Alexey Redkov

List of Publications by Year in Descending Order

63 papers	378 citations	11 h-index	15 g-index
70 ext. papers	471 ext. citations	2.1 avg, IF	4.08 L-index

#	Paper	IF	Citations
63	SiC/Si as a New Platform for Growth of Wide-Bandgap Semiconductors. *Advanced Structured Materials*, **2022**, 335-373	0.6	
62	Dendritic structures by glass electrolysis: Studies and SERS capability. *Current Applied Physics*, **2021**, 24, 54-59	2.6	2
61	Molybdenum/tungsten disulfide solid solutions nanoparticles formation by aerosol-assisted CVD. *Solid State Sciences*, **2021**, 115, 106583	3.4	1
60	Dynamic Interaction of Steps and Nanoislands during Growth of a Multicomponent Crystal. *Crystal Growth and Design*, **2021**, 21, 4914-4926	3.5	1
59	Modification of soda-lime silicate glass under corona poling in air and nitrogen atmosphere. *Journal of Non-Crystalline Solids*, **2021**, 554, 120599	3.9	0
58	Vacancy growth of monocrystalline SiC from Si by the method of self-consistent substitution of atoms. *Catalysis Today*, **2021**,	5.3	2
57	Formation of composite SiC-C coatings on graphite via annealing Si-melt in CO. *Surface and Coatings Technology*, **2021**, 423, 127610	4.4	1
56	Crystallization of K2O-TiO2-SiO2 glass below glass transition by poling. *Journal of Non-Crystalline Solids*, **2021**, 571, 121081	3.9	0
55	CW laser-initiated formation of nano-Si crystals in glass-metal nanostructures. *Journal of the American Ceramic Society*, **2020**, 103, 4625-4631	3.8	
54	Control of soda-lime glass surface crystallization with thermal poling. *Journal of Non-Crystalline Solids*, **2020**, 533, 119899	3.9	4
53	Development of Burton□Cabrera□Frank Theory for the Growth of a Non-Kossel Crystal via Chemical Reaction. *Crystal Growth and Design*, **2020**, 20, 2590-2601	3.5	6
52	Formation and SERS efficiency of periodic metal-dielectric nanostructures. *Journal of Physics: Conference Series*, **2020**, 1695, 012108	0.3	
51	Thermal poling of glasses to fabricate masks for ion exchange. *Journal of Physics: Conference Series*, **2020**, 1695, 012107	0.3	2
50	SERS-Active Pattern in Silver-Ion-Exchanged Glass Drawn by Infrared Nanosecond Laser. *Nanomaterials*, **2020**, 10,	5.4	4
49	Spiral growth of a multicomponent crystal from vapor of its components. *Journal of Crystal Growth*, **2020**, 548, 125845	1.6	2
48	Growth of faceted pores in a multi-component crystal by applying mechanical stress. *CrystEngComm*, **2020**, 22, 5280-5288	3.3	2
47	Epitaxial Growth of Bulk Semipolar AlN Films on Si(001) and Hybrid SiC/Si(001) Substrates. *Technical Physics Letters*, **2020**, 46, 539-542	0.7	2

46	Vacancy Growth of a Faceted Pore in a Crystal via Chernov Mechanism. *Mechanics of Solids*, **2020**, 55, 77-83	0.5	2
45	Is adsorbed water responsible for 2800-3000 cm⁻¹ band in Raman spectrum of inorganic matter?. *Journal of Physics: Conference Series*, **2019**, 1236, 012001	0.3	
44	Growing III–V Semiconductor Heterostructures on SiC/Si Substrates. *Technical Physics Letters*, **2019**, 45, 711-713	0.7	8
43	Studying Evolution of the Ensemble of Micropores in a SiC/Si Structure during Its Growth by the Method of Atom Substitution. *Physics of the Solid State*, **2019**, 61, 299-306	0.8	12
42	Self-assembled silver nanoparticles in glass microstructured by poling for SERS application. *Current Applied Physics*, **2019**, 19, 1088-1095	2.6	5
41	Crystal Structure, Raman Spectroscopy and Dielectric Properties of New Semiorganic Crystals Based on 2-Methylbenzimidazole. *Crystals*, **2019**, 9, 573	2.3	6
40	Growth of Faceted Pores in a Crystal by the Burton–Cabrera–Frank Mechanism. *Physics of the Solid State*, **2019**, 61, 2392-2396	0.8	2
39	Laser formation of nano-Si structures in glasses. *Journal of Physics: Conference Series*, **2019**, 1410, 012248	0.3	
38	Growth of a multicomponent crystal via Chernov's mechanism. *Journal of Physics: Conference Series*, **2019**, 1410, 012039	0.3	1
37	The model for in-plane and out-of-plane growth regimes of semiconductor nanowires. *Journal of Physics: Conference Series*, **2019**, 1410, 012049	0.3	
36	Kinetics of ion-exchange-induced vitrification of glass-ceramics. *Journal of the American Ceramic Society*, **2019**, 102, 3426-3431	3.8	3
35	Modifications of poled silicate glasses under heat treatment. *Journal of Non-Crystalline Solids*, **2019**, 503-504, 279-283	3.9	17
34	Properties of SiC Films Obtained by the Method of Substitution of Atoms on Porous Silicon. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P158-P160	2	7
33	Self-Assembled Silver–Gold Nanoisland Films on Glass for SERS Applications. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1700226	2.5	14
32	Plasma assisted molecular beam epitaxy of thin GaN films on Si(111) and SiC/Si(111) substrates: Effect of SiC and polarity issues. *Thin Solid Films*, **2018**, 646, 158-162	2.2	18
31	A new method for Synthesis of Epitaxial Films of Silicon Carbide on Sapphire Substrates (α-Al2O3). *Reviews on Advanced Materials Science*, **2018**, 57, 82-96	4.8	4
30	Investigation of the Physicomechanical Characteristics of Nanoscale Films by Nanoindentation. *Mechanics of Solids*, **2018**, 53, 481-488	0.5	2
29	Spiral growth of a crystal due to chemical reaction. *Journal of Physics: Conference Series*, **2018**, 1124, 022006	0.3	5

