

# Bogdan I Lazoryak

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	The role of anionic heterovalent $[\text{PO}_4]^{3-}$ $[\text{GeO}_4]^{4-}$ substitution on the luminescence properties of inorganic phosphors with the $\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ -type structure: new data based on accurate crystal structure refinement. Dalton Transactions, 2022, 51, 655-663.	1.6	3
2	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), 2021, 10, 1075.	1.6	10
3	Influence of Synthesis Conditions on Gadolinium-Substituted Tricalcium Phosphate Ceramics and Its Physicochemical, Biological, and Antibacterial Properties. Nanomaterials, 2022, 12, 852.	1.9	12
4	Production of Fibres from Lunar Soil: Feasibility, Applicability and Future Perspectives. Advanced Fiber Materials, 2022, 4, 923-937.	7.9	12
5	$\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ -type anionic $[\text{PO}_4]^{3-}$ $[\text{SO}_4]^{2-}$ substitutions in $\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ type compounds: A new route to design the inorganic phosphors. Ceramics International, 2022, 48, 24012-24020.	2.3	6
6	$\text{K}_5\text{Eu}_2\text{Tb}_2(\text{MoO}_4)_4$ Phosphors for Solid-State Lighting Applications: Aperiodic Structures and the $\text{Tb}^{3+}$ $\text{Eu}^{3+}$ Energy Transfer. Inorganic Chemistry, 2022, 61, 7910-7921.	1.9	7
7	Antimicrobial properties of co-doped tricalcium phosphates $\text{Ca}_3\text{-}2(\text{M})_2(\text{PO}_4)_2$ ( $\text{M} = \text{Zn}^{2+}, \text{Cu}^{2+}, \text{Mn}^{2+}$ ). Journal of Materials Chemistry C, 2021, 9, 7843-7851.	2.3	12
8	A novel high color purity blue-emitting $\text{Tm}^{3+}$ -doped $\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ -type phosphor for WLED application. Optik, 2021, 227, 166027.	1.4	9
9	Correlation of Phase Composition, Structure, and Mechanical Properties of Natural Basalt Continuous Fibers. Natural Resources Research, 2021, 30, 1105-1119.	2.2	11
10	Role of the $\text{Eu}^{3+}$ Distribution on the Properties of $\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ Phosphors: Structural, Luminescent, and $^{151}\text{Eu}$ Mössbauer Spectroscopy Study of $\text{Ca}_{9.5}\text{Mg}_{1.5}\text{Eu}(\text{PO}_4)_7$ . Inorganic Chemistry, 2021, 60, 3961-3971.	1.9	18
11	A Comprehensive Study of $\text{Ca}_9\text{Tb}(\text{PO}_4)_7$ and $\text{Ca}_9\text{Ho}(\text{PO}_4)_7$ Doped $\hat{1}^2\text{-Tricalcium Phosphates}$ : Ab initio Crystal Structure Solution, Rietveld Analysis, and Dielectric Properties. Crystal Growth and Design, 2021, 21, 2263-2276.	1.4	4
12	$\text{KTb}(\text{MoO}_4)_2$ Green Phosphor with $\text{K}^{+}$ -Ion Conductivity: Derived from Different Synthesis Routes. Inorganic Chemistry, 2021, 60, 9471-9483.	1.9	8
13	Luminescent properties of $\text{Er}^{3+}$ in centrosymmetric and acentric phosphates $\text{Ca}_8\text{M}(\text{PO}_4)_7$ ( $\text{M} = \text{Ca}$ ). Journal of Materials Chemistry C, 2021, 9, 7843-7851.	2.7	16
14	$\text{Na}_9\text{In}(\text{MoO}_4)_6$ : synthesis, crystal structure, and $\text{Na}^+$ ion diffusion. Ionics, 2021, 27, 4281-4293.	1.2	4
15	Antibacterial and cell-friendly copper-substituted tricalcium phosphate ceramics for biomedical implant applications. Materials Science and Engineering C, 2021, 129, 112410.	3.8	33
16	$\text{Sr}_8\text{MSm}_1\text{-Eu}(\text{PO}_4)_7$ phosphors derived by different synthesis routes: Solid state, sol-gel and hydrothermal, the comparison of properties. Journal of Alloys and Compounds, 2021, 887, 161340.	2.8	9
