

Bogdan I Lazoryak

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Whitlockite solid solutions $\text{Ca}_9\text{M}_x\text{R}(\text{PO}_4)_7$ ($x = 1, 1.5$; $\text{M} = \text{Mg}, \text{Zn}, \text{Cd}$; $\text{R} = \text{Ln}, \text{Y}$) with antiferroelectric properties. Russian Journal of Inorganic Chemistry, 2007, 52, 308-314.	0.3	67
2	Crystal structures of double calcium and alkali metal phosphates $\text{Ca}_{10}\text{M}(\text{PO}_4)_7$ ($\text{M} = \text{Li}, \text{Na}, \text{K}$). Crystallography Reports, 2000, 45, 13-20.	0.1	62
3	Effect of silane/nano-silica on the mechanical properties of basalt fiber reinforced epoxy composites. Composite Interfaces, 2017, 24, 13-34.	1.3	57
4	Ferroelectric and Ionic-Conductive Properties of Nonlinear-Optical Vanadate, $\text{Ca}_9\text{Bi}(\text{VO}_4)_7$. Chemistry of Materials, 2003, 15, 3003-3010.	3.2	56
5	Ferroelectric phase transition in the whitlockite-type $\text{Ca}_9\text{Fe}(\text{PO}_4)_7$; crystal structure of the paraelectric phase at 923 ÅK. Solid State Sciences, 2004, 6, 185-195.	1.5	49
6	Polar and Centrosymmetric Phases in Solid Solutions $\text{Ca}_{3-x}\text{Sr}_x(\text{PO}_4)_2$ ($0 \leq x \leq 1/2$). Chemistry of Materials, 2002, 14, 3197-3205.	3.2	47
7	$\text{Ca}_8\text{MgSm}_{1-x}\text{Eu}_x(\text{PO}_4)_7$, promising red phosphors for WLED application. Journal of Alloys and Compounds, 2019, 776, 897-903.	2.8	45
8	Influence of alumina on the properties of continuous basalt fibers. Russian Journal of Inorganic Chemistry, 2009, 54, 191-196.	0.3	42
9	Antiferroelectric properties and site occupations of R^{3+} cations in $\text{Ca}_8\text{MgR}(\text{PO}_4)_7$ luminescent host materials. Journal of Alloys and Compounds, 2017, 699, 928-937.	2.8	40
10	A novel red $\text{Ca}_8.5\text{Pb}_0.5\text{Eu}(\text{PO}_4)_7$ phosphor for light emitting diodes application. Journal of Alloys and Compounds, 2015, 647, 965-972.	2.8	38
11	Effect of ZrO_2 on the alkali resistance and mechanical properties of basalt fibers. Inorganic Materials, 2012, 48, 751-756.	0.2	35
12	Positional and Orientational Disorder in a Solid Solution of $\text{Sr}_{9-x}\text{Ni}_{1.5-x}(\text{PO}_4)_7$ ($x = 0.3$). Chemistry of Materials, 2002, 14, 4464-4472.	3.2	33
13	Antibacterial and cell-friendly copper-substituted tricalcium phosphate ceramics for biomedical implant applications. Materials Science and Engineering C, 2021, 129, 112410.	3.8	33
14	New Solid Electrolyte $\text{Na}_9\text{Al}(\text{MoO}_4)_6$: Structure and Na^+ Ion Conductivity. Chemistry of Materials, 2017, 29, 8901-8913.	3.2	29
15	Crystal Structure and Luminescent Properties of $\text{R}_2\text{Eu}(\text{MoO}_4)_3$ ($\text{R} = \text{Gd}, \text{Sm}$) Red Phosphors. Chemistry of Materials, 2014, 26, 7124-7136.	3.2	28
16	Crystal structure of double vanadates $\text{Ca}_9\text{R}(\text{VO}_4)_7$. II. $\text{R} = \text{Tb}, \text{Dy}, \text{Ho}, \text{and Y}$. Crystallography Reports, 2000, 45, 389-394.	0.1	27
17	Effect of iron oxides on the fabrication and properties of continuous glass fibers. Inorganic Materials, 2008, 44, 1026-1030.	0.2	27
