

Anton Gutakovskii

List of Publications by Year in descending order

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230
papers

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231
docs citations

231
times ranked

1971
citing authors

#	ARTICLE	IF	CITATIONS
1	Normal-incidence infrared photoconductivity in Si p-i-n diode with embedded Ge self-assembled quantum dots. Applied Physics Letters, 1999, 75, 1413-1415.	1.5	108
2	Magnetic field-induced dissipation-free state in superconducting nanostructures. Nature Communications, 2013, 4, 1437.	5.8	90
3	Synthesis and Characterization of Cu _x S (x = 1/2) Nanocrystals Formed by the Langmuir-Blodgett Technique. Journal of Physical Chemistry C, 2014, 118, 23409-23414.	1.5	57
4	Closed curved graphite-like structures formation on micron-size diamond. Chemical Physics Letters, 1998, 289, 353-360.	1.2	56
5	Atomic and energy structure of InAs/AlAs quantum dots. Physical Review B, 2008, 78, .	1.1	52
6	Effect of Quantum Confinement on Optical Properties of Ge Nanocrystals in GeO ₂ Films. Semiconductors, 2005, 39, 1168.	0.2	51
7	Exciton recombination dynamics in an ensemble of (In,Al)As/AlAs quantum dots with indirect band-gap and type-I band alignment. Physical Review B, 2011, 84, .	1.1	42
8	Application of high-resolution electron microscopy for visualization and quantitative analysis of strain fields in heterostructures. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 1426-1432.	0.1	38
9	Apoptosis-mediated endothelial toxicity but not direct calcification or functional changes in anti-calcification proteins defines pathogenic effects of calcium phosphate bions. Scientific Reports, 2016, 6, 27255.	1.6	37
10	Properties of extremely thin silicon layer in silicon-on-insulator structure formed by smart-cut technology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 73, 82-86.	1.7	35
11	GeSi films with reduced dislocation density grown by molecular-beam epitaxy on compliant substrates based on porous silicon. Applied Physics Letters, 1999, 75, 4118-4120.	1.5	28
12	High quality relaxed GaAs quantum dots in GaP matrix. Applied Physics Letters, 2010, 97, 023108.	1.5	27
13	Charge Berezinskii-Kosterlitz-Thouless transition in superconducting NbTiN films. Scientific Reports, 2018, 8, 4082.	1.6	27
14	Fluorinated graphene suspension for flexible and printed electronics: Flakes, 2D films, and heterostructures. Materials and Design, 2019, 164, 107526.	3.3	27
15	Ge/Si quantum dot nanostructures grown with low-energy ion beam-assisted epitaxy. Surface and Coatings Technology, 2005, 196, 25-29.	2.2	25
16	Atomic structure and energy spectrum of Ga(As,P)/GaP heterostructures. Journal of Applied Physics, 2012, 112, .	1.1	25
17	Enhancement of the Si p-n diode NIR photoresponse by embedding $\hat{\Gamma}^2$ -FeSi ₂ nanocrystallites. Scientific Reports, 2015, 5, 14795.	1.6	24
18	Mechanisms of edge-dislocation formation in strained films of zinc blende and diamond cubic semiconductors epitaxially grown on (001)-oriented substrates. Journal of Applied Physics, 2011, 109, .	1.1	23

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19	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> , 2013, 61, 617-621.	3.8	23
20	LiVPO ₄ F/Li ₃ V ₂ (PO ₄) ₃ nanostructured composite cathode materials prepared via mechanochemical way. <i>Journal of Solid State Electrochemistry</i> , 2014, 18, 1389-1399.	1.2	23
21	High resolution electron microscopy of semiconductor interfaces. <i>Physica Status Solidi A</i> , 1995, 150, 127-140.	1.7	22
22	Surface-enhanced Raman spectroscopy of semiconductor nanostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016, 75, 210-222.	1.3	22
23	Direct observations of dislocation half-loops inserted from the surface of the GeSi heteroepitaxial film. <i>Applied Physics Letters</i> , 2004, 85, 6140-6142.	1.5	21
24	Solid solutions GeSi grown by MBE on a low temperature Si (001) buffer layer: specific features of plastic relaxation. <i>Thin Solid Films</i> , 2001, 392, 98-106.	0.8	20
25	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> , 2002, 91, 4710-4714.	1.1	20
26	Linear chains of Ge/Si quantum dots grown on a prepatterned surface formed by ion irradiation. <i>Semiconductors</i> , 2015, 49, 749-752.	0.2	20
27	Strain relaxation of GeSi/Si(001) heterostructures grown by low-temperature molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 2004, 96, 7665-7674.	1.1	19
28	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> , 2008, 42, 1-20.	0.2	19
29	Features of formation and propagation of 60° and 90° misfit dislocations in Ge _x Si _{1-x} /Si(001) (x=0.4-0.5) films caused by Si substrate misorientation from (001). <i>Applied Physics Letters</i> , 2008, 92, .	1.5	19
30	Pseudomorphic GeSiSn, SiSn and Ge layers in strained heterostructures. <i>Nanotechnology</i> , 2018, 29, 154002.	1.3	19
31	Atomic and electronic structure of ferroelectric La-doped HfO ₂ films. <i>Materials Research Express</i> , 2019, 6, 036403.	0.8	19
32	Heterostructures Ge _x Si _{1-x} /Si(001) (x=0.18-0.62) grown by molecular beam epitaxy at a low (350 Å°C) temperature: specific features of plastic relaxation. <i>Thin Solid Films</i> , 2004, 466, 69-74.	0.8	18
33	Strong sensitivity of photoluminescence of InAs/AlAs quantum dots to defects: evidence for lateral inter-dot transport. <i>Semiconductor Science and Technology</i> , 2006, 21, 527-531.	1.0	18
34	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> , 2018, 97, .	1.1	18
35	The influence of irradiation and subsequent annealing on Si nanocrystals formed in SiO ₂ layers. <i>Semiconductors</i> , 2000, 34, 965-970.	0.2	17
36	Precise surface measurements at the nanoscale. <i>Measurement Science and Technology</i> , 2010, 21, 054004.	1.4	17

