

# Konstantin Zhuravlev

## 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.

210  
papers

1,073  
citations

15  
h-index

25  
g-index

231  
ext. papers

1,227  
ext. citations

1.2  
avg, IF

4.01  
L-index

#	Paper	IF	Citations
210	High-power InAlAs/InGaAs Schottky barrier photodiodes for analog microwave signal transmission. <i>Journal of Semiconductors</i> , <b>2022</b> , 43, 012302	2.3	
209	Modification of the surface energy and morphology of GaN monolayers on the AlN surface in an ammonia flow. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 053101	3.4	1
208	Evolution of the atomic and electronic structures during nitridation of the Si(1 1 1) surface under ammonia flux. <i>Applied Surface Science</i> , <b>2022</b> , 571, 151276	6.7	0
207	High-Power Microwave Photodiodes Based on MBE-Grown InAlAs/InGaAs Heterostructures. <i>Technical Physics</i> , <b>2021</b> , 66, 1072	0.5	
206	MECHANISMS FOR REMOVING OXIDES FROM THE INP SURFACE AT ANNEALING IN AN ARSENIC FLUX. <i>Avtometriya</i> , <b>2021</b> , 57, 11-17	1.5	
205	Crystal Structure and Predominant Defects in CdS Quantum Dots Fabricated by the Langmuir-Blodgett Method. <i>Langmuir</i> , <b>2021</b> , 37, 5651-5658	4	2
204	The effect of barrier layers on 2D electron effective mass in AlGaN/AlN/GaN heterostructures. <i>Journal of Physics Condensed Matter</i> , <b>2021</b> , 33,	1.8	1
203	Millimeter-Wave Donor-Acceptor-Doped DpHEMT. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 53-56	2.9	0
202	AlSb/InAs Heterostructures for Microwave Transistors. <i>Technical Physics Letters</i> , <b>2021</b> , 47, 139-142	0.7	
201	A Millimeter-Wave Field-Effect Transistor Based on a Pseudomorphic Heterostructure with an Additional Potential Barrier. <i>Technical Physics Letters</i> , <b>2021</b> , 47, 329-332	0.7	
200	Photoluminescence of Multiple GaN/AlN Quantum Wells. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2021</b> , 57, 526-531	0.6	
199	Mechanisms of the Oxides Removal from the InP Surface under Annealing in an Arsenic Flux. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2021</b> , 57, 451-457	0.6	1
198	Features of Optical Gain in Heavily Doped Al <sub>x</sub> Ga <sub>1-x</sub> N:Si-Structures. <i>Technical Physics Letters</i> , <b>2021</b> , 47, 692-695	0.7	0
197	Substitution of Phosphorus at the InP(001) Surface Upon Annealing in an Arsenic Flux. <i>Semiconductors</i> , <b>2021</b> , 55, 823-827	0.7	2
196	AlInSb/InSb Heterostructures for IR Photodetectors Grown by Molecular-Beam Epitaxy. <i>Technical Physics Letters</i> , <b>2020</b> , 46, 154-157	0.7	1
195	Luminescence line shapes of band to deep centre and donor-acceptor transitions in AlN. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 435501	1.8	7
194	Donor-acceptor nature of orange photoluminescence in AlN. <i>Semiconductor Science and Technology</i> , <b>2020</b> , 35, 125006	1.8	1

