

# Irina A Buyanova

## List of Publications by Year in Descending Order

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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.

324  
papers

5,118  
citations

32  
h-index

58  
g-index

353  
ext. papers

5,598  
ext. citations

4.1  
avg, IF

5.17  
L-index

#	Paper	IF	Citations
324	An Efficient Deep-Subwavelength Second Harmonic Nanoantenna Based on Surface Plasmon-Coupled Dilute Nitride GaNP Nanowires. <i>Nano Letters</i> , <b>2021</b> , 21, 3426-3434	11.5	2
323	Anomalously Strong Second-Harmonic Generation in GaAs Nanowires via Crystal-Structure Engineering. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2104671	15.6	1
322	Competition between triplet pair formation and excimer-like recombination controls singlet fission yield. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100339	6.1	5
321	Magneto-optical properties of Cr <sup>3+</sup> in EGa <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2021</b> , 119, 052101	3.4	8
320	Identifying a Generic and Detrimental Role of Fano Resonance in Spin Generation in Semiconductor Nanostructures. <i>Physical Review Letters</i> , <b>2021</b> , 127, 127401	7.4	0
319	Magnetizing lead-free halide double perovskites. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	25
318	Effect of Crystal Symmetry on the Spin States of Fe and Vibration Modes in Lead-free Double-Perovskite CsAgBi(Fe)Br. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 4873-4878	6.4	3
317	Effects of thermal annealing on localization and strain in core/multishell GaAs/GaNAs/GaAs nanowires. <i>Scientific Reports</i> , <b>2020</b> , 10, 8216	4.9	2
316	Outermost AlGaO <sub>x</sub> native oxide as a protection layer for GaAs/AlGaAs core-multishell nanowires. <i>Applied Physics Express</i> , <b>2020</b> , 13, 075003	2.4	2
315	Thermal-annealing effects on energy level alignment at organic heterojunctions and corresponding voltage losses in all-polymer solar cells. <i>Nano Energy</i> , <b>2020</b> , 72, 104677	17.1	7
314	Scattering symmetry-breaking induced spin photocurrent from out-of-plane spin texture in a 3D topological insulator. <i>Scientific Reports</i> , <b>2020</b> , 10, 10610	4.9	2
313	Effects of Bi incorporation on recombination processes in wurtzite GaBiAs nanowires. <i>Nanotechnology</i> , <b>2020</b> , 31, 225706	3.4	1
312	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
311	Gallium vacancies—common non-radiative defects in ternary GaAsP and quaternary GaNAsP nanowires. <i>Nano Express</i> , <b>2020</b> , 1, 020022	2	0
310	Vibronic coherence contributes to photocurrent generation in organic semiconductor heterojunction diodes. <i>Nature Communications</i> , <b>2020</b> , 11, 617	17.4	14
309	Effects of growth temperature and thermal annealing on optical quality of GaNAs nanowires emitting in the near-infrared spectral range. <i>Nanotechnology</i> , <b>2020</b> , 31, 065702	3.4	3
308	Self-assembled nanodisks in coaxial GaAs/GaAsBi/GaAs core-multishell nanowires. <i>Nanoscale</i> , <b>2020</b> , 12, 20849-20858	7.7	1

307	Near-Infrared Light-Responsive Cu-Doped Cs <sub>2</sub> AgBiBr <sub>6</sub> . <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2005521	15.6	17
306	Identification of a Nitrogen-related acceptor in ZnO nanowires. <i>Nanoscale</i> , <b>2019</b> , 11, 10921-10926	7.7	4
305	Measurements of Strain and Bandgap of Coherently Epitaxially Grown Wurtzite InAsP-InP Core-Shell Nanowires. <i>Nano Letters</i> , <b>2019</b> , 19, 2674-2681	11.5	11
304	Dilute nitrides-based nanowires-a promising platform for nanoscale photonics and energy technology. <i>Nanotechnology</i> , <b>2019</b> , 30, 292002	3.4	6
303	Molecular beam epitaxial growth of dilute nitride GaNAs and GaInNAs nanowires. <i>Nanotechnology</i> , <b>2019</b> , 30, 244002	3.4	5
302	Effect of exciton transfer on recombination dynamics in vertically nonuniform GaAsSb epilayers. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 252101	3.4	7
301	Effects of N implantation on defect formation in ZnO nanowires. <i>Thin Solid Films</i> , <b>2019</b> , 687, 137449	2.2	8
300	Increasing N content in GaNAsP nanowires suppresses the impact of polytypism on luminescence. <i>Nanotechnology</i> , <b>2019</b> , 30, 405703	3.4	3
299	Band Structure of Wurtzite GaBiAs Nanowires. <i>Nano Letters</i> , <b>2019</b> , 19, 6454-6460	11.5	5
298	Effects of surface finish on the initial oxidation of HVOF-sprayed NiCoCrAlY coatings. <i>Surface and Coatings Technology</i> , <b>2019</b> , 364, 43-56	4.4	13
297	Electron paramagnetic resonance signatures of Co <sup>2+</sup> and Cu <sup>2+</sup> in Ga <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2019</b> , 115, 242101	3.4	6
296	Near-Infrared Lasing at 1 μm from a Dilute-Nitride-Based Multishell Nanowire. <i>Nano Letters</i> , <b>2019</b> , 19, 885-890	11.5	18
295	Photoelectrochemical response of GaN, InGaN, and GaNP nanowire ensembles. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 175703	2.5	3
294	Effect of a Phonon Bottleneck on Exciton and Spin Generation in Self-Assembled In <sub>1-x</sub> Ga <sub>x</sub> As Quantum Dots. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	3
293	Effects of Strong Band-Tail States on Exciton Recombination Dynamics in Dilute Nitride GaP/GaNP Core/Shell Nanowires. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 19212-19218	3.8	7
292	Design rules for minimizing voltage losses in high-efficiency organic solar cells. <i>Nature Materials</i> , <b>2018</b> , 17, 703-709	27	500
291	GaAs/GaNAs core-multishell nanowires with nitrogen composition exceeding 2%. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 011901	3.4	10
290	Efficient Auger Charge-Transfer Processes in ZnO. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	1