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37	Initial stage growth of Ge x Si1 ^x layers and Ge quantum dot formation on Ge x Si1 ^x surface by MBE. <i>Nanoscale Research Letters</i> , 2012, 7, 561.	3.1	17
38	Different electrochemical responses of LiFe _{0.5} Mn _{0.5} PO ₄ prepared by mechanochemical and solvothermal methods. <i>Journal of Alloys and Compounds</i> , 2018, 742, 454-465.	2.8	17
39	A new approach to the fabrication of VO ₂ nanoswitches with ultra-low energy consumption. <i>Nanoscale</i> , 2020, 12, 3443-3454.	2.8	17
40	Optical vibration modes in (Cd, Pb, Zn)S quantum dots in the Langmuir-Blodgett matrix. <i>Physics of the Solid State</i> , 2002, 44, 1976-1980.	0.2	16
41	Preparation of thin films of platinum group metals by pulsed MOCVD. I. Deposition of Ir layers. <i>Journal of Structural Chemistry</i> , 2012, 53, 715-724.	0.3	16
42	InAs-based metal-oxide-semiconductor structure formation in low-energy Townsend discharge. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	16
43	Quantum dots formed in InSb/AlAs and AlSb/AlAs heterostructures. <i>JETP Letters</i> , 2016, 103, 692-698.	0.4	16
44	Probing the Mg ₂ Si/Si(1 1 1) heterojunction for photovoltaic applications. <i>Solar Energy</i> , 2020, 211, 383-395.	2.9	16
45	The formation of partial misfit dislocations during heteroepitaxy. <i>Physica Status Solidi A</i> , 1981, 67, 299-304.	1.7	15
46	Formation of edge misfit dislocations in Ge _x Si _{1-x} (x ^{1/4} ≈ 0.4) films grown on misoriented (001)†(111) Si substrates. <i>Journal of Crystal Growth</i> , 2008, 310, 3422-3427.	0.7	15
47	Hemozoin ÆœknobsÆœ in <i>Opisthorchis felinus</i> infected liver. <i>Parasites and Vectors</i> , 2015, 8, 459.	1.0	15
48	The convenient preparation of stable aryl-coated zerovalent iron nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1192-1198.	1.5	15
49	Novel self-assembled quantum dots in the GaSb/AlAs heterosystem. <i>JETP Letters</i> , 2012, 95, 534-536.	0.4	14
50	The Mechanism of {113} Defect Formation in Silicon: Clustering of Interstitial-Vacancy Pairs Studied by <i>In Situ</i> High-Resolution Electron Microscope Irradiation. <i>Microscopy and Microanalysis</i> , 2013, 19, 38-42.	0.2	14
51	Heterostructures with diffused interfaces: Luminescent technique for ascertainment of band alignment type. <i>Journal of Applied Physics</i> , 2018, 123, 115701.	1.1	14
52	On the structure and photoluminescence of dislocations in silicon. <i>Journal of Applied Physics</i> , 2018, 124, 053106.	1.1	14
53	Study of Onion-Like Carbon (OLC) Formation from Ultra Disperse Diamond (UDD). <i>Materials Research Society Symposia Proceedings</i> , 1994, 359, 105.	0.1	13
54	Effect of ion dose and annealing mode on photoluminescence from SiO ₂ implanted with Si ions. <i>Semiconductors</i> , 1998, 32, 1222-1228.	0.2	13