193	Growth of Nitride Heteroepitaxial Transistor Structures: from Epitaxy of Buffer Layers to Surface Passivation. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2020</b> , 56, 485-491	0.6	1
192	New Type of Heterostructures for Powerful pHEMT Transistors. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2020</b> , 56, 478-484	0.6	
191	High-Power High-Speed Schottky Photodiodes for Analog Fiber-Optic Microwave Signal Transmission Lines. <i>Technical Physics Letters</i> , <b>2019</b> , 45, 739-741	0.7	6
190	Undoped High-Resistance GaN Buffer Layer for AlGa <sub>N</sub> /GaN High-Electron-Mobility Transistors. <i>Technical Physics Letters</i> , <b>2019</b> , 45, 761-764	0.7	3
189	Optical Gain in Heavily Doped Al <sub>x</sub> Ga <sub>1-x</sub> N:Si Structures. <i>Technical Physics Letters</i> , <b>2019</b> , 45, 951-954	0.7	1
188	Mechanisms of exciton photoluminescence quenching in the electric field of a standing surface acoustic wave. <i>International Journal of Modern Physics B</i> , <b>2019</b> , 33, 1950032	1.1	
187	Surface Polaritons in Silicon-Doped Aluminum and Gallium Nitride Films. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , <b>2019</b> , 127, 36-39	0.7	1
186	About the nature of the barrier inhomogeneities at Au/Ti/n-InAlAs(001) Schottky contacts. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 221602	3.4	4
185	The Influence of the InAlAs Layer Surface Morphology on the Temperature Dependence of Parameters of Au/Ti/n-InAlAs(001) Schottky Diodes. <i>Technical Physics Letters</i> , <b>2019</b> , 45, 180-184	0.7	
184	On the Processes of the Self-Assembly of CdS Nanocrystal Arrays Formed by the Langmuir-Blodgett Technique. <i>Semiconductors</i> , <b>2019</b> , 53, 1540-1544	0.7	0
183	Electron-Stimulated Aluminum Nitride Crystalline Phase Formation on the Sapphire Surface. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1800516	1.3	1
182	Forming the GaN Nanocrystals on the Graphene-Like g-AlN and g-Si <sub>3</sub> N <sub>3</sub> Surface. <i>Physics of the Solid State</i> , <b>2019</b> , 61, 2329-2334	0.8	
181	Growth of AlGa <sub>N</sub> :Si Heterostructures with Bragg Reflectors for the Blue-Green Spectral Range. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2019</b> , 55, 501-507	0.6	
180	Heterostructure InGaAlAs/InAlAs on the InP substrate for the electro-optical modulator based on the quantum confined Stark effect. <i>ITM Web of Conferences</i> , <b>2019</b> , 30, 14004	0.1	
179	Indium-Assisted Plasma-Enhanced Low-Temperature Growth of Silicon Oxide Nanowires. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700749	1.6	3
178	Determination of the energy structure of recombination centers in heavily doped Al <sub>x</sub> Ga <sub>1-x</sub> N:Si epitaxial layers with x > 0.5. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 993, 012006	0.3	2
177	Light emission of heavily doped AlGa <sub>N</sub> structures under optical pumping. <i>Journal of Semiconductors</i> , <b>2018</b> , 39, 043002	2.3	
176	Change in the Character of Biaxial Stresses with an Increase in x from 0 to 0.7 in Al <sub>x</sub> Ga <sub>1-x</sub> N:Si Layers Obtained by Ammonia Molecular Beam Epitaxy. <i>Semiconductors</i> , <b>2018</b> , 52, 221-225	0.7	1

175	Negative Differential Resistance Observation and a New Fitting Model for Electron Drift Velocity in GaN-Based Heterostructures. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 950-956	2.9	4
174	Chemical kinetics and thermodynamics of the AlN crystalline phase formation on sapphire substrate in ammonia MBE. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2018</b> , 133, 1099-1107	4.1	6
173	Mobility of the Two-Dimensional Electron Gas in DA-pHEMT Heterostructures with Various $\bar{\Gamma}$ -Layer Profile Widths. <i>Semiconductors</i> , <b>2018</b> , 52, 44-52	0.7	2
172	Increasing Saturated Electron-Drift Velocity in Donor-Acceptor Doped pHEMT Heterostructures. <i>Technical Physics Letters</i> , <b>2018</b> , 44, 260-262	0.7	4
171	Broadband Spontaneous and Stimulated Luminescence of Heavily Doped Al <sub>x</sub> Ga <sub>1-x</sub> N Structures. <i>Atmospheric and Oceanic Optics</i> , <b>2018</b> , 31, 405-409	0.8	
170	Determination of Electron Temperature in DA-pHEMT Heterostructures by Shubnikov-De Haas Oscillation Method. <i>Russian Physics Journal</i> , <b>2018</b> , 61, 1202-1209	0.7	
169	Formation of a Graphene-Like SiN Layer on the Surface Si(111). <i>Semiconductors</i> , <b>2018</b> , 52, 1511-1517	0.7	1
168	Effect of the Sapphire-Nitridation Level and Nucleation-Layer Enrichment with Aluminum on the Structural Properties of AlN Layers. <i>Semiconductors</i> , <b>2018</b> , 52, 789-796	0.7	5
167	Radiation enhancement in doped AlGaN-structures upon optical pumping. <i>Technical Physics Letters</i> , <b>2017</b> , 43, 46-49	0.7	2
166	Photoelectric characteristics of focal plane arrays based on epitaxial layers of indium antimonide deposited on a heavily doped substrate. <i>Journal of Communications Technology and Electronics</i> , <b>2017</b> , 62, 309-313	0.5	3
165	Electronic excitation transfer from an organic matrix to CdS nanocrystals produced by the Langmuir-Blodgett method. <i>Semiconductors</i> , <b>2017</b> , 51, 576-581	0.7	2
164	AlN/GaN heterostructures for normally-off transistors. <i>Semiconductors</i> , <b>2017</b> , 51, 379-386	0.7	4
163	Nature of intensive defect-related broadband luminescence of heavily doped Al <sub>x</sub> Ga <sub>1-x</sub> N:Si layers. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 816, 012002	0.3	2
162	Properties of intensive defect-related band in photoluminescence spectra of heavily doped Al <sub>x</sub> Ga <sub>1-x</sub> N:Si layers. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012071	0.3	
161	Features of current flow in structures based on Au/Ti/n-InAlAs Schottky barriers. <i>Technical Physics Letters</i> , <b>2017</b> , 43, 581-583	0.7	
160	Defect-related luminescence in InAlAs on InP grown by molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , <b>2017</b> , 32, 095009	1.8	2
159	Fluorinated Surface of Carbon Nanotube Buckypaper for Uniform Growth of CdS Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 19182-19190	3.8	9
158	An X-ray spectroscopy study of CdS nanoparticles formed by the Langmuir-Blodgett technique on the surface of carbon nanotube arrays. <i>Journal of Structural Chemistry</i> , <b>2017</b> , 58, 876-884	0.9	3