289	N-induced Quantum Dots in GaAs/Ga(N,As) Core/Shell Nanowires: Symmetry, Strain, and Electronic Structure. <i>Physical Review Applied</i> , <b>2018</b> , 10,	4.3	5
288	Room-temperature polarized spin-photon interface based on a semiconductor nanodisk-in-nanopillar structure driven by few defects. <i>Nature Communications</i> , <b>2018</b> , 9, 3575	17.4	12
287	Charge Generation via Relaxed Charge-Transfer States in Organic Photovoltaics by an Energy-Disorder-Driven Entropy Gain. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 12640-12646	3.8	19
286	Photon upconversion promoted by defects in low-dimensional semiconductor nanostructures <b>2018</b> , 189-210		1
285	Defects in one-dimensional nanowires <b>2018</b> , 63-85		1
284	Defect-enabled room-temperature spin functionalities in a nonmagnetic semiconductor <b>2018</b> , 265-284		
283	Effects of Nitrogen Incorporation on Structural and Optical Properties of GaNAsP Nanowires. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 7047-7055	3.8	9
282	Luminescent and Optically Detected Magnetic Resonance Studies of CdS/PVA Nanocomposite. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 130	5	8
281	Dilute Nitride Nanowire Lasers Based on a GaAs/GaNAs Core/Shell Structure. <i>Nano Letters</i> , <b>2017</b> , 17, 1775-1781	11.5	36
280	Room-temperature InP/InAsP Quantum Discs-in-Nanowire Infrared Photodetectors. <i>Nano Letters</i> , <b>2017</b> , 17, 3356-3362	11.5	28
279	Spin injection and helicity control of surface spin photocurrent in a three dimensional topological insulator. <i>Nature Communications</i> , <b>2017</b> , 8, 15401	17.4	27
278	Room Temperature Defect-Engineered Spin Functionalities: Concept and Optimization <b>2017</b> , 33-54		
277	Study of the carrier transfer across the GaNP nanowire electrolyte interface by electron paramagnetic spin trapping. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 222101	3.4	2
276	Self-catalyzed core-shell GaAs/GaNAs nanowires grown on patterned Si (111) by gas-source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 072106	3.4	5
275	GaNAs-Based Nanowires for Near-Infrared Optoelectronics <b>2017</b> , 133-159		
274	Novel GaNP Nanowires for Advanced Optoelectronics and Photonics <b>2017</b> , 107-132		
273	Strongly polarized quantum-dot-like light emitters embedded in GaAs/GaNAs core/shell nanowires. <i>Nanoscale</i> , <b>2016</b> , 8, 15939-47	7.7	19
272	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

271	Understanding and optimizing spin injection in self-assembled InAs/GaAs quantum-dot molecular structures. <i>Nano Research</i> , <b>2016</b> , 9, 602-611	10	6
270	Structural properties of GaNAs nanowires probed by micro-Raman spectroscopy. <i>Semiconductor Science and Technology</i> , <b>2016</b> , 31, 025002	1.8	1
269	Core-shell carrier and exciton transfer in GaAs/GaNAs coaxial nanowires. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2016</b> , 34, 04J104	1.3	5
268	Thermal stability of the prominent compensating (AlZn $\sqrt{3}$ Zn) center in ZnO. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 105702	2.5	6
267	Defect formation in GaAs/GaN <sub>x</sub> As <sub>1-x</sub> core/shell nanowires. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 203103	3.4	10
266	Phosphorescence of CdS nanoparticles in polymer matrix as an indication of host-guest interaction. <i>Materials Chemistry and Physics</i> , <b>2016</b> , 177, 379-383	4.4	2
265	Growth of isotopically enriched ZnO nanorods of excellent optical quality. <i>Journal of Crystal Growth</i> , <b>2015</b> , 429, 6-12	1.6	10
264	Effects of Polytypism on Optical Properties and Band Structure of Individual Ga(N)P Nanowires from Correlative Spatially Resolved Structural and Optical Studies. <i>Nano Letters</i> , <b>2015</b> , 15, 4052-8	11.5	16
263	Interfacial bonding in a CdS/PVA nanocomposite: A Raman scattering study. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 452, 33-37	9.3	14
262	Enhancement of polymer endurance to UV light by incorporation of semiconductor nanoparticles. <i>Nanoscale Research Letters</i> , <b>2015</b> , 10, 81	5	21
261	Exciton Fine-Structure Splitting in Self-Assembled Lateral InAs/GaAs Quantum-Dot Molecular Structures. <i>ACS Nano</i> , <b>2015</b> , 9, 5741-9	16.7	4
260	Dual-wavelength excited photoluminescence spectroscopy of deep-level hole traps in Ga(In)NP. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 015701	2.5	2
259	Size dependence of electron spin dephasing in InGaAs quantum dots. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 093109	3.4	4
258	Optimizing GaNP coaxial nanowires for efficient light emission by controlling formation of surface and interfacial defects. <i>Nano Letters</i> , <b>2015</b> , 15, 242-7	11.5	15
257	Suppression of non-radiative surface recombination by N incorporation in GaAs/GaNAs core/shell nanowires. <i>Scientific Reports</i> , <b>2015</b> , 5, 11653	4.9	27
256	Efficient nitrogen incorporation in ZnO nanowires. <i>Scientific Reports</i> , <b>2015</b> , 5, 13406	4.9	17
255	Fabry-Perot Microcavity Modes in Single GaP/GaNP Core/Shell Nanowires. <i>Small</i> , <b>2015</b> , 11, 6331-7	11	10
254	Turning ZnO into an Efficient Energy Upconversion Material by Defect Engineering. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 3760-3764	15.6	32

