Irina A Buyanova

List of Publications by Year
in descending order

349	6,084	109137	110170
papers	citations	35 h-index	64 g-index

353	353	353	5162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design rules for minimizing voltage losses in high-efficiency organic solar cells. Nature Materials, 2018, 17, 703-709.	13.3	701
2	Mechanism for low-temperature photoluminescence in GaNAs/GaAs structures grown by molecular-beam epitaxy. Applied Physics Letters, 1999, 75, 501-503.	1.5	252
3	Direct determination of electron effective mass in GaNAs/GaAs quantum wells. Applied Physics Letters, 2000, 77, 1843.	1.5	172
4	Electronic Properties of Ga(In)NAs Alloys. MRS Internet Journal of Nitride Semiconductor Research, 2001, 6, 1.	1.0	169
5	ZnO Doped With Transition Metal Ions. IEEE Transactions on Electron Devices, 2007, 54, 1040-1048.	1.6	137
6	Wide bandgap GaN-based semiconductors for spintronics. Journal of Physics Condensed Matter, 2004, 16, R209-R245.	0.7	117
7	Oxygen and zinc vacancies in as-grown ZnO single crystals. Journal Physics D: Applied Physics, 2009, 42, 175411.	1.3	117
8	Mechanism for rapid thermal annealing improvements in undoped GaNxAs1â^'x/GaAs structures grown by molecular beam epitaxy. Applied Physics Letters, 2000, 77, 2325-2327.	1.5	95
9	Influence of conduction-band nonparabolicity on electron confinement and effective mass inGaNxAs1â^'xâ^•GaAsquantum wells. Physical Review B, 2004, 69, .	1.1	94
10	Room-temperature defect-engineered spin filter based on a non-magnetic semiconductor. Nature Materials, 2009, 8, 198-202.	13.3	94
11	Ferromagnetism in Transition-Metal Doped ZnO. Journal of Electronic Materials, 2007, 36, 462-471.	1.0	90
12	Time-resolved studies of photoluminescence in GaNxP1â^'x alloys: Evidence for indirect-direct band gap crossover. Applied Physics Letters, 2002, 81, 52-54.	1.5	83
13	Band gap properties of Zn1â^'xCdxO alloys grown by molecular-beam epitaxy. Applied Physics Letters, 2006, 89, 151909.	1.5	71
14	Formation of nonradiative defects in molecular beam epitaxial GaNxAs1â^'x studied by optically detected magnetic resonance. Applied Physics Letters, 2001, 79, 3089-3091.	1.5	63
15	Radiative recombination mechanism in GaNxP1â^'x alloys. Applied Physics Letters, 2002, 80, 1740-1742.	1.5	62
16	Intrinsic optical properties of GaN epilayers grown on SiC substrates: Effect of the builtâ€in strain. Applied Physics Letters, 1996, 69, 1255-1257.	1.5	61
17	Photoluminescence of GaN: Effect of electron irradiation. Applied Physics Letters, 1998, 73, 2968-2970.	1.5	60
18	Effect of growth temperature on photoluminescence of GaNAs/GaAs quantum well structures. Applied Physics Letters, 1999, 75, 3781-3783.	1.5	59

#	Article	IF	Citations
19	Type I band alignment in theGaNxAs1â^'x/GaAsquantum wells. Physical Review B, 2000, 63, .	1.1	57
20	Dominant recombination centers in Ga(In)NAs alloys: Ga interstitials. Applied Physics Letters, 2009, 95, .	1.5	57
21	Signature of an intrinsic point defect inGaNxAs1â^'x. Physical Review B, 2001, 63, .	1.1	56
22	Nearâ€Infrared Lightâ€Responsive Cuâ€Doped Cs₂AgBiBr₆. Advanced Functional Materials, 2020, 30, 2005521.	7.8	56
23	Magnetizing lead-free halide double perovskites. Science Advances, 2020, 6, .	4.7	56
24	Hydrogen-induced improvements in optical quality of GaNAs alloys. Applied Physics Letters, 2003, 82, 3662-3664.	1.5	55
25	Nitrogen passivation induced by atomic hydrogen:â€ƒTheGaP1â^'yNycase. Physical Review B, 2003, 67, .	1.1	53
26	Zinc-Vacancyâ€“Donor Complex: A Crucial Compensating Acceptor in ZnO. Physical Review Applied, 2014, 2, .	1.5	51
27	Analysis of band anticrossing inGaNxP1â^'xalloys. Physical Review B, 2004, 70, .	1.1	50