17	GREEN LUMINOPHORS IN THE FAMILY OF PHOSPHATES WITH WHITLOCKITE STRUCTURE. Journal of Structural Chemistry, 2021, 62, 1621-1630.	0.3	3
18	The influence of second coordination-sphere interactions on the luminescent properties of $\hat{1}^2\text{-Ca}_3(\text{PO}_4)_2$ -related compounds. Journal of Alloys and Compounds, 2020, 815, 152352.	2.8	20

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19	Symmetry Inhomogeneity of $\text{Ca}_{9-x}\text{Zn}_x\text{Eu}(\text{PO}_4)_7$ Phosphor Determined by Second-Harmonic Generation and Dielectric and Photoluminescence Spectroscopy. <i>Crystal Growth and Design</i> , 2020, 20, 6461-6468.	1.4	9
20	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. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 921, 012005.	0.3	2
21	Ferroelectric Phase Transitions in $\text{Sr}_9\text{Tm}(\text{VO}_4)_7$ upon Substitution of Calcium and Lead for Strontium. <i>Physics of the Solid State</i> , 2020, 62, 856-859.	0.2	0
22	The crystal site engineering and turning of cross-relaxation in green-emitting $\hat{\Gamma}^2\text{-Ca}_3(\text{PO}_4)_2$ -related phosphors. <i>Journal of Luminescence</i> , 2020, 223, 117196.	1.5	16
23	$\text{Sr}_9\text{In}(\text{VO}_4)_7$ as a model ferroelectric in the structural family of $\hat{\Gamma}^2\text{-Ca}_3(\text{PO}_4)_2$ -type phosphates and vanadates. <i>RSC Advances</i> , 2020, 10, 10867-10872.	1.7	3
24	Tunable luminescence and energy transfer in $\text{Eu}^{3+}$ doped $\text{Ca}_8\text{MTb}(\text{PO}_4)_7$ (M = Mg, Zn, Ca) phosphors. <i>Materials Research Bulletin</i> , 2020, 130, 110925.	2.7	13
25	Luminescence of $\text{Eu}^{3+}$ as a probe for the determination of the local site symmetry in $\hat{\Gamma}^2\text{-Ca}_3(\text{PO}_4)_2$ -related structures. <i>CrystEngComm</i> , 2019, 21, 5235-5242.	1.3	24
26	Effect of Nozzle Diameter on Basalt Continuous Fiber Properties. <i>Fibers</i> , 2019, 7, 65.	1.8	3
27	Isovalent and aliovalent cation substitutions in the anion sublattice of whitlockite-type ferroelectrics $\text{Ca}_9\text{RE}(\text{VO}_4)_7$ with RE = Y and Yb. <i>Journal of Solid State Chemistry</i> , 2019, 279, 120966.	1.4	9
28	Crystallization and Thermal Stability of the P-Doped Basaltic Glass Fibers. <i>Minerals (Basel)</i> , 2019, 9, 50382.	0.8	5
29	$(\text{Ca},\text{Mg})_9\text{Gd}_1\text{-xEu}_x(\text{PO}_4)_7$ Red Phosphors Activated with $\text{Gd}^{3+}$ and $\text{Eu}^{3+}$ . <i>Inorganic Materials</i> , 2019, 55, 810-814.	0.2	4
30	Ferroelectricity, ionic conductivity and structural paths for large cation migration in $\text{Ca}_{10.5-x}\text{Pb}_x(\text{VO}_4)_7$ single crystals, $x = 1.9, 3.5, 4.9$ . <i>CrystEngComm</i> , 2019, 21, 1309-1319.	1.3	9
31	Barium-induced effects on structure and properties of $\hat{\Gamma}^2\text{-Ca}_3(\text{PO}_4)_2$ -type $\text{Ca}_9\text{Bi}(\text{VO}_4)_7$ . <i>Journal of Alloys and Compounds</i> , 2019, 793, 56-64.	2.8	7
32	Crystal structure, dielectric, and optical properties of $\hat{\Gamma}^2$ -calcium orthophosphates heavily doped with ytterbium. <i>Journal of Alloys and Compounds</i> , 2019, 787, 1301-1309.	2.8	11
33	Influence of annealing conditions on the structure and luminescence properties of $\text{KCa}_{1-x}\text{Eu}_x(\text{MoO}_4)_2$ (0 ≤ x ≤ 1). <i>CrystEngComm</i> , 2019, 21, 6460-6471.	1.3	7
