

# John F Geisz

## List of Publications by Year in descending order

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196  
papers

9,677  
citations

53202

45  
h-index

40544

94  
g-index

199  
all docs

199  
docs citations

199  
times ranked

6320  
citing authors

#	ARTICLE	IF	CITATIONS
1	A framework for comparing the energy production of photovoltaic modules using 2-, 3-, and 4-terminal tandem cells. <i>Sustainable Energy and Fuels</i> , 2023, 7, 461-470.	4.8	5
2	<i>Operando</i> Temperature Measurements of Photovoltaic Laser Power Converter Devices Under Continuous High-Intensity Illumination. <i>IEEE Journal of Photovoltaics</i> , 2023, 13, 808-813.	2.7	5
3	Impact of Irradiation-Induced Filter Heating on Calibration of NIR-Longpass-Filtered Reference Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2023, 13, 793-799.	2.7	1
4	Triple-junction solar cells with 39.5% terrestrial and 34.2% space efficiency enabled by thick quantum well superlattices. <i>Joule</i> , 2022, 6, 1121-1135.	24.7	84
5	Carrier control in Sn-Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. <i>Nature Energy</i> , 2022, 7, 642-651.	29.7	159
6	High-Efficiency Solar Cells Grown on Spalled Germanium for Substrate Reuse without Polishing. <i>Advanced Energy Materials</i> , 2022, 12, .	22.2	18
7	High Efficiency Inverted GaAs and GaInP/GaAs Solar Cells With Strain-Balanced GaInAs/GaAsP Quantum Wells. <i>Advanced Energy Materials</i> , 2021, 11, 2002874.	22.2	65
8	Optimization of four terminal rear heterojunction GaAs on Si interdigitated back contact tandem solar cells. <i>Applied Physics Letters</i> , 2021, 118, .	3.2	14
9	Outdoor performance of a tandem InGaP/Si photovoltaic luminescent solar concentrator. <i>Solar Energy Materials and Solar Cells</i> , 2021, 223, 110945.	6.3	14
10	Graded buffer Bragg reflectors with high reflectivity and transparency for metamorphic optoelectronics. <i>Journal of Applied Physics</i> , 2021, 129, .	2.3	9
11	Multi-junction solar cells paving the way for super high-efficiency. <i>Journal of Applied Physics</i> , 2021, 129, .	2.3	110
12	Fabrication, Measurement, and Modeling of GaInP/GaAs Three-Terminal Cells and Strings. , 2021, , .		4
13	Improvement of front-junction GaInP by point-defect injection and annealing. , 2021, , .		5
14	32.9% efficient tandem solar cell with strain-balanced GaInAs/GaAsP quantum wells. , 2021, , .		0
15	Homogenous Voltage-Matched Strings Using Three-Terminal Tandem Solar Cells: Fundamentals and End Losses. <i>IEEE Journal of Photovoltaics</i> , 2021, 11, 1078-1086.	2.7	13
16	Trapezoidal grid fingers to reduce shadowing loss and improve short circuit current. <i>Solar Energy Materials and Solar Cells</i> , 2021, 231, 111294.	6.3	1
17	Characterization of multiterminal tandem photovoltaic devices and their subcell coupling. <i>Cell Reports Physical Science</i> , 2021, 2, 100677.	5.8	9
18	Reverse Heterojunction (Al)GaInP Solar Cells for Improved Efficiency at Concentration. <i>IEEE Journal of Photovoltaics</i> , 2020, 10, 487-494.	2.7	10

