

Sergey A. Kukushkin

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.

233
papers

2,216
citations

19
h-index

37
g-index

244
ext. papers

2,395
ext. citations

1.4
avg, IF

5.46
L-index

#	Paper	IF	Citations
233	SiC/Si as a New Platform for Growth of Wide-Bandgap Semiconductors. <i>Advanced Structured Materials</i> , 2022 , 335-373	0.6	
232	Epitaxial Silicon Carbide on Silicon. Method of Coordinated Substitution of Atoms (A Review). <i>Russian Journal of General Chemistry</i> , 2022 , 92, 584-610	0.7	0
231	Self-Consistent Modeling of Nucleation and Growth of 2D Islands on the Top Facet of Self-Catalyzed GaAs Nanowires. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2000604	1.3	2
230	Dynamic Interaction of Steps and Nanoislands during Growth of a Multicomponent Crystal. <i>Crystal Growth and Design</i> , 2021 , 21, 4914-4926	3.5	1
229	Vacancy growth of monocrystalline SiC from Si by the method of self-consistent substitution of atoms. <i>Catalysis Today</i> , 2021 ,	5.3	2
228	Spin Polarization and Magnetic Moment in Silicon Carbide Grown by the Method of Coordinated Substitution of Atoms. <i>Materials</i> , 2021 , 14,	3.5	2
227	Comparative Ellipsometric Analysis of Silicon Carbide Polytypes 4H, 15R, and 6H Produced by a Modified Lely Method in the Same Growth Process. <i>Technical Physics Letters</i> , 2020 , 46, 968-971	0.7	1
226	Influence of a Nanoporous Silicon Layer on the Practical Implementation and Specific Features of the Epitaxial Growth of GaN Layers on SiC/por-Si/c-Si Templates. <i>Semiconductors</i> , 2020 , 54, 596-608	0.7	2
225	MBE synthesis and properties of GaN NWs on SiC/Si substrate and InGaN nanostructures on Si substrate. <i>Journal of Physics: Conference Series</i> , 2020 , 1537, 012003	0.3	1
224	Development of Burton- Cabrera- Frank Theory for the Growth of a Non-Kossel Crystal via Chemical Reaction. <i>Crystal Growth and Design</i> , 2020 , 20, 2590-2601	3.5	6
223	Optical Properties of GaN/SiC/por-Si/Si(111) Hybrid Heterostructures. <i>Semiconductors</i> , 2020 , 54, 417-425.	0.7	2
222	Investigation of the Hardness and Young's Modulus in Thin Near-Surface Layers of Silicon Carbide from the Si- and C-Faces by Nanoindentation. <i>Technical Physics Letters</i> , 2020 , 46, 763-766	0.7	2
221	Coating of a Nanostructured Profiled Si Surface with a SiC Layer. <i>Technical Physics Letters</i> , 2020 , 46, 1012-1015.	0.7	1
220	MATERIALS OF THE INTERNATIONAL CONFERENCE "MECHANISMS AND NON-LINEAR PROBLEMS OF NUCLEATION AND GROWTH OF CRYSTALS AND THIN FILMS" DEDICATED TO THE MEMORY OF THE OUTSTANDING THEORETICAL PHYSICIST PROFESSOR V.V. SLEZOV. <i>Mechanics of Solids</i> , 2020 , 55, 1-5	0.5	1
219	Anomalous Properties of the Dislocation-Free Interface between Si(111) Substrate and 3C-SiC(111) Epitaxial Layer. <i>Materials</i> , 2020 , 14,	3.5	3
218	Spiral growth of a multicomponent crystal from vapor of its components. <i>Journal of Crystal Growth</i> , 2020 , 548, 125845	1.6	2
217	Growth of faceted pores in a multi-component crystal by applying mechanical stress. <i>CrystEngComm</i> , 2020 , 22, 5280-5288	3.3	2

