Anatoli I Popov

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8519866/publications.pdf

Version: 2024-02-01

215	4,260	94433	182427
papers	citations	37 h-index	51 g-index

216	216	216	2414
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Radiation-induced point defects in simple oxides. Nuclear Instruments & Methods in Physics Research B, 1998, 141, 1-15.	1.4	248
2	Basic properties of the F-type centers in halides, oxides and perovskites. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3084-3089.	1.4	159
3	Systematic trends in (0 0 1) surface ab initio calculations of ABO 3 perovskites. Journal of Saudi Chemical Society, 2018, 22, 459-468.	5.2	135
4	Calculations of the geometry and optical properties ofFMgcenters and dimer (F2-type) centers in corundum crystals. Physical Review B, 1995, 51, 8770-8778.	3.2	70
5	Vibrational properties of LaPO4 nanoparticles in mid- and far-infrared domain. Journal of Applied Physics, 2012, 112, .	2.5	55
6	Creation and thermal annealing of structural defects in neutron-irradiated MgAl2O4 single crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 31-37.	1.4	55
7	Formation of anion-vacancy clusters and nanocavities in thermochemically reduced MgO single crystals. Physical Review B, 2000, 62, 9299-9304.	3.2	52
8	Mechanism for energy transfer processes between Ce3+ and Tb3+ in LaPO4:Ce,Tb nanocrystals by time-resolved luminescence spectroscopy. Physica Status Solidi (B): Basic Research, 2010, 247, 2252-2257.	1.5	52
9	Surfactant-assisted synthesis of Cd1â^'xCoxS nanocluster alloys and their structural, optical and magnetic properties. Journal of Alloys and Compounds, 2010, 493, 240-245.	5.5	52
10	Distinctive features of diffusion-controlled radiation defect recombination in stoichiometric magnesium aluminate spinel single crystals and transparent polycrystalline ceramics. Scientific Reports, 2020, 10, 7810.	3.3	50
11	Modified Hydroxyapatite Structure and Properties: Modeling and Synchrotron Data Analysis of Modified Hydroxyapatite Structure. Ferroelectrics, 2015, 475, 135-147.	0.6	49
12	LaPO4:Ce,Tb and YVO4:Eu nanophosphors: Luminescence studies in the vacuum ultraviolet spectral range. Journal of Applied Physics, 2011, 110, 053522.	2.5	48
13	Characterization of aluminium nitride nanostructures by XANES and FTIR spectroscopies with synchrotron radiation. Journal of Physics Condensed Matter, 2006, 18, S2095-S2104.	1.8	47
14	Comparison of the F-type center thermal annealing in heavy-ion and neutron irradiated Al2O3 single crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 433, 93-97.	1.4	47
15	Defects in ion implanted and electron irradiated Mgo and Al₂O₃. Radiation Effects and Defects in Solids, 1995, 136, 169-173.	1.2	46
16	Kinetics of F center annealing and colloid formation in Al2O3. Nuclear Instruments & Methods in Physics Research B, 2016, 374, 107-110.	1.4	46
17	Anomalous Kinetics of Diffusion-Controlled Defect Annealing in Irradiated Ionic Solids. Journal of Physical Chemistry A, 2018, 122, 28-32.	2.5	46
18	Nonlinear optical response of bulk ZnO crystals with different content of intrinsic defects. Optical Materials, 2018, 84, 738-747.	3.6	46

