Boris A Andreev

List of Publications by Year
in descending order

130	1,070	471061	525886
papers	citations	17 h-index	27 g-index

131	131	131	1040
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Acceptor states in the photoluminescence spectra ofnâ˜¨InN. Physical Review B, 2005, 71, .	1.1	135
2	A Small Cationic Organoâ€“Copper Cluster as Thermally Robust Highly Photo- and Electroluminescent Material. Journal of the American Chemical Society, 2020, 142, 373-381.	6.6	77
3	Submillimeter wave spectrum and molecular constants of N2O. Journal of Molecular Spectroscopy, 1976, 62, 125-148.	0.4	66
4	Silicon as an advanced window material for high power gyrotrons. Journal of Infrared, Millimeter and Terahertz Waves, 1995, 16, 863-877.	0.6	42
5	LMCT facilitated room temperature phosphorescence and energy transfer in substituted thiophenolates of Gd and Yb. Dalton Transactions, 2017, 46, 3041-3050.	1.6	37
6	GaAsSb/GaAs strained structures with quantum wells for lasers with emission wavelength near 1.3 Î¼m. Semiconductors, 2010, 44, 405-412.	0.2	27
7	Oxygen aggregation in Czochralski-grown silicon heat treated at 450â€‰Â°C under compressive stress. Applied Physics Letters, 1997, 71, 264-266.	1.5	26
8	Optical Er-doping of Si during sublimational molecular beam epitaxy. Journal of Crystal Growth, 1999, 201-202, 534-537.	0.7	25
9	Double thermal donors in Czochralski-grown silicon heat-treated under atmospheric and high hydrostatic pressures. Physica Status Solidi (B): Basic Research, 2003, 235, 75-78.	0.7	25
10	Towards the indium nitride laser: obtaining infrared stimulated emission from planar monocrystalline InN structures. Scientific Reports, 2018, 8, 9454.	1.6	21
11	Synthesis, structure and long-lived NIR luminescence of lanthanide ate complexes with perfluorinated 2-mercaptobenzothiazole. Dalton Transactions, 2019, 48, 1060-1066.	1.6	21
12	Shallow acceptors in strained Ge/Ge1â˜¨x Six heterostructures with quantum wells. Semiconductors, 2000, 34, 563-567.	0.2	19
13	Erbium doped silicon single- and multilayer structures for light-emitting device and laser applications. Journal of Materials Research, 2006, 21, 574-583.	1.2	19
14	Lanthanide complexes with substituted naphtholate ligands: extraordinary bright near-infrared luminescence of ytterbium. Russian Chemical Bulletin, 2013, 62, 392-397.	0.4	19
15	Observation of Zeeman effect in photoluminescence of Er3+ ion imbedded in crystalline silicon. Physica B: Condensed Matter, 2001, 308-310, 340-343.	1.3	18
16	Strain-driven alloying: effect on sizes, shape and photoluminescence of GeSi/Si(001) self-assembled islands. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 62-65.	1.7	18
17	Sensitization of NIR luminescence of Yb³⁺ by Zn²⁺ chromophores in heterometallic complexes with a bridging Schiff-base ligand. Dalton Transactions, 2017, 46, 10408-10417.	1.6	18
18	Luminescent properties of 2-mercaptobenzothiazolates of trivalent lanthanides. Physical Chemistry Chemical Physics, 2015, 17, 11000-11005.	1.3	17