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19	Three-terminal III-V/Si tandem solar cells enabled by a transparent conductive adhesive. Sustainable Energy and Fuels, 2020, 4, 549-558.	4.8	48
20	Guided Optimization of Phase-Unstable III-V Compositionally Graded Buffers by Cathodoluminescence Spectrum Imaging. IEEE Journal of Photovoltaics, 2020, 10, 109-116.	2.7	7
21	Six-junction III-V solar cells with 47.1% conversion efficiency under 143-suns concentration. Nature Energy, 2020, 5, 326-335.	29.7	446
22	High performance III-V photoelectrodes for solar water splitting via synergistically tailored structure and stoichiometry. Nature Communications, 2019, 10, 3388.	13.2	45
23	Toward Low-Cost 4-Terminal GaAs/Si Tandem Solar Cells. ACS Applied Energy Materials, 2019, 2, 2375-2380.	5.3	18
24	Printed assemblies of microscale triple-junction inverted metamorphic GaInP/GaAs/InGaAs solar cells. Progress in Photovoltaics: Research and Applications, 2019, 27, 520-527.	5.3	9
25	Fabrication of Thin III-V Solar Cells on Ni Films using Electroless Ni Deposition. , 2019, , .		0
26	Luminescent Solar Concentrator Tandem-on-Silicon with above 700mV Passivated Contact Silicon Bottom Cell. , 2019, , .		0
27	Development of Solar Cells with Trapezoidal Grid Fingers. , 2019, , .		0
28	Enabling ultrathin III-V solar cells using dual photonic crystals. , 2019, , .		3
29	Internal Resistive Barriers Related to Zinc Diffusion During the Growth of Inverted Metamorphic Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 167-173.	2.7	14
30	Measurements of Six-Junction Concentrator Solar Cells. , 2019, , .		1
31	Building a Six-Junction Inverted Metamorphic Concentrator Solar Cell. IEEE Journal of Photovoltaics, 2018, 8, 626-632.	2.7	156
32	High-efficiency inverted metamorphic 1.7/1.1 eV GaInAsP/GaInAs dual-junction solar cells. Applied Physics Letters, 2018, 112, .	3.2	50
33	Spectral binning for energy production calculations and multijunction solar cell design. Progress in Photovoltaics: Research and Applications, 2018, 26, 48-54.	5.3	11
34	HVPE-Grown GaAs/Si Tandem Device Performance. , 2018, , .		0
35	Six-junction concentrator solar cells. AIP Conference Proceedings, 2018, , .	1.0	22
36	Multijunction Solar Cells With Graded Buffer Bragg Reflectors. IEEE Journal of Photovoltaics, 2018, 8, 1608-1615.	2.7	14

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37	Equivalent Performance in Three-Terminal and Four-Terminal Tandem Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1584-1589.	2.7	35
38	Strategies for Thinning Graded Buffer Regions in Metamorphic Solar Cells and Performance Tradeoffs. IEEE Journal of Photovoltaics, 2018, 8, 1349-1354.	2.7	4
39	Design Criteria for Micro-Optical Tandem Luminescent Solar Concentrators. IEEE Journal of Photovoltaics, 2018, 8, 1560-1567.	2.7	35
40	Direct-to-indirect electronic state transition in dynamically compressed GaAs quantum wells. Applied Physics Letters, 2018, 113, .	3.2	3
41	Enhanced Current Collection in 1.7 eV GaInAsP Solar Cells Grown on GaAs by Metalorganic Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2017, 7, 927-933.	2.7	26
42	Apparent bandgap shift in the internal quantum efficiency for solar cells with back reflectors. Journal of Applied Physics, 2017, 121, .	2.3	18
43	Multijunction solar cell design revisited: disruption of current matching by atmospheric absorption bands. Progress in Photovoltaics: Research and Applications, 2017, 25, 850-860.	5.3	15
44	Raising the one-sun conversion efficiency of III-V/Si solar cells to 32.8% for two junctions and 35.9% for three junctions. Nature Energy, 2017, 2, .	29.7	441
45	100-period InGaAsP/InGaP superlattice solar cell with sub-bandgap quantum efficiency approaching 80%. Applied Physics Letters, 2017, 111, .	3.2	16
46	Pathway to 50% efficient inverted metamorphic concentrator solar cells. AIP Conference Proceedings, 2017, , .	1.0	15
47	In-situ curvature monitoring and X-ray diffraction study of InGaAsP/InGaP quantum wells. Journal of Crystal Growth, 2017, 475, 171-177.	1.6	5
48	Highly Transparent Compositionally Graded Buffers for New Metamorphic Multijunction Solar Cell Designs. IEEE Journal of Photovoltaics, 2017, 7, 347-353.	2.7	20
49	Growth of lattice-matched GaInAsP grown on vicinal GaAs(001) substrates within the miscibility gap for solar cells. Journal of Crystal Growth, 2017, 458, 1-7.	1.6	22
50	Absorption Enhancement in InGaAsP/InGaP Quantum Well Solar Cells. , 2017, , .		1
51	Printed Assemblies of Microscale Triple-Junction (3J) Inverted Metamorphic (IMM) GaInP/GaAs/InGaAs Solar Cells. , 2017, , .		0
52	Notice of Removal Measurements and modeling of III-V solar cells at high temperatures up to 400°C. , 2017, , .		1
53	Notice of Removal Highly transparent compositionally graded buffers for new metamorphic multi-junction solar cell designs. , 2017, , .		0
54	Micro-optical Tandem Luminescent Solar Concentrator. , 2017, , .		6