216	Epitaxial Growth of Bulk Semipolar AlN Films on Si(001) and Hybrid SiC/Si(001) Substrates. <i>Technical Physics Letters</i> , 2020 , 46, 539-542	0.7	2
215	Vacancy Growth of a Faceted Pore in a Crystal via Chernov Mechanism. <i>Mechanics of Solids</i> , 2020 , 55, 77-83	0.5	2
214	Elastic Properties of GaN and AlN Films Formed on SiC/Si Hybrid Substrate, a Porous Basis. <i>Mechanics of Solids</i> , 2020 , 55, 157-161	0.5	2
213	Ascending Si diffusion into growing GaN nanowires from the SiC/Si substrate: up to the solubility limit and beyond. <i>Nanotechnology</i> , 2020 , 31, 294003	3.4	3
212	New Semipolar Aluminum Nitride Thin Films: Growth Mechanisms, Structure, Dielectric and Pyroelectric Properties. <i>Ferroelectrics</i> , 2019 , 544, 33-37	0.6	3
211	Growing III-V Semiconductor Heterostructures on SiC/Si Substrates. <i>Technical Physics Letters</i> , 2019 , 45, 711-713	0.7	8
210	Two-Stage Conversion of Silicon to Nanostructured Carbon by the Method of Coordinated Atomic Substitution. <i>Physics of the Solid State</i> , 2019 , 61, 456-463	0.8	3
209	A New Type of Carbon Nanostructure on a Vicinal Si(111)-8 \times Surface. <i>Technical Physics Letters</i> , 2019 , 45, 201-204	0.7	8
208	Carbon-Based Aromatic-Like Nanostructures on the Vicinal SiC Surfaces Induced by Ba Adsorption. <i>ECS Journal of Solid State Science and Technology</i> , 2019 , 8, M53-M59	2	6
207	Microscopic Description of the Mechanism of Transition between the 2H and 4H Polytypes of Silicon Carbide. <i>Physics of the Solid State</i> , 2019 , 61, 288-291	0.8	2
206	Photoelectric Properties of GaN Layers Grown by Plasma-Assisted Molecular-Beam Epitaxy on Si(111) Substrates and SiC/Si(111) Epitaxial Layers. <i>Semiconductors</i> , 2019 , 53, 180-187	0.7	4
205	On the Mechanism of the Vapor-Solid Growth of Au-Catalyzed GaAs Nanowires. <i>Semiconductors</i> , 2019 , 53, 350-360	0.7	8
204	Studying Evolution of the Ensemble of Micropores in a SiC/Si Structure during Its Growth by the Method of Atom Substitution. <i>Physics of the Solid State</i> , 2019 , 61, 299-306	0.8	12
203	Techniques for Polytypic Transformations in Silicon Carbide. <i>Physics of the Solid State</i> , 2019 , 61, 1389-1393	0.8	3
202	A new insight into the mechanism of low-temperature Au-assisted growth of InAs nanowires. <i>CrystEngComm</i> , 2019 , 21, 4707-4717	3.3	5
201	Microstructure and electrical response of thin SiC films on Si substrates of p- and n-types. <i>Ferroelectrics</i> , 2019 , 542, 52-57	0.6	1
200	Strength and structural properties of AlN films grown on SiC/Si substrates synthesized by atomic substitution. <i>Journal of Physics: Conference Series</i> , 2019 , 1410, 012244	0.3	2
199	Strength and structural properties of AlN films grown on SiC/Si substrates synthesized by atomic substitution. <i>Journal of Physics: Conference Series</i> , 2019 , 1410, 012003	0.3	3