28	Nucleation of CdSe thin films: the kinetic model. *Journal of Physics: Conference Series*, **2018**, 1124, 022044	0.3	2
27	A New Trigonal (Rhombohedral) SiC Phase: Ab Initio Calculations, a Symmetry Analysis and the Raman Spectra. *Physics of the Solid State*, **2018**, 60, 2066-2071	0.8	4
26	The Mechanism of Growth of GaN Films by the HVPE Method on SiC Synthesized by the Substitution of Atoms on Porous Si Substrates. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P480-P486	2	12
25	Resonant properties of coupled silver hemispheroids. *Journal of Nanophotonics*, **2017**, 11, 032503	1.1	1
24	Mechanisms and Peculiarities of Electric Field Imprinting in Glasses. *Journal of the Electrochemical Society*, **2017**, 164, E385-E390	3.9	11
23	Low-Temperature Atmospheric Pressure Plasma-Enhanced CVD of Nanocomposite Coatings Molybdenum Disulfide (Filler)Silicon Oxide (Matrix)*Advanced Materials Interfaces*, **2017**, 4, 1700241	4.6	13
22	Separation of IIIN/SiC epitaxial heterostructure from a Si substrate and their transfer to other substrate types. *Semiconductors*, **2017**, 51, 396-401	0.7	9
21	Raman enhancement by individual silver hemispheroids. *Applied Surface Science*, **2017**, 397, 119-124	6.7	7
20	Nanoindentation of GaN/SiC thin films on silicon substrate. *Journal of Physics and Chemistry of Solids*, **2017**, 102, 151-156	3.9	21
19	GaN growth via HVPE on SiC/Si substrates: growth mechanisms. *Journal of Physics: Conference Series*, **2017**, 917, 032028	0.3	3
18	Effect of SiC buffer layer on GaN growth on Si via PA-MBE. *Journal of Physics: Conference Series*, **2017**, 917, 032038	0.3	3
17	Molecular dynamics simulation of metal nanoislands growth. *Journal of Physics: Conference Series*, **2017**, 929, 012056	0.3	1
16	Molecular dynamics simulation of the indentation of nanoscale films on a substrate. *Technical Physics Letters*, **2016**, 42, 639-643	0.7	4
15	Pendeo-epitaxy of stress-free AlN layer on a profiled SiC/Si substrate. *Thin Solid Films*, **2016**, 606, 74-79	2.2	8
14	Separation of stress-free AlN/SiC thin films from Si substrate. *Journal of Physics: Conference Series*, **2016**, 741, 012034	0.3	3
13	Micro-Raman Spectroscopy Study of Glass-Ceramics with Gradient of Volume Fraction of Crystalline Phase. *Journal of the American Ceramic Society*, **2016**, 99, 2558-2560	3.8	4
12	Nanoscale self-arranged layers of silver nanoparticles in glass. *Chemical Physics Letters*, **2016**, 652, 235-238	2.3	6
11	Formation of silver fractal structures in ion-exchange glasses under poling. *Technical Physics*, **2015**, 60, 270-274	0.5	4

10	How Does Thermal Poling Produce Interstitial Molecular Oxygen in Silicate Glasses?. *Journal of Physical Chemistry C*, **2015**, 119, 17298-17307	3.8	37
9	Surface defects formation on strained thin films growing via chemical reaction: a model. *Journal of Physics: Conference Series*, **2015**, 643, 012005	0.3	1
8	Nanoprofiling of alkali-silicate glasses by thermal poling. *Journal of Non-Crystalline Solids*, **2015**, 409, 166-169	3.9	22
7	Effect of the nand p-type Si(100) substrates with a SiC buffer layer on the growth mechanism and structure of epitaxial layers of semipolar AlN and GaN. *Physics of the Solid State*, **2015**, 57, 1966-1971	0.8	4
6	Stability of the surface of an elastically strained multicomponent film in a system with chemical reactions. *Physics of the Solid State*, **2015**, 57, 2524-2531	0.8	9
5	Self-arrangement of periodic layers of silver nanoparticles in silicate glass. *Journal of Physics: Conference Series*, **2014**, 541, 012005	0.3	1
4	Plasmonic molecules via glass annealing in hydrogen. *Nanoscale Research Letters*, **2014**, 9, 606	5	13
3	Morphological stability criterion for a spherical crystallization front in a multicomponent system with chemical reactions. *Physics of the Solid State*, **2014**, 56, 2530-2536	0.8	8
2	Formation and self-arrangement of silver nanoparticles in glass via annealing in hydrogen: The model. *Journal of Non-Crystalline Solids*, **2013**, 376, 152-157	3.9	21
1	Formation of composite materials based on glasses containing a reductant. *Physics of the Solid State*, **2012**, 54, 1875-1881	0.8	7