# Anton Gutakovskii

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/4651813/anton-gutakovskii-publications-by-citations.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

222
papers
1,749
citations
19
g-index

2,017
ext. papers
2,017
ext. citations
2,017
avg, IF
L-index

#	Paper	IF	Citations
222	Normal-incidence infrared photoconductivity in Si p-i-n diode with embedded Ge self-assembled quantum dots. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 1413-1415	3.4	101
221	Magnetic field-induced dissipation-free state in superconducting nanostructures. <i>Nature Communications</i> , <b>2013</b> , 4, 1437	17.4	75
220	Closed curved graphite-like structures formation on micron-size diamond. <i>Chemical Physics Letters</i> , <b>1998</b> , 289, 353-360	2.5	50
219	Effect of quantum confinement on optical properties of Ge nanocrystals in GeO2 films. <i>Semiconductors</i> , <b>2005</b> , 39, 1168	0.7	46
218	Atomic and energy structure of InAs/AlAs quantum dots. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	42
217	Synthesis and Characterization of CuxS ( $x = 10$ ) Nanocrystals Formed by the Langmuir <b>B</b> lodgett Technique. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 23409-23414	3.8	40
216	Application of high-resolution electron microscopy for visualization and quantitative analysis of strain fields in heterostructures. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2007</b> , 71, 1426-14	32 <sup>0.4</sup>	33
215	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
214	Properties of extremely thin silicon layer in silicon-on-insulator structure formed by smart-cut technology. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2000</b> , 73, 82-86	3.1	28
213	Mechanism of induced nucleation of misfit dislocations in the Ge-on-Si(0 0 1) system and its role in the formation of the core structure of edge misfit dislocations. <i>Acta Materialia</i> , <b>2013</b> , 61, 617-621	8.4	23
212	Ge/Si quantum dot nanostructures grown with low-energy ion beam-assisted epitaxy. <i>Surface and Coatings Technology</i> , <b>2005</b> , 196, 25-29	4.4	23
211	LiVPO4F/Li3V2(PO4)3 nanostructured composite cathode materials prepared via mechanochemical way. <i>Journal of Solid State Electrochemistry</i> , <b>2014</b> , 18, 1389-1399	2.6	22
210	Mechanisms of edge-dislocation formation in strained films of zinc blende and diamond cubic semiconductors epitaxially grown on (001)-oriented substrates. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 123519	2.5	22
209	Apoptosis-mediated endothelial toxicity but not direct calcification or functional changes in anti-calcification proteins defines pathogenic effects of calcium phosphate bions. <i>Scientific Reports</i> , <b>2016</b> , 6, 27255	4.9	22
208	GeSi films with reduced dislocation density grown by molecular-beam epitaxy on compliant substrates based on porous silicon. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 4118-4120	3.4	21
207	High quality relaxed GaAs quantum dots in GaP matrix. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 023108	3.4	20
206	Plastic relaxation of solid GeSi solutions grown by molecular-beam epitaxy on the low temperature Si(100) buffer layer. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 4710-4714	2.5	20

# (2002-2015)

205	Enhancement of the Si p-n diode NIR photoresponse by embedding FeSi2 nanocrystallites. <i>Scientific Reports</i> , <b>2015</b> , 5, 14795	4.9	19	
204	Strain relaxation of GeSi/Si(001) heterostructures grown by low-temperature molecular-beam epitaxy. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 7665-7674	2.5	19	
203	Direct observations of dislocation half-loops inserted from the surface of the GeSi heteroepitaxial film. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 6140-6142	3.4	19	
202	Solid solutions GeSi grown by MBE on a low temperature Si (001) buffer layer: specific features of plastic relaxation. <i>Thin Solid Films</i> , <b>2001</b> , 392, 98-106	2.2	19	
201	High resolution electron microscopy of semiconductor interfaces. <i>Physica Status Solidi A</i> , <b>1995</b> , 150, 12	7-140	19	
200	Charge Berezinskii-Kosterlitz-Thouless transition in superconducting NbTiN films. <i>Scientific Reports</i> , <b>2018</b> , 8, 4082	4.9	18	
199	Potentialities and basic principles of controlling the plastic relaxation of GeSi/Si and Ge/Si films with stepwise variation in the composition. <i>Semiconductors</i> , <b>2008</b> , 42, 1-20	0.7	18	
198	Surface-enhanced Raman spectroscopy of semiconductor nanostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2016</b> , 75, 210-222	3	17	
197	Atomic structure and energy spectrum of Ga(As,P)/GaP heterostructures. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 083713	2.5	17	
196	Pseudomorphic GeSiSn, SiSn and Ge layers in strained heterostructures. <i>Nanotechnology</i> , <b>2018</b> , 29, 154	0924	16	
195	Features of formation and propagation of $60^\circ$ and $90^\circ$ misfit dislocations in GexSi1 1818 (x~0.40.5) films caused by Si substrate misorientation from (001). <i>Applied Physics Letters</i> , <b>2008</b> , 92, 131901	3.4	16	
194	Heterostructures GexSi1½/Si(001) (x=0.18Ď.62) grown by molecular beam epitaxy at a low (350 °C) temperature: specific features of plastic relaxation. <i>Thin Solid Films</i> , <b>2004</b> , 466, 69-74	2.2	16	
193	Fluorinated graphene suspension for flexible and printed electronics: Flakes, 2D films, and heterostructures. <i>Materials and Design</i> , <b>2019</b> , 164, 107526	8.1	16	
192	The convenient preparation of stable aryl-coated zerovalent iron nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , <b>2015</b> , 6, 1192-8	3	15	
191	InAs-based metal-oxide-semiconductor structure formation in low-energy Townsend discharge. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 173501	3.4	14	
190	Precise surface measurements at the nanoscale. <i>Measurement Science and Technology</i> , <b>2010</b> , 21, 05400	42	14	
189	Formation of edge misfit dislocations in GexSi1 $\mbox{\ensuremath{\mathbb{N}}}$ (x~0.4 $\mbox{\ensuremath{\mathbb{D}}}$ .5) films grown on misoriented (001)->(111) Si substrates. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 3422-3427	1.6	14	
188	Optical vibration modes in (Cd, Pb, Zn)S quantum dots in the Langmuir-Blodgett matrix. <i>Physics of the Solid State</i> , <b>2002</b> , 44, 1976-1980	0.8	14	