198	Growth of a multicomponent crystal via Chernov mechanism. <i>Journal of Physics: Conference Series</i> , 2019 , 1410, 012039	0.3	1
197	Electronic Structure of SiN Layers on Si(111) and SiC/Si(111) Substrates. <i>Semiconductors</i> , 2019 , 53, 1935-1938	0.3	2
196	Epitaxial Growth of Zinc Sulfide by Atomic Layer Deposition on SiC/Si Hybrid Substrates. <i>Technical Physics Letters</i> , 2019 , 45, 1075-1077	0.7	2
195	The use of SiC/Si hybrid substrate for MBE growth of thick GaN layers 2019 ,		3
194	Study of SiC buffer layer thickness influence on photovoltaic properties of n-GaN NWs/SiC/p-Si heterostructure. <i>Materials Science in Semiconductor Processing</i> , 2019 , 90, 20-25	4.3	5
193	Semipolar GaN(100) Epitaxial Layer Prepared on Nano-Patterned SiC/Si(100) Template. <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1800268	1.3	7
192	MBE growth and Structural Properties of InAs and InGaAs Nanowires with Different Mole Fraction of In on Si and Strongly Mismatched SiC/Si(111) Substrates. <i>Semiconductors</i> , 2018 , 52, 651-653	0.7	2
191	Structural and elastoplastic properties of $(\beta\text{-Ga}_2\text{O}_3)$ films grown on hybrid SiC/Si substrates. <i>Continuum Mechanics and Thermodynamics</i> , 2018 , 30, 1059-1068	3.5	10
190	Hybrid GaAs/AlGaAs Nanowire/Quantum dot System for Single Photon Sources. <i>Semiconductors</i> , 2018 , 52, 462-464	0.7	9
189	Epitaxial Growth of Cadmium Selenide Films on Silicon with a Silicon Carbide Buffer Layer. <i>Physics of the Solid State</i> , 2018 , 60, 504-509	0.8	7
188	Properties of SiC Films Obtained by the Method of Substitution of Atoms on Porous Silicon. <i>ECS Journal of Solid State Science and Technology</i> , 2018 , 7, P158-P160	2	7
187	MBE growth of thin AlGaAs nanowires with a complex structure on strongly mismatched SiC/Si(111) substrate. <i>Journal of Physics: Conference Series</i> , 2018 , 1038, 012063	0.3	1
186	Plasma assisted molecular beam epitaxy of thin GaN films on Si(111) and SiC/Si(111) substrates: Effect of SiC and polarity issues. <i>Thin Solid Films</i> , 2018 , 646, 158-162	2.2	18
185	Synchrotron-based photoemission study of electronic structure of the Cs/GaN ultrathin interface. <i>Solid State Communications</i> , 2018 , 271, 6-10	1.6	1
184	MBE growth and properties of GaAs, AlGaAs and InAs nanowires on SiC/Si(111) hybrid substrate. <i>Journal of Physics: Conference Series</i> , 2018 , 1135, 012036	0.3	
183	A new method for Synthesis of Epitaxial Films of Silicon Carbide on Sapphire Substrates (Al ₂ O ₃). <i>Reviews on Advanced Materials Science</i> , 2018 , 57, 82-96	4.8	4
182	Investigation of the Physicomechanical Characteristics of Nanoscale Films by Nanoindentation. <i>Mechanics of Solids</i> , 2018 , 53, 481-488	0.5	2
181	Spiral growth of a crystal due to chemical reaction. <i>Journal of Physics: Conference Series</i> , 2018 , 1124, 022006	0.6	5