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55	Effect of Atmospheric Absorption Bands on the Optimal Design of Multijunction Solar Cells. , 2017, , .		0
56	Development of lattice-matched 1.7 eV GaInAsP solar cells grown on GaAs by MOVPE. , 2016, , .		10
57	Towards the ultimate multi-junction solar cell using transfer printing. , 2016, , .		3
58	Boosting the efficiency of III-V/Si tandem solar cells. , 2016, , .		6
59	Development of High-Bandgap AlGaInP Solar Cells Grown by Organometallic Vapor-Phase Epitaxy. IEEE Journal of Photovoltaics, 2016, 6, 770-776.	2.7	50
60	Realization of GaInP/Si Dual-Junction Solar Cells With 29.8% 1-Sun Efficiency. IEEE Journal of Photovoltaics, 2016, 6, 1012-1019.	2.7	116
61	Measurements and Modeling of III-V Solar Cells at High Temperatures up to 400 $^{\circ}\text{C}$ . IEEE Journal of Photovoltaics, 2016, 6, 1345-1352.	2.7	42
62	Optically Enhanced Photon Recycling in Mechanically Stacked Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2016, 6, 358-365.	2.7	33
63	Design Flexibility of Ultrahigh Efficiency Four-Junction Inverted Metamorphic Solar Cells. IEEE Journal of Photovoltaics, 2016, 6, 578-583.	2.7	79
64	Metamorphic III-V Solar Cells: Recent Progress and Potential. IEEE Journal of Photovoltaics, 2016, 6, 366-373.	2.7	26
65	Solar-to-hydrogen efficiency: shining light on photoelectrochemical device performance. Energy and Environmental Science, 2016, 9, 74-80.	32.2	104
66	Radiation effects on luminescent coupling in III-V solar cells. , 2015, , .		5
67	Mechanically stacked four-junction concentrator solar cells. , 2015, , .		3
68	High aspect ratio electrodeposited Ni/Au contacts for GaAs-based III-V concentrator solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 646-653.	5.3	26
69	Energy yield determination of concentrator solar cells using laboratory measurements. AIP Conference Proceedings, 2015, , .	1.0	4
70	Design flexibility of ultra-high efficiency 4-junction inverted metamorphic solar cells. , 2015, , .		13
71	Development of a 2.0 eV AlGaInP solar cell grown by OMVPE. , 2015, , .		11
72	Metamorphic III-V solar cells: recent progress and potential. , 2015, , .		0