18	Luminescence, structure and antiferroelectric-type phase transition in $\text{Ca}_8\text{ZnEu}(\text{PO}_4)_7$. Materials Research Bulletin, 2018, 104, 20-26.	2.7	25

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19	Ferroelectric-Ionic Conductor Phase Transitions in Optical Nonlinear Ca ₉ R(VO ₄) ₇ Vanadates. Doklady Physical Chemistry, 2002, 384, 144-148.	0.2	24
20	Luminescence of Eu ³⁺ as a probe for the determination of the local site symmetry in $\text{Ca}_3(\text{PO}_4)_2$ -related structures. CrystEngComm, 2019, 21, 5235-5242.	1.3	24
21	Antiferroelectric phase transition in Sr ₉ In(PO ₄) ₇ . Physical Review B, 2004, 70, .	1.1	23
22	Complex Structural Behavior of BiMn ₇ O ₁₂ Quadruple Perovskite. Inorganic Chemistry, 2017, 56, 12272-12281.	1.9	23
23	SrFe ₂ (PO ₄) ₂ : Ab Initio Structure Determination with X-ray Powder Diffraction Data and Unusual Magnetic Properties. Chemistry of Materials, 2004, 16, 4311-4318.	3.2	20
24	The influence of second coordination-sphere interactions on the luminescent properties of $\text{Ca}_3(\text{PO}_4)_2$ -related compounds. Journal of Alloys and Compounds, 2020, 815, 152352.	2.8	20
25	Reduction and Re-oxidation Behavior of Calcium Iron Phosphate, Ca ₉ Fe(PO ₄) ₇ . Chemistry of Materials, 2003, 15, 625-631.	3.2	19
26	New alluaudite-related triple molybdates Na ₂₅ Cs ₈ R ₅ (MoO ₄) ₂₄ (R = Sc, In): synthesis, crystal structures and properties. New Journal of Chemistry, 2017, 41, 5450-5457.	1.4	19
27	New Noncentrosymmetric Vanadates Sr ₉ R(VO ₄) ₇ (R = Tm, Yb, and Lu): Synthesis, Structure Analysis, and Characterization. Chemistry of Materials, 2005, 17, 122-129.	3.2	18
28	Effect of deferrization on continuous basalt fiber properties. Mendeleev Communications, 2015, 25, 386-388.	0.6	18
29	Role of the Eu ³⁺ Distribution on the Properties of $\text{Ca}_3(\text{PO}_4)_2$ Phosphors: Structural, Luminescent, and ¹⁵¹ Eu Mössbauer Spectroscopy Study of Ca ₉ Eu _{1.5} MgEu _{7.5} (PO ₄) ₇ . Inorganic Chemistry, 2021, 60, 3961-3971.	1.9	18
30	Crystal structures of double vanadates, Ca ₉ R(VO ₄) ₇ (R = Nd, Sm, Gd, or Ce). Crystallography Reports, 2000, 45, 728-733.	0.1	17
31	Large second order optical nonlinearity in thermally poled amorphous niobium borophosphate films. Journal of Applied Physics, 2006, 100, 013108.	1.1	17
32	Optical non-linearity tuning in Ca ₈ PbMBi(VO ₄) ₇ whitlockite-type systems. Journal of Alloys and Compounds, 2016, 674, 323-330.	2.8	17
33	Luminescence Property Upgrading via the Structure and Cation Changing in Ag ₂ Eu ₂ (WO ₄) ₃ and Ag ₂ Gd ₂ (WO ₄) ₃ . Chemistry of Materials, 2017, 29, 8811-8823.	3.2	17
34	Ferroelectric crystal Ca ₉ Yb(VO ₄) ₇ in the series of Ca ₉ R(VO ₄) ₇ non-linear optical materials (R = REE, Bi, Y). Journal of Materials Chemistry C, 2017, 5, 2301-2310.	2.7	16
35	Enhanced nonlinear optical activity and Ca ²⁺ -conductivity in $\text{Ca}_2\text{Pb}(\text{VO}_4)_7$ ferroelectrics. Journal of Alloys and Compounds, 2018, 735, 1826-1837.	2.8	16
36	The crystal site engineering and turning of cross-relaxation in green-emitting $\text{Ca}_3(\text{PO}_4)_2$ -related phosphors. Journal of Luminescence, 2020, 223, 117196.	1.5	16