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55	Growth and structure of Ge nanoislands on an atomically clean silicon oxide surface. <i>Physics of the Solid State</i> , 2004, 46, 77-79.	0.2	13
56	Interface phonons in semiconductor nanostructures with quantum dots. <i>Journal of Experimental and Theoretical Physics</i> , 2005, 101, 554-561.	0.2	13
57	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> , 2006, 297, 57-60.	0.7	13
58	Pulsed ion-beam induced nucleation and growth of Ge nanocrystals on SiO ₂ . <i>Applied Physics Letters</i> , 2007, 90, 133120.	1.5	13
59	Growth, structure and luminescence properties of multilayer Si ^{1-x} -FeSi ₂ NCs/Si/Si nanoheterostructures. <i>Thin Solid Films</i> , 2011, 519, 8480-8484.	0.8	13
60	CdZnS quantum dots formed by the Langmuir-Blodgett technique. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013, 31, 04D109.	0.6	13
61	A room-temperature-operated Si LED with Si ^{1-x} -FeSi ₂ nanocrystals in the active layer: 1/4 W emission power at 1.5 μm. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	13
62	Heterostructures Ge _x Si ^{1-x} /Si(001) grown by low-temperature (300-400 °C) molecular beam epitaxy: Misfit dislocation propagation. <i>Journal of Crystal Growth</i> , 2005, 280, 309-319.	0.7	12
63	The formation of silicon nanocrystals in SiO ₂ layers by the implantation of Si ions with intermediate heat treatments. <i>Semiconductors</i> , 2005, 39, 552-556.	0.2	12
64	Nonradiative energy transfer between vertically coupled indirect and direct bandgap InAs quantum dots. <i>Applied Physics Letters</i> , 2010, 97, 263102.	1.5	12
65	Crystallization of Amorphous Si Nanoclusters in SiO _x Films Using Femtosecond Laser Pulse Annealings. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 8694-8699.	0.9	12
66	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> , 2014, 105, .	1.5	12
67	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> , 2016, 49, 095108.	1.3	12
68	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> , 1999, 48, 383-386.	1.1	11
69	Specific features of formation and propagation of 60° and 90° misfit dislocations in Ge _x Si ^{1-x} /Si films with x > 0.4. <i>Journal of Crystal Growth</i> , 2010, 312, 3080-3084.	0.7	11
70	Initial stages of Ge epitaxy on Si(111) under quasi-equilibrium growth conditions. <i>JETP Letters</i> , 2010, 92, 388-395.	0.4	11
71	Evolution of silicon nanoclusters and hydrogen in SiN _x :H films: Influence of high hydrostatic pressure under annealing. <i>Thin Solid Films</i> , 2012, 520, 6207-6214.	0.8	11
72	Dislocation interaction of layers in the Ge/Ge-seed/Ge Si ^{1-x} /Si(0 0 1) (x = 0.3-0.5) system: Trapping of misfit dislocations on the Ge-seed/GeSi interface. <i>Acta Materialia</i> , 2013, 61, 5400-5405.	3.8	11

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73	Dominating nucleation of misfit dislocations from the surface in GeSi/Si(001) films with a stepwise composition grown by means of molecular-beam epitaxy. Journal of Crystal Growth, 2006, 293, 247-252.	0.7	10
74	Formation of edge misfit dislocations in $GexSi_{1-x}$ ($x \approx 0.4$) films grown on misoriented (001) (111) Si substrates: Features before and after film annealing. Journal of Applied Physics, 2010, 107, .	1.1	10
75	Formation of a Thin Continuous GaSb Film on Si(001) by Solid Phase Epitaxy. Nanomaterials, 2018, 8, 987.	1.9	10
76	Aluminum-induced crystallization of silicon suboxide thin films. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	10
77	Effect of the structure and the phase composition on the mechanical properties of Al-Cu-Li alloy laser welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 809, 140947.	2.6	10
78	Study of InGaAs _{1-x} GaAs strained-layer superlattices by TEM and RBS techniques. Physica Status Solidi A, 1989, 115, 413-425.	1.7	9
79	Electrical conductivity of silicon-on-insulator structures prepared by bonding silicon wafers to a substrate using hydrogen implantation. Semiconductors, 2000, 34, 1054-1057.	0.2	9
80	Enhanced strain relaxation in a two-step process of $GexSi_{1-x}$ /Si(001) heterostructures grown by low-temperature molecular-beam epitaxy. Applied Physics Letters, 2004, 84, 4599-4601.	1.5	9
81	Defects in the crystal structure of Cd _x Hg _{1-x} Te layers grown on the Si (310) substrates. Semiconductors, 2011, 45, 926-934.	0.2	9
82	Resonant plasmon enhancement of light emission from CdSe/CdS nanoplatelets on Au nanodisk arrays. Journal of Chemical Physics, 2020, 153, 164708.	1.2	9
83	Electron-nuclei interaction in the $(In,Al)As/AlAs$ quantum dots. Physical Review B, 2020, 101, .	1.1	9
84	Robust semiconductor-on-ferroelectric structures with hafnia-zirconia-alumina UTBOX stacks compatible with CMOS technology. Journal Physics D: Applied Physics, 2021, 54, 225101.	1.3	9
85	Defect Formation during MBE Growth of CdTe (111). Physica Status Solidi A, 1991, 126, 181-188.	1.7	8
86	InP decomposition phosphorus beam source for MBE: design, properties and superlattice growth. Semiconductor Science and Technology, 2003, 18, 417-422.	1.0	8
87	Instability of the distribution of atomic steps on Si(111) upon submonolayer gold adsorption at high temperatures. JETP Letters, 2005, 81, 117-121.	0.4	8
88	Preparation of thin films of platinum group metals by pulsed MOCVD. II. Deposition of Ru layers. Journal of Structural Chemistry, 2012, 53, 725-733.	0.3	8
89	New system of self-assembled GaSb/GaP quantum dots. Semiconductors, 2012, 46, 1534-1538.	0.2	8
90	Coexistence of type-I and type-II band alignment in Ga(Sb, P)/GaP heterostructures with pseudomorphic self-assembled quantum dots. JETP Letters, 2014, 99, 76-81.	0.4	8