253	Identification of an isolated arsenic antisite defect in GaAsBi. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 052110	3.4	16
252	Origin of strong photoluminescence polarization in GaNP nanowires. <i>Nano Letters</i> , <b>2014</b> , 14, 5264-9	11.5	17
251	Growth and characterization of dilute nitride GaN <sub>x</sub> P <sub>1-x</sub> nanowires and GaN <sub>x</sub> P <sub>1-x</sub> /Ga <sub>y</sub> N <sub>y</sub> P <sub>1-y</sub> core/shell nanowires on Si (111) by gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 072107	3.4	29
250	Zinc-Vacancy Donor Complex: A Crucial Compensating Acceptor in ZnO. <i>Physical Review Applied</i> , <b>2014</b> , 2,	4.3	45
249	Energy upconversion in GaP/GaNP core/shell nanowires for enhanced near-infrared light harvesting. <i>Small</i> , <b>2014</b> , 10, 4403-8	11	22
248	Magneto-optical properties and recombination dynamics of isoelectronic bound excitons in ZnO <b>2014</b> ,		1
247	Defect properties of ZnO nanowires <b>2014</b> ,		4
246	Origin of radiative recombination and manifestations of localization effects in GaAs/GaNAs core/shell nanowires. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 253106	3.4	24
245	Raman spectroscopy of GaP/GaNP core/shell nanowires. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 193102	3.4	18
244	Limiting factor of defect-engineered spin-filtering effect at room temperature. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	3
243	Anomalous spectral dependence of optical polarization and its impact on spin detection in InGaAs/GaAs quantum dots. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 132106	3.4	10
242	Recharging behavior of nitrogen-centers in ZnO. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 063701	2.5	9
241	Spin dynamics of isoelectronic bound excitons in ZnO. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	1
240	Effects of Ni-coating on ZnO nanowires: A Raman scattering study. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 214302	2.5	15
239	Cathodoluminescence characterization of ZnO tetrapod structures. <i>Thin Solid Films</i> , <b>2013</b> , 543, 114-117	2.2	6
238	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
237	Optical properties of GaP/GaNP core/shell nanowires: a temperature-dependent study. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 239	5	6
236	Room-temperature electron spin amplifier based on Ga(In)NAs alloys. <i>Advanced Materials</i> , <b>2013</b> , 25, 738-42		21

235	Defect properties of ZnO nanowires revealed from an optically detected magnetic resonance study. <i>Nanotechnology</i> , <b>2013</b> , 24, 015701	3.4	15
234	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
233	Dynamics of donor bound excitons in ZnO. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 121103	3.4	14
232	Role of the host polymer matrix in light emission processes in nano-CdS/poly vinyl alcohol composite. <i>Thin Solid Films</i> , <b>2013</b> , 543, 11-15	2.2	9
231	Defects in N, O and N, Zn implanted ZnO bulk crystals. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 103509	2.5	31
230	Optically detected magnetic resonance studies of point defects in quaternary GaNAsP epilayers grown by vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 021910	3.4	9
229	Effect of hyperfine-induced spin mixing on the defect-enabled spin blockade and spin filtering in GaNAs. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	10
228	Efficient upconversion of photoluminescence via two-photon absorption in bulk and nanorod ZnO. <i>Applied Physics B: Lasers and Optics</i> , <b>2012</b> , 108, 919-924	1.9	21
227	Effects of Ultraviolet Light on Optical Properties of Colloidal CdS Nanoparticles Embedded in Polyvinyl Alcohol (PVA) Matrix. <i>Advanced Science, Engineering and Medicine</i> , <b>2012</b> , 4, 394-400	0.6	11
226	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
225	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
224	Antiferromagnetic interaction in coupled CdSe/ZnMnSe quantum dot structures. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 052405	3.4	4
223	The Hanle effect and electron spin polarization in InAs/GaAs quantum dots up to room temperature. <i>Nanotechnology</i> , <b>2012</b> , 23, 135705	3.4	4
222	Effects of P implantation and post-implantation annealing on defect formation in ZnO. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 043520	2.5	6
221	Long delays of light in ZnO caused by exciton-polariton propagation. <i>Physica Status Solidi (B): Basic Research</i> , <b>2012</b> , 249, 1307-1311	1.3	
220	Catalytic conversion of C2-C3 alcohols on detonation nanodiamond and its modifications. <i>Russian Journal of Physical Chemistry A</i> , <b>2012</b> , 86, 26-31	0.7	17
219	Efficient room-temperature spin detector based on GaNAs. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 07C303	3.5	9
218	Effects of a longitudinal magnetic field on spin injection and detection in InAs/GaAs quantum dot structures. <i>Journal of Physics Condensed Matter</i> , <b>2012</b> , 24, 145304	1.8	3



217	Evidence for coupling between exciton emissions and surface plasmon in Ni-coated ZnO nanowires. <i>Nanotechnology</i> , <b>2012</b> , 23, 425201	3-4	30
216	Sub-millisecond dynamic nuclear spin hyperpolarization in a semiconductor: A case study from PIn antisite in InP. <i>Physical Review B</i> , <b>2012</b> , 86,	3-3	2
215	Zeeman splitting and dynamics of an isoelectronic bound exciton near the band edge of ZnO. <i>Physical Review B</i> , <b>2012</b> , 86,	3-3	5
214	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
213	Donor bound excitons involving a hole from the B valence band in ZnO: Time resolved and magneto-photoluminescence studies. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 091909	3-4	7
212	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
211	Slowdown of light due to exciton-polariton propagation in ZnO. <i>Physical Review B</i> , <b>2011</b> , 83,	3-3	12
210	Room temperature spin filtering effect in GaNAs: Role of hydrogen. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 152109	3-4	7
209	Effect of postgrowth hydrogen treatment on defects in GaNP. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 141920	3-4	7
208	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
207	On the origin of suppression of free exciton no-phonon emission in ZnO tetrapods. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 033108	3-4	11
206	Evidence for a phosphorus-related interfacial defect complex at a GaP/GaNP heterojunction. <i>Physical Review B</i> , <b>2010</b> , 81,	3-3	10
205	Long lifetime of free excitons in ZnO tetrapod structures. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 083104	3-4	26
204	Electron spin filtering by thin GaNAs/GaAs multiquantum wells. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 052104	3-4	25
203	Efficiency of spin injection in novel InAs quantum dot structures: exciton vs. free carrier injection. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 245, 012044	0-3	4
202	Spin Dynamics in ZnO-Based Materials. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2010</b> , 23, 161-165	3-5	7
201	Paramagnetic centers in detonation nanodiamonds studied by CW and pulse EPR. <i>Chemical Physics Letters</i> , <b>2010</b> , 493, 319-322	2-5	19
200	Dominant recombination centers in Ga(In)NAs alloys: Ga interstitials. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 241904	3-4	54