187	The influence of irradiation and subsequent annealing on Si nanocrystals formed in SiO2 layers. <i>Semiconductors</i> , <b>2000</b> , 34, 965-970	0.7	14
186	The formation of partial misfit dislocations during heteroepitaxy. <i>Physica Status Solidi A</i> , <b>1981</b> , 67, 299	-304	14
185	Linear chains of Ge/Si quantum dots grown on a prepatterned surface formed by ion irradiation. <i>Semiconductors</i> , <b>2015</b> , 49, 749-752	0.7	13
184	Preparation of thin films of platinum group metals by pulsed MOCVD. I. Deposition of Ir layers. <i>Journal of Structural Chemistry</i> , <b>2012</b> , 53, 715-724	0.9	13
183	Initial stage growth of GexSi1-x layers and Ge quantum dot formation on GexSi1-x surface by MBE. <i>Nanoscale Research Letters</i> , <b>2012</b> , 7, 561	5	13
182	CdZnS quantum dots formed by the Langmuir <b>B</b> lodgett technique. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2013</b> , 31, 04D109	1.3	13
181	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
180	Sb as surfactant at plastic relaxation of GeSi/Si(001) films grown by molecular-beam epitaxy: Reduction of surface roughness value. <i>Journal of Crystal Growth</i> , <b>2006</b> , 297, 57-60	1.6	13
179	Growth and structure of Ge nanoislands on an atomically clean silicon oxide surface. <i>Physics of the Solid State</i> , <b>2004</b> , 46, 77-79	0.8	13
178	Oxide-free InAs(111)A interface in metal-oxide-semiconductor structure with very low density of states prepared by anodic oxidation. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 161601	3.4	12
177	The mechanism of {113} defect formation in silicon: clustering of interstitial-vacancy pairs studied by in situ high-resolution electron microscope irradiation. <i>Microscopy and Microanalysis</i> , <b>2013</b> , 19 Suppl 5, 38-42	0.5	12
176	Growth, structure and luminescence properties of multilayer Si/FeSi2NCs/Si//Si nanoheterostructures. <i>Thin Solid Films</i> , <b>2011</b> , 519, 8480-8484	2.2	12
175	Pulsed ion-beam induced nucleation and growth of Ge nanocrystals on SiO2. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 133120	3.4	12
174	Heterostructures GexSi1½/Si(0 0 1) grown by low-temperature (300½00 °C) molecular beam epitaxy: Misfit dislocation propagation. <i>Journal of Crystal Growth</i> , <b>2005</b> , 280, 309-319	1.6	12
173	Hemozoin "knobs" in Opisthorchis felineus infected liver. <i>Parasites and Vectors</i> , <b>2015</b> , 8, 459	4	11
172	Initial stages of Ge epitaxy on Si(111) under quasi-equilibrium growth conditions. <i>JETP Letters</i> , <b>2010</b> , 92, 388-395	1.2	11
171	Specific features of formation and propagation of 60ʿland 90ʿlmisfit dislocations in GexSi1⊠/Si films with x>0.4. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 3080-3084	1.6	11
170	Effect of ion dose and annealing mode on photoluminescence from SiO2 implanted with Si ions. <i>Semiconductors</i> , <b>1998</b> , 32, 1222-1228	0.7	11

