GaInNP/GaAs heterostructures grown by gas-source molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 261904	3-4	8
38	Room-temperature spin injection and spin loss across a GaNAs/GaAs interface. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 012112	3-4	7
37	Room temperature spin filtering effect in GaNAs: Role of hydrogen. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 152109	3-4	7
36	Effect of postgrowth hydrogen treatment on defects in GaNP. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 141920	3-4	7
35	Nature and Formation of Non-Radiative Defects in GaNAs And InGaAsN. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 692, 1		7
34	Atomic-scale compositional structure of InAsP/InP and InNAsP/InP heterostructures grown by molecular-beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1998</b> , 16, 2395		7
33	Heteroepitaxial growth of InP/In <sub>0.52</sub> Ga <sub>0.48</sub> As structures on GaAs (100) by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 2708-2710	3-4	7
32	Hydrogen passivation of nitrogen in GaNAs and GaNP alloys: How many H atoms are required for each N atom?. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 021920	3-4	6
31	Magnetic resonance signatures of grown-in defects in GaInNP alloys grown on a GaAs substrate. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 222110	3-4	6
30	Optical properties of InGaNP quantum wells grown on GaP (100) substrates by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 111922	3-4	5
29	A Study of Mixed Group-V Nitrides Grown by Gas-Source Molecular Beam Epitaxy Using a Nitrogen Radical Beam Source. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 449, 203		5
28	Low-Temperature Growth and Characterization of InP Grown by Gas-Source Molecular-Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 241, 283		5
27	Effects of hydrogenation on non-radiative defects in GaNP and GaNAs alloys: An optically detected magnetic resonance study. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 023501	2-5	4
26	Temperature dependence of dynamic nuclear polarization and its effect on electron spin relaxation and dephasing in InAs/GaAs quantum dots. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 143105	3-4	4

25	Optimization and characterization of interfaces of InGaAs/InGaAsP quantum well structures grown by gas-source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1995</b> , 78, 2889-2891	2.5	4
24	Formation, electronic structure, and optical properties of self-assembled quantum-dot single-photon emitters in Ga(N,As,P) nanowires. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	3
23	Growth and characterization of AlGaNP on GaP(100) substrates. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 071903.	3.4	2
22	Unintentional nitrogen incorporation in ZnO nanowires detected by electron paramagnetic resonance spectroscopy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2016</b> , 13, 572-575		1
21	Effect of thermal annealing on defects in post-growth hydrogenated GaNP. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 561-563		1
20	Silicon dopant passivation by nitrogen during molecular beam epitaxy of GaNAs. <i>Applied Physics A: Materials Science and Processing</i> , <b>2015</b> , 120, 635-639	2.6	1
19	Material optimization for a polarized electron source from strained GaAs:Be grown on an InGaP pseudosubstrate. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 2282		1
18	Raman Studies of GaNP Alloy. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 693, 567		1
17	Thermal stability and doping efficiency of intrinsic modulation doping in InP-based structures. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 1733-1735	3.4	1
16	Planarized growth of AlGaAs/GaAs heterostructures on patterned substrates by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 2128-2130	2.5	1
15	Photoelastic Waveguides Using Strain-Compensated InAsP/InGaP Multi-Quantum-Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 379, 303		1
14	Evidence of type-II band alignment at the ordered GaInNP to GaAs heterointerface. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 803-807	1.6	
13	Study on interface abruptness of In <sub>x</sub> Ga <sub>1-x</sub> As/In <sub>y</sub> Ga <sub>1-y</sub> As <sub>z</sub> P <sub>1-z</sub> heterostructures grown by gas-source molecular beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 2918		
12	Gas-Source Molecular Beam Epitaxy Growth and Characterization of GaNP/GaP Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 618, 279		
11	A study of Ar <sup>+</sup> laser-assisted Si doping of GaAs by chemical beam epitaxy. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1716-1718	3.4	
10	Chemical Beam Epitaxy of InP with Ar + Laser Irradiation. <i>Journal of the Electrochemical Society</i> , <b>1999</b> , 146, 2679-2682	3.9	
9	Localized Doping Enhancement by Photon-Assisted Chemical Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 570, 291		
8	A Study of Low-Temperature Grown GaP by Gas-Source Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 421, 293		

- 7 In-Situ Etch to Improve Chemical Beam Epitaxy Regrown AlGaAs/GaAs Interfaces for HBT Applications. *Materials Research Society Symposia Proceedings*, **1996**, 448, 87
- 6 Gas-Source molecular beam epitaxy and characterization of InGaAs/InGaAsP quantum well structures on InP. *Journal of Electronic Materials*, **1996**, 25, 1049-1053 1.9
- 5 Strain-Compensation in InAsP/GaInP Multiple Quantum Wells for 1.3  $\mu$ m Wavelength. *Materials Research Society Symposia Proceedings*, **1995**, 379, 291
- 4 A New type of Graded Buffer Layer for Gas-Source Molecular Beam Epitaxial Growth of Highly Strained In<sub>x</sub>Ga<sub>1-x</sub>P/GAP Multiple Quantum Wells on Gap. *Materials Research Society Symposia Proceedings*, **1995**, 379, 67
- 3 Enhanced Photoluminescence from Erbium-Doped Gap Microdisk Resonator. *Materials Research Society Symposia Proceedings*, **1995**, 392, 229
- 2 Growth and Characterization of In<sub>x</sub>Ga<sub>1-x</sub>P (x=0.38) on GaP(100) with a Linearly Graded Buffer Layer by Gas-Source Molecular Beam Epitaxy. *Materials Research Society Symposia Proceedings*, **1992**, 281, 227
- 1 On the Origin of Light Emission in GaN<sub>x</sub>P<sub>1-x</sub>. *Materials Research Society Symposia Proceedings*, **2002**, 722, 421