199	Spin injection in lateral InAs quantum dot structures by optical orientation spectroscopy. <i>Nanotechnology</i> , <b>2009</b> , 20, 375401	3.4	12
198	Electron spin control in dilute nitride semiconductors. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 174211	1.8	13
197	Propagation dynamics of exciton spins in a high-density semiconductor quantum dot system. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 50-52		
196	Room-temperature defect-engineered spin filter based on a non-magnetic semiconductor. <i>Nature Materials</i> , <b>2009</b> , 8, 198-202	27	78
195	Effects of Ga doping on optical and structural properties of ZnO epilayers. <i>Superlattices and Microstructures</i> , <b>2009</b> , 45, 413-420	2.8	8
194	Transfer dynamics of spin-polarized excitons into semiconductor quantum dots. <i>Journal of Luminescence</i> , <b>2009</b> , 129, 1927-1930	3.8	1
193	Oxygen and zinc vacancies in as-grown ZnO single crystals. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 175411	3	106
192	Effects of hydrogen on the optical properties of ZnCdO/ZnO quantum wells grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 261912	3.4	21
191	Formation of grown-in defects in molecular beam epitaxial Ga(In)NP: Effects of growth conditions and postgrowth treatments. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 063519	2.5	14
190	Migration and luminescence enhancement effects of deuterium in ZnO/ZnCdO quantum wells. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 032103	3.4	10
189	Dominant factors limiting efficiency of optical spin detection in ZnO-based materials. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 092103	3.4	17
188	Spin-Conserving Tunneling of Excitons in Diluted Magnetic Semiconductor Double Quantum Wells. <i>Japanese Journal of Applied Physics</i> , <b>2008</b> , 47, 3533-3536	1.4	4
187	Effects of stoichiometry on defect formation in ZnO epilayers grown by molecular-beam epitaxy: An optically detected magnetic resonance study. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 023712	2.5	17
186	Efficiency of optical spin injection and spin loss from a diluted magnetic semiconductor ZnMnSe to CdSe nonmagnetic quantum dots. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	14
185	Magneto-optical and tunable laser excitation spectroscopy of spin-injection and spin loss from Zn(Cd)MnSe diluted magnetic quantum well to CdSe non-magnetic quantum dots. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2008</b> , 147, 262-266	3.1	1
184	Spin injection in a coupled system of a diluted magnetic semiconductor Zn <sub>0.80</sub> Mn <sub>0.20</sub> Se and self-assembled quantum dots of CdSe. <i>Superlattices and Microstructures</i> , <b>2008</b> , 43, 615-619	2.8	
183	Effect of growth conditions on grown-in defect formation and luminescence efficiency in Ga(In)NP epilayers grown by molecular-beam epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 460-463		
182	Effects of grown-in defects on electron spin polarization in dilute nitride alloys. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 1529-1531		

181	Optical and electronic properties of GaInNP alloys: A new material system for lattice matching to GaAs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 101-106	1.6	1
180	Spin resonance spectroscopy of grown-in defects in Ga(In)NP alloys. <i>Superlattices and Microstructures</i> , <b>2008</b> , 43, 620-625	2.8	
179	Optical and Electronic Properties of GaInNP Alloys: A New Material for Lattice Matching to GaAs <b>2008</b> , 301-316		
178	Optically detected cyclotron resonance studies of $\text{In}_x\text{Ga}_{1-x}\text{N}_y\text{As}_{1-y}\text{GaAs}$ quantum wells sandwiched between type-II AlAs/GaAs superlattices. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 073705	2.5	3
177	Optical characterization studies of grown-in defects in ZnO epilayers grown by molecular beam epitaxy. <i>Physica B: Condensed Matter</i> , <b>2007</b> , 401-402, 413-416	2.8	4
176	. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 1040-1048	2.9	121
175	Mechanism for radiative recombination in ZnCdO alloys. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 261907	3.4	23
174	Ferromagnetism in Transition-Metal Doped ZnO. <i>Journal of Electronic Materials</i> , <b>2007</b> , 36, 462-471	1.9	80
173	Metamorphic InGaAs quantum wells for light emission at 1.3 $\mu\text{m}$ . <i>Thin Solid Films</i> , <b>2007</b> , 515, 4348-4351	2.2	6
172	Dynamics of exciton-spin injection, transfer, and relaxation in self-assembled quantum dots of CdSe coupled with a diluted magnetic semiconductor layer of $\text{Zn}_{0.80}\text{Mn}_{0.20}\text{Se}$ . <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	22
171	Transition Metal Doped ZnO for Spintronics. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 999, 1		3
170	Prospects of Potential Semiconductor Spin Detectors. <i>Solid State Phenomena</i> , <b>2007</b> , 124-126, 839-842	0.4	
169	Magneto-optical spectroscopy of spin injection and spin relaxation in ZnMnSe/ZnCdSe and GaMnN/InGaN spin light-emitting structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2007</b> , 204, 159-173	1.6	1
168	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
167	Point defects in dilute nitride III-NAs and III-NPs. <i>Physica B: Condensed Matter</i> , <b>2006</b> , 376-377, 545-551	2.8	20
166	On a possible origin of the 2.87 eV optical transition in GaNP. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, 449-457	1.8	1
165	Optical characterization of ZnMnO-based dilute magnetic semiconductor structures. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2006</b> , 24, 259		13
164	Density-dependent dynamics of exciton magnetic polarons in ZnMnSe/ZnSSe type-II quantum wells. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	8