#### (2018-2005)

169	The formation of silicon nanocrystals in SiO2 layers by the implantation of Si ions with intermediate heat treatments. <i>Semiconductors</i> , <b>2005</b> , 39, 552-556	0.7	11
168	Interface phonons in semiconductor nanostructures with quantum dots. <i>Journal of Experimental and Theoretical Physics</i> , <b>2005</b> , 101, 554-561	1	11
167	A room-temperature-operated Si LED with FeSi2 nanocrystals in the active layer:  we emission power at 1.5 fb. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 113101	2.5	10
166	Different electrochemical responses of LiFe0.5Mn0.5PO4 prepared by mechanochemical and solvothermal methods. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 742, 454-465	5.7	10
165	Evolution of silicon nanoclusters and hydrogen in SiNx:H films: Influence of high hydrostatic pressure under annealing. <i>Thin Solid Films</i> , <b>2012</b> , 520, 6207-6214	2.2	10
164	Dislocation interaction of layers in the Ge/Ge-seed/GexSi1 $\mathbb{R}$ /Si(0 0 1) (x ~ 0.3 $\mathbb{D}$ .5) system: Trapping of misfit dislocations on the Ge-seed/GeSi interface. <i>Acta Materialia</i> , <b>2013</b> , 61, 5400-5405	8.4	10
163	Crystallization of amorphous Si nanoclusters in SiO(x) films using femtosecond laser pulse annealings. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2012</b> , 12, 8694-9	1.3	10
162	Study of Onion-Like Carbon (OLC) Formation from Ultra Disperse Diamond (UDD). <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 359, 105		10
161	Defects in the crystal structure of Cd x Hg1 lk Te layers grown on the Si (310) substrates. <i>Semiconductors</i> , <b>2011</b> , 45, 926-934	0.7	9
160	Formation of edge misfit dislocations in GexSi1\(\mathbb{U}\)(x~0.4\(\mathbb{D}\).8) films grown on misoriented (001)->(111) Si substrates: Features before and after film annealing. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 123521	2.5	9
159	Nonradiative energy transfer between vertically coupled indirect and direct bandgap InAs quantum dots. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 263102	3.4	9
158	Dominating nucleation of misfit dislocations from the surface in GeSi/Si(0 0 1) films with a stepwise composition grown by means of molecular-beam epitaxy. <i>Journal of Crystal Growth</i> , <b>2006</b> , 293, 247-252	1.6	9
157	Enhanced strain relaxation in a two-step process of GexSi1½/Si(001) heterostructures grown by low-temperature molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 4599-4601	3.4	9
156	Electrical conductivity of silicon-on-insulator structures prepared by bonding silicon wafers to a substrate using hydrogen implantation. <i>Semiconductors</i> , <b>2000</b> , 34, 1054-1057	0.7	9
155	Splitting and electrical properties of the SOI structure formed from the heavily boron doped silicon with using of the smart-cut technology. <i>Microelectronic Engineering</i> , <b>1999</b> , 48, 383-386	2.5	9
154	Study of InGaAs?GaAs strained-layer superlattices by TEM and RBS techniques. <i>Physica Status Solidi A</i> , <b>1989</b> , 115, 413-425		9
153	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
152	Heterostructures with diffused interfaces: Luminescent technique for ascertainment of band alignment type. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 115701	2.5	8

151	Quantum dots formed in InSb/AlAs and AlSb/AlAs heterostructures. <i>JETP Letters</i> , <b>2016</b> , 103, 692-698	1.2	8
150	Aluminum-induced crystallization of silicon suboxide thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2018</b> , 124, 1	2.6	8
149	Novel self-assembled quantum dots in the GaSb/AlAs heterosystem. <i>JETP Letters</i> , <b>2012</b> , 95, 534-536	1.2	8
148	Defects and their Electronic Properties in High-Pressure-Annealed SOI Structures Sliced by Hydrogen <b>2002</b> , 269-288		8
147	Probing the Mg2Si/Si(1 1 1) heterojunction for photovoltaic applications. <i>Solar Energy</i> , <b>2020</b> , 211, 383-3	<b>95</b> 8	8
146	Atomic and electronic structure of ferroelectric La-doped HfO2 films. <i>Materials Research Express</i> , <b>2019</b> , 6, 036403	1.7	8
145	Peculiarities of structure, morphology, and electrochemistry of the doped 5-V spinel cathode materials LiNi0.5-x Mn1.5-y M x+y O4 (M = Co, Cr, Ti; x+y = 0.05) prepared by mechanochemical way. Journal of Solid State Electrochemistry, <b>2016</b> , 20, 235-246	2.6	7
144	Dual threshold diode based on the superconductor-to-insulator transition in ultrathin TiN films. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 042601	3.4	7
143	Formation of iron and iron silicides on silicon and iron surfaces. Role of the deposition rate and volumetric effects. <i>Applied Physics A: Materials Science and Processing</i> , <b>2013</b> , 112, 507-515	2.6	7
142	Photoluminescence associated with {113} defects in oxygen-implanted silicon. <i>Physica Status Solidi</i> (A) Applications and Materials Science, <b>2017</b> , 214, 1700317	1.6	7
141	Preparation of thin films of platinum group metals by pulsed MOCVD. II. Deposition of Ru layers. Journal of Structural Chemistry, <b>2012</b> , 53, 725-733	0.9	7
140	New system of self-assembled GaSb/GaP quantum dots. <i>Semiconductors</i> , <b>2012</b> , 46, 1534-1538	0.7	7
139	MODIFICATION OF GROWTH MODE OF Ge ON Si BY PULSED LOW-ENERGY ION-BEAM IRRADIATION. <i>International Journal of Nanoscience</i> , <b>2004</b> , 03, 19-27	0.6	7
138	Formation of nanocrystalline silicon films using high-dose H+ ion implantation into silicon-on-insulator layers with subsequent rapid thermal annealing. <i>Semiconductors</i> , <b>2004</b> , 38, 107-112	0.7	7
137	Instability of the distribution of atomic steps on Si(111) upon submonolayer gold adsorption at high temperatures. <i>JETP Letters</i> , <b>2005</b> , 81, 117-121	1.2	7
136	In Situ HREM Irradiation Study of an Intrinsic Point Defects Clustering in FZ-Si. <i>Crystal Research and Technology</i> , <b>2000</b> , 35, 775-786	1.3	7
135	Defect Formation during MBE Growth of CdTe (111). <i>Physica Status Solidi A</i> , <b>1991</b> , 126, 181-188		7
134	On the structure and photoluminescence of dislocations in silicon. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 053106	2.5	6