34	$\text{Ca}_8\text{MgSm}_1\text{-xEu}_x(\text{PO}_4)_7$ , promising red phosphors for WLED application. <i>Journal of Alloys and Compounds</i> , 2019, 776, 897-903.	2.8	45
35	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
36	Influence of magnesium on dielectric properties of $\text{Ca}_{9-x}\text{Mg}_x\text{Bi}(\text{VO}_4)_7$ ceramics. <i>Journal of the American Ceramic Society</i> , 2018, 101, 4011-4022.	1.9	6

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37	Luminescence, structure and antiferroelectric-type phase transition in Ca <sub>8</sub> ZnEu(PO <sub>4</sub> ) <sub>7</sub> . Materials Research Bulletin, 2018, 104, 20-26.	2.7	25
38	Pure, lithium- or magnesium-doped ferroelectric single crystals of Ca <sub>9</sub> Y(VO <sub>4</sub> ) <sub>7</sub> : cation arrangements and phase transitions. Zeitschrift Fur Kristallographie - Crystalline Materials, 2018, 233, 453-462.	0.4	9
39	Enhanced nonlinear optical activity and Ca <sup>2+</sup> -conductivity in $\text{D}_{3d}^5$ -Pb (VO <sub>4</sub> ) <sub>7</sub> ferroelectrics. Journal of Alloys and Compounds, 2018, 735, 1826-1837.	2.8	16
40	Influence of lithium and magnesium on the real structure and dielectric properties of Ca <sub>9</sub> Y(VO <sub>4</sub> ) <sub>7</sub> single crystals. CrystEngComm, 2018, 20, 6310-6318.	1.3	2
41	Effect of silane/nano-silica on the mechanical properties of basalt fiber reinforced epoxy composites. Composite Interfaces, 2017, 24, 13-34.	1.3	57
42	Ferroelectric crystal Ca <sub>9</sub> Yb(VO <sub>4</sub> ) <sub>7</sub> in the series of Ca <sub>9</sub> R(VO <sub>4</sub> ) <sub>7</sub> non-linear optical materials (R = REE, Bi, Y). Journal of Materials Chemistry C, 2017, 5, 2301-2310.	2.7	16
43	New alluaudite-related triple molybdates Na <sub>25</sub> Cs <sub>8</sub> R <sub>5</sub> (MoO <sub>4</sub> ) <sub>24</sub> (R = Sc, In): synthesis, crystal structures and properties. New Journal of Chemistry, 2017, 41, 5450-5457.	1.4	19
44	Ferroelectric properties and structural refinement of whitlockite-type phosphate Ca <sub>8.5</sub> Pb <sub>0.5</sub> Ho(PO <sub>4</sub> ) <sub>7</sub> . Powder Diffraction, 2017, 32, S168-S171.	0.4	1
45	Crystal structure refinement of new vanadates Ca <sub>8-x</sub> PbxCdBi(VO <sub>4</sub> ) <sub>7</sub> . Powder Diffraction, 2017, 32, S106-S109.	0.4	2
46	Comment on "Tuning of Photoluminescence and Local Structures of Substituted Cations in Sr <sub>2</sub> Ca(PO <sub>4</sub> ) <sub>2</sub> " (1) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (<i>x</i>)</sup>Ca<sub>11</sub> Materials, 2017, 29, 3800-3802.	3.2	11
47	Antiferroelectric properties and site occupations of R <sup>3+</sup> cations in Ca <sub>8</sub> MgR(PO <sub>4</sub> ) <sub>7</sub> luminescent host materials. Journal of Alloys and Compounds, 2017, 699, 928-937.	2.8	40
48	Luminescence Property Upgrading via the Structure and Cation Changing in Ag <sub>x</sub> Eu <sub>(2-x)/3</sub> WO <sub>4</sub> and Ag <sub>x</sub> Gd <sub>(2-x)/3</sub> Eu <sub>0.3</sub> WO <sub>4</sub> . Chemistry of Materials, 2017, 29, 8811-8823.	3.2	17
49	New Solid Electrolyte Na <sub>9</sub> Al(MoO <sub>4</sub> ) <sub>6</sub> : Structure and Na <sup>+</sup> Ion Conductivity. Chemistry of Materials, 2017, 29, 8901-8913.	3.2	29
50	Complex Structural Behavior of BiMn <sub>7</sub> O <sub>12</sub> Quadruple Perovskite. Inorganic Chemistry, 2017, 56, 12272-12281.	1.9	23