163	Photoluminescence upconversion in GaInNP/GaAs heterostructures grown by gas source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 073515	2.5	13
162	Optically detected magnetic resonance studies of point defects in Ga(Al)NAs. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	9
161	Effect of nitrogen ion bombardment on defect formation and luminescence efficiency of GaNP epilayers grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 101904	3.4	7
160	Radiative recombination of GaInNP alloys lattice matched to GaAs. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 011919	3.4	8
159	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
158	Ferromagnetism in ZnO Doped with Transition Metal Ions <b>2006</b> , 555-576		
157	Band gap properties of Zn <sub>1-x</sub> CdxO alloys grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 151909	3.4	71
156	Unusual effects of hydrogen on electronic and lattice properties of GaNP alloys. <i>Physica B: Condensed Matter</i> , <b>2006</b> , 376-377, 568-570	2.8	1
155	Signatures of grown-in defects in GaInNP alloys grown on a GaAs substrate from magnetic resonance studies. <i>Physica B: Condensed Matter</i> , <b>2006</b> , 376-377, 571-574	2.8	
154	Material properties of dilute nitrides: Ga(In)NAs and Ga(In)NP. <i>Journal of Crystal Growth</i> , <b>2006</b> , 288, 7-11	1.6	2
153	Transient photoluminescence spectroscopy of spin injection dynamics in double quantum wells of diluted magnetic semiconductors. <i>Journal of Luminescence</i> , <b>2006</b> , 119-120, 418-422	3.8	1
152	Transient Spectroscopy of Optical Spin Injection in ZnMnSe/ZnCdSe Quantum Structures. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2006</b> , 18, 371-373		
151	Optical Study of Spin Injection Dynamics in Double Quantum Wells of II-VI Diluted Magnetic Semiconductors. <i>AIP Conference Proceedings</i> , <b>2005</b> ,	0	1
150	Spin injection and spin loss in GaMnN/InGaN Light-Emitting Diodes. <i>AIP Conference Proceedings</i> , <b>2005</b> ,	0	2
149	Formation of Ferromagnetic SiC:Mn Phases. <i>Materials Science Forum</i> , <b>2005</b> , 483-485, 241-244	0.4	2
148	Effects of rapid thermal annealing on optical properties of GaN <sub>x</sub> P <sub>1-x</sub> alloys grown by solid source molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, 353-356	1.8	7
147	Identification of a dominant mechanism for optical spin injection from a diluted magnetic semiconductor: Spin-conserving energy transfer via localized excitations. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	25
146	Efficient spin relaxation in InGaN/GaN and InGaN/GaNMnN quantum wells: An obstacle to spin detection. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 192107	3.4	17

145	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
144	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
143	Properties of Ga-interstitial defects in Al <sub>x</sub> Ga <sub>1-x</sub> NyP <sub>1-y</sub> . <i>Physical Review B</i> , <b>2005</b> , 71,	3-3	36
142	Effect of momentum relaxation on exciton spin dynamics in diluted magnetic semiconductor ZnMnSe/CdSe superlattices. <i>Physical Review B</i> , <b>2005</b> , 71,	3-3	13
141	Defects in Dilute Nitrides. <i>Acta Physica Polonica A</i> , <b>2005</b> , 108, 571-579	0.6	2
140	Optical study of spin injection dynamics in InGaNP/GaN quantum wells with GaMnN injection layers. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 2668		14
139	Identification of Ga-interstitial defects in GaNyP <sub>1-y</sub> and Al <sub>x</sub> Ga <sub>1-x</sub> NyP <sub>1-y</sub> . <i>Physical Review B</i> , <b>2004</b> , 70,	3-3	18
138	On the origin of spin loss in GaMnN/InGaN light-emitting diodes. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2599-2601		35
137	Experimental evidence for N-induced strong coupling of host conduction band states in Ga <sub>x</sub> P <sub>1-x</sub> : Insight into the dominant mechanism for giant band-gap bowing. <i>Physical Review B</i> , <b>2004</b> , 69,	3-3	25
136	Analysis of band anticrossing in Ga <sub>x</sub> P <sub>1-x</sub> alloys. <i>Physical Review B</i> , <b>2004</b> , 70,	3-3	46
135	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
134	Efficient spin depolarization in ZnCdSe spin detector: an important factor limiting optical spin injection efficiency in ZnMnSe/ZnCdSe spin light-emitting structures. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5260-5262	3-4	23
133	Origin of bandgap bowing in GaNP alloys. <i>IEE Proceedings: Optoelectronics</i> , <b>2004</b> , 151, 389-392		3
132	Effects of rapid thermal annealing on optical quality of GaNP alloys. <i>IEE Proceedings: Optoelectronics</i> , <b>2004</b> , 151, 335-337		3
131	Defects in dilute nitrides: significance and experimental signatures. <i>IEE Proceedings: Optoelectronics</i> , <b>2004</b> , 151, 379-384		4
130	Electrical and luminescent properties and the spectra of deep centers in GaMnN/InGaN light-emitting diodes. <i>Journal of Electronic Materials</i> , <b>2004</b> , 33, 241-247	1-9	2
129	Optical and electrical characterization of (Ga,Mn)N/InGaN multiquantum well light-emitting diodes. <i>Journal of Electronic Materials</i> , <b>2004</b> , 33, 467-471	1-9	8
128	InAs/Zn(Mn)Te/Cd(Mn)Se pseudomorphic quantum well structures for spintronic applications. <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, 704-707	1-3	1