28	Free Excitons in GaN. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	45
29	Dilute Nitride Nanowire Lasers Based on a GaAs/GaNAs Core/Shell Structure. Nano Letters, 2017, 17, 1775-1781.	4.5	45
30	Recombination processes in N-containing IIIâ€“V ternary alloys. Solid-State Electronics, 2003, 47, 467-475.	0.8	44
31	Magneto-optical and light-emission properties of IIIÂAsÂN semiconductors. Semiconductor Science and Technology, 2002, 17, 815-822.	1.0	42
32	Er/O and Er/F doping during molecular beam epitaxial growth of Si layers for efficient 1.54 Î¼m light emission. Applied Physics Letters, 1997, 70, 3383-3385.	1.5	41
33	Properties of Ga-interstitial defects inAlxGa1â^'xNyP1â^'y. Physical Review B, 2005, 71, .	1.1	37
34	On the origin of spin loss in GaMnN/InGaN light-emitting diodes. Applied Physics Letters, 2004, 84, 2599-2601.	1.5	36
35	Turning ZnO into an Efficient Energy Upconversion Material by Defect Engineering. Advanced Functional Materials, 2014, 24, 3760-3764.	7.8	36
36	Growth and characterization of dilute nitride GaNxP1â^'x nanowires and GaNxP1â^'x/GaNyP1â^'y core/shell nanowires on Si (111) by gas source molecular beam epitaxy. Applied Physics Letters, 2014, 105, .	1.5	36

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37	Room-temperature InP/InAsP Quantum Discs-in-Nanowire Infrared Photodetectors. Nano Letters, 2017, 17, 3356-3362.	4.5	36
38	Spin injection and helicity control of surface spin photocurrent in a three dimensional topological insulator. Nature Communications, 2017, 8, 15401.	5.8	36
39	Evidence for coupling between exciton emissions and surface plasmon in Ni-coated ZnO nanowires. Nanotechnology, 2012, 23, 425201.	1.3	35
40	Suppression of non-radiative surface recombination by N incorporation in GaAs/GaNAs core/shell nanowires. Scientific Reports, 2015, 5, 11653.	1.6	35
41	Temperature dependence of the GaNxP1â^'x band gap and effect of band crossover. Applied Physics Letters, 2002, 81, 3984-3986.	1.5	34
42	Defects in N, O and N, Zn implanted ZnO bulk crystals. Journal of Applied Physics, 2013, 113, .	1.1	34
43	Exciton spin relaxation in diluted magnetic semiconductorZn1â^'xMnxSe/CdSesuperlattices: Effect of spin splitting and role of longitudinal optical phonons. Physical Review B, 2003, 67, .	1.1	33
44	Efficient room-temperature nuclear spin hyperpolarization of a defect atom in a semiconductor. Nature Communications, 2013, 4, 1751.	5.8	33
45	The excitonic bandgap of GaN: Dependence on substrate. Solid-State Electronics, 1997, 41, 239-241.	0.8	31
46	Electron spin filtering by thin GaNAs/GaAs multiquantum wells. Applied Physics Letters, 2010, 96, .	1.5	31
47	Defects in dilute nitrides. Journal of Physics Condensed Matter, 2004, 16, S3027-S3035.	0.7	30
48	Long lifetime of free excitons in ZnO tetrapod structures. Applied Physics Letters, 2010, 96, .	1.5	30
49	Mechanism for radiative recombination and defect properties of GaP/GaNP core/shell nanowires. Applied Physics Letters, 2012, 101, 163106.	1.5	30
50	Mechanism for thermal quenching of luminescence in SiGe/Si structures grown by molecular beam epitaxy: Role of nonradiative defects. Applied Physics Letters, 1997, 71, 3676-3678.	1.5	29
51	Tunable laser spectroscopy of spin injection in ZnMnSe/ZnCdSe quantum structures. Applied Physics Letters, 2002, 81, 2196-2198.	1.5	29
52	Enhancement of polymer endurance to UV light by incorporation of semiconductor nanoparticles. Nanoscale Research Letters, 2015, 10, 81.	3.1	29
53	Optical characterization of III-nitrides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 112-122.	1.7	28
54	Near-Infrared Lasing at 1 Î¼m from a Dilute-Nitride-Based Multishell Nanowire. Nano Letters, 2019, 19, 885-890.	4.5	28