51	Ca <sub>6.5</sub> Pb <sub>1.5</sub> ZnBi(VO <sub>4</sub> ) <sub>7</sub> , a novel whitlockite-type vanadate: crystal structure refinement and properties characterization. Powder Diffraction, 2017, 32, 175-178.	0.4	1
52	Synthesis, crystal structures and properties of the new compounds K <sub>7-x</sub> Ag <sub>1+x</sub> (XO <sub>4</sub> ) <sub>4</sub> (X = Mo, W). Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 1071-1077.	0.2	1
53	Effects of Ion Exchange on the Mechanical Properties of Basaltic Glass Fibers. International Journal of Applied Glass Science, 2016, 7, 118-127.	1.0	14
54	Optical non-linearity tuning in Ca <sub>8</sub> -PbMBi(VO <sub>4</sub> ) <sub>7</sub> whitlockite-type systems. Journal of Alloys and Compounds, 2016, 674, 323-330.	2.8	17

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55	Structural changes in Sr <sub>9</sub> In(PO <sub>4</sub> ) <sub>7</sub> during antiferroelectric phase transition. <i>Inorganic Materials</i> , 2016, 52, 176-185.	0.2	5
56	Crystal structure of new phosphates Ca <sub>9-<i>x</i></sub> Pb <sub><i>x</i></sub> Eu(PO <sub>4</sub> ) <sub>7</sub> from Rietveld refinement. <i>Powder Diffraction</i> , 2015, 30, S101-S103.	0.4	1
57	A novel red Ca <sub>8.5</sub> Pb <sub>0.5</sub> Eu(PO <sub>4</sub> ) <sub>7</sub> phosphor for light emitting diodes application. <i>Journal of Alloys and Compounds</i> , 2015, 647, 965-972.	2.8	38
58	Effect of deferrization on continuous basalt fiber properties. <i>Mendeleev Communications</i> , 2015, 25, 386-388.	0.6	18
59	Crystal Structure and Luminescent Properties of R <sub>2</sub> Eu(MoO <sub>4</sub> ) <sub>3</sub> (R = Gd, Sm) Red Phosphors. <i>Chemistry of Materials</i> , 2014, 26, 7124-7136.	3.2	28
60	Ca <sub>10.5-<i>x</i></sub> Pb <sub><i>x</i></sub> (PO <sub>4</sub> ) <sub>7</sub> and Ca <sub>9.5-<i>x</i></sub> Pb <sub><i>x</i></sub> M(PO <sub>4</sub> ) <sub>7</sub> ferroelectrics with the whitlockite structure. <i>Inorganic Materials</i> , 2013, 49, 807-812.	0.2	12
61	Structure and properties of Ca <sub>9-<i>x</i></sub> Pb <sub><i>x</i></sub> R(PO <sub>4</sub> ) <sub>7</sub> (R = Sc, Cr, Fe, Ga, In) whitlockite-like solid solutions. <i>Inorganic Materials</i> , 2013, 49, 507-512.	0.2	10
62	Effect of ZrO <sub>2</sub> on the alkali resistance and mechanical properties of basalt fibers. <i>Inorganic Materials</i> , 2012, 48, 751-756.	0.2	35
63	Influence of alumina on the properties of continuous basalt fibers. <i>Russian Journal of Inorganic Chemistry</i> , 2009, 54, 191-196.	0.3	42
64	Effect of iron oxides on the fabrication and properties of continuous glass fibers. <i>Inorganic Materials</i> , 2008, 44, 1026-1030.	0.2	27
65	Crystallization and dielectric and optical properties of borate glasses (1- <i>x</i> )Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> + <i>x</i> Nb <sub>2</sub> O <sub>5</sub> . <i>Russian Journal of Inorganic Chemistry</i> , 2007, 52, 301-307.	0.3	2
66	Whitlockite solid solutions Ca <sub>9-<i>x</i></sub> M <sub><i>x</i></sub> R(PO <sub>4</sub> ) <sub>7</sub> ( <i>x</i> = 1, 1.5; M = Mg, Zn, Cd; R = Ln, Y) with antiferroelectric properties. <i>Russian Journal of Inorganic Chemistry</i> , 2007, 52, 308-314.	0.3	67
67	Magnetic and vibrational properties and crystal structure of Sr <sub>9.2</sub> Co <sub>1.3</sub> (PO <sub>4</sub> ) <sub>7</sub> with disordered arrangements of some strontium, cobalt, and phosphate ions. <i>Journal of Solid State Chemistry</i> , 2006, 179, 161-168.	1.4	8