133	Optically detected magnetic resonance of photoexcited electrons in (In,Al)As/AlAs quantum dots with indirect band gap and type-I band alignment. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	6
132	High-precision nanoscale length measurement. <i>Nanotechnologies in Russia</i> , <b>2013</b> , 8, 518-531	0.6	6
131	High-quality single-crystal diamond-graphite-diamond membranes and devices. <i>International Journal of Nanotechnology</i> , <b>2015</b> , 12, 226	1.5	6
130	Morphological transformations of vanadium oxide films during low-temperature reduction in hydrogen electron cyclotron resonance plasma. <i>Journal of Surface Investigation</i> , <b>2007</b> , 1, 454-461	0.5	6
129	Bimetallic Pt,Ir-containing coatings formed by MOCVD for medical applications. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2019</b> , 30, 69	4.5	5
128	Raman, AFM, and TEM profiling of QD multilayer structures. <i>Materials Research Express</i> , <b>2015</b> , 2, 035003	B1.7	5
127	Fluorinated graphene nanoparticles with 1-3 nm electrically active graphene quantum dots. <i>Nanotechnology</i> , <b>2020</b> , 31, 295602	3.4	5
126	A new approach to the fabrication of VO nanoswitches with ultra-low energy consumption. <i>Nanoscale</i> , <b>2020</b> , 12, 3443-3454	7.7	5
125	Specific features of plastic relaxation of a metastable Ge x Si1 Ik layer buried between a silicon substrate and a relaxed germanium layer. <i>Physics of the Solid State</i> , <b>2014</b> , 56, 247-253	0.8	5
124	Formation of Mg silicides on amorphous Si. Origin and role of high pressure in the film growth. <i>Materials Chemistry and Physics</i> , <b>2014</b> , 148, 1078-1082	4.4	5
123	Coexistence of type-I and type-II band alignment in Ga(Sb, P)/GaP heterostructures with pseudomorphic self-assembled quantum dots. <i>JETP Letters</i> , <b>2014</b> , 99, 76-81	1.2	5
122	Ferromagnetic HfO2/Si/GaAs interface for spin-polarimetry applications. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 123506	3.4	5
121	Pulsed ion-beam assisted deposition of Ge nanocrystals on SiO2 for non-volatile memory device. <i>Thin Solid Films</i> , <b>2008</b> , 517, 313-316	2.2	5
120	InP decomposition phosphorus beam source for MBE: design, properties and superlattice growth. <i>Semiconductor Science and Technology</i> , <b>2003</b> , 18, 417-422	1.8	5
119	Formation of ultrasmall germanium nanoislands with a high density on an atomically clean surface of silicon oxide. <i>Physics of the Solid State</i> , <b>2005</b> , 47, 67	0.8	5
118	Strained multilayer structures with pseudomorphic GeSiSn layers. <i>Semiconductors</i> , <b>2016</b> , 50, 1584-1588	0.7	5
117	Intrinsic Point Defect Clustering in Si: A Study by HVEM and HREM in Situ Electron Irradiation <b>1997</b> , 63-9	92	5
116	GaAs/GaP Quantum-Well Heterostructures Grown on Si Substrates. <i>Semiconductors</i> , <b>2019</b> , 53, 1143-114	76. <sub>7</sub>	4