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55	Vibronic coherence contributes to photocurrent generation in organic semiconductor heterojunction diodes. Nature Communications, 2020, 11, 617.	5.8	28
56	Structural properties of a GaNxP1â^'x alloy: Raman studies. Applied Physics Letters, 2001, 78, 3959-3961.	1.5	27
57	Origin of radiative recombination and manifestations of localization effects in GaAs/GaNAs core/shell nanowires. Applied Physics Letters, 2014, 105, .	1.5	27
58	Room-temperature electron spin polarization exceeding 90% in an opto-spintronic semiconductor nanostructure via remote spin filtering. Nature Photonics, 2021, 15, 475-482.	15.6	27
59	Identification of a dominant mechanism for optical spin injection from a diluted magnetic semiconductor: Spin-conserving energy transfer via localized excitations. Physical Review B, 2005, 72, .	1.1	26
60	Efficient upconversion of photoluminescence via two-photon absorption in bulk and nanorod ZnO. Applied Physics B: Lasers and Optics, 2012, 108, 919-924.	1.1	26
61	Energy Upconversion in GaP/GaNP Core/Shell Nanowires for Enhanced Nearâ€Infrared Light Harvesting. Small, 2014, 10, 4403-4408.	5.2	26
62	Experimental evidence for N-induced strong coupling of host conduction band states inGaNxP1â^'x:â€ƒInsight into the dominant mechanism for giant band-gap bowing. Physical Review B, 2004, 69, .	1.1	25
63	Point defects in dilute nitride III-Nâ€“As and III-Nâ€“P. Physica B: Condensed Matter, 2006, 376-377, 545-551.	1.3	25
64	Effects of surface finish on the initial oxidation of HVAF-sprayed NiCoCrAlY coatings. Surface and Coatings Technology, 2019, 364, 43-56.	2.2	25
65	Direct experimental evidence for unusual effects of hydrogen on the electronic and vibrational properties ofGaNxP1â^'xalloys: A proof for a general property of dilute nitrides. Physical Review B, 2004, 70, .	1.1	24
66	Charge Generation via Relaxed Charge-Transfer States in Organic Photovoltaics by an Energy-Disorder-Driven Entropy Gain. Journal of Physical Chemistry C, 2018, 122, 12640-12646.	1.5	24
67	Efficient spin depolarization in ZnCdSe spin detector: an important factor limiting optical spin injection efficiency in ZnMnSeâ•ZnCdSe spin light-emitting structures. Applied Physics Letters, 2004, 85, 5260-5262.	1.5	23
68	Mechanism for radiative recombination in ZnCdO alloys. Applied Physics Letters, 2007, 90, 261907.	1.5	23
69	Roomâ€Temperature Electron Spin Amplifier Based on Ga(In)NAs Alloys. Advanced Materials, 2013, 25, 738-742.	11.1	23
70	Dynamics of exciton-spin injection, transfer, and relaxation in self-assembled quantum dots of CdSe coupled with a diluted magnetic semiconductor layer ofZn0.80Mn0.20Se. Physical Review B, 2007, 75, .	1.1	22
71	Effects of hydrogen on the optical properties of ZnCdOâ•ZnO quantum wells grown by molecular beam epitaxy. Applied Physics Letters, 2008, 92, 261912.	1.5	22
72	Origin of Strong Photoluminescence Polarization in GaNP Nanowires. Nano Letters, 2014, 14, 5264-5269.	4.5	22

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73	Strongly polarized quantum-dot-like light emitters embedded in GaAs/GaNAs core/shell nanowires. Nanoscale, 2016, 8, 15939-15947.	2.8	22
74	Control of spin functionality in ZnMnSe-based structures: Spin switching versus spin alignment. Applied Physics Letters, 2003, 82, 1700-1702.	1.5	21
75	Paramagnetic centers in detonation nanodiamonds studied by CW and pulse EPR. Chemical Physics Letters, 2010, 493, 319-322.	1.2	21
76	Efficient nitrogen incorporation in ZnO nanowires. Scientific Reports, 2015, 5, 13406.	1.6	21
77	Intrinsic Doping: A New Approach forn-Type Modulation Doping in InP-Based Heterostructures. Physical Review Letters, 1996, 77, 2734-2737.	2.9	20