157	MBE-grown InSb photodetector arrays. <i>Technical Physics</i> , <b>2017</b> , 62, 915-919	0.5	2
156	Nature of luminescence of PbS quantum dots synthesized in a Langmuir-Blodgett matrix. <i>JETP Letters</i> , <b>2017</b> , 106, 18-22	1.2	
155	Original method of GaN and InGaN quantum dots formation on (0001)AlN surface by ammonia molecular beam epitaxy. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012007	0.3	1
154	Defect-related transitions in luminescence of InAlAs on InP. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012075	0.3	
153	Studying average electron drift velocity in pHEMT structures. <i>Technical Physics Letters</i> , <b>2016</b> , 42, 848-851	0.7	5
152	Influence of substrate temperature on the morphology of silicon oxide nanowires synthesized using a tin catalyst. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 1790-1795	1.6	10
151	Peculiarities of CdS nanocrystal formation at annealing of a Langmuir-Blodgett matrix. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2016</b> , 13, 417-420		2
150	Influence of defects on the photoluminescence kinetics in GaN/AlN quantum-dot structures. <i>Semiconductors</i> , <b>2016</b> , 50, 191-194	0.7	1
149	The influence of water-organic solvent composition on the morphology and luminescent properties of CdS nanoparticles obtained by chemical precipitation. <i>Colloid Journal</i> , <b>2016</b> , 78, 30-36	1.1	2
148	Synthesis of silicon oxide nanowires by the GJ EBP CVD method using different diluent gases. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 1774-1782	1.6	13
147	Structure of interfaces in GaN/AlN and Ge/Si multilayered heterosystems by XAFS spectroscopy. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 774, 012128	0.3	
146	Calculating the nonequilibrium carrier relaxation kinetics in AlGaAs. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2016</b> , 80, 23-27	0.4	
145	Influence of the additional p+ doped layers on the properties of AlGaAs/InGaAs/AlGaAs heterostructures for high power SHF transistors. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 095108	3	9
144	Photoluminescence kinetics slowdown in an ensemble of GaN/AlN quantum dots upon tunneling interaction with defects. <i>Semiconductors</i> , <b>2016</b> , 50, 1038-1042	0.7	
143	Normally off transistors based on in situ passivated AlN/GaN heterostructures. <i>Technical Physics Letters</i> , <b>2016</b> , 42, 750-753	0.7	3
142	Identification of photoluminescence bands in AlGaAs/InGaAs/GaAs PHEMT heterostructures with donor-acceptor-doped barriers. <i>Semiconductors</i> , <b>2015</b> , 49, 224-228	0.7	3
141	Moving photoluminescence band in AlGaIn/GaN heterostructures. <i>Semiconductor Science and Technology</i> , <b>2015</b> , 30, 085010	1.8	1
140	Nitridation of an unreconstructed and reconstructed (111)R (0001) sapphire surface in an ammonia flow. <i>Semiconductors</i> , <b>2015</b> , 49, 905-910	0.7	2