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37	Effects of Ion Exchange on the Mechanical Properties of Basaltic Glass Fibers. <i>International Journal of Applied Glass Science</i> , 2016, 7, 118-127.	1.0	14
38	Tunable luminescence and energy transfer in Eu ³⁺ doped Ca ₈ MTb(PO ₄) ₇ (M = Mg, Zn, Ca) phosphors. <i>Materials Research Bulletin</i> , 2020, 130, 110925.	2.7	13
39	Ca _{10.5} x Pb x (PO ₄) ₇ and Ca _{9.5} x Pb x M(PO ₄) ₇ ferroelectrics with the whitlockite structure. <i>Inorganic Materials</i> , 2013, 49, 807-812.	0.2	12
40	Influence of Synthesis Conditions on Gadolinium-Substituted Tricalcium Phosphate Ceramics and Its Physicochemical, Biological, and Antibacterial Properties. <i>Nanomaterials</i> , 2022, 12, 852.	1.9	12
41	Production of Fibres from Lunar Soil: Feasibility, Applicability and Future Perspectives. <i>Advanced Fiber Materials</i> , 2022, 4, 923-937.	7.9	12
42	Antimicrobial properties of co-doped tricalcium phosphates Ca ₃₋₂ (M ₂) ₂ (PO ₄) ₂ (M = Zn ²⁺ , Cu ²⁺ , Mn ²⁺) <i>Tj ETQq0 0 0 rgBT /Over</i>	2.3	12
43	Structural Changes and Phase Transitions in Whitlockite-Like Phosphates. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2002, 177, 1899-1902.	0.8	11
44	Comment on "Tuning of Photoluminescence and Local Structures of Substituted Cations in Sr ₂ Ca(PO ₄) ₂ " (1) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (<i>x</i>)</sub>Ca</sub> Materials</i> , 2017, 29, 3800-3802.	3.2	11
45	Crystal structure, dielectric, and optical properties of β -calcium orthophosphates heavily doped with ytterbium. <i>Journal of Alloys and Compounds</i> , 2019, 787, 1301-1309.	2.8	11
46	Correlation of Phase Composition, Structure, and Mechanical Properties of Natural Basalt Continuous Fibers. <i>Natural Resources Research</i> , 2021, 30, 1105-1119.	2.2	11
47	Correlation of the chemical composition, structure and mechanical properties of basalt continuous fibers. <i>AIMS Materials Science</i> , 2019, 6, 806-832.	0.7	11
48	Structure and properties of Ca ₉ x Pb x R(PO ₄) ₇ (R = Sc, Cr, Fe, Ga, In) whitlockite-like solid solutions. <i>Inorganic Materials</i> , 2013, 49, 507-512.	0.2	10
49	Luminescent properties of Er ³⁺ in centrosymmetric and acentric phosphates Ca ₈ MEr(PO ₄) ₇ (M = Ca,) <i>Tj ETQq1 1 0.784314 rgBT /Ov</i>	2.7	16
50	Strontium phosphates with β -Ca ₃ (PO ₄) ₂ -type structures: Sr ₉ NiLi(PO ₄) ₇ , Sr _{9.04} Ni _{1.02} Na _{0.88} (PO ₄) ₇ , and Sr _{9.08} Ni _{1.04} K _{0.76} (PO ₄) ₇ . <i>Journal of Materials Chemistry</i> , 2002, 12, 3803-3808.	6.7	9
51	Pure, lithium- or magnesium-doped ferroelectric single crystals of Ca ₉ Y(VO ₄) ₇ : cation arrangements and phase transitions. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2018, 233, 453-462.	0.4	9
52	Isovalent and aliovalent cation substitutions in the anion sublattice of whitlockite-type ferroelectrics Ca ₉ RE(VO ₄) ₇ with RE = Y and Yb. <i>Journal of Solid State Chemistry</i> , 2019, 279, 120966.	1.4	9