#	Article	IF	Citations
19	Comparative Ab Initio Calculations of ReO3, SrZrO3, BaZrO3, PbZrO3 and CaZrO3 (001) Surfaces. Crystals, 2020, 10, 745.	2.2	46
20	Comparative study of the luminescence properties of macro- and nanocrystalline MgO using synchrotron radiation. Nuclear Instruments & Methods in Physics Research B, 2013, 310, 23-26.	1.4	45
21	Fast-neutron-induced and as-grown structural defects in magnesium aluminate spinel crystals with different stoichiometry. Optical Materials, 2019, 91, 42-49.	3.6	45
22	Positron annihilation characterization of free volume in micro- and macro-modified Cu0.4Co0.4Ni0.4Mn1.8O4 ceramics. Low Temperature Physics, 2016, 42, 601-605.	0.6	44
23	Influence of complex impurity centres on radiation damage in wide-gap metal oxides. Nuclear Instruments & Methods in Physics Research B, 2016, 374, 90-96.	1.4	44
24	The kinetics of defect aggregation and metal colloid formation in ionic solids under irradiation. Radiation Effects and Defects in Solids, 2001, 155, 113-125.	1.2	43
25	Afterglow, TL and OSL properties of Mn2+-doped ZnGa2O4 phosphor. Scientific Reports, 2019, 9, 9544.	3.3	43
26	Shallow and deep trap levels in X-ray irradiated Î²-Ga2O3: Mg. Nuclear Instruments & Methods in Physics Research B, 2019, 441, 12-17.	1.4	43
27	Photoconversion ofF-type centers in thermochemically reduced MgO single crystals. Physical Review B, 1999, 59, 4786-4790.	3.2	42
28	Tracks induced in TeO2 by heavy ions at low velocities. Nuclear Instruments & Methods in Physics Research B, 2000, 166-167, 949-953.	1.4	42
29	Stabilization of primary mobile radiation defects in MgF2 crystals. Nuclear Instruments & Methods in Physics Research B, 2016, 374, 24-28.	1.4	42
30	Effect of Poly(Titanium Oxide) on the Viscoelastic and Thermophysical Properties of Interpenetrating Polymer Networks. Crystals, 2021, 11, 794.	2.2	42
31	Extractionâ€“Pyrolytic Method for TiO2 Polymorphs Production. Crystals, 2021, 11, 431.	2.2	41
32	Semi-empirical simulations of the electron centers in MgO crystal. Computational Materials Science, 1996, 5, 298-306.	3.0	40
33	Quantum chemical calculations of the electron center diffusion in MgO crystals. Physica Status Solidi (B): Basic Research, 1996, 195, 61-66.	1.5	40
34	Photoconversion and dynamic hole recycling process in anion vacancies in neutron-irradiated MgO crystals. Physical Review B, 1999, 60, 3787-3791.	3.2	40
35	Vacancy Defects in Ga2O3: First-Principles Calculations of Electronic Structure. Materials, 2021, 14, 7384.	2.9	40
36	Dynamics of F-center annihilation in thermochemically reduced MgO single crystals. Solid State Communications, 2001, 118, 163-167.	1.9	39

#	Article	IF	Citations
37	Luminescence of nano- and macrosized LaPO4:Ce,Tb excited by synchrotron radiation. Optical Materials, 2011, 33, 1102-1105.	3.6	38
38	Radiation creation of cation defects in alkali halide crystals: Review and today's concept (Review) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7	0.6	38
39	Kinetics of nanocavity formation based onF-center aggregation in thermochemically reduced MgO single crystals. Physical Review B, 2001, 64, .	3.2	37
40	Structural and electronic properties of single-walled AlN nanotubes of different chiralities and sizes. Journal of Physics Condensed Matter, 2006, 18, S2045-S2054.	1.8	37
41	Cathodoluminescence characterization of polystyrene-BaZrO3 hybrid composites. Low Temperature Physics, 2016, 42, 597-600.	0.6	37
42	Photoconversion of F+ centers in neutron-irradiated MgO. Nuclear Instruments & Methods in Physics Research B, 2000, 166-167, 220-224.	1.4	36
43	The Temperature Dependence of Scintillation Parameters in PbWO4 Crystals. Physica Status Solidi (B): Basic Research, 1997, 203, 585-589.	1.5	35
44	Silicon carbide nanowires: synthesis and cathodoluminescence. Physica Status Solidi (B): Basic Research, 2009, 246, 2806-2808.	1.5	35
45	Luminescence and ultraviolet excitation spectroscopy of SrI2 and SrI2:Eu2+. Radiation Measurements, 2013, 56, 13-17.	1.4	35
46	Modification of Polymer-Magnetic Nanoparticles by Luminescent and Conducting Substances. Molecular Crystals and Liquid Crystals, 2014, 590, 35-42.	0.9	35
47	Luminescence, vibrational and XANES studies of AlN nanomaterials. Radiation Measurements, 2007, 42, 708-711.	1.4	34
48	A few common misconceptions in the interpretation of experimental spectroscopic data. Optical Materials, 2022, 127, 112276.	3.6	34
49	F centre production in CsI and Cslâ€“Tl crystals under Kr ion irradiation at 15 K. Nuclear Instruments & Methods in Physics Research B, 2000, 166-167, 545-549.	1.4	33
50	Positron Annihilation Lifetime Spectroscopy Insight on Free Volume Conversion of Nanostructured MgAl2O4 Ceramics. Nanomaterials, 2021, 11, 3373.	4.1	33
51	Charge distribution and optical properties of and F centres in crystals. Journal of Physics Condensed Matter, 1997, 9, L315-L321.	1.8	32
52	Photo- and thermo-stimulated luminescence of Cslâ€”Tl crystal after UV light irradiation at 80 K. Radiation Effects and Defects in Solids, 1998, 143, 345-355.	1.2	32
53	Impact of Gadolinium on the Structure and Magnetic Properties of Nanocrystalline Powders of Iron Oxides Produced by the Extraction-Pyrolytic Method. Materials, 2020, 13, 4147.	2.9	32
54	Study of phase composition, photocatalytic activity, and photoluminescence of TiO2 with Eu additive produced by the extraction-pyrolytic method. Journal of Materials Research and Technology, 2021, 13, 2350-2360.	5.8	32