- 139 Origin of the blue luminescence band in zirconium oxide. *Physics of the Solid State*, **2015**, 57, 1347-1351 0.8 7
- 138 MBE-grown AlGa<sub>N</sub>/Ga<sub>N</sub> heterostructures for UV photodetectors. *Technical Physics*, **2015**, 60, 546-552 0.5 3
- 137 Adjusting the position of the optimum operating point of a power heterostructure field-effect transistor by forming a gate potential barrier based on a donor-acceptor structure. *Technical Physics Letters*, **2015**, 41, 142-145 0.7 2
- 136 Minority carrier diffusion length in Al<sub>x</sub>Ga<sub>1-x</sub>N (x = 0.1) grown by ammonia molecular beam epitaxy. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 447-450 2
- 135 2D AlN crystal phase formation on (0001) Al<sub>2</sub>O<sub>3</sub> surface by ammonia MBE. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 443-446 11
- 134 Power dependence of unusual bands in photoluminescence spectra of AlGa<sub>N</sub>/Ga<sub>N</sub> heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 372-375
- 133 Surface polariton spectroscopy of AlN films grown by ammonia MBE on (0001) Al<sub>2</sub>O<sub>3</sub> substrate. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 439-442 2
- 132 Photoluminescence kinetics in CdS nanoclusters formed by the Langmuir-Blodgett technique. *Semiconductors*, **2015**, 49, 380-386 0.7 5
- 131 Increase in the diffusion length of minority carriers in Al<sub>x</sub>Ga<sub>1-x</sub>N alloys (x = 0.1) fabricated by ammonia molecular beam epitaxy. *Semiconductors*, **2015**, 49, 1285-1289 0.7 5
- 130 Prospects for the development of high-power field-effect transistors based on heterostructures with donor-acceptor doping. *Semiconductors*, **2014**, 48, 666-674 0.7 21
- 129 Tunneling transport through passivated CdS nanocrystal arrays grown by the Langmuir-Blodgett method. *Semiconductors*, **2014**, 48, 1205-1210 0.7 3
- 128 Analysis of the microwave loss in AlGaAs/GaAs heterostructure pin-diodes. *Optoelectronics, Instrumentation and Data Processing*, **2014**, 50, 276-282 0.6
- 127 Effect of spin polarization of excitons on the energy spectra of GaAs/AlGaAs heterostructures. *Optoelectronics, Instrumentation and Data Processing*, **2014**, 50, 287-291 0.6
- 126 Thermodynamic and kinetic aspects of AlN crystal formation on (0001)Al<sub>2</sub>O<sub>3</sub> surface by ammonia MBE. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 613-616 6
- 125 Decrease in the binding energy of donors in heavily doped GaN:Si layers. *Semiconductors*, **2014**, 48, 1134-1138 5
- 124 INFRARED PHOTOLUMINESCENCE SPECTRA OF PBS NANOPARTICLES PREPARED BY LANGMUIR-BLODGETT AND LASER ABLATION METHODS. *Acta Polytechnica*, **2014**, 54, 426-429 1 3
- 123 The origin of 2.7 eV blue luminescence band in zirconium oxide. *Journal of Applied Physics*, **2014**, 116, 244109 2.5 29
- 122 A silicon donor layer in heavily doped GaN. *Bulletin of the Russian Academy of Sciences: Physics*, **2014**, 78, 943-945 0.4

121	Luminescence and superradiance in electron-beam-excited Al <sub>x</sub> Ga <sub>1-x</sub> N. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 113103	2.5	13
120	Chromium mask for plasma-chemical etching of Al <sub>x</sub> Ga <sub>1-x</sub> N layers. <i>Technical Physics</i> , <b>2014</b> , 59, 1356-1359		
119	Defects and stresses in MBE-grown GaN and Al <sub>0.3</sub> Ga <sub>0.7</sub> N layers doped by silicon using silane. <i>Crystallography Reports</i> , <b>2013</b> , 58, 1023-1029	0.6	3
118	Growth of AlGaN/GaN heterostructures with a two-dimensional electron gas on AlN/Al <sub>2</sub> O <sub>3</sub> substrates. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2013</b> , 49, 429-433	0.6	7
117	Microsecond Lifetime of Exciton Spin Polarization in (In,Al)As/AlAs Quantum Dots. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2013</b> , 49, 514-519	0.6	
116	Effect of annealing and nitridation on (0001) sapphire surface polaritons. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 377-380		1
115	Characterization of MBE-grown AlGa <sub>1-x</sub> N layers heavily doped using silane. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 315-318		15
114	Electron scattering in AlGa <sub>1-x</sub> N/GaN heterostructures with a two-dimensional electron gas. <i>Semiconductors</i> , <b>2013</b> , 47, 33-44	0.7	19
113	Photoluminescence of CdS nanoparticles grown on carbon nanotubes covered by a dielectric polymer layer. <i>Physica Status Solidi (B): Basic Research</i> , <b>2013</b> , 250, 2759-2764	1.3	3
112	Diffusion and deformations in heterosystems with GaN/AlN superlattices, according to data from EXAFS spectroscopy. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2013</b> , 77, 1147-1150	0.4	2
111	Electro- and Photoluminescence of CdS Nanoparticles Deposited on Carbon Nanotubes. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2013</b> , 8, 36-41	1.3	8
110	Numerical modeling of GaAs field-effect transistor characteristics as functions of channel doping profile parameters. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2012</b> , 48, 105-109	0.6	
109	Electronic excitation energy transfer between CdS quantum dots and carbon nanotubes. <i>JETP Letters</i> , <b>2012</b> , 95, 362-365	1.2	6
108	Self-assembled Quantum Dots: From Stranski-Krastanov to Droplet Epitaxy <b>2012</b> , 127-200		4
107	Decreasing the role of transverse spatial electron transport and increasing the output power of heterostructure field-effect transistors. <i>Technical Physics Letters</i> , <b>2012</b> , 38, 819-821	0.7	13
106	Room temperature 1.5 μm light-emitting silicon diode with embedded FeSi <sub>2</sub> nanocrystallites. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 163501	3.4	10
105	Influence of shape of GaN/AlN quantum dots on luminescence decay law. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 653-656	1.6	4
104	Spin relaxation of negatively charged excitons in (In,Al)As/AlAs quantum dots with indirect band gap and type-I band alignment. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 142108	3.4	13