115	Analysis of the dislocation structure at the Ge/Si(111) heterointerface. <i>Journal of Surface Investigation</i> , <b>2014</b> , 8, 787-793	0.5	4
114	Structural state of Ge/Si heterosystems with (001), (111), and (7 7 10) interfaces. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2012</b> , 76, 325-327	0.4	4
113	Structure and Optical Properties of Ca Silicide Films and Si/Ca3Si4/Si(111) Heterostructures. <i>Solid State Phenomena</i> , <b>2014</b> , 213, 71-79	0.4	4
112	Edge misfit dislocations in the GeSi/Si(001) pair: Conditions and specific features of high-quantity generation. <i>Journal of Crystal Growth</i> , <b>2012</b> , 338, 12-15	1.6	4
111	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
110	Spontaneous composition modulation during Cd x Hg1⊠ Te(301) molecular beam epitaxy. <i>JETP Letters</i> , <b>2011</b> , 94, 324-328	1.2	4
109	Strained germanium films in Ge/InGaAs/GaAs heterostructures: Formation of edge misfit dislocations at the Ge/InGaAs interface. <i>Physics of the Solid State</i> , <b>2011</b> , 53, 2005-2011	0.8	4
108	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
107	Plastic relaxation of GeSi/Si(001) films grown by molecular-beam epitaxy in the presence of the Sb surfactant. <i>Semiconductors</i> , <b>2007</b> , 41, 1234-1239	0.7	4
106	Origination of misfit dislocations at the surface during the growth of GeSi/Si(001) films by low-temperature (300월00°C) molecular-beam epitaxy. <i>Semiconductors</i> , <b>2006</b> , 40, 319-326	0.7	4
105	Epitaxial silicon films deposited at high rates by gas-jet electron beam plasma CVD. <i>Surface and Coatings Technology</i> , <b>2003</b> , 174-175, 1178-1181	4.4	4
104	Defects in silicon heat-treated under uniform stress and irradiated with fast neutrons. <i>Physica Status Solidi A</i> , <b>2003</b> , 199, 207-213		4
103	Structure of cadmium and lead sulfide nanoclusters in a matrix of a langmuir-blodgett film. <i>Journal of Structural Chemistry</i> , <b>1999</b> , 40, 485-487	0.9	4
102	Formation and crystal structure of GaSb/GaP quantum dots. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2016</b> , 80, 17-22	0.4	4
101	Unexpected travel of Lomer-type dislocations in Ge/GexSi1-x/Si(001) heterostructures. <i>Thin Solid Films</i> , <b>2016</b> , 616, 348-350	2.2	4
100	Formation of a Thin Continuous GaSb Film on Si(001) by Solid Phase Epitaxy. <i>Nanomaterials</i> , <b>2018</b> , 8,	5.4	4
99	Transformation of the InP(001) surface upon annealing in an arsenic flux. <i>Surface Science</i> , <b>2021</b> , 710, 121861	1.8	4
98	Self-assembled strained GeSiSn nanoscale structures grown by MBE on Si(100). <i>Journal of Crystal Growth</i> , <b>2017</b> , 457, 215-219	1.6	3

# (2007-2019)

97	Structure of Hf0.9La0.1O2 Ferroelectric Films Obtained by the Atomic Layer Deposition. <i>JETP Letters</i> , <b>2019</b> , 109, 116-120	1.2	3
96	Electron-nuclei interaction in the X valley of (In,Al)As/AlAs quantum dots. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	3
95	Electron Microscopy Study of Metal Sulfide Nanocrystals Formed in Langmuir <b>B</b> lodgett Films. <i>Nanotechnologies in Russia</i> , <b>2017</b> , 12, 369-375	0.6	3
94	Influence of a Low-Temperature GaAs Dislocation Filter on the Perfection of GaAs/Si Layers. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2018</b> , 54, 181-186	0.6	3
93	Resistive Switching Effect with ON/OFF Current Relation up to 109 in 2D Printed Composite Films of Fluorinated Graphene with V2O5 Nanoparticles. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900310	6.4	3
92	Electron microscopic studies of CuS nanocrystals formed in Langmuir-Blodgett films. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2014</b> , 50, 304-309	0.6	3
91	Brief observe on iron silicide growth on amorphous silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 1742-1745		3
90	Surface-enhanced Raman scattering by semiconductor nanostructures. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2013</b> , 49, 504-513	0.6	3
89	Sn influence on MBE growth of GeSiSn/Si MQW. Journal of Physics: Conference Series, 2017, 816, 01202	0 0.3	3
88	Formation of low-dimensional structures in the InSb/AlAs heterosystem. <i>Semiconductors</i> , <b>2017</b> , 51, 123	3d <b>7</b> 3!	9 3
88 87	Formation of low-dimensional structures in the InSb/AlAs heterosystem. <i>Semiconductors</i> , <b>2017</b> , 51, 123  Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95	3d <b>7</b> 39	9 3
		<u>,                                     </u>	
87	Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95  Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and</i>	0.9	3
8 <sub>7</sub> 86	Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95  Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 03C127  Edge misfit dislocations in Ge x Si1 [k /Si(001) (x ~ 1) heterostructures: role of buffer Ge y Si1 [ly (y	0.9	3
87 86 85	Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95  Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 03C127  Edge misfit dislocations in Ge x Si1 Ik /Si(001) (x ~ 1) heterostructures: role of buffer Ge y Si1 Iy (y Physics of the Solid State, <b>2011</b> , 53, 1791-1797  Crystal perfection of GaP films grown on Si substrates by solid-source MBE with atomic hydrogen.	0.9	3 3
87 86 85 84	Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95  Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 03C127  Edge misfit dislocations in Ge x Si1 Ik /Si(001) (x ~ 1) heterostructures: role of buffer Ge y Si1 Iy (y Physics of the Solid State, <b>2011</b> , 53, 1791-1797  Crystal perfection of GaP films grown on Si substrates by solid-source MBE with atomic hydrogen. <i>Semiconductors</i> , <b>2009</b> , 43, 1235-1239  Heteroepitaxy of Ge x Si1 Ik (x ~ 0.40.5) films on Si(001) substrates misoriented to (111): Formation of short edge misfit dislocations alone in the misorientation direction. <i>Physics of the</i>	0.9 1.3 0.8	3 3 3
87 86 85 84 83	Decomposition of a supersaturated solid solution of Fe in GaAs. <i>Inorganic Materials</i> , <b>2012</b> , 48, 93-95  Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 03C127  Edge misfit dislocations in Ge x Si1 [k /Si(001) (x ~ 1) heterostructures: role of buffer Ge y Si1 [y (y Physics of the Solid State, <b>2011</b> , 53, 1791-1797  Crystal perfection of GaP films grown on Si substrates by solid-source MBE with atomic hydrogen. <i>Semiconductors</i> , <b>2009</b> , 43, 1235-1239  Heteroepitaxy of Ge x Si1 [k (x ~ 0.40.5) films on Si(001) substrates misoriented to (111): Formation of short edge misfit dislocations alone in the misorientation direction. <i>Physics of the Solid State</i> , <b>2010</b> , 52, 32-36  Role of the dislocation screw component in the formation of the dislocation structure in Ge- and	0.9 1.3 0.8 0.7	3 3 3 3