127	Exciton magnetic polarons in a type II ZnMnSe/ZnSSe superlattice. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 847-850		3
126	Role of hydrogen in improving optical quality of GaNAs alloys. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2004</b> , 20, 313-316		3
125	Wide bandgap GaN-based semiconductors for spintronics. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, R209-R245	1.8	106
124	Direct experimental evidence for unusual effects of hydrogen on the electronic and vibrational properties of GaN <sub>x</sub> P <sub>1-x</sub> alloys: A proof for a general property of dilute nitrides. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	21
123	Evaluation of optical quality and defect properties of GaN <sub>x</sub> P <sub>1-x</sub> alloys lattice matched to Si. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 6347-6349	3.4	7
122	Defects in dilute nitrides. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3027-S3035	1.8	26
121	As-Grown 4H-SiC Epilayers with Magnetic Properties. <i>Materials Science Forum</i> , <b>2004</b> , 457-460, 747-750	0.4	19
120	Influence of conduction-band nonparabolicity on electron confinement and effective mass in GaN <sub>x</sub> As <sub>1-x</sub> /GaAs quantum wells. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	85
119	Exciton Spin Manipulation in ZnMnSe-Based Structures. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2003</b> , 16, 399-402		3
118	P <sub>N</sub> defect in GaNP studied by optically detected magnetic resonance. <i>Physica B: Condensed Matter</i> , <b>2003</b> , 340-342, 399-402	2.8	1
117	Identification of Ga interstitials in GaAlNP. <i>Physica B: Condensed Matter</i> , <b>2003</b> , 340-342, 466-469	2.8	2
116	Hydrogen-related effects in diluted nitrides. <i>Physica B: Condensed Matter</i> , <b>2003</b> , 340-342, 371-376	2.8	3
115	Recombination processes in N-containing III <sup>V</sup> ternary alloys. <i>Solid-State Electronics</i> , <b>2003</b> , 47, 467-475	1.7	39
114	Temperature behavior of the GaNP band gap energy. <i>Solid-State Electronics</i> , <b>2003</b> , 47, 493-496	1.7	6
113	Magneto-photoluminescence studies of diluted magnetic semiconductor type-II quantum wells ZnMnSe/ZnSSe. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2003</b> , 17, 352-354	3	3
112	Resonant suppression of exciton spin relaxation in Zn <sub>0.96</sub> Mn <sub>0.04</sub> Se/CdSe superlattices. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 7352-7354	2.5	3
111	Nitrogen passivation induced by atomic hydrogen: The GaP <sub>1-x</sub> N <sub>x</sub> case. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	51
110	Hydrogen-induced improvements in optical quality of GaNAs alloys. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 3662-3664	3.4	45

109	Exciton spin relaxation in diluted magnetic semiconductor Zn <sub>1-x</sub> MnxSe/CdSe superlattices: Effect of spin splitting and role of longitudinal optical phonons. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	31
108	Control of spin functionality in ZnMnSe-based structures: Spin switching versus spin alignment. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1700-1702	3.4	20
107	Semimagnetic ZnMnSe/CdSe Fractional Monolayer Superlattice as an Injector of Spin-Polarized Carriers. <i>Physica Status Solidi (B): Basic Research</i> , <b>2002</b> , 229, 765-768	1.3	4
106	Optical characterization of III-nitrides. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2002</b> , 93, 112-122	3.1	26
105	On the spin injection in ZnMnSe/ZnCdSe heterostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 13, 538-541	3	6
104	Evidence for type I band alignment in GaNAs/GaAs quantum structures by optical spectroscopies. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 13, 1074-1077	3	1
103	ZnMnSe/ZnSse Type-II semimagnetic superlattices: Growth and magnetoluminescence properties. <i>Semiconductors</i> , <b>2002</b> , 36, 1288-1293	0.7	5
102	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
101	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
100	Magneto-optical and light-emission properties of III <sub>1-x</sub> As <sub>x</sub> N semiconductors. <i>Semiconductor Science and Technology</i> , <b>2002</b> , 17, 815-822	1.8	39
99	Tunable laser spectroscopy of spin injection in ZnMnSe/ZnCdSe quantum structures. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 2196-2198	3.4	29
98	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
97	On the Origin of Light Emission in GaN <sub>x</sub> P <sub>1-x</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 722, 421		
96	Strain relaxation in GaN <sub>x</sub> P <sub>1-x</sub> alloy: effect on optical properties. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 308-310, 106-109	2.8	3
95	Optical properties of GaNAs/GaAs structures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 82, 143-147	3.1	14
94	Properties of GaAsN/GaAs quantum wells studied by optical detection of cyclotron resonance. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 82, 218-220	3.1	3
93	Electronic Properties of Ga(In)NAs Alloys. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>2001</b> , 6, 1		157
92	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



91	Signature of an intrinsic point defect in GaN <sub>x</sub> As <sub>1-x</sub> . <i>Physical Review B</i> , <b>2001</b> , 63,	3-3	50
90	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
89	Spin Polarization and Injection in ZnMnSe/ZnCdSe Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 690, F1.7.1		
88	Nature and Formation of Non-Radiative Defects in GaN <sub>s</sub> And InGaAsN. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 692, 1		7
87	Raman Studies of GaNP Alloy. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 693, 567		1
86	Disorder-Activated Resonant Raman Scattering in GaN <sub>s</sub> /GaAs Structures. <i>Springer Proceedings in Physics</i> , <b>2001</b> , 73-74	0.2	
85	Recombination Processes of GaN <sub>s</sub> /GaAs structures: Effect of Rapid Thermal Annealing. <i>Springer Proceedings in Physics</i> , <b>2001</b> , 559-560	0.2	
84	Optical characterization of wide bandgap semiconductors. <i>Thin Solid Films</i> , <b>2000</b> , 364, 98-106	2.2	9
83	Applications of defect engineering in InP-based structures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2000</b> , 75, 103-109	3.1	2
82	Photoluminescence characterization of GaN <sub>s</sub> /GaAs structures grown by molecular beam epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2000</b> , 75, 166-169	3.1	11
81	Photoluminescence characterization of defects created in electron-irradiated silicon at elevated temperatures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2000</b> , 72, 146-149	3.1	5
80	Ga-related defect in as-grown Zn-doped GaN: An optically detected magnetic resonance study. <i>Physical Review B</i> , <b>2000</b> , 62, R10607-R10609	3-3	10
79	Type I band alignment in the GaN <sub>x</sub> As <sub>1-x</sub> /GaAs quantum wells. <i>Physical Review B</i> , <b>2000</b> , 63,	3-3	50
78	Direct determination of electron effective mass in GaN <sub>s</sub> /GaAs quantum wells. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 1843	3-4	156
77	Magneto-optical studies of the 0.88-eV photoluminescence emission in electron-irradiated GaN. <i>Physical Review B</i> , <b>2000</b> , 62, 16572-16577	3-3	10
76	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
75	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
74	Electronic structure of the 0.88-eV luminescence center in electron-irradiated gallium nitride. <i>Physical Review B</i> , <b>1999</b> , 60, 1746-1751	3-3	2