78	As-Grown 4H-SiC Epilayers with Magnetic Properties. Materials Science Forum, 2004, 457-460, 747-750.	0.3	20
79	Efficient spin relaxation in InGaNâˆ•GaN and InGaNâˆ•GaMnN quantum wells: An obstacle to spin detection. Applied Physics Letters, 2005, 87, 192107.	1.5	20
80	Raman spectroscopy of GaP/GaNP core/shell nanowires. Applied Physics Letters, 2014, 105, 193102.	1.5	20
81	Interfacial bonding in a CdS/PVA nanocomposite: A Raman scattering study. Journal of Colloid and Interface Science, 2015, 452, 33-37.	5.0	20
82	Optimizing GaNP Coaxial Nanowires for Efficient Light Emission by Controlling Formation of Surface and Interfacial Defects. Nano Letters, 2015, 15, 242-247.	4.5	20
83	Strong room-temperature optical and spin polarization in InAs/GaAs quantum dot structures. Applied Physics Letters, 2011, 98, .	1.5	19
84	Effects of Polytypism on Optical Properties and Band Structure of Individual Ga(N)P Nanowires from Correlative Spatially Resolved Structural and Optical Studies. Nano Letters, 2015, 15, 4052-4058.	4.5	19
85	Photoluminescence of the two-dimensional hole gas inp-type Î´-doped Si layers. Physical Review B, 1996, 53, 9587-9590.	1.1	18
86	Identification ofGa-interstitial defects inGaNyP1âˆ’yandAlxGa1âˆ’xNyP1âˆ’y. Physical Review B, 2004, 70, .	1.1	18
87	Dominant factors limiting efficiency of optical spin detection in ZnO-based materials. Applied Physics Letters, 2008, 92, 092103.	1.5	18
88	Effects of stoichiometry on defect formation in ZnO epilayers grown by molecular-beam epitaxy: An optically detected magnetic resonance study. Journal of Applied Physics, 2008, 103, 023712.	1.1	18
89	Catalytic conversion of C2-C3 alcohols on detonation nanodiamond and its modifications. Russian Journal of Physical Chemistry A, 2012, 86, 26-31.	0.1	18
90	Effects of Ni-coating on ZnO nanowires: A Raman scattering study. Journal of Applied Physics, 2013, 113, 214302.	1.1	18

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91	Influence of ion bombardment on Si and SiGe films during molecular beam epitaxy growth. Applied Physics Letters, 1996, 68, 238-240.	1.5	17
92	Effects of defect scattering on the photoluminescence of exciton-polaritons in n-GaN. Solid State Communications, 1998, 105, 497-501.	0.9	17
93	Identification of an isolated arsenic antisite defect in GaAsBi. Applied Physics Letters, 2014, 104, 052110.	1.5	17
94	Identification of Grown-In Efficient Nonradiative Recombination Centers in Molecular Beam Epitaxial Silicon. Physical Review Letters, 1996, 77, 4214-4217.	2.9	16
95	Optical study of spin injection dynamics in InGaNâˆ•GaN quantum wells with GaMnN injection layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2668.	1.6	16
96	Efficiency of optical spin injection and spin loss from a diluted magnetic semiconductor ZnMnSe to CdSe nonmagnetic quantum dots. Physical Review B, 2008, 77, .	1.1	16
97	Dynamics of donor bound excitons in ZnO. Applied Physics Letters, 2013, 102, .	1.5	16
98	Room-temperature polarized spin-photon interface based on a semiconductor nanodisk-in-nanopillar structure driven by few defects. Nature Communications, 2018, 9, 3575.	5.8	16
99	GaAs/GaNAs core-multishell nanowires with nitrogen composition exceeding 2%. Applied Physics Letters, 2018, 113, .	1.5	16
100	Measurements of Strain and Bandgap of Coherently Epitaxially Grown Wurtzite InAsPâ€“InP Coreâ€“Shell Nanowires. Nano Letters, 2019, 19, 2674-2681.	4.5	16
101	Thermal-annealing effects on energy level alignment at organic heterojunctions and corresponding voltage losses in all-polymer solar cells. Nano Energy, 2020, 72, 104677.	8.2	16
102	Similarity between the 0.88-eV photoluminescence in GaN and the electron-capture emission of theOPdonor in GaP. Physical Review B, 1998, 58, R13351-R13354.	1.1	15