#	Article	IF	Citations
55	Tendencies in ABO3 Perovskite and SrF2, BaF2 and CaF2 Bulk and Surface F-Center Ab Initio Computations at High Symmetry Cubic Structure. Symmetry, 2021, 13, 1920.	2.2	30
56	Quantum chemical simulations of the optical properties and diffusion of electron centres in mgo crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 37, 212-214.	3.5	29
57	Influence of F centres on structural and electronic properties of AlN single-walled nanotubes. Journal of Physics Condensed Matter, 2007, 19, 395021.	1.8	29
58	Analysis of self-trapped hole mobility in alkali halides and metal halides. Solid State Ionics, 2017, 302, 3-6.	2.7	29
59	Correlated annealing of radiation defects in alkali halide crystals. Journal of Physics Condensed Matter, 1992, 4, 5901-5910.	1.8	27
60	Theoretical analysis of the kinetics of low-temperature defect recombination in alkali halide crystals. Low Temperature Physics, 2016, 42, 588-593.	0.6	27
61	A novel model for F+to F photoconversion in corundum crystals. Journal of Physics Condensed Matter, 1994, 6, L569-L573.	1.8	26
62	Ab initio calculations of structural, electronic and vibrational properties of BaTiO3 and SrTiO3 perovskite crystals with oxygen vacancies. Low Temperature Physics, 2020, 46, 1185-1195.	0.6	26
63	Radiation-induced defects in sapphire single crystals irradiated by a pulsed ion beam. Nuclear Instruments & Methods in Physics Research B, 2020, 466, 1-7.	1.4	24
64	Cadmium clusters in CdI₂layered crystals: the influence on the optical properties. Journal of Physics Condensed Matter, 2007, 19, 395015.	1.8	23
65	Positron trapping defects in free-volume investigation of Geâ€“Gaâ€“Sâ€“CsCl glasses. Radiation Measurements, 2016, 90, 117-121.	1.4	23
66	Ab initio calculations of CaZrO3 (011) surfaces: systematic trends in polar (011) surface calculations of ABO3 perovskites. Journal of Materials Science, 2020, 55, 203-217.	3.7	23
67	Time-resolved luminescence of YAG:Ce and YAGG:Ce ceramics prepared by electron beam assisted synthesis. Nuclear Instruments & Methods in Physics Research B, 2020, 479, 222-228.	1.4	23
68	Ab Initio Computations of O and AO as well as ReO2, WO2 and BO2-Terminated ReO3, WO3, BaTiO3, SrTiO3 and BaZrO3 (001) Surfaces. Symmetry, 2022, 14, 1050.	2.2	23
69	Fast electronâ€“hole plasma luminescence from track-cores in heavy-ion irradiated wide-band-gap crystals. Nuclear Instruments & Methods in Physics Research B, 2002, 191, 48-53.	1.4	22
70	Time-resolved cathodoluminescence spectroscopy of YAG and YAG:Ce3+ phosphors. Optical Materials, 2019, 96, 109289.	3.6	22
71	Using a deformed crystal for bending a sub-GeV positron beam. Nuclear Instruments & Methods in Physics Research B, 2006, 252, 3-6.	1.4	21
72	Synchrotron radiation studies on luminescence of Eu2+-doped LaCl3 microcrystals embedded in a NaCl matrix. Nuclear Instruments & Methods in Physics Research B, 2012, 274, 78-82.	1.4	21