103	Interaction of excitons with carriers accelerated by the electric field of a surface acoustic wave in type-II GaAs/AlAs superlattices. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	2
102	Exciton recombination dynamics in an ensemble of (In,Al)As/AlAs quantum dots with indirect band-gap and type-I band alignment. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	30
101	Quantum confinement and electron spin resonance characteristics in Si-implanted silicon oxide films. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 084502	2.5	5
100	The microstructure of vertically coupled quantum dots ensembles by EXAFS spectroscopy. <i>Journal of Surface Investigation</i> , <b>2011</b> , 5, 856-862	0.5	1
99	Trapping of charge carriers into InAs/AlAs quantum dots at liquid-helium temperature. <i>Semiconductors</i> , <b>2011</b> , 45, 179-187	0.7	2
98	The influence of a doping profile on the characteristics of an ion-implanted GaAs field-effect transistor with a Schottky barrier. <i>Semiconductors</i> , <b>2011</b> , 45, 1589-1599	0.7	
97	Quantization of the electronic spectrum and localization of electrons and holes in silicon quantum dots. <i>Physics of the Solid State</i> , <b>2011</b> , 53, 860-863	0.8	4
96	Dependences of the optical characteristics of Al <sub>x</sub> Ga <sub>1-x</sub> N films on the substrate composition and polarity. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2011</b> , 47, 485-489	0.6	0
95	Linearly polarized photoluminescence from an ensemble of wurtzite GaN/AlN quantum dots. <i>JETP Letters</i> , <b>2010</b> , 91, 452-454	1.2	1
94	Carrier dynamics in InAs/AlAs quantum dots: lack in carrier transfer from wetting layer to quantum dots. <i>Nanotechnology</i> , <b>2010</b> , 21, 155703	3.4	19
93	The form of the profile of heterointerfaces in (311)Ga GaAs/AlAs structures. <i>Semiconductors</i> , <b>2010</b> , 44, 341-349	0.7	
92	Recombination of charge carriers in the GaAs-based p-i-n diode. <i>Semiconductors</i> , <b>2010</b> , 44, 1362-1364	0.7	1
91	Heterointerface relief in the (311)A-oriented GaAs-AlAs superlattices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 272-275		
90	Linear polarized photoluminescence from GaN quantum dots imbedded in AlN matrix. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 2227-2229		1
89	Photoluminescence of GaN/AlN quantum dots at high excitation powers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 2230-2232		5
88	Deep levels and electron transport in AlGaN/GaN heterostructures <b>2010</b> , 42, 52		2
87	Electrical properties and deep traps spectra of N-polar and Ga-polar AlGaN films grown by molecular beam epitaxy in a wide composition range. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 113712	2.5	7
86	Modeling the operation of field-effect transistors based on GaAs/AlGaAs heterostructures. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2009</b> , 45, 337-341	0.6	