53	Ferroelectricity, ionic conductivity and structural paths for large cation migration in Ca _{10.5} x Pb x (VO ₄) ₇ single crystals, $\epsilon = 1.9, 3.5, 4.9$. <i>CrystEngComm</i> , 2019, 21, 1309-1319.	1.3	9
54	Symmetry Inhomogeneity of Ca ₉ x Zn x Eu(PO ₄) ₇ Phosphor Determined by Second-Harmonic Generation and Dielectric and Photoluminescence Spectroscopy. <i>Crystal Growth and Design</i> , 2020, 20, 6461-6468.	1.4	9

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55	A novel high color purity blue-emitting Tm ³⁺ -doped $\hat{\text{I}}^2\text{-Ca}_3(\text{PO}_4)_2$ -type phosphor for WLED application. <i>Optik</i> , 2021, 227, 166027.	1.4	9
56	Sr ₈ Msm ₁ -Eu (PO ₄) ₇ phosphors derived by different synthesis routes: Solid state, sol-gel and hydrothermal, the comparison of properties. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161340.	2.8	9
57	Magnetic and vibrational properties and crystal structure of Sr _{9.2} Co _{1.3} (PO ₄) ₇ with disordered arrangements of some strontium, cobalt, and phosphate ions. <i>Journal of Solid State Chemistry</i> , 2006, 179, 161-168.	1.4	8
58	KTb(MoO ₄) ₂ Green Phosphor with K ⁺ -Ion Conductivity: Derived from Different Synthesis Routes. <i>Inorganic Chemistry</i> , 2021, 60, 9471-9483.	1.9	8
59	Barium-induced effects on structure and properties of $\hat{\text{I}}^2\text{-Ca}_3(\text{PO}_4)_2$ -type Ca ₉ Bi(VO ₄) ₇ . <i>Journal of Alloys and Compounds</i> , 2019, 793, 56-64.	2.8	7
60	Influence of annealing conditions on the structure and luminescence properties of KGd _{1-x} Eu _x (MoO ₄) ₂ (0 ≤ x ≤ 1). <i>CrystEngComm</i> , 2019, 21, 6460-6471.	1.3	7
61	K ₅ Eu _{1-x} Tb _x (MoO ₄) ₄ Phosphors for Solid-State Lighting Applications: Aperiodic Structures and the Tb ³⁺ → Eu ³⁺ Energy Transfer. <i>Inorganic Chemistry</i> , 2022, 61, 7910-7921.	1.9	7
62	Influence of magnesium on dielectric properties of Ca _{9-x} Mg _x Bi(VO ₄) ₇ ceramics. <i>Journal of the American Ceramic Society</i> , 2018, 101, 4011-4022.	1.9	6
63	Å«Ellestadite»-type anionic [PO ₄] ₃ → [SO ₄] ₂ substitutions in $\hat{\text{I}}^2\text{-Ca}_3(\text{PO}_4)_2$ type compounds: A new route to design the inorganic phosphors. <i>Ceramics International</i> , 2022, 48, 24012-24020.	2.3	6
64	Structural changes in Sr ₉ In(PO ₄) ₇ during antiferroelectric phase transition. <i>Inorganic Materials</i> , 2016, 52, 176-185.	0.2	5
65	Crystallization and Thermal Stability of the P-Doped Basaltic Glass Fibers. <i>Minerals (Basel)</i> , Tj ETQq1 1 0.784314 rgBT/Overlock 10 Tf 50	0.8	5
66	(Ca,Mg) ₉ Gd _{1-x} Eux(PO ₄) ₇ Red Phosphors Activated with Gd ³⁺ and Eu ³⁺ . <i>Inorganic Materials</i> , 2019, 55, 810-814.	0.2	4
67	A Comprehensive Study of Ca ₉ Tb(PO ₄) ₇ and Ca ₉ Ho(PO ₄) ₇ Doped $\hat{\text{I}}^2$ -Tricalcium Phosphates: Ab initio Crystal Structure Solution, Rietveld Analysis, and Dielectric Properties. <i>Crystal Growth and Design</i> , 2021, 21, 2263-2276.	1.4	4
68	Na ₉ In(MoO ₄) ₆ : synthesis, crystal structure, and Na ⁺ ion diffusion. <i>Ionics</i> , 2021, 27, 4281-4293.	1.2	4
69	The spectral and structural properties of K ₅ Nd(MoO ₄) ₄ . <i>Journal of Applied Spectroscopy</i> , 1978, 29, 1342-1345.	0.3	3