68	Large second order optical nonlinearity in thermally poled amorphous niobium borophosphate films. <i>Journal of Applied Physics</i> , 2006, 100, 013108.	1.1	17
69	New Noncentrosymmetric Vanadates Sr <sub>9</sub> R(VO <sub>4</sub> ) <sub>7</sub> (R = Tm, Yb, and Lu): Synthesis, Structure Analysis, and Characterization. <i>Chemistry of Materials</i> , 2005, 17, 122-129.	3.2	18
70	Antiferroelectric phase transition in Sr <sub>9</sub> In(PO <sub>4</sub> ) <sub>7</sub> . <i>Physical Review B</i> , 2004, 70, .	1.1	23
71	Ferroelectric phase transition in the whitlockite-type Ca <sub>9</sub> Fe(PO <sub>4</sub> ) <sub>7</sub> ; crystal structure of the paraelectric phase at 923 ÅK. <i>Solid State Sciences</i> , 2004, 6, 185-195.	1.5	49
72	SrFe <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> : Ab Initio Structure Determination with X-ray Powder Diffraction Data and Unusual Magnetic Properties. <i>Chemistry of Materials</i> , 2004, 16, 4311-4318.	3.2	20

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73	Ferroelectric and Ionic-Conductive Properties of Nonlinear-Optical Vanadate, Ca <sub>9</sub> Bi(VO <sub>4</sub> ) <sub>7</sub> . Chemistry of Materials, 2003, 15, 3003-3010.	3.2	56
74	Reduction and Re-oxidation Behavior of Calcium Iron Phosphate, Ca <sub>9</sub> Fe(PO <sub>4</sub> ) <sub>7</sub> . Chemistry of Materials, 2003, 15, 625-631.	3.2	19
75	Structural Changes and Phase Transitions in Whitlockite-Like Phosphates. Phosphorus, Sulfur and Silicon and the Related Elements, 2002, 177, 1899-1902.	0.8	11
76	Positional and Orientational Disorder in a Solid Solution of Sr <sub>9+x</sub> Ni <sub>1.5-x</sub> (PO <sub>4</sub> ) <sub>7</sub> (x = 0.3). Chemistry of Materials, 2002, 14, 4464-4472.	3.2	33
77	Polar and Centrosymmetric Phases in Solid Solutions Ca <sub>3-x</sub> Sr <sub>x</sub> (PO <sub>4</sub> ) <sub>2</sub> (O <sup>1/2</sup> x <sup>1/2</sup> 16/7). Chemistry of Materials, 2002, 14, 3197-3205.	3.2	47
78	Strontium phosphates with $\hat{I}^2$ -Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> -type structures: Sr <sub>9</sub> NiLi(PO <sub>4</sub> ) <sub>7</sub> , Sr <sub>9.04</sub> Ni <sub>1.02</sub> Na <sub>0.88</sub> (PO <sub>4</sub> ) <sub>7</sub> , and Sr <sub>9.08</sub> Ni <sub>1.04</sub> K <sub>0.76</sub> (PO <sub>4</sub> ) <sub>7</sub> . Journal of Materials Chemistry, 2002, 12, 3803-3808.	6.7	9
79	Ferroelectric-Ionic Conductor Phase Transitions in Optical Nonlinear Ca <sub>9</sub> R(VO <sub>4</sub> ) <sub>7</sub> Vanadates. Doklady Physical Chemistry, 2002, 384, 144-148.	0.2	24
80	Crystal structures of double vanadates, Ca <sub>9</sub> R(VO <sub>4</sub> ) <sub>7</sub> $\hat{A}$ ... III. R = Nd, Sm, Gd, or Ce. Crystallography Reports, 2000, 45, 728-733.	0.1	17
81	Crystal structures of double calcium and alkali metal phosphates Ca <sub>10</sub> M(PO <sub>4</sub> ) <sub>7</sub> (M = Li, Na, K). Crystallography Reports, 2000, 45, 13-20.	0.1	62
82	Crystal structure of double vanadates Ca <sub>9</sub> R(VO <sub>4</sub> ) <sub>7</sub> . II. R = Tb, Dy, Ho, and Y. Crystallography Reports, 2000, 45, 389-394.	0.1	27
83	The spectral and structural properties of K <sub>5</sub> Nd(MoO <sub>4</sub> ) <sub>4</sub> . Journal of Applied Spectroscopy, 1978, 29, 1342-1345.	0.3	3
84	Comment on "Tuning luminescence of Ca <sub>9</sub> La(PO <sub>4</sub> ) <sub>7</sub> :Eu <sup>2+</sup> 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