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91	Peculiarities of structure, morphology, and electrochemistry of the doped 5-V spinel cathode materials $\text{LiNi}_{0.5-x}\text{Mn}_{1.5-y}\text{M}_{x+y}\text{O}_4$ ($\text{M} = \text{Co, Cr, Ti}$; $x+y = 0.05$) prepared by mechanochemical way. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 235-246.	1.1	8
92	MBE-grown InSb photodetector arrays. <i>Technical Physics</i> , 2017, 62, 915-919.	0.2	8
93	Fluorinated graphene nanoparticles with ~ 3 nm electrically active graphene quantum dots. <i>Nanotechnology</i> , 2020, 31, 295602.	1.3	8
94	Defects and their Electronic Properties in High-Pressure-Annealed SOI Structures Sliced by Hydrogen. <i>Journal of Applied Physics</i> , 2002, 92, 269-288.	0.2	8
95	In Situ HREM Irradiation Study of an Intrinsic Point Defects Clustering in FZ-Si. <i>Crystal Research and Technology</i> , 2000, 35, 775-786.	0.6	7
96	MODIFICATION OF GROWTH MODE OF Ge ON Si BY PULSED LOW-ENERGY ION-BEAM IRRADIATION. <i>International Journal of Nanoscience</i> , 2004, 03, 19-27.	0.4	7
97	Formation of nanocrystalline silicon films using high-dose H^+ ion implantation into silicon-on-insulator layers with subsequent rapid thermal annealing. <i>Semiconductors</i> , 2004, 38, 107-112.	0.2	7
98	High-precision nanoscale length measurement. <i>Nanotechnologies in Russia</i> , 2013, 8, 518-531.	0.7	7
99	Dual threshold diode based on the superconductor-to-insulator transition in ultrathin TiN films. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	7
100	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> , 2013, 112, 507-515.	1.1	7
101	Ferromagnetic $\text{HfO}_2/\text{Si}/\text{GaAs}$ interface for spin-polarimetry applications. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	7
102	Photoluminescence associated with $\{113\}$ defects in oxygen-implanted silicon. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1700317.	0.8	7
103	Resistive Switching Effect with ON/OFF Current Relation up to 10^9 in 2D Printed Composite Films of Fluorinated Graphene with V_2O_5 Nanoparticles. <i>Advanced Electronic Materials</i> , 2019, 5, 1900310.	2.6	7
104	Bimetallic Pt,Ir-containing coatings formed by MOCVD for medical applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2019, 30, 69.	1.7	7
105	Resistive switching on individual V_2O_5 nanoparticles encapsulated in fluorinated graphene films. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 20434-20443.	1.3	7
106	Transformation of the $\text{InP}(001)$ surface upon annealing in an arsenic flux. <i>Surface Science</i> , 2021, 710, 121861.	0.8	7
107	Morphological transformations of vanadium oxide films during low-temperature reduction in hydrogen electron cyclotron resonance plasma. <i>Journal of Surface Investigation</i> , 2007, 1, 454-461.	0.1	6
108	Influence of shape of GaN/AlN quantum dots on luminescence decay law. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 653-656.	0.8	6