73	Effect of high-temperature electron irradiation on the formation of radiative defects in silicon. <i>Physica B: Condensed Matter</i> , <b>1999</b> , 273-274, 528-531	2.8	2
72	Intrinsic modulation doping in InP-based structures: properties relevant to device applications. <i>Journal of Crystal Growth</i> , <b>1999</b> , 201-202, 786-789	1.6	
71	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
70	Mechanism for Light Emission in GaNAs/GaAs Structures Grown by Molecular Beam Epitaxy. <i>Physica Status Solidi (B): Basic Research</i> , <b>1999</b> , 216, 125-129	1.3	8
69	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
68	Effect of Electron Irradiation on Optical Properties of Gallium Nitride. <i>Physica Scripta</i> , <b>1999</b> , T79, 72	2.6	5
67	Role of the Substitutional Oxygen Donor in the Residual N-Type Conductivity in GaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 514-519		1
66	Relaxation Phenomena in GaN/ AlN/ 6H-SiC Heterostructures. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 423-428		
65	Incorporation and luminescence properties of Er <sub>2</sub> O <sub>3</sub> and ErF <sub>3</sub> doped Si layers grown by molecular beam epitaxy. <i>Thin Solid Films</i> , <b>1998</b> , 321, 223-227	2.2	2
64	Effects of defect scattering on the photoluminescence of exciton-polaritons in n-GaN. <i>Solid State Communications</i> , <b>1998</b> , 105, 497-501	1.6	17
63	Room Temperature Photoluminescence Linewidth versus Material Quality of GaN. <i>Materials Science Forum</i> , <b>1998</b> , 264-268, 1319-1322	0.4	1
62	On the improvement in thermal quenching of luminescence in SiGe/Si structures 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, 1928		
61	Photoluminescence of GaN: Effect of electron irradiation. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2968-2970	3.4	55
60	Properties of Er-related emission in in situ doped Si epilayers 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, 1732		7
59	Similarity between the 0.88-eV photoluminescence in GaN and the electron-capture emission of the OP donor in GaP. <i>Physical Review B</i> , <b>1998</b> , 58, R13351-R13354	3.3	15
58	Influence of Growth Conditions on the Thermal Quenching of Photoluminescence From SiGe/Si Quantum Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 533, 295		
57	Relaxation Phenomena in GaN/AlN/6HSiC Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 537, 1		
56	Role of the Substitutional Oxygen Donor in the Residual N-Type Conductivity in GaN. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 537, 1		

55	Optical properties of electron-irradiated GaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1998</b> , 3, 1		6
54	Strong effects of carrier concentration on the Fermi-edge singularity in modulation-doped InP/InxGa1-xAs heterostructures. <i>Physical Review B</i> , <b>1997</b> , 55, 7052-7058	3.3	11
53	Er/O and Er/F doping during molecular beam epitaxial growth of Si layers for efficient 1.54 $\mu$ m light emission. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 3383-3385	3.4	36
52	The Role of Non-Radiative Defects in Thermal Quenching of Luminescence in SiGe/Si Structures Grown by Molecular Beam Epitaxy. <i>Materials Science Forum</i> , <b>1997</b> , 258-263, 139-144	0.4	
51	Intrinsic Modulation Doping in InP-Based Heterostructures. <i>Materials Science Forum</i> , <b>1997</b> , 258-263, 805-812	0.4	1
50	Mbe Growth And Characterization Of Er/O And Er/F Doped Si Light Emitting Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 486, 133		
49	Silicon-based structures for IR light emission. <i>Physica Scripta</i> , <b>1997</b> , T69, 60-64	2.6	2
48	Postgrowth hydrogen treatments of nonradiative defects in low-temperature molecular beam epitaxial Si. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 369-371	3.4	7
47	Mechanism for thermal quenching of luminescence in SiGe/Si structures grown by molecular beam epitaxy: Role of nonradiative defects. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 3676-3678	3.4	25
46	Electronic structure and temperature dependence of excitons in GaN. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1997</b> , 43, 172-175	3.1	4
45	Photoluminescence of exciton-polaritons in GaN. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1997</b> , 50, 130-133	3.1	12
44	Optical spectroscopy of MBE grown quantum wells at various acceptor doping levels. <i>Thin Solid Films</i> , <b>1997</b> , 306, 244-247	2.2	2
43	The excitonic bandgap of GaN: Dependence on substrate. <i>Solid-State Electronics</i> , <b>1997</b> , 41, 239-241	1.7	26
42	Free Excitons in GaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1996</b> , 1, 1		43
41	Intrinsic N-Type Modulation Doping in InP-Based Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 421, 21		
40	Electronic Structure and Temperature Dependence of Excitons in GaN. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 423, 675		5
39	Defects in Low Temperature MBE-Grown Si and SiGe/Si Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 442, 355		1
38	Optical properties of boron modulation-doped SiGe quantum wells and Si thin films. <i>Solid-State Electronics</i> , <b>1996</b> , 40, 53-57	1.7	