103	Optical properties of GaNAs/GaAs structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 82, 143-147.	1.7	15
104	Modeling of band gap properties of GaInNP alloys lattice matched to GaAs. Applied Physics Letters, 2006, 88, 031907.	1.5	15
105	Optical characterization of ZnMnO-based dilute magnetic semiconductor structures. Journal of Vacuum Science & Technology B, 2006, 24, 259.	1.3	15
106	Defect properties of ZnO nanowires revealed from an optically detected magnetic resonance study. Nanotechnology, 2013, 24, 015701.	1.3	15
107	Magneto-optical properties of Cr3+ in Î²-Ga2O3. Applied Physics Letters, 2021, 119, .	1.5	15
108	Exciton properties inp-type GaAs/AlxGa1â^'xAs quantum wells in the high doping regime. Physical Review B, 1996, 54, 16989-16993.	1.1	14

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109	Photoluminescence characterization of GaNAs/GaAs structures grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 75, 166-169.	1.7	14
110	Formation of Ga interstitials in (Al,In)yGa1â^'yNxP1â^'x alloys and their role in carrier recombination. Applied Physics Letters, 2004, 85, 2827-2829.	1.5	14
111	Formation of grown-in defects in molecular beam epitaxial Ga(In)NP: Effects of growth conditions and postgrowth treatments. Journal of Applied Physics, 2008, 103, 063519.	1.1	14
112	Electron spin control in dilute nitride semiconductors. Journal of Physics Condensed Matter, 2009, 21, 174211.	0.7	14
113	Photoluminescence of exciton-polaritons in GaN. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 130-133.	1.7	13
114	Effect of momentum relaxation on exciton spin dynamics in diluted magnetic semiconductorZnMnSeâ^•CdSesuperlattices. Physical Review B, 2005, 71, .	1.1	13
115	Photoluminescence upconversion in GaInNPâ^•GaAs heterostructures grown by gas source molecular beam epitaxy. Journal of Applied Physics, 2006, 99, 073515.	1.1	13
116	Slowdown of light due to exciton-polariton propagation in ZnO. Physical Review B, 2011, 83, .	1.1	13
117	Fabryâ€“Perot Microcavity Modes in Single GaP/GaNP Core/Shell Nanowires. Small, 2015, 11, 6331-6337.	5.2	13
118	Dilute nitrides-based nanowiresâ€”a promising platform for nanoscale photonics and energy technology. Nanotechnology, 2019, 30, 292002.	1.3	13
119	Competition between triplet pair formation and excimer-like recombination controls singlet fission yield. Cell Reports Physical Science, 2021, 2, 100339.	2.8	13
120	Spin injection in lateral InAs quantum dot structures by optical orientation spectroscopy. Nanotechnology, 2009, 20, 375401.	1.3	12
121	On the origin of suppression of free exciton no-phonon emission in ZnO tetrapods. Applied Physics Letters, 2010, 96, .	1.5	12
122	Effect of hyperfine-induced spin mixing on the defect-enabled spin blockade and spin filtering in GaNAs. Physical Review B, 2013, 87, .	1.1	12
123	Defect formation in GaAs/GaNxAs1-x core/shell nanowires. Applied Physics Letters, 2016, 109, .	1.5	12
124	Effects of Nitrogen Incorporation on Structural and Optical Properties of GaNAsP Nanowires. Journal of Physical Chemistry C, 2017, 121, 7047-7055.	1.5	12
125	Strong effects of carrier concentration on the Fermi-edge singularity in modulation-doped InP/InxGa1â^'xAs heterostructures. Physical Review B, 1997, 55, 7052-7058.	1.1	11
126	Ga-related defect in as-grown Zn-doped GaN: An optically detected magnetic resonance study. Physical Review B, 2000, 62, R10607-R10609.	1.1	11

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127	Optically detected magnetic resonance studies of point defects in Ga(Al)NAs. Physical Review B, 2006, 73, .	1.1	11