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73	Field spectra binning for energy production calculations and multijunction solar cell design. , 2015, , .		3
74	Generalized Optoelectronic Model of Series-Connected Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1827-1839.	2.7	97
75	Development of highly-efficient GaInP/Si Tandem Solar Cells. , 2015, , .		8
76	Implications of Redesigned, High-Radiative-Efficiency GaInP Junctions on III-V Multijunction Concentrator Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 418-424.	2.7	18
77	Quadruple-Junction Inverted Metamorphic Concentrator Devices. IEEE Journal of Photovoltaics, 2015, 5, 432-437.	2.7	101
78	Two-terminal metal-interconnected multijunction III-V solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 593-599.	5.3	13
79	Optimization of Multijunction Solar Cells Through Indoor Energy Yield Measurements. IEEE Journal of Photovoltaics, 2015, 5, 438-445.	2.7	11
80	Progress Towards a 30% Efficient GaInP/Si Tandem Solar Cell. Energy Procedia, 2015, 77, 464-469.	1.8	92
81	Improved modeling of photoluminescent and electroluminescent coupling in multijunction solar cells. Solar Energy Materials and Solar Cells, 2015, 143, 48-51.	6.3	30
82	Analysis of ZnTe:Cu/Ti contacts for crystalline CdTe. , 2014, , .		4
83	Component integration strategies in metamorphic 4-junction III-V concentrator solar cells. AIP Conference Proceedings, 2014, , .	1.0	6
84	Device characterization for design optimization of 4 junction inverted metamorphic concentrator solar cells. AIP Conference Proceedings, 2014, , .	1.0	17
85	Back reflectors based on buried Al <sub>2</sub> O <sub>3</sub> for enhancement of photon recycling in monolithic, on-substrate III-V solar cells. Applied Physics Letters, 2014, 105, .	3.2	10
86	<i>In situ</i> measurement of CuPt alloy ordering using strain anisotropy. Journal of Applied Physics, 2014, 115, .	2.3	17
87	Metamorphic Ga <sub>0.76</sub> In <sub>0.24</sub> As/GaAs <sub>0.75</sub> Sb <sub>0.25</sub> tunnel junctions grown on GaAs substrates. Journal of Applied Physics, 2014, 116, .	2.3	24
88	Analytical modeling of III-V solar cells close to the fundamental limit. Proceedings of SPIE, 2014, , .	1.0	0
89	Incorporating photon recycling into the analytical drift-diffusion model of high efficiency solar cells. Journal of Applied Physics, 2014, 116, .	2.3	73
90	Lattice-Mismatched 0.7-eV GaInAs Solar Cells Grown on GaAs Using GaInP Compositionally Graded Buffers. IEEE Journal of Photovoltaics, 2014, 4, 190-195.	2.7	39

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91	Sunlight absorption in water " efficiency and design implications for photoelectrochemical devices. Energy and Environmental Science, 2014, 7, 2951-2956.	32.2	181
92	Effect of Luminescent Coupling on the Optimal Design of Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 986-990.	2.7	57
93	Enhanced external radiative efficiency for 20.8% efficient single-junction GaInP solar cells. Applied Physics Letters, 2013, 103, .	3.2	262
94	Metal Pillar Interconnection Topology for Bonded Two-Terminal Multijunction III-V Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 868-872.	2.7	16
95	Analysis of Multijunction Solar Cell Current-Voltage Characteristics in the Presence of Luminescent Coupling. IEEE Journal of Photovoltaics, 2013, 3, 1429-1436.	2.7	68
96	Effects of Internal Luminescence and Internal Optics on $V_{oc}$ and $J_{sc}$ of III-V Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 1437-1442.	2.7	79
97	Pushing Inverted Metamorphic Multijunction Solar Cells Toward Higher Efficiency at Realistic Operating Conditions. IEEE Journal of Photovoltaics, 2013, 3, 893-898.	2.7	31
98	Measuring IV Curves and Subcell Photocurrents in the Presence of Luminescent Coupling. IEEE Journal of Photovoltaics, 2013, 3, 879-887.	2.7	87
99	Experimental and modeling analysis of internal luminescence in III-V solar cells. AIP Conference Proceedings, 2013, , .	1.0	5
100	Optical enhancement of the open-circuit voltage in high quality GaAs solar cells. Journal of Applied Physics, 2013, 113, .	2.3	262
101	Effects of in situ annealing on GaInNAs solar cells. , 2013, , .		4
102	Pushing inverted metamorphic multijunction solar cells toward higher efficiency at realistic operating conditions. , 2013, , .		0
103	Measuring IV curves and subcell photocurrents in the presence of luminescent coupling. , 2013, , .		1
104	The influence of atomic ordering on strain relaxation during the growth of metamorphic solar cells. Journal of Physics: Conference Series, 2013, 471, 012006.	0.4	4
105	Control of misfit dislocation glide plane distribution during strain relaxation of CuPt-ordered GaInAs and GaInP. Journal of Applied Physics, 2012, 112, 023520.	2.3	32
106	Non-linear luminescent coupling in series-connected multijunction solar cells. Applied Physics Letters, 2012, 100, .	3.2	112
107	Design of semiconductor-based back reflectors for high $V_{oc}$ ; monolithic multijunction solar cells. , 2012, , .		12
108	Optimization of 3-junction inverted metamorphic solar cells for high-temperature and high-concentration operation. AIP Conference Proceedings, 2012, , .	1.0	15