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109	High-quality single-crystal diamond-graphite-diamond membranes and devices. International Journal of Nanotechnology, 2015, 12, 226.	0.1	6
110	Raman, AFM, and TEM profiling of QD multilayer structures. Materials Research Express, 2015, 2, 035003.	0.8	6
111	Recombination and spin dynamics of excitons in thin (Ga,Al)(Sb,As)/AlAs quantum wells with an indirect band gap and type-I band alignment. Physical Review B, 2020, 102, .	1.1	6
112	Synthesis of crystalline Mg ₂ Si films by ultrafast deposition of Mg on Si(111) and Si(001) at high temperatures. Mg/Si intermixing and reaction mechanisms. Materials Chemistry and Physics, 2021, 258, 123903.	2.0	6
113	Extended Defects in O ⁺ -Implanted Si Layers and Their Luminescence. Crystallography Reports, 2021, 66, 625-635.	0.1	6
114	On the mechanism of {113}-defect formation in Si. , 2005, , 359-362.		6
115	Intrinsic Point Defect Clustering in Si: A Study by HVEM and HREM in Situ Electron Irradiation. , 1997, , 63-92.		6
116	Epitaxial silicon films deposited at high rates by gas-jet electron beam plasma CVD. Surface and Coatings Technology, 2003, 174-175, 1178-1181.	2.2	5
117	Formation of Ultrasmall Germanium Nanoislands with a High Density on an Atomically Clean Surface of Silicon Oxide. Physics of the Solid State, 2005, 47, 67.	0.2	5
118	Narrowing of ground energy level distribution in an array of InAs/AlAs QDs by post grown annealing. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3932-3934.	0.8	5
119	Origination of misfit dislocations at the surface during the growth of GeSi/Si(001) films by low-temperature (300-400Å°C) molecular-beam epitaxy. Semiconductors, 2006, 40, 319-326.	0.2	5
120	Pulsed ion-beam assisted deposition of Ge nanocrystals on SiO ₂ for non-volatile memory device. Thin Solid Films, 2008, 517, 313-316.	0.8	5
121	Investigation of Multilayer Silicon Structures with Buried Iron Silicide Nanocrystallites: Growth, Structure, and Properties. Journal of Nanoscience and Nanotechnology, 2008, 8, 527-534.	0.9	5
122	Spontaneous composition modulation during Cd x Hg _{1-x} Te(301) molecular beam epitaxy. JETP Letters, 2011, 94, 324-328.	0.4	5
123	Decomposition of a supersaturated solid solution of Fe in GaAs. Inorganic Materials, 2012, 48, 93-95.	0.2	5
124	Structure and Optical Properties of Ca Silicide Films and Si/Ca ₃ Si ₄ /Si(111) Heterostructures. Solid State Phenomena, 2014, 213, 71-79.	0.3	5
125	Specific features of plastic relaxation of a metastable Ge x Si _{1-x} layer buried between a silicon substrate and a relaxed germanium layer. Physics of the Solid State, 2014, 56, 247-253.	0.2	5
126	Formation of Mg silicides on amorphous Si. Origin and role of high pressure in the film growth. Materials Chemistry and Physics, 2014, 148, 1078-1082.	2.0	5

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127	Strained multilayer structures with pseudomorphic GeSiSn layers. Semiconductors, 2016, 50, 1584-1588.	0.2	5
128	Self-assembled strained GeSiSn nanoscale structures grown by MBE on Si(100). Journal of Crystal Growth, 2017, 457, 215-219.	0.7	5
129	Formation of low-dimensional structures in the InSb/AlAs heterosystem. Semiconductors, 2017, 51, 1233-1239.	0.2	5
130	Spinodal Decomposition in InSb/AlAs Heterostructures. Semiconductors, 2018, 52, 1392-1397.	0.2	5
131	Influence of a Low-Temperature GaAs Dislocation Filter on the Perfection of GaAs/Si Layers. Optoelectronics, Instrumentation and Data Processing, 2018, 54, 181-186.	0.2	5
132	GaAs/GaP Quantum-Well Heterostructures Grown on Si Substrates. Semiconductors, 2019, 53, 1143-1147.	0.2	5
133	Structure of Hf _{0.9} La _{0.1} O ₂ Ferroelectric Films Obtained by the Atomic Layer Deposition. JETP Letters, 2019, 109, 116-120.	0.4	5
134	Graphene/Hexagonal Boron Nitride Composite Nanoparticles for 2D Printing Technologies. Advanced Engineering Materials, 2022, 24, 2100917.	1.6	5
135	Structure of cadmium and lead sulfide nanoclusters in a matrix of a langmuir-blodgett film. Journal of Structural Chemistry, 1999, 40, 485-487.	0.3	4
136	Defects in silicon heat-treated under uniform stress and irradiated with fast neutrons. Physica Status Solidi A, 2003, 199, 207-213.	1.7	4
137	Formation, crystal structure, and properties of silicon with buried iron disilicide nanocrystallites on Si (100) substrates. Semiconductors, 2007, 41, 1067-1073.	0.2	4
138	Plastic relaxation of GeSi/Si(001) films grown by molecular-beam epitaxy in the presence of the Sb surfactant. Semiconductors, 2007, 41, 1234-1239.	0.2	4
139	Crystal perfection of GaP films grown on Si substrates by solid-source MBE with atomic hydrogen. Semiconductors, 2009, 43, 1235-1239.	0.2	4
140	Strained germanium films in Ge/InGaAs/GaAs heterostructures: Formation of edge misfit dislocations at the Ge/InGaAs interface. Physics of the Solid State, 2011, 53, 2005-2011.	0.2	4
141	Non-linear conduction in the critical region of the superconductor-insulator transition in TiN thin films. Journal of Physics: Conference Series, 2012, 400, 022042.	0.3	4
142	Edge misfit dislocations in the GeSi/Si(001) pair: Conditions and specific features of high-quantity generation. Journal of Crystal Growth, 2012, 338, 12-15.	0.7	4
143	Structural state of Ge/Si heterosystems with (001), (111), and (7 7 10) interfaces. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 325-327.	0.1	4
144	Analysis of the dislocation structure at the Ge/Si(111) heterointerface. Journal of Surface Investigation, 2014, 8, 787-793.	0.1	4