180	Influence of elastic stresses on the vapor-solid-solid growth mechanism of Au-catalyzed GaAs nanowires. <i>Journal of Physics: Conference Series</i> , 2018 , 1124, 022036	0.3	1
179	Nucleation of CdSe thin films: the kinetic model. <i>Journal of Physics: Conference Series</i> , 2018 , 1124, 022044	0.3	2
178	Mechanisms of epitaxial growth of SiC films by the method of atom substitution on the surfaces (100) and (111) of Si single crystals and on surfaces of Si films grown on single crystals Al ₂ O ₃ . <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 387, 012044	0.4	2
177	Mechanism of Formation of Carbon Vacancy Structures in Silicon Carbide during Its Growth by Atomic Substitution. <i>Physics of the Solid State</i> , 2018 , 60, 1891-1896	0.8	8
176	A New Trigonal (Rhombohedral) SiC Phase: Ab Initio Calculations, a Symmetry Analysis and the Raman Spectra. <i>Physics of the Solid State</i> , 2018 , 60, 2066-2071	0.8	4
175	The Mechanism of Growth of GaN Films by the HVPE Method on SiC Synthesized by the Substitution of Atoms on Porous Si Substrates. <i>ECS Journal of Solid State Science and Technology</i> , 2018 , 7, P480-P486	2	12
174	Effect of Chemical Treatment of a Silicon Surface on the Quality and Structure of Silicon-Carbide Epitaxial Films Synthesized by Atom Substitution. <i>Semiconductors</i> , 2018 , 52, 802-808	0.7	10
173	Study of the Anisotropic Elastoplastic Properties of Ga ₂ O ₃ Films Synthesized on SiC/Si Substrates. <i>Physics of the Solid State</i> , 2018 , 60, 852-857	0.8	14
172	MBE Growth and Optical Properties of GaN, InN, and A ₃ B ₅ Nanowires on SiC/Si(111) Hybrid Substrate. <i>Advances in Condensed Matter Physics</i> , 2018 , 2018, 1-5	1	
171	Semipolar AlN and GaN on Si(100): HVPE technology and layer properties. <i>Journal of Crystal Growth</i> , 2017 , 457, 202-206	1.6	13
170	Structural heteroepitaxy during topochemical transformation of silicon to silicon carbide. <i>Physics of the Solid State</i> , 2017 , 59, 773-779	0.8	2
169	Photoelectric characteristics of silicon carbide-silicon structures grown by the atomic substitution method in a silicon crystal lattice. <i>Semiconductors</i> , 2017 , 51, 621-627	0.7	8
168	Semipolar AlN on Si(100): Technology and properties. <i>Microelectronic Engineering</i> , 2017 , 178, 34-37	2.5	4
167	X-ray reflectometry and simulation of the parameters of SiC epitaxial films on Si(111), grown by the atomic substitution method. <i>Physics of the Solid State</i> , 2017 , 59, 1014-1026	0.8	8
166	Drift mechanism of mass transfer on heterogeneous reaction in crystalline silicon substrate. <i>Physica B: Condensed Matter</i> , 2017 , 512, 26-31	2.8	12
165	Epitaxial growth of cadmium telluride films on silicon with a buffer silicon carbide layer. <i>Physics of the Solid State</i> , 2017 , 59, 399-402	0.8	5
164	AlGaAs and AlGaAs/GaAs/AlGaAs nanowires grown by molecular beam epitaxy on silicon substrates. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 484003	3	15
163	Quantum mechanical theory of epitaxial transformation of silicon to silicon carbide. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 464006	3	14

162	Metal organic vapor phase epitaxy growth of (Al)GaN heterostructures on SiC/Si(111) templates synthesized by topochemical method of atoms substitution. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1700190	1.6	5
161	Structural properties and parameters of epitaxial silicon carbide films, grown by atomic substitution on the high-resistance (111) oriented silicon. <i>Superlattices and Microstructures</i> , 2017 , 111, 899-911	2.8	10
160	MBE growth of ultrathin III ν nanowires on a highly mismatched SiC/Si(111) substrate. <i>Semiconductors</i> , 2017 , 51, 1472-1476	0.7	1
159	MBE growth and optical properties of GaN layers on SiC/Si(111) hybrid substrate. <i>Journal of Physics: Conference Series</i> , 2017 , 917, 032014	0.3	
158	A quantum-mechanical model of dilatation dipoles in topochemical synthesis of silicon carbide from silicon. <i>Physics of the Solid State</i> , 2017 , 59, 1238-1241	0.8	3
157	Misfit dislocation locking and rotation during gallium nitride growth on SiC/Si substrates. <i>Physics of the Solid State</i> , 2017 , 59, 674-681	0.8	4
156	Separation of III ν /SiC epitaxial heterostructure from a Si substrate and their transfer to other substrate types. <i>Semiconductors</i> , 2017 , 51, 396-401	0.7	9
155	Evolution of the symmetry of intermediate phases and their phonon spectra during the topochemical conversion of silicon into silicon carbide. <i>Physics of the Solid State</i> , 2017 , 59, 28-33	0.8	6
154	Nanoindentation of GaN/SiC thin films on silicon substrate. <i>Journal of Physics and Chemistry of Solids</i> , 2017 , 102, 151-156	3.9	21
153	Dependencies of photoelectric properties of SiC/Si structures grown by the method of atoms substitution on synthesis time. <i>Journal of Physics: Conference Series</i> , 2017 , 872, 012030	0.3	1
152	GaN growth via HVPE on SiC/Si substrates: growth mechanisms. <i>Journal of Physics: Conference Series</i> , 2017 , 917, 032028	0.3	3
151	Effect of SiC buffer layer on GaN growth on Si via PA-MBE. <i>Journal of Physics: Conference Series</i> , 2017 , 917, 032038	0.3	3
150	The Gorsky effect in the synthesis of silicon-carbide films from silicon by topochemical substitution of atoms. <i>Technical Physics Letters</i> , 2017 , 43, 631-634	0.7	14
149	IR spectra of carbon-vacancy clusters in the topochemical transformation of silicon into silicon carbide. <i>Physics of the Solid State</i> , 2017 , 59, 2430-2435	0.8	7
148	Epitaxial Silicon Carbide Films Grown by New Method of Replacement of Atoms on the Surface of High-resistivity (111) Oriented Silicon. <i>MATEC Web of Conferences</i> , 2016 , 43, 01003	0.3	
147	Molecular dynamics simulation of the indentation of nanoscale films on a substrate. <i>Technical Physics Letters</i> , 2016 , 42, 639-643	0.7	4
146	Growth and optical properties of filamentary GaN nanocrystals grown on a hybrid SiC/Si(111) substrate by molecular beam epitaxy. <i>Physics of the Solid State</i> , 2016 , 58, 1952-1955	0.8	10
145	MBE growth and optical properties of GaN nanowires on SiC/Si(111) hybrid substrate 2016 ,		6