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109	Reduction of crosshatch roughness and threading dislocation density in metamorphic GaInP buffers and GaInAs solar cells. <i>Journal of Applied Physics</i> , 2012, 111, .	2.3	58
110	Measuring IV curves and subcell photocurrents in the presence of luminescent coupling. , 2012, , .		4
111	Pushing inverted metamorphic multijunction solar cells toward higher efficiency at realistic operating conditions. , 2012, , .		8
112	Using Phase Effects to Understand Measurements of the Quantum Efficiency and Related Luminescent Coupling in a Multijunction Solar Cell. <i>IEEE Journal of Photovoltaics</i> , 2012, 2, 424-433.	2.7	27
113	Temperature-dependent measurements of an inverted metamorphic multijunction (IMM) solar cell. , 2011, , .		27
114	Infrared Reflective and Transparent Inverted Metamorphic Triple Junction Solar Cells. <i>AIP Conference Proceedings</i> , 2010, , .	1.0	4
115	2.0&#x2013;2.1 eV Ga&#x26amp;#x2013;In&#x26amp;#x2013;P solar cells grown on relaxed GaAsP step grades. , 2010, , .		3
116	Cell-level thermal management issues in concentrator III&#x26amp;#x2013;V multijunction solar cells. , 2010, , .		4
117	Multijunction solar cells for conversion of concentrated sunlight to electricity. <i>Optics Express</i> , 2010, 18, A73.	3.4	95
118	Polarized photoluminescence from point emitters in ordered GaIn <sup>1-x</sup> P. <i>Physical Review B</i> , 2009, 80, .	3.3	3
119	Bound exciton luminescence in shock compressed GaP:S and GaP:N. <i>Journal of Applied Physics</i> , 2009, 106, 023710.	2.3	1
120	CuPt ordering in high bandgap GaIn <sup>1-x</sup> P alloys on relaxed GaAsP step grades. <i>Journal of Applied Physics</i> , 2009, 106, .	2.3	24
121	Tailoring the electronic properties of GaIn <sup>1-x</sup> P beyond simply varying alloy composition. <i>Applied Physics Letters</i> , 2009, 94, 091113.	3.2	6
122	A comparison of theoretical efficiencies of multi-junction concentrator solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2008, 16, 537-546.	5.3	82
123	Hopping energy relaxation of localized excitons in GaP(N). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 768-771.	0.8	3
124	40.8% efficient inverted triple-junction solar cell with two independently metamorphic junctions. <i>Applied Physics Letters</i> , 2008, 93, .	3.2	437
125	A direct comparison of inverted and non-inverted growths of GaInP solar cells. <i>Conference Record of the IEEE Photovoltaic Specialists Conference</i> , 2008, , .	0.0	11
126	Spectral and time dependences of the energy transfer of bound optical excitations in GaP(N). <i>Journal of Physics Condensed Matter</i> , 2008, 20, 015217.	1.9	15