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145	InAsSb on GaAs (001): influence of the arsenic molecules form on composition and crystalline properties of MBE layers. Journal of Physics: Conference Series, 2015, 643, 012006.	0.3	4
146	Formation and crystal structure of GaSb/GaP quantum dots. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 17-22.	0.1	4
147	Unexpected travel of Lomer-type dislocations in Ge/GexSi1-x/Si(001) heterostructures. Thin Solid Films, 2016, 616, 348-350.	0.8	4
148	Selective MOCVD synthesis of VO ₂ crystals on nanosharp Si structures. CrystEngComm, 2021, 23, 443-452.	1.3	4
149	Epitaxial growth of peculiar GeSn and SiSn nanostructures using a Sn island array as a seed. Applied Surface Science, 2021, 553, 149572.	3.1	4
150	The plastic deformation kinetics for heteroepitaxial films during the misfit dislocation generation from the growth surface. Physica Status Solidi A, 1981, 66, 249-253.	1.7	3
151	Self-Orientation of Silicon Nanocrystals Created under Pulse Laser Impact in Stressed $\hat{\pm}$ -Si:H Films on Glass Substrates. Solid State Phenomena, 2001, 82-84, 681-686.	0.3	3
152	Influence of the misfit-dislocation screw component on the formation of threading dislocations in semiconductor heterostructures. Semiconductors, 2002, 36, 290-297.	0.2	3
153	Ge Nanoclusters in GeO ₂ : Synthesis and Optical Properties. Solid State Phenomena, 2005, 108-109, 83-90.	0.3	3
154	Dense arrays of Ge nanoclusters induced by low-energy ion-beam assisted deposition on SiO ₂ films. , 2006, , .		3
155	Role of the dislocation screw component in the formation of the dislocation structure in Ge- and Si-based semiconductor heterosystems. Journal of Surface Investigation, 2007, 1, 247-254.	0.1	3
156	Silicon layers atop iron silicide nanoislands on Si(100) substrate: Island formation, silicon growth, morphology and structure. Thin Solid Films, 2007, 515, 7805-7812.	0.8	3
157	Effect of the ion-energy loss rate on defect formation during implantation in silicon nanocrystals. Semiconductors, 2008, 42, 1127-1131.	0.2	3
158	Formation of misfit edge dislocations in Ge _x Si _{1-x} films ($x \approx 0.4-0.5$) grown on tilted Si(001) $\hat{\parallel}$ (111) substrates. Physics of the Solid State, 2008, 50, 1857-1861.	0.2	3
159	Heteroepitaxy of Ge _x Si _{1-x} ($x \approx 0.4-0.5$) films on Si(001) substrates misoriented to (111): Formation of short edge misfit dislocations alone in the misorientation direction. Physics of the Solid State, 2010, 52, 32-36.	0.2	3
160	Precise measurements of nanostructure parameters. Optoelectronics, Instrumentation and Data Processing, 2010, 46, 301-311.	0.2	3
161	Optical property improvement of InAs/GaAs quantum dots grown by hydrogen-plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, .	0.6	3
162	Edge misfit dislocations in Ge _x Si _{1-x} /Si(001) ($x \approx 1$) heterostructures: role of buffer Ge _y Si _{1-y} ($y \approx 0.2$)	0.2	3

#	ARTICLE	IF	CITATIONS
163	Ge and $\text{Ge}_x\text{Si}_{1-x}$ islands formation on $\text{Ge}_x\text{Si}_{1-x}$ solid solution surface. <i>Thin Solid Films</i> , 2012, 520, 3319-3321.	0.8	3
164	Brief observe on iron silicide growth on amorphous silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1742-1745.	0.8	3
165	Surface-enhanced Raman scattering by semiconductor nanostructures. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2013, 49, 504-513.	0.2	3
166	Heteroepitaxy of AlIBV films on vicinal Si(001) substrates. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2014, 50, 224-233.	0.2	3
167	Electron microscopic studies of CuS nanocrystals formed in Langmuir-Blodgett films. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2014, 50, 304-309.	0.2	3
168	Experimental observation of the dislocation walls in heterostructures with two interfaces: $\text{Ge}/\text{Ge}_{0.5}/\text{Si}_{0.5}/10\text{\AA}/\text{Si}(001)$ as an example. <i>Philosophical Magazine Letters</i> , 2016, 96, 361-366.	0.5	3
169	Sn influence on MBE growth of GeSiSn/Si MQW. <i>Journal of Physics: Conference Series</i> , 2017, 816, 012020.	0.3	3
170	Electron Microscopy Study of Metal Sulfide Nanocrystals Formed in Langmuir-Blodgett Films. <i>Nanotechnologies in Russia</i> , 2017, 12, 369-375.	0.7	3
171	Silicon p-n Diodes with Embedded FeSi_2 and CrSi_2 Nanocrystals: Morphology, Crystal Structure and Photoelectric Properties. <i>International Journal of Nanoscience</i> , 2019, 18, 1940084.	0.4	3
172	An Influence of the $\text{Si}(111)3\text{-}4^\circ$ Vicinal Surface on the Solid Phase Epitaxy of FeSi_2 Nanorods and their Crystal Parameters. <i>Key Engineering Materials</i> , 2019, 806, 30-35.	0.4	3
173	Effect of Sn for the dislocation-free SiSn nanostructure formation on the vapor-liquid-crystal mechanism. <i>AIP Advances</i> , 2020, 10, 015309.	0.6	3
174	Si-based light emitters synthesized with Ge^+ ion bombardment. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	3
175	Optimization of the plastic relaxation of misfit stresses in $\text{Ge}_x\text{Si}_{1-x}/\text{Si}(001)$ ($x \approx 0.61$) heterostructures. <i>Technical Physics Letters</i> , 2004, 30, 68-70.	0.2	2
176	VARIATION OF IN-PLANE LATTICE CONSTANT OF $\text{Si}/\text{Ge}/\text{Si}$ HETEROSTRUCTURES WITH Ge QUANTUM DOTS. <i>International Journal of Nanoscience</i> , 2007, 06, 297-299.	0.4	2
177	New Compositionally-Ordered GeSi Nano Dots Fabricated with 1250 keV Electrons. <i>Advanced Materials Research</i> , 2007, 26-28, 1195-1198.	0.3	2
178	Structure and electrical properties of polycrystalline SiGe films grown by molecular beam deposition. <i>Semiconductors</i> , 2007, 41, 341-344.	0.2	2
179	High-quality structures with $\text{InAs}/\text{Al}_{0.9}\text{Ga}_{0.1}\text{As}$ QDs produced by droplet epitaxy. <i>Journal of Crystal Growth</i> , 2011, 337, 93-96.	0.7	2
180	Role of edge dislocations in plastic relaxation of $\text{GeSi}/\text{Si}(001)$ heterostructures: Dependence of introduction mechanisms on film thickness. <i>Physics of the Solid State</i> , 2015, 57, 765-770.	0.2	2