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19	Realization of photo- and electroluminescent Si:Er structures by the method of sublimation molecular beam epitaxy. Nanotechnology, 2002, 13, 97-102.	1.3	16
20	Features of spectral properties of Sm3+ complexes with dithia- and diselenophosphinate ligands. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 163, 134-139.	2.0	15
21	Organic Er-Yb complexes as potential upconversion materials. Journal of Luminescence, 2017, 192, 208-211.	1.5	14
22	Resonant acceptor states in Ge/Ge1-xSixMQW heterostructures. Nanotechnology, 2000, 11, 348-350.	1.3	13
23	Towards 0.99999 28Si. Solid State Communications, 2012, 152, 455-457.	0.9	13
24	Properties of optically active Si:Er and Si1â^'Ge layers grown by the sublimation MBE method. Thin Solid Films, 2000, 369, 426-430.	0.8	12
25	Smbe Grown Uniformly And Selectively Doped Si:Er Structures For Leds And Lasers. , 2003, , 445-454.		11
26	Er3+ photoluminescence excitation spectra in erbium-doped epitaxial silicon structures. Physics of the Solid State, 2004, 46, 97-100.	0.2	11
27	Spectroscopic parameters of the absorption bands related to the local vibrational modes of carbon and oxygen impurities in silicon enriched with 28Si, 29Si, and 30Si isotopes. Semiconductors, 2005, 39, 300-307.	0.2	11
28	Structural and electrical properties of Ge-on-Si(0â€¯0â€¯1) layers with ultra heavy n-type doping grown by MBE. Journal of Crystal Growth, 2018, 491, 26-30.	0.7	11
29	Cyclotron resonance quantum Hall effect detector. Semiconductor Science and Technology, 2001, 16, 300-303.	1.0	10
30	Infrared lateral photoconductivity of InGaAs quantum dot heterostructures grown by MOCVD. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 634-635.	1.3	10
31	Deposition of microcrystalline silicon in electron-cyclotron resonance discharge (24GHz) plasma from silicon tetrafluoride precursor. Thin Solid Films, 2014, 562, 114-117.	0.8	10
32	Near infrared luminescence of Nd, Er and Yb complexes with perfluorinated 2-mercaptobenzothiazolate and phosphine oxide ligands. Optical Materials, 2021, 118, 111241.	1.7	10
33	Oscillator Strengths and Linewidths of Shallow Impurity Spectra in Si and Ge. Materials Science Forum, 1995, 196-201, 121-126.	0.3	9
34	Photoluminescence excitation spectroscopy of erbium in epitaxially grown Si:Er structures. Optical Materials, 2005, 27, 890-893.	1.7	9
35	Features of the Molecular Structure and Luminescence of Rare-Earth Metal Complexes with Perfluorinated (Benzothiazolyl)phenolate Ligands. Molecules, 2019, 24, 2376.	1.7	9
36	Stress-induced changes of thermal donor formation in heat-treated Czochralski-grown silicon. Physica B: Condensed Matter, 2003, 340-342, 769-772.	1.3	8

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37	Er-Doped Electro-Optical Memory Element for 1.5-mu m Silicon Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1539-1544.	1.9	8
38	Title is missing!. Journal of Materials Science: Materials in Electronics, 2001, 12, 223-225.	1.1	7
39	Study of IR absorption and photoconductivity spectra of thermal double donors in silicon. Physica Status Solidi (B): Basic Research, 2003, 235, 79-84.	0.7	7
40	Manifestation of the equilibrium hole distribution in photoluminescence of n-InN. Physica Status Solidi (B): Basic Research, 2005, 242, R33-R35.	0.7	7
41	The Auger process of luminescence quenching in Si/Si:Er multinanolayers. Journal of Physics Condensed Matter, 2005, 17, S2191-S2195.	0.7	7
42	New photoelectrical properties of InN: Interband spectra and fast kinetics of positive and negative photoconductivity of InN. Journal of Applied Physics, 2018, 123, .	1.1	7
43	Contactless Photothermal Ionization Spectroscopy of Shallow Defects in Semiconductors. Materials Science Forum, 1994, 143-147, 1365-1370.	0.3	6
44	Uniformly and selectively doped silicon:erbium structures produced by the sublimation MBE method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 67-70.	1.7	6
45	Luminescent properties of MBE-grown Si:Er/SOI structures. Journal of Luminescence, 2012, 132, 3148-3150.	1.5	6
46	Tris(trifluoromethyl)germylethynyl derivatives of biphenyl and anthracene: Synthesis, structure, and evidence of the intramolecular charge transfer on the germanium center. Journal of Organometallic Chemistry, 2015, 797, 83-95.	0.8	6
47	Synthesis and luminescent properties of heteroleptic benzothiazolylâ€“naphtholates of ytterbium. Synthetic Metals, 2015, 203, 117-121.	2.1	6
48	Features of InN growth by nitrogen-plasma-assisted MBE at different ratios of fluxes of group-III and -V elements. Semiconductors, 2016, 50, 261-265.	0.2	6
49	Radiative Properties of Up-Conversion Coatings Formed on the Basis of Erbium-Doped Barium Titanate Xerogels. Semiconductors, 2021, 55, 735-740.	0.2	6
50	Optically active layers of silicon doped with erbium during sublimation molecular-beam epitaxy. Semiconductors, 1999, 33, 131-134.	0.2	5
51	Shallow acceptors in Ge/GeSi multi-quantum well heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 608-611.	1.3	5
52	Shallow donors in silicon coimplanted with rare-earth ions and oxygen. Physica B: Condensed Matter, 2001, 308-310, 350-353.	1.3	5
53	Photoluminescence of n-InN with low electron concentrations. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 50-58.	0.8	5
54	Effect of surface Si-Si dimers on photoluminescence of silicon nanocrystals in the silicon dioxide matrix. Journal of Experimental and Theoretical Physics, 2014, 118, 728-734.	0.2	5