144	Determining polytype composition of silicon carbide films by UV ellipsometry. <i>Technical Physics Letters</i> , 2016 , 42, 175-178	0.7	16
143	Epitaxial growth of cadmium sulfide films on silicon. <i>Physics of the Solid State</i> , 2016 , 58, 629-632	0.8	8
142	Synchrotron-radiation photoemission study of the ultrathin Ba/3C ₂ SiC(111) interface. <i>Journal of Physics and Chemistry of Solids</i> , 2016 , 90, 40-44	3.9	4
141	Pendeo-epitaxy of stress-free AlN layer on a profiled SiC/Si substrate. <i>Thin Solid Films</i> , 2016 , 606, 74-79	2.2	8
140	Separation of stress-free AlN/SiC thin films from Si substrate. <i>Journal of Physics: Conference Series</i> , 2016 , 741, 012034	0.3	3
139	The use of SiC/Si(111) hybrid substrate for MBE growth of GaN nanowires. <i>Journal of Physics: Conference Series</i> , 2016 , 741, 012027	0.3	3
138	Phase equilibrium in the formation of silicon carbide by topochemical conversion of silicon. <i>Physics of the Solid State</i> , 2016 , 58, 747-751	0.8	13
137	Photoemission studies of the vicinal SiC(100) 4 \times 4 surface and the Cs/SiC(100) 4 \times 4 interface. <i>Technical Physics Letters</i> , 2016 , 42, 1145-1148	0.7	3
136	The C 1s core level spectroscopy of carbon atoms at the surface SiC/Si(111)-4 \times 4 layer and Cs/SiC/Si(111)-4 \times 4 interface. <i>Semiconductors</i> , 2016 , 50, 1327-1332	0.7	3
135	Elastic interaction of point defects in cubic and hexagonal crystals. <i>Physics of the Solid State</i> , 2016 , 58, 971-980	0.8	10
134	Pyroelectric and piezoelectric responses of thin AlN films epitaxy-grown on a SiC/Si substrate. <i>Physics of the Solid State</i> , 2016 , 58, 967-970	0.8	12
133	Epitaxial growth of zinc oxide by the method of atomic layer deposition on SiC/Si substrates. <i>Physics of the Solid State</i> , 2016 , 58, 1448-1452	0.8	16
132	Induced surface states of the ultrathin Ba/3C-SiC(111) interface. <i>Semiconductors</i> , 2016 , 50, 457-461	0.7	2
131	Epitaxial gallium oxide on a SiC/Si substrate. <i>Physics of the Solid State</i> , 2016 , 58, 1876-1881	0.8	17
130	Pore- and delamination-induced mismatch strain relaxation and conditions for the formation of dislocations, cracks, and buckles in the epitaxial AlN(0001)/SiC/Si(111) heterostructure. <i>Physics of the Solid State</i> , 2015 , 57, 162-172	0.8	17
129	SEM, Dielectric, Pyroelectric, and Piezoelectric Response of Thin Epitaxial AlN Films Grown on SiC/Si Substrate. <i>Ferroelectrics</i> , 2015 , 477, 121-130	0.6	15
128	Role of elastic energy in the formation of ferroelectric barium strontium titanate films on sapphire. <i>Physics of the Solid State</i> , 2015 , 57, 815-819	0.8	5
127	The equilibrium state in the Si-O-C ternary system during SiC growth by chemical substitution of atoms. <i>Technical Physics Letters</i> , 2015 , 41, 259-262	0.7	1