#	ARTICLE	IF	CITATIONS
181	Experimental observation of motion of edge dislocations in Ge/Ge _x Si _{1-x} /Si(001) (x = 0.2-0.6) heterostructures. Journal of Experimental and Theoretical Physics, 2016, 123, 832-837.	0.2	2
182	Effect of synthesis conditions on the structure and properties of new SiC _x N _y M _z materials for spintronics. Journal of Structural Chemistry, 2017, 58, 1493-1502.	0.3	2
183	Silicide phase formation by Mg deposition on amorphous Si. Ab initio calculations, growth process and thermal stability. Journal of Alloys and Compounds, 2019, 778, 514-521.	2.8	2
184	Preparation of monolayers of nanoparticles for transmission electron microscopy. Technical Physics, 2000, 45, 783-785.	0.2	1
185	Interaction of a Ti-capped Co thin film with Si ₃ N ₄ . Applied Physics Letters, 2000, 77, 4307-4309.	1.5	1
186	Effect of stress on defect transformation in hydrogen-implanted silicon and SOI structures. , 2001, 4412, 120.		1
187	X-ray-emission study of the structure of Si:H layers formed by low-energy hydrogen-ion implantation. Semiconductors, 2002, 36, 568-573.	0.2	1
188	Defect formation in LT MBE InGaAs and GaAs. Journal of Structural Chemistry, 2004, 45, S96-S102.	0.3	1
189	Photoluminescence kinetics of wurtzite GaN quantum dots in an AlN matrix. JETP Letters, 2005, 81, 62-65.	0.4	1
190	Observation of antiphase domains in Cd _x Hg _{1-x} Te films on silicon by the phase contrast method in atomic force microscopy. JETP Letters, 2005, 82, 292-296.	0.4	1
191	Ge nanoclusters in GeO ₂ : formation and optical properties. , 2006, 6260, 298.		1
192	The influence of elastic strains on the growth and properties of vertically ordered Ge clusters. Thin Solid Films, 2008, 517, 69-70.	0.8	1
193	Role of cross-slipping in formation of edge dislocations in heteroepitaxial systems GeSi-on-Si(001) and Ge-on-InGaAs/GaAs. Philosophical Magazine Letters, 2011, 91, 458-464.	0.5	1
194	Electroluminescent 1.5-μm light-emitting diodes based on p ⁺ -Si/NC-FeSi ₂ /n-Si structures. Semiconductors, 2015, 49, 508-512.	0.2	1
195	Structure and morphology of InSb epitaxial films in the AlAs matrix. Nanotechnologies in Russia, 2016, 11, 12-19.	0.7	1
196	Determining the structure of energy in heterostructures with diffuse interfaces. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 1052-1057.	0.1	1
197	Stress-induced indirect to direct band gap transition in FeSi ₂ nanocrystals embedded in Si. AIP Conference Proceedings, 2017, , .	0.3	1
198	Photoluminescence spectroscopy investigation of epitaxial Si/CaSb nanocrystals/Si heterostructure. AIP Conference Proceedings, 2017, , .	0.3	1