79	Effect of the ion-energy loss rate on defect formation during implantation in silicon nanocrystals. <i>Semiconductors</i> , <b>2008</b> , 42, 1127-1131	0.7	3
78	Formation of misfit edge dislocations in Ge x Si1	0.8	3
77	Self-Orientation of Silicon Nanocrystals Created under Pulse Laser Impact in Stressed : H Films on Glass Substrates. <i>Solid State Phenomena</i> , <b>2001</b> , 82-84, 681-686	0.4	3
76	The plastic deformation kinetics for heteroepitaxial films during the misfit dislocation generation from the growth surface. <i>Physica Status Solidi A</i> , <b>1981</b> , 66, 249-253		3
75	Resonant plasmon enhancement of light emission from CdSe/CdS nanoplatelets on Au nanodisk arrays. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 164708	3.9	3
74	Epitaxial growth of peculiar GeSn and SiSn nanostructures using a Sn island array as a seed. <i>Applied Surface Science</i> , <b>2021</b> , 553, 149572	6.7	3
73	On the mechanism of {113}-defect formation in Si <b>2005</b> , 359-362		3
72	Role of edge dislocations in plastic relaxation of GeSi/Si(001) heterostructures: Dependence of introduction mechanisms on film thickness. <i>Physics of the Solid State</i> , <b>2015</b> , 57, 765-770	0.8	2
71	Effect of Sn for the dislocation-free SiSn nanostructure formation on the vapor-liquid-crystal mechanism. <i>AIP Advances</i> , <b>2020</b> , 10, 015309	1.5	2
70	Experimental observation of motion of edge dislocations in Ge/Ge x Si1 $\mathbb{N}$ /Si(001) (x = 0.2 $\mathbb{D}$ .6) heterostructures. <i>Journal of Experimental and Theoretical Physics</i> , <b>2016</b> , 123, 832-837	1	2
69	Silicon p+pd Diodes with Embedded FeSi2 and CrSi2 Nanocrystals: Morphology, Crystal Structure and Photoelectric Properties. <i>International Journal of Nanoscience</i> , <b>2019</b> , 18, 1940084	0.6	2
68	Heteroepitaxy of AIIIBV films on vicinal Si(001) substrates. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2014</b> , 50, 224-233	0.6	2
67	Ge and GexSi1 িk islands formation on GexSi1 িk solid solution surface. Thin Solid Films, 2012, 520, 3319-	3 <u>3</u> 21	2
66	MBE-grown InSb photodetector arrays. <i>Technical Physics</i> , <b>2017</b> , 62, 915-919	0.5	2
65	Effect of synthesis conditions on the structure and properties of new SiC x N y M z materials for spintronics. <i>Journal of Structural Chemistry</i> , <b>2017</b> , 58, 1493-1502	0.9	2
64	InAsSb on GaAs (001): influence of the arsenic molecules form on composition and crystalline properties of MBE layers. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 643, 012006	0.3	2
63	High-quality structures with InAs/Al0.9Ga0.1As QDs produced by droplet epitaxy. <i>Journal of Crystal Growth</i> , <b>2011</b> , 337, 93-96	1.6	2
62	Precise measurements of nanostructure parameters. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2010</b> , 46, 301-311	0.6	2