126	Growth and structure of GaN layers on silicon carbide synthesized on a Si substrate by the substitution of atoms: A model of the formation of V-defects during the growth of GaN. <i>Physics of the Solid State</i> , 2015 , 57, 1899-1907	0.8	19
125	Surface defects formation on strained thin films growing via chemical reaction: a model. <i>Journal of Physics: Conference Series</i> , 2015 , 643, 012005	0.3	1
124	Evolution of the morphology of diamond particles and mechanism of their growth during the synthesis by chemical vapor deposition. <i>Physics of the Solid State</i> , 2015 , 57, 2184-2190	0.8	4
123	Infrared spectroscopy of silicon carbide layers synthesized by the substitution of atoms on the surface of single-crystal silicon. <i>Physics of the Solid State</i> , 2015 , 57, 2543-2549	0.8	8
122	TEM investigation of semipolar GaN layers grown on Si(001) offcut substrates. <i>Semiconductor Science and Technology</i> , 2015 , 30, 114002	1.8	8
121	Effect of the n and p-type Si(100) substrates with a SiC buffer layer on the growth mechanism and structure of epitaxial layers of semipolar AlN and GaN. <i>Physics of the Solid State</i> , 2015 , 57, 1966-1971	0.8	4
120	Stability of the surface of an elastically strained multicomponent film in a system with chemical reactions. <i>Physics of the Solid State</i> , 2015 , 57, 2524-2531	0.8	9
119	Epitaxial silicon carbide on a 6 μ silicon wafer. <i>Technical Physics Letters</i> , 2014 , 40, 36-39	0.7	8
118	Synthesis of epitaxial silicon carbide films through the substitution of atoms in the silicon crystal lattice: A review. <i>Physics of the Solid State</i> , 2014 , 56, 1507-1535	0.8	91
117	Theory and practice of SiC growth on Si and its applications to wide-gap semiconductor films. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 313001	3	117
116	First-order phase transition through an intermediate state. <i>Physics of the Solid State</i> , 2014 , 56, 792-800	0.8	34
115	Epitaxy of semipolar GaN on a Si(001) substrate with a SiC buffer layer. <i>Technical Physics Letters</i> , 2014 , 40, 386-388	0.7	9
114	A new method of replacement atoms for the synthesis of epitaxial layers of SiC on Si: From theory to practice. <i>Journal of Physics: Conference Series</i> , 2014 , 541, 012003	0.3	
113	Nanoindentation and deformation properties of nanoscale silicon carbide films on silicon substrate. <i>Technical Physics Letters</i> , 2014 , 40, 1114-1116	0.7	16
112	Morphological stability criterion for a spherical crystallization front in a multicomponent system with chemical reactions. <i>Physics of the Solid State</i> , 2014 , 56, 2530-2536	0.8	8
111	A new mechanism of elastic energy relaxation in heteroepitaxy of monocrystalline films: Interaction of point defects and dilatation dipoles. <i>Mechanics of Solids</i> , 2013 , 48, 216-227	0.5	11
110	Carrier mobility in undoped SiC layers grown on silicon by a new epitaxial technique. <i>Technical Physics Letters</i> , 2013 , 39, 488-491	0.7	5
109	Epitaxy of gallium nitride in semi-polar direction on Si(210) substrate. <i>Technical Physics Letters</i> , 2013 , 39, 274-276	0.7	1