85	Nonradiative recombination in GaN quantum dots formed in the AlN matrix. <i>Semiconductors</i> , <b>2009</b> , 43, 768-774	0.7	3
84	Materials for photodetectors based on intersubband transitions in GaN/AlGaIn quantum dots. <i>Journal of Optical Technology (A Translation of Opticheski Zhurnal)</i> , <b>2009</b> , 76, 791	0.9	1
83	Observation of the zero-magnetic-field exciton spin splitting in high quality bulk GaAs and AlGaAs. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 182107	3.4	6
82	Reversal of spin polarization direction in excitonic photoluminescence of AlGaAs. <i>Europhysics Letters</i> , <b>2009</b> , 88, 17001	1.6	3
81	Microstructure of quantum dots ensembles by EXAFS spectroscopy. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 190, 012131	0.3	3
80	Optical properties of photodetectors based on wurtzite quantum dot arrays. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	7
79	Atomic and energy structure of InAs/AlAs quantum dots. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	42
78	Investigation of multilayer silicon structures with buried iron silicide nanocrystallites: growth, structure, and properties. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2008</b> , 8, 527-34	1.3	4
77	Photoluminescence of a single InAs/AlAs quantum dot. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 2528-2529		1
76	Luminescence and energy structure of ultrathin InAs/AlAs quantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 2408-2411		
75	Deep levels and electron transport in AlGaIn/GaN heterostructures. <i>Semiconductors</i> , <b>2008</b> , 42, 52-58	0.7	7
74	Changes in optical properties of CdS nanoclusters in langmuir-blodgett films on passivation in ammonia. <i>Semiconductors</i> , <b>2008</b> , 42, 702-709	0.7	16
73	Effect of electric field on recombination of self-trapped excitons in silicon nanocrystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2007</b> , 4, 382-384		2
72	Continuous order-disorder phase transition ( $2\times 2$ ) $\rightarrow$ ( $1\times 1$ ) on the (0001)AlN surface. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2007</b> , 4, 2498-2501		3
71	Application of XAFS spectroscopy to studying the microstructure and electronic structure of quantum dots. <i>Journal of Surface Investigation</i> , <b>2007</b> , 1, 26-34	0.5	4
70	Mechanism of the effect of the electric field of a surface acoustic wave on the low-temperature photoluminescence kinetics in type-II GaAs/AlAs superlattices. <i>Semiconductors</i> , <b>2007</b> , 41, 205-210	0.7	1
69	Photoluminescence dynamics in GaAs along an optically induced Mott transition). <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 081717	2.5	12
68	Pauli blockade of the electron spin flip in bulk GaAs. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	11

67	Morphological, structural and luminescence properties of Si/FeSi <sub>2</sub> /Si heterostructures fabricated by Fe ion implantation and Si MBE. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 5319-5326	3	3
66	Prolonged decay of free-to-bound photoluminescence in direct band gap InGaAs and AlGaAs alloys: magnetic resonance studies. <i>Semiconductor Science and Technology</i> , <b>2006</b> , 21, 105-111	1.8	
65	Interplay of exciton and electron-hole plasma recombination on the photoluminescence dynamics in bulk GaAs. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	37
64	Strong sensitivity of photoluminescence of InAs/AlAs quantum dots to defects: evidence for lateral inter-dot transport. <i>Semiconductor Science and Technology</i> , <b>2006</b> , 21, 527-531	1.8	13
63	Wavelength-selective enhancement of the intensity of visible photoluminescence in hydrogen-ion-implanted silicon-on-insulator structures annealed under high pressure. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 013106	3.4	6
62	Investigation of growth mechanisms of GaN quantum dots on (0001)AlN surface by ammonia MBE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 1548-1551		9
61	Microphotoluminescence of GaN/AlN quantum dots grown by MBE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2048-2051		
60	Prolonged kinetics of photoluminescence of two-dimensional electron gas in AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2095-2098		1
59	Temperature dependence of photoluminescence from CdS nanoclusters formed in the matrix of Langmuir-Blodgett film. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 3951-3954		1
58	Transport properties of the two-dimensional electron gas in GaN/AlGa <sub>N</sub> heterostructures grown by ammonia molecular-beam epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, 2186-2189	1.6	
57	Special features of photoluminescence in silicon-on-insulator structures implanted with hydrogen ions. <i>Semiconductors</i> , <b>2006</b> , 40, 420-426	0.7	
56	Exciton-polariton transition induced by elastic exciton-exciton collisions in ultrahigh quality AlGaAs alloys. <i>Semiconductors</i> , <b>2006</b> , 40, 527-533	0.7	
55	Temperature dependence of photoluminescence of CdS nanoclusters formed in the Langmuir-Blodgett film matrix. <i>Semiconductors</i> , <b>2006</b> , 40, 1188-1192	0.7	12
54	Predominance of Geminate Process of Exciton Formation in AlGaAs Layers at Low Excitation <b>2006</b> , 237-240		
53	Long-time photoluminescence kinetics of InAs/AlAs quantum dots in a magnetic field. <i>Semiconductors</i> , <b>2005</b> , 39, 27	0.7	
52	Photoluminescence of germanium quantum dots grown in silicon on a SiO <sub>2</sub> submonolayer. <i>Physics of the Solid State</i> , <b>2005</b> , 47, 82	0.8	4
51	Photoluminescence kinetics of wurtzite GaN quantum dots in an AlN matrix. <i>JETP Letters</i> , <b>2005</b> , 81, 62-65.2		1
50	Photoluminescence of silicon nanocrystals under the effect of an electric field. <i>Semiconductors</i> , <b>2005</b> , 39, 1319	0.7	1