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127	High-efficiency GaInP <sup>~</sup> GaAs <sup>~</sup> InGaAs triple-junction solar cells grown inverted with a metamorphic bottom junction. Applied Physics Letters, 2007, 91, .	3.2	351
128	Using MOVPE growth to generate tomorrow's solar electricity. Journal of Crystal Growth, 2007, 298, 748-753.	1.6	25
129	Vibrational properties of GaP and GaP <sub>1-x</sub> N <sub>x</sub> under hydrostatic pressures up to 30 GPa. Physica Status Solidi (B): Basic Research, 2007, 244, 336-341.	1.6	11
130	Experimental and theoretical investigation of the conduction band edge of GaN <sub>x</sub> P <sub>1-x</sub> . Physical Review B, 2006, 74, .	3.3	25
131	Monolithic, Ultra-Thin GaInP/GaAs/GaInAs Tandem Solar Cells. , 2006, , .		13
132	Resonant Raman scattering spectroscopy of GaP <sub>1-x</sub> N <sub>x</sub> and GaAs <sub>1-x</sub> N <sub>x</sub> in the ultraviolet range. Physical Review B, 2005, 71, .	3.3	5
133	Comment on "Experimental evidence for N-induced strong coupling of host conduction band states in GaN <sub>x</sub> P <sub>1-x</sub> : Insight into the dominant mechanism for giant band-gap bowing". Physical Review B, 2005, 72, .	3.3	1
134	Confirmation of the impurity-band model for GaP <sub>1-x</sub> N <sub>x</sub> . Physical Review B, 2005, 72, .	3.3	19
135	Mutual Passivation in Dilute GaN <sub>x</sub> As <sub>1-x</sub> Alloys. Materials Research Society Symposia Proceedings, 2005, 864, 811.	0.1	0
136	Annealing-induced-type conversion of GaInNAs. Journal of Applied Physics, 2004, 95, 2505-2508.	2.3	23
137	Effects of ordering on the optical properties of GaInP 2. , 2004, 5530, 326.		3
138	Effects of heavy nitrogen doping in III <sup>~</sup> V semiconductors <sup>~</sup> How well does the conventional wisdom hold for the dilute nitrogen <sup>~</sup> III <sup>~</sup> V-N alloys <sup>~</sup> ?. Physica Status Solidi (B): Basic Research, 2003, 240, 396-403.	1.6	28
139	Measurement of built-in electrical potential in III <sup>~</sup> V solar cells by scanning Kelvin probe microscopy. Journal of Applied Physics, 2003, 93, 10035-10040.	2.3	64
140	Band-gap bowing effects in B <sub>x</sub> Ga <sub>1-x</sub> As alloys. Journal of Applied Physics, 2003, 93, 2696-2699.	2.3	38
141	Nitrogen-induced decrease of the electron effective mass in GaAs <sub>1-x</sub> N <sub>x</sub> thin films measured by thermomagnetic transport phenomena. Applied Physics Letters, 2003, 82, 1236-1238.	3.2	48
142	Evolution of electronic states in GaAs <sub>1-x</sub> N <sub>x</sub> probed by resonant Raman spectroscopy. Physical Review B, 2003, 68, .	3.3	21
143	To Data Management and Beyond <sup>~</sup> for Photovoltaic Applications. Materials Research Society Symposia Proceedings, 2003, 804, 54.	0.1	2
144	Growth and Characterization of GaPNAs on Si. Materials Research Society Symposia Proceedings, 2003, 799, 36.	0.1	5