#	Article	IF	Citations
73	Kinetics of the electronic center annealing in Al2O3 crystals. Journal of Nuclear Materials, 2018, 502, 295-300.	2.7	21
74	Optical absorption and Raman studies of neutron-irradiated Gd3Ga5O12 single crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 306-312.	1.4	21
75	Luminescence and vacuum ultraviolet excitation spectroscopy of samarium doped SrB4O7. Journal of Alloys and Compounds, 2020, 826, 154205.	5.5	21
76	Thermal annealing and transformation of dimer F centers in neutron-irradiated Al2O3 single crystals. Journal of Nuclear Materials, 2021, 543, 152600.	2.7	21
77	Time-resolved luminescence of CsIî—¸Tl crystals excited by pulsed electron beam. Nuclear Instruments & Methods in Physics Research B, 1997, 122, 602-605.	1.4	20
78	Luminescence properties of KNbO3 crystals. Journal of Luminescence, 1997, 72-74, 672-674.	3.1	20
79	A Contradiction between Pulsed and Steady-State Studies in the Recombination Kinetics of Close Frenkel Defects in KBr and KCl Crystals. Journal of the Physical Society of Japan, 1994, 63, 2602-2611.	1.6	19
80	Accumulation of radiation defects and modification of micromechanical properties under MgO crystal irradiation with swift 132Xe ions. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 50-54.	1.4	19
81	CsPbCl3 nanocrystals dispersed in the Rb0,8Cs0,2Cl matrix studied by far-infrared spectroscopy. Solid State Communications, 2009, 149, 593-597.	1.9	18
82	Effects of Mn doping on dielectric properties of ferroelectric relaxor PLZT ceramics. Current Applied Physics, 2017, 17, 169-173.	2.4	18
83	Atomic, electronic and magnetic structure of an oxygen interstitial in neutron-irradiated Al2O3 single crystals. Scientific Reports, 2020, 10, 15852.	3.3	18
84	Synthesis and luminescent properties of Mn-doped alpha-tricalcium phosphate. Ceramics International, 2021, 47, 5335-5340.	4.8	18
85	Ab initioand semiempirical calculations ofHâ^'centers in MgO crystals. Physical Review B, 1999, 59, 1885-1890.	3.2	17
86	Electronic excitations in ZnWO4 and ZnxNi1â^'x WO4 (x = 0.1 â^' 0.9) using VUV synchrotron radiation. Open Physics, 2011, 9, .	1.7	17
87	Luminescence characteristics of magnesium aluminate spinel crystals of different stoichiometry. IOP Conference Series: Materials Science and Engineering, 0, 503, 012021.	0.6	17
88	Thermal annealing of radiation damage produced by swift 132Xe ions in MgO single crystals. Nuclear Instruments & Methods in Physics Research B, 2020, 462, 163-168.	1.4	17
89	Characterization of LiF and CaF2 surfaces using MIES and UPS (HeI). Journal of Electron Spectroscopy and Related Phenomena, 1998, 88-91, 725-732.	1.7	16
90	Optical, infrared and electron-microscopy studies of metallic clusters in layered crystals. Radiation Measurements, 2007, 42, 851-854.	1.4	16

#	Article	IF	Citations
91	Kinetics of dimer F type center annealing in MgF2 crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 79-82.	1.4	16
92	CdTe Nanocrystal Synthesis in SiO₂/Si Ionâ€Track Template: The Study of Electronic and Structural Properties. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, .	1.8	16
93	First principles hybrid Hartree-Fock-DFT calculations of bulk and (001) surface F centers in oxide perovskites and alkaline-earth fluorides. Low Temperature Physics, 2020, 46, 1206-1212.	0.6	16
94	Optical, Structural, and Mechanical Properties of Gd₃Ga₅O₁₂ Single Crystals Irradiated with ⁸⁴Kr⁺ Ions. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	16
95	Low temperature X-ray luminescence of KNbO3 crystals. Nuclear Instruments & Methods in Physics Research B, 2000, 166-167, 305-308.	1.4	15
96	UV-VUV synchrotron radiation spectroscopy of NiWO4. Low Temperature Physics, 2016, 42, 543-546.	0.6	15
97	Hybrid density functional calculations of hyperfine coupling tensor for hole-type defects in MgAl2O4. Nuclear Instruments & Methods in Physics Research B, 2020, 464, 60-64.	1.4	15
98	Optical Destruction and Restoration of {F, In²⁺} Pairs in KBrï£¿In Crystals. Physica Status Solidi (B): Basic Research, 1992, 170, 395-401.	1.5	14
99	Stimulation Energy of the Xâ€Ray Storage Material KBr: In. Physica Status Solidi (B): Basic Research, 1993, 180, K31.	1.5	14
100	Calculations of Diffusion Energies for Defects in MgO Crystals. Defect and Diffusion Forum, 1997, 143-147, 1231-1236.	0.4	14
101	Microstructure of Ag₂BI₄(B = Ag, Cd) superionics studied by SEM, impedance spectroscopy and fractal dimension analysis. Journal of Physics Condensed Matter, 2008, 20, 474211.	1.8	14
102	Excitation of different chromium centres by synchrotron radiation in MgO:Cr single crystals. Physica B: Condensed Matter, 2015, 477, 133-136.	2.7	14
103	Optical and Vibrational Spectra of CsCl-Enriched GeS2-Ga2S3 Glasses. Nanoscale Research Letters, 2016, 11, 132.	5.7	14
104	Ab initio calculations for the polar (0â€¯0â€¯1) surfaces of YAlO3. Nuclear Instruments & Methods in Physics Research B, 2018, 434, 1-5.	1.4	14
105	Spectroscopic studies of Cr3+ ions in natural single crystal of magnesium aluminate spinel MgAl2O4. Optical Materials, 2021, 121, 111496.	3.6	14
106	Evidence for the formation of two types of oxygen interstitials in neutron-irradiated Î±-Al2O3 single crystals. Scientific Reports, 2021, 11, 20909.	3.3	14
107	Evolution of Free Volumes in Polycrystalline BaGa2O4 Ceramics Doped with Eu3+ Ions. Crystals, 2021, 11, 1515.	2.2	14
108	Crystalline phase detection in glass ceramics by EPR spectroscopy. Low Temperature Physics, 2018, 44, 341-345.	0.6	13