49	Dynamics of relaxation and trapping of excitons in Al <sub>x</sub> Ga <sub>1-x</sub> As films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 906-909		
48	Excitonic polaritons in semiconductor solid solutions Al <sub>x</sub> Ga <sub>1-x</sub> As. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 900-905		15
47	Influence of trapping on the exciton dynamics of Al <sub>x</sub> Ga <sub>1-x</sub> As films. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 111906	3.4	5
46	Exciton fine structure and spin dynamics in high purity AlGaAs layers. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S377-S379	1.8	1
45	Infrared light emission from GaAs MESFETs operating at avalanche breakdown conditions. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S94-S95	1.8	6
44	Formation of nanocrystalline silicon films using high-dose H <sup>+</sup> ion implantation into silicon-on-insulator layers with subsequent rapid thermal annealing. <i>Semiconductors</i> , <b>2004</b> , 38, 107-112	0.7	7
43	Effect of uniform compression on photoluminescence spectra of GaAs layers heavily doped with beryllium. <i>Semiconductors</i> , <b>2004</b> , 38, 277-280	0.7	1
42	Ge/Si waveguide photodiodes with built-in layers of Ge quantum dots for fiber-optic communication lines. <i>Semiconductors</i> , <b>2004</b> , 38, 1225-1229	0.7	12
41	Comparative analysis of (0001)GaN and (001)GaAs growth kinetics under Ga-rich conditions. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 321-324		
40	Growth kinetics of (0001)GaN from Ga and NH <sub>3</sub> fluxes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 325-328		1
39	Porous-like silicon prepared from Si:H annealed at high argon pressure. <i>Physica Status Solidi A</i> , <b>2003</b> , 197, 236-240		3
38	Recombination of excitons bound on donor-acceptor impurity pairs in $\delta$ -doped type II GaAs/AlAs superlattices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 657-660		
37	Optically detected magnetic resonance of shallow donors in GaAs observed in photoluminescence kinetics. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 669-672		1
36	Properties of Ge nanocrystals formed by implantation of Ge <sup>+</sup> ions into SiO <sub>2</sub> films with subsequent annealing under hydrostatic pressure. <i>Semiconductors</i> , <b>2003</b> , 37, 462-467	0.7	1
35	Millisecond photoluminescence kinetics in a system of direct-bandgap InAs quantum dots in an AlAs matrix. <i>JETP Letters</i> , <b>2003</b> , 77, 389-392	1.2	21
34	Observation of exchange interaction effects under optical orientation of excitons in AlGaAs. <i>JETP Letters</i> , <b>2003</b> , 77, 561-564	1.2	1
33	Photoluminescence from cadmium sulfide nanoclusters formed in the matrix of a Langmuir-Blodgett film. <i>Semiconductors</i> , <b>2003</b> , 37, 1321-1325	0.7	16
32	Changes in the density of nonradiative recombination centers in GaAs/AlGaAs quantum-well structures as a result of treatment in CF <sub>4</sub> plasma. <i>Semiconductors</i> , <b>2002</b> , 36, 81-84	0.7	0