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145	Trap-dominated minority-carrier recombination in GaInNAs $\epsilon$ pn junctions. Applied Physics Letters, 2003, 83, 698-700.	3.2	9
146	Distribution of built-in electrical potential in GaInP <sub>2</sub> /GaAs tandem-junction solar cells. Applied Physics Letters, 2003, 83, 1572-1574.	3.2	23
147	Effect of growth rate and gallium source on GaAsN. Applied Physics Letters, 2003, 82, 2634-2636.	3.2	39
148	Evolution of electronic states in GaP $\epsilon$ Nx studied by resonant Raman scattering spectroscopy. Physical Review B, 2003, 67, .	3.3	16
149	Origin of the nitrogen-induced optical transitions in GaAs $\epsilon$ Nx. Physical Review B, 2003, 68, .	3.3	20
150	Symmetry of GaAs $\epsilon$ Nx conduction-band minimum probed by resonant Raman scattering. Physical Review B, 2003, 67, .	3.3	5
151	Resonant excitation study of ultrasharp emission lines in ordered GaIn $\epsilon$ P. Physical Review B, 2002, 65, .	3.3	9
152	Direct measurement of electrical potentials in GaInP <sub>2</sub> solar cells. Applied Physics Letters, 2002, 81, 2569-2571.	3.2	18
153	III $\epsilon$ N $\epsilon$ V semiconductors for solar photovoltaic applications. Semiconductor Science and Technology, 2002, 17, 769-777.	2.1	304
154	Mutual passivation of electrically active and isovalent impurities. Nature Materials, 2002, 1, 185-189.	26.6	55
155	Band structure and optical properties of In $\epsilon$ Ga $\epsilon$ As $\epsilon$ Nx alloys. Physical Review B, 2001, 65, .	3.3	63
156	Alternative boron precursors for BGaAs epitaxy. Journal of Electronic Materials, 2001, 30, 1387-1391.	2.2	14
157	Discrete and continuous spectrum of nitrogen-induced bound states in heavily doped GaAs $\epsilon$ Nx. Physical Review B, 2001, 63, .	3.3	96
158	Distribution of nitrogen atoms in dilute GaAsN and InGaAsN alloys studied by scanning tunneling microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1644.	1.6	24
159	Reply to "Comment on "Phonon modes in spontaneously ordered GaInP <sub>2</sub> studied by micro-Raman measurements"™". Physical Review B, 2001, 63, .	3.3	2
160	"L $\epsilon$ X mixed symmetry of nitrogen-induced states in GaAs $\epsilon$ Nx probed by resonant Raman scattering. Applied Physics Letters, 2001, 79, 1297-1299.	3.2	28
161	Conduction-band-resonant nitrogen-induced levels in GaAs $\epsilon$ Nx with $x < 0.03$ . Physical Review B, 2001, 64, .	3.3	29
162	Resonant Raman scattering in spontaneously ordered GaInP <sub>2</sub> . Physical Review B, 2000, 62, 1536-1539.	3.3	6

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163	Nitrogen-induced levels in GaAs <sub>1-x</sub> N <sub>x</sub> studied with resonant Raman scattering. Physical Review B, 2000, 61, 13687-13690.	3.3	62
164	Nitrogen-induced enhancement of the free electron concentration in sulfur implanted GaN <sub>x</sub> As <sub>1-x</sub> . Applied Physics Letters, 2000, 77, 2858-2860.	3.2	29
165	Effects of spontaneous ordering and alloy statistical fluctuations on exciton linewidth in Ga <sub>x</sub> In <sub>1-x</sub> alloys. Physical Review B, 2000, 61, 9910-9912.	3.3	19
166	BGaInAs alloys lattice matched to GaAs. Applied Physics Letters, 2000, 76, 1443-1445.	3.2	95
167	Effect of nitrogen on the electronic band structure of group III-N-V alloys. Physical Review B, 2000, 62, 4211-4214.	3.3	102
168	Nitrogen-induced increase of the maximum electron concentration in group III-N-V alloys. Physical Review B, 2000, 61, R13337-R13340.	3.3	65
169	Large, nitrogen-induced increase of the electron effective mass in In <sub>y</sub> Ga <sub>1-y</sub> N <sub>x</sub> As <sub>1-x</sub> . Applied Physics Letters, 2000, 76, 2409-2411.	3.2	238
170	Optical investigation of GaNAs. AIP Conference Proceedings, 1999, , .	1.0	21
171	Excitons and recombination in photovoltaic materials. AIP Conference Proceedings, 1999, , .	1.0	0
172	Crystal anisotropy and spin-polarized photoluminescence of ordered Ga <sub>x</sub> In <sub>1-x</sub> P. Physical Review B, 1999, 60, R11261-R11264.	3.3	2
173	Ge-related faceting and segregation during the growth of metastable (GaAs) <sub>1-x</sub> (Ge) <sub>2</sub> alloy layers by metal-organic vapor-phase epitaxy. Applied Physics Letters, 1999, 74, 1382-1384.	3.2	34
174	Far-infrared transmission studies in disordered and ordered Ga <sub>0.52</sub> In <sub>0.48</sub> P. Physical Review B, 1999, 60, 1484-1487.	3.3	13
175	Persistent photoconductivity in Ga <sub>1-x</sub> In <sub>x</sub> N <sub>y</sub> As <sub>1-y</sub> . Applied Physics Letters, 1999, 75, 1899-1901.	3.2	59
176	Spatially resolved photoluminescence in partially ordered GaInP <sub>2</sub> . Applied Physics Letters, 1999, 74, 706-708.	3.2	21
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