37	Photoluminescence characterization of SF6O2 plasma etching of silicon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1996</b> , 36, 100-103	3.1	2
36	Important defect aspects in optoelectronic applications of Si- and SiGe/Si-heterostructures. <i>Applied Surface Science</i> , <b>1996</b> , 102, 279-282	6.7	
35	Influence of growth conditions on the formation of deep photoluminescence bands in MBE-grown Si layers and SiGe/Si quantum structures. <i>Applied Surface Science</i> , <b>1996</b> , 102, 293-297	6.7	4
34	Intense photoluminescence observed in modulation doped Si/SiGe quantum well structures. <i>Applied Surface Science</i> , <b>1996</b> , 102, 298-302	6.7	1
33	Exciton properties in p-type GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As quantum wells in the high doping regime. <i>Physical Review B</i> , <b>1996</b> , 54, 16989-16993	3.3	14
32	Fermi-edge singularity in p-type modulation-doped SiGe quantum wells. <i>Physical Review B</i> , <b>1996</b> , 53, R1701-R1704	3.3	4
31	Nonradiative defects in Si and SiGe/Si heterostructures grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1256-1258	3.4	8
30	Intrinsic Doping: A New Approach for n-Type Modulation Doping in InP-Based Heterostructures. <i>Physical Review Letters</i> , <b>1996</b> , 77, 2734-2737	7.4	18
29	Thermally activated intersubband and hopping transport in center-doped p-type GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As quantum wells. <i>Physical Review B</i> , <b>1996</b> , 53, 1357-1361	3.3	9
28	Effect of hydrogen passivation on Be-doped AlGaAs/GaAs quantum wells. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1365-1367	3.4	7
27	Photoluminescence of the two-dimensional hole gas in p-type delta -doped Si layers. <i>Physical Review B</i> , <b>1996</b> , 53, 9587-9590	3.3	17
26	Identification of Grown-In Efficient Nonradiative Recombination Centers in Molecular Beam Epitaxial Silicon. <i>Physical Review Letters</i> , <b>1996</b> , 77, 4214-4217	7.4	14
25	Optical detection of quantum oscillations in InP/InGaAs quantum structures. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 809-811	3.4	9
24	Intrinsic optical properties of GaN epilayers grown on SiC substrates: Effect of the built-in strain. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 1255-1257	3.4	53
23	Influence of ion bombardment on Si and SiGe films during molecular beam epitaxy growth. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 238-240	3.4	14
22	Radiative recombination processes in p-type modulation-doped SiGe quantum wells and Si epilayers. <i>Journal of Crystal Growth</i> , <b>1995</b> , 157, 362-366	1.6	
21	Some critical issues on growth of high quality Si and SiGe films using a solid-source molecular beam epitaxy system. <i>Journal of Crystal Growth</i> , <b>1995</b> , 157, 242-247	1.6	8
20	Excitation mechanism of porous silicon luminescence: the role of sensitizers. <i>Thin Solid Films</i> , <b>1995</b> , 255, 185-187	2.2	4

19	Effect of ion bombardment on deep photoluminescence bands in p-type boron-modulation-doped Si layers grown by molecular-beam epitaxy. <i>Physical Review B</i> , <b>1995</b> , 52, 12006-12012	3.3	8
18	Photoluminescence of defects induced in silicon by SF <sub>6</sub> /O <sub>2</sub> reactive-ion etching. <i>Journal of Applied Physics</i> , <b>1995</b> , 78, 3348-3352	2.5	7
17	SF <sub>6</sub> /O <sub>2</sub> and CF <sub>4</sub> /O <sub>2</sub> Reactive-Ion-Etching-Induced Defects in Silicon Studied by Photoluminescence Spectroscopy: Role of Oxygen. <i>Materials Science Forum</i> , <b>1995</b> , 196-201, 1807-1812	0.4	1
16	Important Nonradiative Grown-In Defects in MBE-Grown Si and SiGe/Si Heterostructures. <i>Materials Science Forum</i> , <b>1995</b> , 196-201, 473-478	0.4	2
15	Defect Formation and Recombination Processes in p-Type Modulation-Doped Si Epilayers. <i>Materials Science Forum</i> , <b>1995</b> , 196-201, 479-484	0.4	
14	Properties of deep photoluminescence bands in SiGe/Si quantum structures grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 1642-1644	3.4	8
13	Characterization of Defects Created in Silicon Due to Etching in Low-Pressure Plasmas Containing Fluorine and Oxygen. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 396, 599		
12	Efficient Nonradiative Recombination Centers in MBE-Grown Si and SiGe/Si Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 378, 135		1
11	Radiative Recombination Processes in Boron Modulation-Doped SiGe Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 378, 881		1
10	Deep Photoluminescence Bands in MBE Grown Si and SiGe. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 379, 405		1
9	Influence of subthreshold ultrasound treatment on the recombination properties of dislocations in Ge <sub>x</sub> Si <sub>1-x</sub> -Si heterostructures. <i>Semiconductor Science and Technology</i> , <b>1994</b> , 9, 2042-2046	1.8	4
8	Ultrasound regeneration of EL2 centres in GaAs. <i>Semiconductor Science and Technology</i> , <b>1994</b> , 9, 158-162	1.8	6
7	Symmetry of optically active Yb-related centers in InP and In <sub>1-x</sub> Ga <sub>x</sub> P (x=0.13). <i>Journal of Applied Physics</i> , <b>1994</b> , 76, 1180-1183	2.5	2
6	Influence of Ultrasound Vibrations on the Stable-Metastable Transitions of EL2 Centers in GaAs. <i>Materials Science Forum</i> , <b>1993</b> , 143-147, 1063-1068	0.4	3
5	Symmetry properties of Er <sup>3+</sup> related centers in In <sub>1-x</sub> Ga <sub>x</sub> P with low alloy compositions. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 2461-2463	3.4	5
4	Coexistence of two deep donor states, DX- and DX <sub>0</sub> , of the Sn donor in Ga <sub>1-x</sub> Al <sub>x</sub> As. <i>Physical Review B</i> , <b>1992</b> , 45, 11667-11671	3.3	9
3	Symmetry of metastable EL2 luminescence centres in semi-insulating GaAs single crystals. <i>Semiconductor Science and Technology</i> , <b>1989</b> , 4, 797-802	1.8	6
2	Excitation Spectra and Polarized Luminescence of Deep Centres in GaAs Single Crystals. <i>Physica Status Solidi A</i> , <b>1987</b> , 103, K161-K164		

- 1 Room-temperature electron spin polarization exceeding 90% in an opto-spintronic semiconductor nanostructure via remote spin filtering. *Nature Photonics*, 33:9 7