

Sergey B Vakhrushev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9511291/publications.pdf>

Version: 2024-02-01

110
papers

3,315
citations

159585

30
h-index

149698

56
g-index

115
all docs

115
docs citations

115
times ranked

2079
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermally tunable dielectric performance of t-ZrO ₂ stabilized amorphous Si(Pb,Zr)OC ceramic nanocomposites. <i>Materials Chemistry and Physics</i> , 2022, 277, 125495.	4.0	5
2	Space-charge polarisation dielectric behaviour of precursor derived monoclinic HfO ₂ . <i>Ceramics International</i> , 2022, 48, 13063-13070.	4.8	4
3	Peculiar electric properties of polarized layer in alkaline silicate glasses. <i>Journal of the American Ceramic Society</i> , 2022, 105, 3418-3427.	3.8	4
4	Mode Coupling at around M-Point in PZT. <i>Materials</i> , 2022, 15, 79.	2.9	0
5	Mechanism of ferroelectric phase transition in ultra-dispersed sodium nitrite particles. <i>Ferroelectrics</i> , 2021, 575, 75-83.	0.6	1
6	Electric field control of antiferroelectric domain pattern. <i>Physical Review B</i> , 2021, 103, .	3.2	10
7	Infralow Frequency Dielectric Spectroscopy of PMN Relaxor. <i>Springer Proceedings in Physics</i> , 2021, , 45-53.	0.2	2
8	A System for Simultaneous Application of Uniaxial Strain and Electric Field to the Crystal Sample in Wide Temperature Range for X-Ray Scattering Experiments. , 2021, , .		0
9	Antiferrodistortive Soft Mode in PbZr _{0.024} Ti _{0.976} O ₃ Crystal. <i>Physics of the Solid State</i> , 2021, 63, 1840-1846.	0.6	0
10	Temperature dependent conductivity and broadband dielectric response of precursor-derived Nb ₂ O ₅ . <i>Ceramics International</i> , 2020, 46, 9512-9518.	4.8	10
11	Combined Real-Time Study of Dielectric Response and Piezoresponse of Pb(Mg _{1/3} Nb _{2/3})O ₃ Relaxor in an Electric Field. <i>Physics of the Solid State</i> , 2020, 62, 1873-1879.	0.6	2
12	Structural Peculiarities of the Intermediate Phase in Zr-Rich Lead Zirconate Titanate. <i>Physics of the Solid State</i> , 2019, 61, 1772-1778.	0.6	6
13	Incommensurate instability and diffuse scattering at Brillouin zone boundary in Zr-rich lead zirconate titanate. <i>Ferroelectrics</i> , 2019, 538, 65-73.	0.6	2
14	Multiscale local ordering in the prototypical uniaxial relaxor Sr _{0.6} Ba _{0.4} Nb ₂ O ₆ single crystal at room temperature. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 175401.	1.8	5
15	Shell model analysis of the low-energy lattice dynamics in PbHfO ₃ . <i>Ferroelectrics</i> , 2018, 534, 110-113.	0.6	1
16	Structural Evolution in Morphotropic Lead Zirconate Titanate. , 2018, , .		0
17	X-Ray Scattering by Antiphase Ferroelectric Domain Walls in the Antiferroelectric Phase of the PbZr _{0.985} Ti _{0.015} O ₃ . <i>Lecture Notes in Computer Science</i> , 2018, , 683-690.	1.3	1
18	Crystallography Based on Synchrotron Radiation: Experiments of Russian Users of the ESRF BM01 Diffraction Beam Line. <i>Journal of Surface Investigation</i> , 2018, 12, 395-407.	0.5	0