61	VARIATION OF IN-PLANE LATTICE CONSTANT OF Si/Ge/Si HETEROSTRUCTURES WITH Ge QUANTUM DOTS. <i>International Journal of Nanoscience</i> , <b>2007</b> , 06, 297-299	0.6	2
60	New Compositionally-Ordered GeSi Nano Dots Fabricated with 1250 keV Electrons. <i>Advanced Materials Research</i> , <b>2007</b> , 26-28, 1195-1198	0.5	2
59	Dense arrays of Ge nanoclusters induced by low-energy ion-beam assisted deposition on Si02 films <b>2006</b> ,		2
58	Narrowing of ground energy level distribution in an array of InAs/AlAs QDs by post grown annealing. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 3932-3934		2
57	Influence of the misfit-dislocation screw component on the formation of threading dislocations in semiconductor heterostructures. <i>Semiconductors</i> , <b>2002</b> , 36, 290-297	0.7	2
56	Robust semiconductor-on-ferroelectric structures with hafniadirconiallumina UTBOX stacks compatible with CMOS technology. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 225101	3	2
55	Silicide phase formation by Mg deposition on amorphous Si. Ab initio calculations, growth process and thermal stability. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 778, 514-521	5.7	2
54	Effect of the structure and the phase composition on the mechanical properties of Alūuūi alloy laser welds. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 809, 140947	5.3	2
53	Determining the structure of energy in heterostructures with diffuse interfaces. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2017</b> , 81, 1052-1057	0.4	1
52	Stress-induced indirect to direct band gap transition in EFeSi2 nanocrystals embedded in Si 2017,		1
51	Electroluminescent 1.5-th light-emitting diodes based on p +-Si/NC FeSi2/n-Si structures. <i>Semiconductors</i> , <b>2015</b> , 49, 508-512	0.7	1
50	Formation and thermoelectric properties of the n- and p-type silicon nanostructures with embedded GaSb nanocrystals. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, SFFB04	1.4	1
49	An Influence of the Si(111)3-4o Vicinal Surface on the Solid Phase Epitaxy of FeSi2 Nanorods and their Crystal Parameters. <i>Key Engineering Materials</i> , <b>2019</b> , 806, 30-35	0.4	1
48	Photoluminescence spectroscopy investigation of epitaxial Si/GaSb nanocrystals/Si heterostructure <b>2017</b> ,		1
47	Role of cross-slipping in formation of edge dislocations in heteroepitaxial systems GeSi-on-Si(001) and Ge-on-InGaAs/GaAs. <i>Philosophical Magazine Letters</i> , <b>2011</b> , 91, 458-464	1	1
46	Non-linear conduction in the critical region of the superconductor-insulator transition in TiN thin films. <i>Journal of Physics: Conference Series</i> , <b>2012</b> , 400, 022042	0.3	1
45	Structure and electrical properties of polycrystalline SiGe films grown by molecular beam deposition. <i>Semiconductors</i> , <b>2007</b> , 41, 341-344	0.7	1
44	The influence of elastic strains on the growth and properties of vertically ordered Ge ButEclusters. <i>Thin Solid Films</i> , <b>2008</b> , 517, 69-70	2.2	1

43	Optimization of the plastic relaxation of misfit stresses in GexSi1½/Si(001) (x\overline{\mathbb{O}}.61) heterostructures. <i>Technical Physics Letters</i> , <b>2004</b> , 30, 68-70	0.7	1
42	Defect formation in LT MBE InGaAs and GaAs. <i>Journal of Structural Chemistry</i> , <b>2004</b> , 45, S96-S102	0.9	1
41	X-ray-emission study of the structure of Si:H layers formed by low-energy hydrogen-ion implantation. <i>Semiconductors</i> , <b>2002</b> , 36, 568-573	0.7	1
40	Photoluminescence kinetics of wurtzite GaN quantum dots in an AlN matrix. <i>JETP Letters</i> , <b>2005</b> , 81, 62-	65.2	1
39	Observation of antiphase domains in CdxHg1\( \text{I} Te films on silicon by the phase contrast method in atomic force microscopy. JETP Letters, 2005, 82, 292-296	1.2	1
38	Ge Nanoclusters in GeO2: Synthesis and Optical Properties. <i>Solid State Phenomena</i> , <b>2005</b> , 108-109, 83-9	<b>0</b> 0.4	1
37	Preparation of monolayers of nanoparticles for transmission electron microscopy. <i>Technical Physics</i> , <b>2000</b> , 45, 783-785	0.5	1
36	Interaction of a Ti-capped Co thin film with Si3N4. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 4307-4309	3.4	1
35	Structure and morphology of InSb epitaxial films in the AlAs matrix. <i>Nanotechnologies in Russia</i> , <b>2016</b> , 11, 12-19	0.6	1
34	Experimental observation of the dislocation walls in heterostructures with two interfaces: Ge/Ge0.5Si0.5 10 nm/Si(001) as an example. <i>Philosophical Magazine Letters</i> , <b>2016</b> , 96, 361-366	1	1
33	Resistive switching on individual VO nanoparticles encapsulated in fluorinated graphene films. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 20434-20443	3.6	1
32	Spinodal Decomposition in InSb/AlAs Heterostructures. <i>Semiconductors</i> , <b>2018</b> , 52, 1392-1397	0.7	1
31	Extended Defects in O+-Implanted Si Layers and Their Luminescence. <i>Crystallography Reports</i> , <b>2021</b> , 66, 625-635	0.6	1
30	Graphene/Hexagonal Boron Nitride Composite Nanoparticles for 2D Printing Technologies. <i>Advanced Engineering Materials</i> ,2100917	3.5	1
29	Generation of hydrocarbons: Mechanism of reaction, geologic and experimental evidence <b>2005</b> , 179-18	2	1
28	Si-based light emitters synthesized with Ge+ ion bombardment. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 153101	2.5	O
27	Extraction of the components of effective mobility in thin films. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 255105	3	0
26	Synthesis of crystalline Mg2Si films by ultrafast deposition of Mg on Si(111) and Si(001) at high temperatures. Mg/Si intermixing and reaction mechanisms. <i>Materials Chemistry and Physics</i> , <b>2021</b> , 258, 123903	4.4	O