108	Anisotropy of the solid-state epitaxy of silicon carbide in silicon. <i>Semiconductors</i> , 2013 , 47, 1551-1555	0.7	19
107	Sequential structural characterization of layers in the GaN/AlN/SiC/Si(111) system by X-ray diffraction upon every growth stage. <i>Technical Physics Letters</i> , 2013 , 39, 994-997	0.7	6
106	HVPE growth of GaN in the semipolar direction on planar Si(210). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013 , 10, 433-436		7
105	A new method for the synthesis of epitaxial layers of silicon carbide on silicon owing to formation of dilatation dipoles. <i>Journal of Applied Physics</i> , 2013 , 113, 024909	2.5	81
104	Elastic interaction of point defects in crystals with cubic symmetry. <i>Mechanics of Solids</i> , 2013 , 48, 431-438.5		3
103	Transmission electron microscopy study of semi-polar gallium nitride layer grown by hydride-chloride vapour-phase epitaxy on SiC/(001)Si heterostructure. <i>Journal of Physics: Conference Series</i> , 2013 , 471, 012033	0.3	1
102	Thin-film heteroepitaxy by the formation of the dilatation dipole ensemble. <i>Doklady Physics</i> , 2012 , 57, 217-220	0.8	20
101	Mechanism of the phase transformation of the pyrochlore phase into the perovskite phase in lead zirconate titanate films on silicon substrates. <i>Physics of the Solid State</i> , 2012 , 54, 611-616	0.8	14
100	Group-III-nitride-based light-emitting diode on silicon substrate with epitaxial nanolayer of silicon carbide. <i>Technical Physics Letters</i> , 2012 , 38, 297-299	0.7	11
99	Structural and optical properties of high quality ZnO thin film on Si with SiC buffer layer. <i>Thin Solid Films</i> , 2012 , 520, 6836-6840	2.2	17
98	Theory of Phase Transformations in the Mechanics of Solids and its Applications for Description of Fracture, Formation of Nanostructures and Thin Semiconductor Films Growth. <i>Key Engineering Materials</i> , 2012 , 528, 145-164	0.4	4
97	Aluminum and gallium nitrides on a silicon substrate with an intermediate silicon carbide nanolayer for ultraviolet devices. <i>Journal of Optical Technology (A Translation of Opticheskii Zhurnal)</i> , 2011 , 78, 435	0.9	5
96	The optical constants of zinc oxide epitaxial films grown on silicon with a buffer nanolayer of silicon carbide. <i>Journal of Optical Technology (A Translation of Opticheskii Zhurnal)</i> , 2011 , 78, 440	0.9	4
95	Structural characterization of GaN/AlN layers on 3C-SiC/Si(111) by TEM. <i>Journal of Physics: Conference Series</i> , 2011 , 326, 012015	0.3	
94	Peculiarities of crystallization of thin ferroelectric films of lead zirconate titanate. <i>Technical Physics Letters</i> , 2011 , 37, 163-165	0.7	10
93	Structural characterization of GaN epilayers on silicon: Effect of buffer layers. <i>Technical Physics Letters</i> , 2011 , 37, 326-329	0.7	13
92	Raman Investigation of Different Polytypes in SiC Thin Films Grown by Solid-Gas Phase Epitaxy on Si (111) and 6H-SiC Substrates. <i>Materials Science Forum</i> , 2010 , 645-648, 359-362	0.4	44
91	Crystallization of thin polycrystalline PZT films on Si/SiO ₂ /Pt substrates. <i>Physics of the Solid State</i> , 2010 , 52, 132-136	0.8	34

90	Influence of the external mechanical load on the formation of nanopores in an optical fiber under pulsed UV light. <i>Physics of the Solid State</i> , 2010 , 52, 1645-1652	0.8	1
89	Aluminum nitride on silicon: Role of silicon carbide interlayer and chloride vapor-phase epitaxy technology. <i>Technical Physics Letters</i> , 2010 , 36, 496-499	0.7	8
88	Micro-Raman Mapping of 3C-SiC Thin Films Grown by Solid-Gas Phase Epitaxy on Si (111). <i>Nanoscale Research Letters</i> , 2010 , 5, 1507-1511	5	33
87	Luminescence spectra of hexagonal forms of silicon carbide in mosaic films grown by solid-state epitaxy. <i>Physics of the Solid State</i> , 2009 , 51, 2469-2473	0.8	6
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