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55	Near-infrared stimulated emission from indium-rich InGaN layers grown by plasma-assisted MBE. Applied Physics Letters, 2021, 118, .	1.5	5
56	Holmium-related luminescence in crystalline silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 176-178.	1.7	4
57	Electrically active centers in Si:Er light-emitting layers grown by sublimation molecular-beam epitaxy. Semiconductors, 2002, 36, 171-175.	0.2	4
58	1.54Î¼m Si:Er light emitting diode with memory function. Applied Physics Letters, 2006, 88, 201101.	1.5	4
59	Fabrication of nanocrystalline silicon layers by plasma enhanced chemical vapor deposition from silicon tetrafluoride. Semiconductors, 2009, 43, 968-972.	0.2	4
60	PECVD growth of crystalline silicon from its tetrafluoride. Crystal Research and Technology, 2010, 45, 899-908.	0.6	4
61	Raman spectra of amorphous isotope-enriched 74Ge with low-strained Ge nanocrystals. Thin Solid Films, 2014, 552, 46-49.	0.8	4
62	Absorption cross section for the 4 I 15/2 â† 4 I 13/2 transition of Er3+ in Si:Er:O/SOI epitaxial layers. JETP Letters, 2015, 100, 807-811.	0.4	4
63	Polynuclear Heteroligand Yb(III)â€“Er(III) Complexes as Potential Upconversion Materials. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2019, 45, 712-720.	0.3	4
64	Ge/Si Core/Shell Quantum Dots in an Alumina Matrix: Influence of the Annealing Temperature on the Optical Properties. Semiconductors, 2020, 54, 181-189.	0.2	4
65	Optical Properties and Upconversion Luminescence of BaTiO3 Xerogel Structures Doped with Erbium and Ytterbium. Gels, 2022, 8, 347.	2.1	4
66	Copper in ultra-pure germanium: determination of the electrically active fraction. Semiconductor Science and Technology, 1994, 9, 1050-1053.	1.0	3
67	Peculiarities of photoluminescence of erbium in silicon structures prepared by the sublimation molecular-beam epitaxy method. Physics of the Solid State, 2001, 43, 1012-1017.	0.2	3
68	Simultaneous doping of silicon layers with erbium and oxygen in the course of molecular-beam epitaxy. Semiconductors, 2001, 35, 918-923.	0.2	3
69	Erbium Photoluminescence Excitation Spectroscopy in Si : Er Epitaxial Structures. Physics of the Solid State, 2005, 47, 86.	0.2	3
70	Erbium ion electroluminescence in p ++/n +/n-Si:Er/n ++ silicon diode structures. Semiconductors, 2007, 41, 1312-1314.	0.2	3
71	Electrical properties of Si:Er/Si layers grown by sublimation molecular-beam epitaxy. Semiconductors, 2008, 42, 137-141.	0.2	3
72	Specific features of the mechanisms of excitation of erbium photoluminescence in epitaxial Si:Er/Si structures. Semiconductors, 2010, 44, 1472-1475.	0.2	3