31	Exciton recombination in doped type-II GaAs/AlAs superlattices. <i>Semiconductors</i> , <b>2002</b> , 36, 461-465	0.7	2
30	Power Microwave FETs Using Epitaxial AlGaAs/GaAs Structures. <i>Russian Microelectronics</i> , <b>2002</b> , 31, 137-143	0.7	2
29	Study of photoluminescence of SiO <sub>x</sub> N <sub>y</sub> films implanted with Ge <sup>+</sup> ions and annealed under the conditions of hydrostatic pressure. <i>Semiconductors</i> , <b>2001</b> , 35, 125-131	0.7	2
28	Photoluminescence kinetics in GaAs under the influence of surface acoustic waves. <i>Semiconductors</i> , <b>2001</b> , 35, 895-899	0.7	5
27	Optical properties of germanium monolayers on silicon. <i>Semiconductors</i> , <b>2001</b> , 35, 941-946	0.7	5
26	The role of nitrogen in the formation of luminescent silicon nanoprecipitates during heat treatment of SiO <sub>2</sub> layers implanted with Si <sup>+</sup> ions. <i>Semiconductors</i> , <b>2001</b> , 35, 1182-1186	0.7	6
25	Visible photoluminescence from Ge <sup>+</sup> -ion-implanted SiO <sub>x</sub> N <sub>y</sub> annealed under hydrostatic pressure <b>2001</b> , 4413, 237		
24	Self-trapped exciton recombination in silicon nanocrystals. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	82
23	Millisecond phosphorescence of free electrons in pure GaAs. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3455-3457	3.4	12
22	Below bottleneck polaritonic radiation in ultra high quality AlGaAs alloys. <i>Springer Proceedings in Physics</i> , <b>2001</b> , 91-92	0.2	1
21	The influence of irradiation and subsequent annealing on Si nanocrystals formed in SiO <sub>2</sub> layers. <i>Semiconductors</i> , <b>2000</b> , 34, 965-970	0.7	14
20	Recombination of self-trapped excitons in silicon nanocrystals grown in silicon oxide. <i>Semiconductors</i> , <b>2000</b> , 34, 1203-1206	0.7	14
19	Photoresistance of Si/Ge/Si structures with germanium quantum dots. <i>Semiconductors</i> , <b>2000</b> , 34, 1311-1315	1.5	7
18	Polariton luminescence in high-purity layers of AlGaAs solid solutions. <i>JETP Letters</i> , <b>2000</b> , 71, 148-150	1.2	1
17	Photoluminescence of high-quality AlGaAs layers grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1131-1133	3.4	23
16	Use of high-purity Al <sub>x</sub> Ga <sub>1-x</sub> as layers in epitaxial structures for high-power microwave field-effect transistors. <i>Technical Physics Letters</i> , <b>1999</b> , 25, 595-597	0.7	1
15	Donor-acceptor recombination in type-II GaAs/AlAs superlattices. <i>Physics of the Solid State</i> , <b>1998</b> , 40, 1577-1581	0.8	2
14	Manganese-related recombination centers in epitaxial GaAs grown from a bismuth melt. <i>Semiconductors</i> , <b>1998</b> , 32, 43-48	0.7	9

13	Properties of manganese-doped gallium arsenide layers grown by liquid-phase epitaxy from a bismuth melt. <i>Semiconductors</i> , <b>1998</b> , 32, 704-710	0.7	4
12	A new recombination center in heavily doped GaAs: Zn grown by liquid-phase epitaxy. <i>Semiconductors</i> , <b>1998</b> , 32, 1057-1061	0.7	
11	Effect of ion dose and annealing mode on photoluminescence from SiO <sub>2</sub> implanted with Si ions. <i>Semiconductors</i> , <b>1998</b> , 32, 1222-1228	0.7	11
10	Transformation of nonradiative recombination centers in GaAs/AlGaAs quantum well structures upon treatment in a CF <sub>4</sub> plasma followed by low-temperature annealing. <i>Semiconductors</i> , <b>1998</b> , 32, 1293-1298 <sup>1</sup>	0.7	1
9	New impurity-induced defect in heavily zinc-doped GaAs grown by liquid phase epitaxy. <i>Semiconductor Science and Technology</i> , <b>1998</b> , 13, 1123-1129	1.8	2
8	Mechanism of photoluminescence of Si nanocrystals fabricated in a SiO <sub>2</sub> matrix. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2962-2964	3.4	48
7	Effect of surface acoustic waves on low-temperature photoluminescence of GaAs. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 3389-3391	3.4	36
6	Annihilation of nonradiative recombination centers in GaAs/AlGaAs multiquantum well structures as a result of exposure to plasma. <i>Semiconductors</i> , <b>1997</b> , 31, 1241-1243	0.7	1
5	A suite of experimental conditions for photoluminescence monitoring of a heterojunction bipolar transistor structure. <i>Technical Physics</i> , <b>1997</b> , 42, 1395-1399	0.5	1
4	Mobile line in the acceptor photoluminescence spectrum of pure GaAs. <i>JETP Letters</i> , <b>1997</b> , 65, 86-90	1.2	3
3	Quantum-Sized Silicon Precipitates in Silicon-Implanted and Pulse-Annealed Silicon Dioxide Films: Photoluminescence and Structural Transformations. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 438, 453		7
2	Characterization of shallow acceptors in GaAs by microsecond-scale time-resolved photoluminescence. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 373-375	3.4	6
1	Liquid phase epitaxial growth of undoped gallium arsenide from bismuth and gallium melts. <i>Crystal Research and Technology</i> , <b>1989</b> , 24, 235-246	1.3	15