25	Selective MOCVD synthesis of VO2 crystals on nanosharp Si structures. CrystEngComm, 2021, 23, 443-4	· <b>53</b> .3	Ο
24	Forming Dislocation Pairs in the Ge/GeSi/Si(001) Heterostructure. <i>Physics of the Solid State</i> , <b>2019</b> , 61, 145-148	0.8	
23	Electron Paramagnetic Resonance in Ge/Si Heterostructures with Mn-Doped Quantum Dots. <i>JETP Letters</i> , <b>2019</b> , 109, 270-275	1.2	
22	High-Resolution Electron Microscopy Investigations of Structure and Morphology of Cadmium Selenide Nanocrystals. <i>Russian Physics Journal</i> , <b>2018</b> , 61, 509-515	0.7	
21	Atomic structure of extended defects in boron-implanted silicon layers. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2014</b> , 50, 241-246	0.6	
20	Electroluminescence properties of p-Si/IPeSi2 NCs/IPn-Si mesa diodes with embedded multilayers of IPeSi2 nanocrystallites. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 1850-1853		
19	Nature of luminescence of PbS quantum dots synthesized in a Langmuir <b>B</b> lodgett matrix. <i>JETP Letters</i> , <b>2017</b> , 106, 18-22	1.2	
18	Strain in Ultrathin SiGeSn Layers in a Silicon Matrix. <i>JETP Letters</i> , <b>2017</b> , 106, 780-784	1.2	
17	Inclined misfit dislocations in a film/substrate system. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2011</b> , 208, 1896-1901	1.6	
16	On triple dislocation nodes observed by TEM in a Ge0.4Si0.6 film grown on a slightly deviating (0 0 1)Si substrate. <i>Philosophical Magazine Letters</i> , <b>2011</b> , 91, 510-515	1	
15	Influence of the step height of the vicinal surface of germanium on the formation of antiphase boundaries in a gallium-arsenide-germanium-gallium-arsenide(001) system. <i>Technical Physics Letters</i> , <b>1998</b> , 24, 949-951	0.7	
14	Pulsed Low-energy Ion-beam Induced Nucleation and Growth of Ge Nanocrystals on SiO2. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1020, 1		
13	TEM study of incommensurate phases in minerals: implication for materials science. <i>Materials Chemistry and Physics</i> , <b>2003</b> , 81, 237-240	4.4	
12	Laser Crystallization of Thin a-Si Films on Plastic Substrates Using Excimer Laser Treatments. <i>Solid State Phenomena</i> , <b>2003</b> , 95-96, 29-34	0.4	
11	Recrystallization of Silicon on Insulator Layers Implanted with High Doses of Hydrogen Ions. <i>Solid State Phenomena</i> , <b>2003</b> , 95-96, 23-28	0.4	
10	Surface morphology transitions induced by ion beam action during Ge/Si MBE <b>2004</b> , 5401, 290		
9	Ftir Spectroscopy and Spectroscopic Ellipsometry Study of Nanocrystalline Layers Formed by High-Dose Hydrogen and Deuterium Implantation of Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 609, 2491		
8	Optical phonons in nanosize GaAs and AlAs clusters in an InAs matrix. <i>JETP Letters</i> , <b>1999</b> , 70, 469-475	1.2	

Potentialities and basic principles of controlling the plastic relaxation of GeSi/Si and Ge/Si films with stepwise variation in the composition **2010**, 42, 1

6	Specific Features of the Atomic Structure of Iron Silicide Nanocrystals in a Silicon Matrix. <i>Crystallography Reports</i> , <b>2021</b> , 66, 601-607	0.6
5	Structural and morphological features of ultrathin epitaxial InSb films in AlAs matrix. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 769, 012030	0.3
4	Structural Transformations of the Dislocation Cores in Si and Their Relationship with Photoluminescence. <i>Crystallography Reports</i> , <b>2021</b> , 66, 636-643	0.6
3	Blister suppression in the CO+ molecule implanted SOI substrates with ultrathin buried oxides. <i>Materials Today Communications</i> , <b>2021</b> , 28, 102498	2.5
2	Effect of embedding of CrSi2 and IFeSi2 nanocrystals into n-type conductivity silicon on the transport and thermal generation of carriers. <i>Applied Surface Science</i> , <b>2021</b> , 566, 150620	6.7
1	Al2O3/InGaAs interface passivation by fluorine-containing anodic layers. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 085301	2.5