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73	Determination of the excitation cross section of photoluminescence from an Er ion in the case of homogeneous and inhomogeneous optical excitation. Semiconductors, 2012, 46, 1372-1375.	0.2	3
74	Mechanism of the subband excitation of photoluminescence from erbium ions in silicon under high-intensity optical pumping. Semiconductors, 2012, 46, 1407-1410.	0.2	3
75	Photoluminescence of Erbium-Doped Silicon: Temperature Dependence. Solid State Phenomena, 1999, 69-70, 359-364.	0.3	2
76	Electrically active centers in light emitting Si:Er/Si structures grown by the sublimation MBE method. Physica B: Condensed Matter, 2001, 308-310, 361-364.	1.3	2
77	Thermal Donors in Silicon Implanted with Rare Earth Impurities. Solid State Phenomena, 2001, 82-84, 93-98.	0.3	2
78	Luminescent Si-Ge solid solution layers ER-doped in molecular-beam epitaxy. Semiconductors, 2002, 36, 625-628.	0.2	2
79	Structure, Impurity Composition, and Photoluminescence of Mechanically Polished Layers of Single-Crystal Silicon. Physics of the Solid State, 2005, 47, 1.	0.2	2
80	Light-Emitting Si:Er Structures Produced by Molecular-Beam Epitaxy: High-Resolution Photoluminescence Spectroscopy. Semiconductors, 2005, 39, 1399.	0.2	2
81	Erbium Doped Silicon Single- and Multilayer Structures for LED and Laser Applications. Materials Research Society Symposia Proceedings, 2005, 866, 29.	0.1	2
82	Production of nanocrystalline silicon layers using the plasma enhanced chemical vapor deposition from the gas phase of silicon tetrafluoride. JETP Letters, 2009, 89, 73-75.	0.4	2
83	Plasmaâ€enhanced chemical vapor deposition of 99.95% ²⁸Si in form of nanoâ€and polycrystals using silicon tetrafluoride precursor. Crystal Research and Technology, 2010, 45, 983-987.	0.6	2
84	Dependence of the concentration of ionized donors on epitaxy temperature for Si:Er/Si layers grown by sublimation molecular-beam epitaxy. Semiconductors, 2011, 45, 130-133.	0.2	2
85	Si and Ge nanocrystals in resonator multilayer structures. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2867-2872.	0.8	2
86	Emission Properties of Heavily Doped Epitaxial Indium-Nitride Layers. Semiconductors, 2019, 53, 1357-1362.	0.2	2
87	Effect of antimony doping on the energy of optical transitions in n-Ge layers grown on Si (001) and Ge (001) substrates. Journal of Applied Physics, 2020, 127, 165701.	1.1	2
88	Coherent Radiation From Active Josephson Antennas. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.1	2
89	Formation of Thermal Donors in Czochralski Grown Silicon Under Hydrostatic Pressure Up to 1 GPa. , 1996, , 345-353.		2
90	Plasma-Assisted Molecular Beam Epitaxy of In-Rich InGaN: Growth Optimization for Near-IR Lasing. ECS Journal of Solid State Science and Technology, 2022, 11, 014003.	0.9	2

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91	Infrared stimulated emission with an ultralow threshold from low-dislocation-density InN films grown on a vicinal GaN substrate. Fundamental Research, 2022, 2, 794-798.	1.6	2
92	Novel ditopic 2-mercaptothiazoles and their sodium salts: synthesis, structural diversity and luminescence. New Journal of Chemistry, 0, , .	1.4	2
93	Low-temperature photoluminescence in holmium-doped silicon. Semiconductors, 1999, 33, 407-409.	0.2	1
94	Doping of silicon layers from a sublimating erbium source in molecular beam epitaxy. Technical Physics Letters, 2000, 26, 41-43.	0.2	1
95	Optical absorption and birefringence in GaAs/AlAs MQW structures due to intersubband electron transitions. Nanotechnology, 2000, 11, 218-220.	1.3	1
96	Localised and resonant states of shallow acceptors in Ge/Ge1â^'xSix multiple-quantum well heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 317-320.	1.3	1
97	Effective cross section for photoluminescence excitation and lifetime of excited Er3+ ions in selectively doped multilayer Si:Er structures. Semiconductors, 2003, 37, 1100-1103.	0.2	1
98	"New Donors" in Czochralski Grown Silicon Annealed at Tâ‰¥ 600Â°C under Compressive Stress. Solid State Phenomena, 2005, 108-109, 181-186.	0.3	1
99	Band-to-band and direct optical excitation of Er in silicon: Comparison of kinetics, temperature dependence of erbium PL. Physica B: Condensed Matter, 2009, 404, 4601-4603.	1.3	1
100	Isotopic effects in photoconductivity spectrum of impurities in silicon. Physica B: Condensed Matter, 2009, 404, 5057-5059.	1.3	1
101	Exciton selfâ€trapped on Siâ€“Si dimers on the surface of silicon nanocrystal: Experimental evidence. Physica Status Solidi (B): Basic Research, 2016, 253, 2150-2153.	0.7	1
102	Comparative Analysis of the Luminescence of Ge:Sb Layers Grown on Ge(001) and Si(001) Substrates. Semiconductors, 2019, 53, 1318-1323.	0.2	1
103	Luminescence thermochromism in novel mixed Eu(<scp>ii</scp>)â€“Cu(<scp>i</scp>) iodide. Dalton Transactions, 2021, 50, 14244-14251.	1.6	1
104	The metric of submillimeter range of wavelengths using a reference spectrum. Radiophysics and Quantum Electronics, 1975, 18, 387-391.	0.1	0
105	Copper Species in Ultra-Pure Germanium Crystals. Materials Science Forum, 1995, 196-201, 701-706.	0.3	0
106	Donor Centers in Er-Implanted Silicon. Materials Science Forum, 1997, 258-263, 1515-1520.	0.3	0
107	Thermal Donors in Silicon Doped with Erbium. Solid State Phenomena, 1997, 57-58, 207-212.	0.3	0
108	Alloy fluctuations in Si1â^'xGex crystals. Physica B: Condensed Matter, 2001, 308-310, 558-560.	1.3	0