128	Migration and luminescence enhancement effects of deuterium in ZnOâˆ•ZnCdO quantum wells. Applied Physics Letters, 2008, 92, .	1.5	11
129	Evidence for a phosphorus-related interfacial defect complex at a GaP/GaNP heterojunction. Physical Review B, 2010, 81, .	1.1	11
130	Effects of Ultraviolet Light on Optical Properties of Colloidal CdS Nanoparticles Embedded in Polyvinyl Alcohol (PVA) Matrix. Advanced Science, Engineering and Medicine, 2012, 4, 394-400.	0.3	11
131	Role of the host polymer matrix in light emission processes in nano-CdS/poly vinyl alcohol composite. Thin Solid Films, 2013, 543, 11-15.	0.8	11
132	Anomalous spectral dependence of optical polarization and its impact on spin detection in InGaAs/GaAs quantum dots. Applied Physics Letters, 2014, 105, 132106.	1.5	11
133	Growth of isotopically enriched ZnO nanorods of excellent optical quality. Journal of Crystal Growth, 2015, 429, 6-12.	0.7	11
134	Electron paramagnetic resonance signatures of Co2+ and Cu2+ in Î² -Ga2O3. Applied Physics Letters, 2019, 115, .	1.5	11
135	Effect of Crystal Symmetry on the Spin States of Fe³⁺ and Vibration Modes in Lead-free Double-Perovskite Cs₂AgBi(Fe)Br₆. Journal of Physical Chemistry Letters, 2020, 11, 4873-4878.	2.1	11
136	Thermally activated intersubband and hopping transport in center-dopedp-type GaAs/AlxGa1â^'xAs quantum wells. Physical Review B, 1996, 53, 1357-1361.	1.1	10
137	Optical characterization of wide bandgap semiconductors. Thin Solid Films, 2000, 364, 98-106.	0.8	10
138	Magneto-optical studies of the 0.88-eV photoluminescence emission in electron-irradiated GaN. Physical Review B, 2000, 62, 16572-16577.	1.1	10
139	Optical and electrical characterization of (Ga,Mn)N/InGaN multiquantum well light-emitting diodes. Journal of Electronic Materials, 2004, 33, 467-471.	1.0	10
140	Recharging behavior of nitrogen-centers in ZnO. Journal of Applied Physics, 2014, 116, .	1.1	10
141	Effects of Strong Band-Tail States on Exciton Recombination Dynamics in Dilute Nitride GaP/GaNP Core/Shell Nanowires. Journal of Physical Chemistry C, 2018, 122, 19212-19218.	1.5	10
142	Coexistence of two deep donor states,DXâ^'andDX0, of the Sn donor inGa1â^'xAlxAs. Physical Review B, 1992, 45, 11667-11671.	1.1	9
143	Ultrasound regeneration of EL2 centres in GaAs. Semiconductor Science and Technology, 1994, 9, 158-162.	1.0	9
144	Some critical issues on growth of high quality Si and SiGe films using a solid-source molecular beam epitaxy system. Journal of Crystal Growth, 1995, 157, 242-247.	0.7	9

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145	Properties of deep photoluminescence bands in SiGe/Si quantum structures grown by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 1642-1644.	1.5	9
146	Effect of hydrogen passivation on Beâ€doped AlGaAs/GaAs quantum wells. Applied Physics Letters, 1996, 68, 1365-1367.	1.5	9
147	Optical detection of quantum oscillations in InP/InGaAs quantum structures. Applied Physics Letters, 1996, 69, 809-811.	1.5	9
148	Mechanism for Light Emission in GaNAs/GaAs Structures Grown by Molecular Beam Epitaxy. Physica Status Solidi (B): Basic Research, 1999, 216, 125-129.	0.7	9
149	Evaluation of optical quality and defect properties of GaNxP1â^'x alloys lattice matched to Si. Applied Physics Letters, 2004, 85, 6347-6349.	1.5	9
150	Effects of rapid thermal annealing on optical properties of GaNxP1â^'xalloys grown by solid source molecular beam epitaxy. Semiconductor Science and Technology, 2005, 20, 353-356.	1.0	9
151	Density-dependent dynamics of exciton magnetic polarons inZnMnSeâ•ZnSSetype-II quantum wells. Physical Review B, 2006, 73, .	1.1	9
152	Hydrogen passivation of nitrogen in GaNAs and GaNP alloys: How many H atoms are required for each N atom?. Applied Physics Letters, 2007, 90, 021920.	1.5	9