#	Article	IF	Citations
109	Computer Modelling of Radiation Damage in Cation Sublattice of Corundum. Physica Status Solidi (B): Basic Research, 1998, 207, 69-73.	1.5	12
110	Far IR spectra of Ag2CdI4 at temperature range 10â€“420ÂK: complementary experimental and first-principle theoretical study. European Physical Journal B, 2009, 70, 443-447.	1.5	12
111	FTIR Studies of Silicon Carbide 1D-Nanostructures. Materials Science Forum, 2015, 821-823, 261-264.	0.3	12
112	Electronic structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>Mn</mml:mtext></mml:mrow><mml:mrow><mml:mtext>Al</mml:mtext></mml:mrow> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>Mn</mml:mtext></mml:mrow><mml:mrow><mml:mtext>. Optical Materials, 2018, 85, 162-166.	3.6	12
113	Ion track template technology for fabrication of CdTe and CdO nanocrystals. Nuclear Instruments & Methods in Physics Research B, 2020, 481, 30-34.	1.4	12
114	Ab-Initio Calculations of Oxygen Vacancy in Ga₂O₃ Crystals. Latvian Journal of Physics and Technical Sciences, 2021, 58, 3-10.	0.6	12
115	Comparative Ab initio Calculations for ABO3 Perovskite (001), (011) and (111) as well as YAlO3 (001) Surfaces and F Centers. Journal of Nano- and Electronic Physics, 2019, 11, 01001-1-01001-6.	0.5	12
116	Determination of the oscillator strength of F centres in KBr-In by photostimulated luminescence. Journal of Physics Condensed Matter, 1991, 3, 1265-1270.	1.8	11
117	ESD of nonthermal halogen atoms from In-doped (001) KBr. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 228-231.	1.4	11
118	Novel ultra-fast luminescence from incipient ion tracks of insulator crystals: electronâ€“hole plasma formation in the track core. Radiation Measurements, 2001, 34, 99-103.	1.4	11
119	BiI3 nanoclusters in melt-grown CdI2 crystals studied by optical absorption spectroscopy. Physica B: Condensed Matter, 2013, 413, 12-14.	2.7	11
120	Systematic trends in YAlO₃, SrTiO₃, BaTiO₃, BaZrO₃ (001) and (111) surface ab initio calculations. International Journal of Modern Physics B, 2019, 33, 1950390.	2.0	11
121	Low temperature structural transformations on the (001) surface of SrTiO3 single crystals. Low Temperature Physics, 2020, 46, 740-750.	0.6	11
122	Structure properties of CdTe nanocrystals created in SiO2/Si ion track templates. Surface and Coatings Technology, 2020, 401, 126269.	4.8	11
123	About complexity of the 2.16-eV absorption band in MgO crystals irradiated with swift Xe ions. Radiation Measurements, 2020, 135, 106379.	1.4	11
124	Ion track template technique for fabrication of ZnSe2O5 nanocrystals. Nuclear Instruments & Methods in Physics Research B, 2020, 476, 10-13.	1.4	11
125	Ion-Track Template Synthesis and Characterization of ZnSeO3 Nanocrystals. Crystals, 2022, 12, 817.	2.2	11
126	THE KINETICS OF RADIATION-INDUCED POINT DEFECT AGGREGATION AND METALLIC COLLOID FORMATION IN IONIC SOLIDS. , 2007, , 153-192.		10