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109	Impact of Compressive Stress on the Formation of Thermal Donors in Heat-Treated Silicon. Solid State Phenomena, 2002, 82-84, 259-266.	0.3	0
110	Er-related luminescence in Si:Er epilayers grown with sublimation molecular-beam epitaxy. , 2002, , .		0
111	Erbium Segregation in Silicon Layers Grown by Molecular-Beam Epitaxy. Inorganic Materials, 2002, 38, 421-424.	0.2	0
112	Title is missing!. Inorganic Materials, 2003, 39, 3-5.	0.2	0
113	Spectroscopic characterization of Er-1 center in selectively doped silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 105, 150-152.	1.7	0
114	Photoluminescence at 1.5 Âμm from single-crystal silicon layers subjected to mechanical treatment. Semiconductors, 2003, 37, 1380-1382.	0.2	0
115	Effect of growth conditions on photoluminescence of erbium-doped silicon layers grown using sublimation molecular-beam epitaxy. Physics of the Solid State, 2004, 46, 101-103.	0.2	0
116	<title>Single- and multilayer Si:Er structures for LED and laser applications grown with sublimation MBE technique</title>. , 2006, 6180, 118.		0
117	Phonon Induced Resonances in Impurity Photocurrent Spectra of Bulk Semiconductors and Quantum Wells Doped with Shallow Donors. AIP Conference Proceedings, 2007, , .	0.3	0
118	PECVD Deposition of nc-Si, Î¼c-Si, and a-Si of Different Isotopic Composition in Form of Films and Bulk Material from SiF4 Precursor. ECS Transactions, 2009, 25, 229-233.	0.3	0
119	Dependence of the energy of the resonance states of an acceptor in silicon on the host isotopic mass. JETP Letters, 2009, 90, 455-458.	0.4	0
120	The features of electro-optical memory effect for 1.54Î¼m electroluminescence of an Er doped Si diode. Physica B: Condensed Matter, 2009, 404, 4597-4600.	1.3	0
121	Isotope-modified silicon layers obtained by plasma enhanced chemical vapor deposition from gaseous silicon tetrafluoride. Technical Physics Letters, 2009, 35, 948-950.	0.2	0
122	ERBIUM EXCITATION IN THE NANOSTRUCTURED AMORPHOUS SILICON. , 2009, , .		0
123	Electroluminescence at a wavelength of 1.5 Î¼m in Si:Er/Si diode structures doped with Al, Ga, and B acceptors. Semiconductors, 2010, 44, 1597-1599.	0.2	0
124	Electroluminescence at a wavelength of 1.54 Î¼m in Si:Er/Si structures consisting of a number of p-n junctions. Semiconductors, 2011, 45, 1430-1432.	0.2	0
125	Electron Mobility in Moderately Doped Si_{1-x}Ge_x. Solid State Phenomena, 0, 178-179, 31-34.	0.3	0
126	Effect of the annealing temperature on the low-temperature photoluminescence in Si:Er light-emitting structures grown by molecular-beam epitaxy. Semiconductors, 2013, 47, 1333-1335.	0.2	0

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127	Specific features of the photoexcitation spectra of epitaxial InN layers grown by molecular-beam epitaxy with the plasma activation of nitrogen. Semiconductors, 2017, 51, 1537-1541.	0.2	0
128	A CYCLOTRON RESONANCE QUANTUM HALL EFFECT DETECTOR. , 2001, , .		0
129	Microscopic Structure of Er-Related Optically Active Centers in Si. Materials Research Society Symposia Proceedings, 2003, 770, 711.	0.1	0
130	10.1007/s11453-008-2003-z. , 2010, 42, 137.		0