153	Effects of Ga doping on optical and structural properties of ZnO epilayers. Superlattices and Microstructures, 2009, 45, 413-420.	1.4	9
154	Donor bound excitons involving a hole from the B valence band in ZnO: Time resolved and magneto-photoluminescence studies. Applied Physics Letters, 2011, 99, 091909.	1.5	9
155	Effect of postgrowth hydrogen treatment on defects in GaNP. Applied Physics Letters, 2011, 98, 141920.	1.5	9
156	Efficient room-temperature spin detector based on GaNAs. Journal of Applied Physics, 2012, 111, 07C303.	1.1	9
157	Optically detected magnetic resonance studies of point defects in quaternary GaNAsP epilayers grown by vapor phase epitaxy. Applied Physics Letters, 2013, 102, 021910.	1.5	9
158	Luminescent and Optically Detected Magnetic Resonance Studies of CdS/PVA Nanocomposite. Nanoscale Research Letters, 2017, 12, 130.	3.1	9
159	Effects of N implantation on defect formation in ZnO nanowires. Thin Solid Films, 2019, 687, 137449.	0.8	9
160	Molecular beam epitaxial growth of dilute nitride GaNAs and GaInNAs nanowires. Nanotechnology, 2019, 30, 244002.	1.3	9
161	Anomalously Strong Secondâ€Harmonic Generation in GaAs Nanowires via Crystalâ€Structure Engineering. Advanced Functional Materials, 2021, 31, 2104671.	7.8	9
162	Symmetry properties of Er3+related centers in In1â^'xGaxP with low alloy compositions. Applied Physics Letters, 1992, 61, 2461-2463.	1.5	8

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163	Effect of ion bombardment on deep photoluminescence bands inp-type boron-modulation-doped Si layers grown by molecular-beam epitaxy. Physical Review B, 1995, 52, 12006-12012.	1.1	8
164	Photoluminescence of defects induced in silicon by SF6/O2reactiveâ€ion etching. Journal of Applied Physics, 1995, 78, 3348-3352.	1.1	8
165	Nonradiative defects in Si and SiGe/Si heterostructures grown by molecular beam epitaxy. Applied Physics Letters, 1996, 68, 1256-1258.	1.5	8
166	Postgrowth hydrogen treatments of nonradiative defects in low-temperature molecular beam epitaxial Si. Applied Physics Letters, 1997, 70, 369-371.	1.5	8
167	Temperature behavior of the GaNP band gap energy. Solid-State Electronics, 2003, 47, 493-496.	0.8	8
168	Band alignment in GaInNPâˆ•GaAs heterostructures grown by gas-source molecular-beam epitaxy. Applied Physics Letters, 2005, 86, 261904.	1.5	8
169	Radiative recombination of GaInNP alloys lattice matched to GaAs. Applied Physics Letters, 2006, 88, 011919.	1.5	8
170	Understanding and optimizing spin injection in self-assembled InAs/GaAs quantum-dot molecular structures. Nano Research, 2016, 9, 602-611.	5.8	8
171	Properties of Er-related emission in in situ doped Si epilayers grown by molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 1732.	1.6	7
172	Nature and Formation of Non-Radiative Defects in GaNAs And InGaAsN. Materials Research Society Symposia Proceedings, 2001, 692, 1.	0.1	7
173	Effect of nitrogen ion bombardment on defect formation and luminescence efficiency of GaNP epilayers grown by molecular-beam epitaxy. Applied Physics Letters, 2006, 88, 101904.	1.5	7
174	Spin Dynamics in ZnO-Based Materials. Journal of Superconductivity and Novel Magnetism, 2010, 23, 161-165.	0.8	7
175	Room-temperature spin injection and spin loss across a GaNAs/GaAs interface. Applied Physics Letters, 2011, 98, 012112.	1.5	7
176	Room temperature spin filtering effect in GaNAs: Role of hydrogen. Applied Physics Letters, 2011, 99, 152109.	1.5	7
177	Optical properties of GaP/GaNP core/shell nanowires: a temperature-dependent study. Nanoscale Research Letters, 2013, 8, 239.	3.1	7
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