#	Article	IF	Citations
127	Photostimulated luminescence properties of neutron image plates. Optical Materials, 2016, 59, 83-86.	3.6	10
128	Semi-empirical simulations of F-center diffusion in KCl crystals. Journal of Physics and Chemistry of Solids, 1997, 58, 103-106.	4.0	9
129	The Dynamics of the Hydride Ion in MgO Single Crystals. Defect and Diffusion Forum, 1999, 169-170, 1-0.	0.4	9
130	Storage properties of Ce3+ doped haloborate phosphors enriched with 10B isotope. Journal of Applied Physics, 2004, 95, 7898-7902.	2.5	9
131	Long-term evolution of luminescent properties in CdI2 crystals. Low Temperature Physics, 2016, 42, 594-596.	0.6	9
132	Optical absorption and luminescence studies of fast neutron-irradiated complex oxides for jewellery applications. Low Temperature Physics, 2016, 42, 584-587.	0.6	9
133	The first principles calculations of CO2 adsorption on (101Â¯0) ZnO surface. AIP Conference Proceedings, 2019, , .	0.4	9
134	Comparative quantum chemistry study of the F-center in lanthanum trifluoride. Nuclear Instruments & Methods in Physics Research B, 2020, 474, 57-62.	1.4	9
135	Low-temperature studies of Cr3+ ions in natural and neutron-irradiated g-Al spinel. Low Temperature Physics, 2020, 46, 1154-1159.	0.6	9
136	Formation of porous Ga₂O₃/GaAs layers for electronic devices. , 2022, , .		9
137	The Kinetics of Correlated Annealing of F, I Centres in KBr Crystals. Physica Status Solidi (B): Basic Research, 1993, 175, K39.	1.5	8
138	Photostimulated emission of KBrâ€”In previously exposed to UV- or X-radiation. Nuclear Instruments & Methods in Physics Research B, 1995, 101, 252-254.	1.4	8
139	Charge transport in electrically responsive polymer layers. Journal of Physics: Conference Series, 2007, 93, 012042.	0.4	8
140	Small radius electron and hole polarons in PbX₂ (X = F, Cl, Br) crystals: a computational study. Journal of Materials Chemistry C, 2021, 9, 16536-16544.	5.5	8
141	Computer Simulations of Iâ€Center Annealing in KCl and KBr Crystals. Theoretical Interpretation of Thermostimulated Experiments. Physica Status Solidi (B): Basic Research, 1995, 190, 353-362.	1.5	7
142	Neutron characterization of aluminium nitride nanotubes. Journal of Neutron Research, 2006, 14, 287-291.	1.1	7
143	Nanoporous characterization of modified humidity-sensitive MgO-Al2O3 ceramics by positron annihilation lifetime spectroscopy method. IOP Conference Series: Materials Science and Engineering, 2019, 503, 012019.	0.6	7
144	Structural and electronic properties of Î²-NaYF4 and Î²-NaYF4:Ce3+. Optical Materials, 2020, 99, 109529.	3.6	7

#	Article	IF	Citations
145	Optical production and destruction of V2 centres in KBr-In and KBr-T1 crystals. Nuclear Instruments & Methods in Physics Research B, 1992, 65, 521-524.	1.4	6
146	Thermally induced fading of Mn-doped YAP nanoceramics. Journal of Physics: Conference Series, 2018, 987, 012009.	0.4	6
147	Raman spectra of vacancy-containing LiF: Predictions from first principles. Nuclear Instruments & Methods in Physics Research B, 2020, 480, 33-37.	1.4	6
148	EPR and optical spectroscopy of neutron-irradiated Gd3Ga5O12 single crystals. Nuclear Instruments & Methods in Physics Research B, 2020, 480, 22-26.	1.4	6
149	Fabrication and characterization of magnetic FePt nanoparticles prepared by extractionâ€“pyrolysis method. Chemija, 2018, 29, .	0.2	6
150	Determination of the Effective Absorption Crossâ€Section of Fâ€Centres in KBrâ€”In by Photostimulated Luminescence. Physica Status Solidi (B): Basic Research, 1990, 161, 85-89.	1.5	5
151	Diffusion-controlled annihilation and aggregation of F-centers in thermochemically reduced MgO crystals. Nuclear Instruments & Methods in Physics Research B, 2002, 191, 208-211.	1.4	5
152	Atomic structure of manganese-doped yttrium orthoaluminate. Nuclear Instruments & Methods in Physics Research B, 2018, 434, 6-8.	1.4	5
153	Optical investigation of the OH^{â^'} groups in the LiNbO₃ doped by copper. Integrated Ferroelectrics, 2019, 196, 32-38.	0.7	5
154	Time-resolved pulsed OSL of ceramic YAP:Mn phosphors. Integrated Ferroelectrics, 2019, 196, 24-31.	0.7	5
155	Thermal annealing of radiation defects in MgF2 single crystals induced by neutrons at low temperatures. Nuclear Instruments & Methods in Physics Research B, 2020, 480, 16-21.	1.4	5
156	First principles calculations of the vibrational properties of single and dimer F-type centers in corundum crystals. Journal of Chemical Physics, 2020, 153, 134107.	3.0	5
157	Ab initio calculations of pure and Co+2-doped MgF2 crystals. Nuclear Instruments & Methods in Physics Research B, 2020, 470, 10-14.	1.4	5
158	The Two Types of Oxygen Interstitials in Neutronâ€irradiated Corundum Single Crystals: Joint Experimental and Theoretical Study. Physica Status Solidi (B): Basic Research, 0, , 2100317.	1.5	5
159	Increase in the density of Sr2Fe1.5Mo0.5O6-Î´ membranes through an excess of iron oxide: The effect of iron oxide on transport and kinetic parameters. Surfaces and Interfaces, 2022, 29, 101784.	3.0	5
160	Freeâ€volume extended defects in structurallyâ€modified Geâ€Saâ€S/Se glasses. Physica Status Solidi (B): Basic Research, 0, , .	1.5	5
161	Manifesttion of Hâ€Centre Aggregation in the Excitonâ€Induced Thermostimulated Luminescence of KBr: In and KBr: Tl Crystals. Physica Status Solidi (B): Basic Research, 1992, 169, K47.	1.5	4
162	A simple analysis of the HA centre destruction temperatures for doped alkali halides. Solid State Communications, 1998, 106, 289-291.	1.9	4