70	Effect of Nozzle Diameter on Basalt Continuous Fiber Properties. <i>Fibers</i> , 2019, 7, 65.	1.8	3
71	Sr ₉ In(VO ₄) ₇ as a model ferroelectric in the structural family of $\hat{\text{I}}^2\text{-Ca}_3(\text{PO}_4)_2$ -type phosphates and vanadates. <i>RSC Advances</i> , 2020, 10, 10867-10872.	1.7	3
72	GREEN LUMINOPHORS IN THE FAMILY OF PHOSPHATES WITH WHITLOCKITE STRUCTURE. <i>Journal of Structural Chemistry</i> , 2021, 62, 1621-1630.	0.3	3

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73	The role of anionic heterovalent $[\text{PO}_4]^{3-}$ $[\text{GeO}_4]^{4-}$ substitution on the luminescence properties of inorganic phosphors with the $\text{Ca}_3(\text{PO}_4)_2$ -type structure: new data based on accurate crystal structure refinement. Dalton Transactions, 2022, 51, 655-663.	1.6	3
74	Crystallization and dielectric and optical properties of borate glasses $(1-x)\text{Na}_2\text{B}_4\text{O}_7 + x\text{Nb}_2\text{O}_5$. Russian Journal of Inorganic Chemistry, 2007, 52, 301-307.	0.3	2
75	Crystal structure refinement of new vanadates $\text{Ca}_8-x\text{PbxCdBi}(\text{VO}_4)_7$. Powder Diffraction, 2017, 32, S106-S109.	0.4	2
76	Influence of lithium and magnesium on the real structure and dielectric properties of $\text{Ca}_9\text{Y}(\text{VO}_4)_7$ single crystals. CrystEngComm, 2018, 20, 6310-6318.	1.3	2
77	Centrosymmetric and acentric whitlockite-type phosphates and vanadates among $\text{Ca}_3(\text{VO}_4)_2\text{-Ca}_3(\text{PO}_4)_2\text{-Y}_2\text{O}_3$ compositions. IOP Conference Series: Materials Science and Engineering, 2020, 921, 012005.	0.3	2
78	Crystal structure of new phosphates $\text{Ca}_9-x\text{PbxEu}(\text{PO}_4)_7$ from Rietveld refinement. Powder Diffraction, 2015, 30, S101-S103.	0.4	1
79	Ferroelectric properties and structural refinement of whitlockite-type phosphate $\text{Ca}_8.5\text{Pb}_0.5\text{Ho}(\text{PO}_4)_7$. Powder Diffraction, 2017, 32, S168-S171.	0.4	1
80	$\text{Ca}_6.5\text{Pb}_1.5\text{ZnBi}(\text{VO}_4)_7$, a novel whitlockite-type vanadate: crystal structure refinement and properties characterization. Powder Diffraction, 2017, 32, 175-178.	0.4	1
81	Synthesis, crystal structures and properties of the new compounds $\text{K}_{1+x}\text{Ag}_{1-x}\text{O}_4$ ($X = \text{Mo}, \text{W}$). Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 1071-1077.	0.2	1
82	Comment on "Tuning luminescence of $\text{Ca}_9\text{La}(\text{PO}_4)_7\text{:Eu}^{2+}$ via artificially inducing potential luminescence centers" by P. Li, Z. Wang, et al., J. Mater. Chem. C, 2019, 7, 14601. Journal of Materials Chemistry C, 0, , .	2.7	1
83	Ferroelectric Phase Transitions in $\text{Sr}_9\text{Tm}(\text{VO}_4)_7$ upon Substitution of Calcium and Lead for Strontium. Physics of the Solid State, 2020, 62, 856-859.	0.2	0
84	Whitlockite-Type Structure as a Matrix for Optical Materials: Synthesis and Characterization of Novel TM-SM Co-Doped Phosphate $\text{Ca}_9\text{Gd}(\text{PO}_4)_7$, a Single-Phase White Light Phosphors. Minerals (Basel,) Tj ETQq0 0 0 r g B T / Overlock 10 Tf 5		