#	ARTICLE	IF	CITATIONS
199	Formation and thermoelectric properties of the n- and p-type silicon nanostructures with embedded GaSb nanocrystals. Japanese Journal of Applied Physics, 2020, 59, SFFB04.	0.8	1
200	Extraction of the components of effective mobility in thin films. Journal Physics D: Applied Physics, 2021, 54, 255105.	1.3	1
201	Generation of hydrocarbons: Mechanism of reaction, geologic and experimental evidence. , 2005, , 179-182.		1
202	Phase composition evolution of iron silicide nanocrystals in the course of embedding into monocrystalline silicon. , 0, , .		1
203	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. Technical Physics Letters, 1998, 24, 949-951.	0.2	0
204	Optical phonons in nanosize GaAs and AlAs clusters in an InAs matrix. JETP Letters, 1999, 70, 469-475.	0.4	0
205	Ftir Spectroscopy and Spectroscopic Ellipsometry Study of Nanocrystalline Layers Formed by High-Dose Hydrogen and Deuterium Implantation of Silicon. Materials Research Society Symposia Proceedings, 2000, 609, 2491.	0.1	0
206	Formation of Si nanocrystals in a-Si films using excimer laser. , 2002, 4748, 465.		0
207	TEM study of incommensurate phases in minerals: implication for materials science. Materials Chemistry and Physics, 2003, 81, 237-240.	2.0	0
208	Laser Crystallization of Thin a-Si Films on Plastic Substrates Using Excimer Laser Treatments. Solid State Phenomena, 2004, 95-96, 29-34.	0.3	0
209	Recrystallization of Silicon on Insulator Layers Implanted with High Doses of Hydrogen Ions. Solid State Phenomena, 2003, 95-96, 23-28.	0.3	0
210	<title>Surface morphology transitions induced by ion beam action during Ge/Si MBE</title>. , 2004, 5401, 290.		0
211	Pulsed Low-energy Ion-beam Induced Nucleation and Growth of Ge Nanocrystals on SiO2. Materials Research Society Symposia Proceedings, 2007, 1020, 1.	0.1	0
212	Inclined misfit dislocations in a film/substrate system. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1896-1901.	0.8	0
213	On triple dislocation nodes observed by TEM in a Ge_{0.4}Si_{0.6}film grown on a slightly deviating (0â%0â%1)Si substrate. Philosophical Magazine Letters, 2011, 91, 510-515.	0.5	0
214	Electroluminescence properties of pâ%Si/<i>Î²</i> â%FeSi₂ NCs/â% /nâ%Si mesa diodes with embedded multilayers of <i>Î²</i> â%FeSi₂ nanocrystallites. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1850-1853.	0.8	0
215	Atomic structure of extended defects in boron-implanted silicon layers. Optoelectronics, Instrumentation and Data Processing, 2014, 50, 241-246.	0.2	0
216	High resolution electron microscopy study of atomic structure and morphology of InSb films in AlAs matrix. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
217	Structural and morphological features of ultrathin epitaxial InSb films in AlAs matrix. Journal of Physics: Conference Series, 2016, 769, 012030.	0.3	0
218	Nature of luminescence of PbS quantum dots synthesized in a Langmuir-Blodgett matrix. JETP Letters, 2017, 106, 18-22.	0.4	0
219	Strain in Ultrathin SiGeSn Layers in a Silicon Matrix. JETP Letters, 2017, 106, 780-784.	0.4	0
220	High-Resolution Electron Microscopy Investigations of Structure and Morphology of Cadmium Selenide Nanocrystals. Russian Physics Journal, 2018, 61, 509-515.	0.2	0
221	Forming Dislocation Pairs in the Ge/GeSi/Si(001) Heterostructure. Physics of the Solid State, 2019, 61, 145-148.	0.2	0
222	Electron Paramagnetic Resonance in Ge/Si Heterostructures with Mn-Doped Quantum Dots. JETP Letters, 2019, 109, 270-275.	0.4	0
223	Specific Features of the Atomic Structure of Iron Silicide Nanocrystals in a Silicon Matrix. Crystallography Reports, 2021, 66, 601-607.	0.1	0
224	Structural Transformations of the Dislocation Cores in Si and Their Relationship with Photoluminescence. Crystallography Reports, 2021, 66, 636-643.	0.1	0
225	Blister suppression in the CO ₂ molecule implanted SOI substrates with ultrathin buried oxides. Materials Today Communications, 2021, 28, 102498.	0.9	0
226	Effect of embedding of CrSi ₂ and FeSi ₂ nanocrystals into n-type conductivity silicon on the transport and thermal generation of carriers. Applied Surface Science, 2021, 566, 150620.	3.1	0
227	Conditions for the identical distribution of free carriers in thin films. Journal Physics D: Applied Physics, 2022, 55, 075101.	1.3	0
228	10.1007/s11453-008-1001-5. , 2010, 42, 1.		0
229	Embedding of iron silicide nanocrystals into monocrystalline silicon: suppression of emission effect. , 2019, , .		0
230	Al ₂ O ₃ /InGaAs interface passivation by fluorine-containing anodic layers. Journal of Applied Physics, 2022, 131, 085301.	1.1	0