#	Article	IF	Citations
163	Multicolor photon emission from organic thin films on different substrates. Radiation Measurements, 2016, 90, 38-42.	1.4	4
164	ÐœÐ¾ÐÐµÐ»Ð¸Ñ€Ð¾Ð²Ð°Ð½Ð¸Ðµ Ð¸ Ð°Ð½Ð°Ð»Ð¸Ð· ÐÐ°Ð½Ð½Ñ‹Ñ… Ñ€Ð¸Ñ…Ñ€Ð¾Ð¼Ñ€Ð¾Ð¼Ð¾Ð² Ð¾Ð±Ð»	1.6	4
165	Effect of polymer matrix on the structure and luminescence properties of barium zirconate nanocrystals. Chemistry of Metals and Alloys, 2013, 6, 177-182.	0.1	4
166	Comparative ab initio calculations of SrTiO3, BaTiO3, PbTiO3, and SrZrO3 (001) and (111) surfaces as well as oxygen vacancies. Low Temperature Physics, 2022, 48, 80-88.	0.6	4
167	Luminescence and Vacuum Ultraviolet Excitation Spectroscopy of Nanophosphors under Synchrotron Irradiation. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	4
168	Extended Positronâ€“Positronium Trapping Defects in the MgAl ₂ O ₄ Spinel Ceramics. Physica Status Solidi (B): Basic Research, 0, , 2100473.	1.5	4
169	Kinetics of correlated annealing of radiation defects in alkali halide crystals. Nuclear Instruments & Methods in Physics Research B, 1992, 65, 512-515.	1.4	3
170	Copper and iron precipitates in thermochemically reduced yttria-stabilized zirconia crystals. Philosophical Magazine Letters, 2001, 81, 555-561.	1.2	3
171	Steering a multi-MeV positron beam with a curved crystal. JETP Letters, 2006, 83, 95-97.	1.4	3
172	First-principles simulations of the electronic density of states for superionic Ag2CdI4 crystals. Solid State Ionics, 2011, 188, 31-35.	2.7	3
173	Structural investigation of crystallized Ge-Ga-Se chalcogenide glasses. IOP Conference Series: Materials Science and Engineering, 2019, 503, 012020.	0.6	3
174	Ab initio calculations of the electronic structure for Mn2+-doped YAlO3 crystals. Low Temperature Physics, 2020, 46, 1160-1164.	0.6	3
175	Combustion Formation of Novel Nanomaterials: Synthesis and Cathodoluminescence of Silicon Carbide Nanowires. Acta Physica Polonica A, 2009, 116, S-142-S-145.	0.5	3
176	Intrinsic nanostructures on the (001) surface of strontium titanate at low temperatures. Low Temperature Physics, 2020, 46, 1170-1177.	0.6	3
177	Extended Positronâ€Trapping Defects in the Eu³⁺â€Doped BaGa₂O₄ Ceramics Studied by Positron Annihilation Lifetime Method. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	3
178	The Observation of a New Dâ€Absorption Band in KBrâ€“In Crystals. Physica Status Solidi (B): Basic Research, 1993, 176, 255-259.	1.5	2
179	Excitation spectra of activator luminescenceâ€”the observation of a new D absorption band in KBr:In crystals. Radiation Effects and Defects in Solids, 1994, 128, 27-33.	1.2	2
180	Theoretical simulations of I-center annealing in KCl crystals. Radiation Effects and Defects in Solids, 1995, 134, 83-86.	1.2	2

#	Article	IF	Citations
181	Time-resolved luminescence and induced absorption in PbWO4. Journal of Luminescence, 1997, 72-74, 693-695.	3.1	2
182	First Principles Calculations of Atomic and Electronic Structure of TiAl3+- and TiAl2+-Doped YAlO3. Materials, 2021, 14, 5589.	2.9	2
183	Luminescence Properties and Decay Kinetics of Mn²⁺ and Eu³⁺ Co-Dopant Ions In MgGa₂O₄ Ceramics. Latvian Journal of Physics and Technical Sciences, 2018, 55, 43-51.	0.6	2
184	Computer Simulations of the Band Structure and Density of States of the Linear Chains of NaCl Ions. Latvian Journal of Physics and Technical Sciences, 2019, 56, 49-56.	0.6	2
185	Nanostructure Formation on ZnSe Crystal Surface by Electrochemical Etching. , 2021, , .		2
186	Photostimulated luminescence of KBr-in crystals. Radiation Effects and Defects in Solids, 1995, 135, 125-128.	1.2	1
187	Photostimulated processes in the CsI-Tl crystal after UV irradiation. , 1997, 2967, 111.		1
188	Theoretical simulations of regular and defective aluminium nitride nanotubes. Journal of Physics: Conference Series, 2007, 93, 012005.	0.4	1
189	Texturing of Indium Phosphide for Improving the Characteristics of Space Solar Cells. , 2021, , .		1
190	Investigation of Critical Points of Pore Formation Voltage on the Surface of Semiconductors of A₃B₅ Group. , 2021, , .		1
191	Quantum chemical simulations of the optical properties and diffusion of electron centres in MgO crystals. , 1996, , 212-214.		1
192	Computer Simulation of the Electric Transport Properties of the FeSe Monolayer. Latvian Journal of Physics and Technical Sciences, 2020, 57, 3-11.	0.6	1
193	Temperature dependence of luminescence of LiF crystals doped with different metal oxides. Low Temperature Physics, 2020, 46, 1235-1240.	0.6	1
194	Efficiency of H center stabilization in alkali halide crystals at low-temperature uniaxial deformation. Low Temperature Physics, 2020, 46, 1165-1169.	0.6	1
195	Multimode Representation of the Magnetic Field for the Analysis of the Nonlinear Behavior of Solar Activity as a Driver of Space Weather. Mathematics, 2022, 10, 1655.	2.2	1
196	Detection of hidden oxygen interstitials in neutron-irradiated corundum crystals. Optical Materials: X, 2022, , 100151.	0.8	1
197	Electronic Structure, Optical, and Elastic Properties of AgGaS ₂ Crystal: Theoretical Study. Advanced Theory and Simulations, 0, , 2200247.	2.8	1
198	The kinetics of diffusion-controlled annealing of Frenkel defects in alkali halide crystals. Nuclear Instruments & Methods in Physics Research B, 1994, 91, 83-86.	1.4	0

#	Article	IF	Citations
199	Performance data of optically stimulable irradiated materials (doped alkali halides) oriented for imaging and dosimetry purposes. , 1997, , .		0
200	Efficiency and dynamic range of the photostimulable x-ray storage material KBr:In. , 1997, 2967, 74.		0
201	Possible mechanism of energy storage in optically stimulable materials: doped alkali halides. , 1997, , .		0
202	Polar nanoregions in Pb(Mg1/3Nb2/3)O3 (PMN): insights from a supercell approach. Open Physics, 2011, 9, 438-445.	1.7	0
203	Numerical Evidences of Polarization Switching in PMN Type Relaxor Ferroelectrics. Integrated Ferroelectrics, 2011, 123, 32-39.	0.7	0
204	Study of polar and electrical properties of Hydroxyapatite: Modeling and data analysis. , 2013, , .		0
205	Low-temperature radiation effects in wide gap materials. Low Temperature Physics, 2016, 42, 537-538.	0.6	0
206	Peculiarities of the diffusion-controlled radiation defect accumulation kinetics under high fluencies. Nuclear Instruments & Methods in Physics Research B, 2020, 480, 45-48.	1.4	0
207	The peculiarities of the radiation damage accumulation kinetics in the case of defect complex formation. Nuclear Instruments & Methods in Physics Research B, 2020, 481, 1-5.	1.4	0
208	Ab initio Calculations of Bulk and (001) Surface F-centers in ABO3 Perovskites. , 2021, , .		0
209	Fast Luminescence Studies of NaLaF4: Pr3+ Glass Ceramics. , 2021, , .		0
210	Morphology Study of the Porosity of the GaP Surface Layer Formed on the Surface of a Single Crystal by Electrochemical Etching. , 2021, , .		0
211	Low-temperature luminescence of CdI2 under synchrotron radiation. Low Temperature Physics, 2020, 46, 1213-1216.	0.6	0
212	Low-temperature radiation effects and surface phenomena in the wide-bandgap materials. Low Temperature Physics, 2020, 46, 1147-1148.	0.6	0
213	Oxygen Vacancy Formation and Migration within the Antiphase Boundaries in Lanthanum Scandate-Based Oxides: Computational Study. Materials, 2022, 15, 2695.	2.9	0
214	Influence of â€œProductiveâ€•Impurities (Cd, Na, O) on the Properties of the Cu₂ZnSnS₄ Absorber of Model Solar Cells. Latvian Journal of Physics and Technical Sciences, 2021, 58, 13-23.	0.6	0
215	The Mechanism of the Formation of Grain Boundaries Nanopores in Polycrystalline Materials. , 2022, , .		0