#	ARTICLE	IF	CITATIONS
19	The Technique of Studying X-Ray Scattering over Wide Temperature Range in an Electric Field. <i>Physics of the Solid State</i> , 2018, 60, 963-966.	0.6	7
20	Critical scattering and incommensurate phase transition in antiferroelectric PbZrO ₃ under pressure. <i>Scientific Reports</i> , 2017, 7, 41512.	3.3	43
21	Dielectric properties of magnetic-ferroelectric CoO@NaNO ₂ porous glass nanocomposite. <i>Physics of the Solid State</i> , 2017, 59, 2036-2044.	0.6	7
22	Domain structures and correlated out-of-plane and in-plane polarization reorientations in Pb(Zr _{0.96} Ti _{0.04})O ₃ single crystal via piezoresponse force microscopy. <i>AIP Advances</i> , 2016, 6, .	1.3	3
23	Pre-transitional evolution of central peaks and transverse acoustic phonon branch in single crystal lead zirconate titanate with Ti concentration 0.7%. <i>Journal of Physics: Conference Series</i> , 2016, 769, 012070.	0.4	4
24	Tribute to Professor Alexander S. Sigov. <i>Ferroelectrics</i> , 2016, 503, 3-3.	0.6	0
25	An analysis of the phonon dispersion curves of lead hafnate in the cubic phase using lattice-dynamical models. <i>St Petersburg Polytechnical University Journal Physics and Mathematics</i> , 2016, 2, 171-174.	0.3	0
26	Composition dependence of the diffuse scattering in cubic PbZr _{1-x} Ti _x O ₃ . <i>Ferroelectrics</i> , 2016, 503, 45-51.	0.6	3
27	Dielectric response of potassium nitrate in a restricted geometry. <i>Composites Part B: Engineering</i> , 2016, 94, 322-326.	12.0	10
28	Low-temperature dynamics of ferroelectric domains in PbZr _{0.3} Ti _{0.7} O ₃ epitaxial thin films studied by piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	6
29	Peculiarities of diffuse synchrotron radiation scattering in the SBN-60 single crystal at room temperature. <i>St Petersburg Polytechnical University Journal Physics and Mathematics</i> , 2015, 1, 235-238.	0.3	3
30	Phonon dispersion calculations using the Vaks model in antiferroelectric lead zirconate. <i>Journal of Advanced Dielectrics</i> , 2015, 05, 1550016.	2.4	1
31	Critical scattering of synchrotron radiation in lead zirconate@titanate with low titanium concentrations. <i>Physics of the Solid State</i> , 2015, 57, 2441-2446.	0.6	6
32	X-Ray Mn K line shifts in manganese oxide nanoparticles. <i>Technical Physics Letters</i> , 2015, 41, 1205-1207.	0.7	2
33	Critical X-Ray Scattering in Mixed Piezoelectric Material PbZr _{0.6} Ti _{0.4} O ₃ . <i>Solid State Phenomena</i> , 2015, 245, 211-216.	0.3	4
34	Neutron diffraction study of the (BiFeO ₃) _{1-x} (PbTiO ₃) _x solid solution: nanostructured multiferroic system. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 046004.	1.8	2
35	Lattice dynamics in the paraelectric phase of PbHfO ₃ studied by inelastic x-ray scattering. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 335901.	1.8	15
36	Temperature Dependence of Ferroelectric Properties of the Potassium Lithium Tantalate K _{1-x} Li _x TaO ₃ Obtained with Piezoresponse Force Microscopy Technique. <i>Ferroelectrics</i> , 2014, 469, 73-78.	0.6	1

#	ARTICLE	IF	CITATIONS
37	Low-temperature evolution of local polarization properties of PbZr _{0.65} Ti _{0.35} O ₃ thin films probed by piezoresponse force microscopy. Applied Physics Letters, 2014, 104, .	3.3	10
38	Lattice dynamics and antiferroelectricity in PbZrO_3 by x-ray and Brillouin light scattering. Physical Review B, 2014, 90, .	3.2	10
39	The origin of antiferroelectricity in PbZrO ₃ . Nature Communications, 2013, 4, 2229.	12.8	251
40	Critical neutron scattering in a uniaxial relaxor Sr _{0.6} Ba _{0.4} Nb ₂ O ₆ . Physics of the Solid State, 2013, 55, 334-341.	0.6	13
41	Glass-like structure of a lead-based relaxor ferroelectric. Journal of Applied Crystallography, 2012, 45, 1309-1313.	4.5	7
42	Structural Heterogeneity and Diffuse Scattering in Morphotropic Lead Zirconate-Titanate Single Crystals. Physical Review Letters, 2012, 109, 097603.	7.8	43
43	Diffuse scattering anisotropy and inhomogeneous lattice deformations in the lead magnoniobate relaxor PMN above the Burns temperature. Physical Review B, 2012, 85, .	3.2	12
44	Diffuse scattering in relaxor ferroelectrics: true three-dimensional mapping, experimental artefacts and modelling. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, 117-123.	0.3	74
45	Neutron powder diffraction and single crystal X-ray magnetic resonant and non-resonant scattering studies of the doped multiferroic Tb(Bi)MnO ₃ . European Physical Journal B, 2012, 85, 1.	1.5	9
46	Study of the formation processes of a domain nanostructure in relaxor ferroelectrics. Physics of Particles and Nuclei Letters, 2011, 8, 1061-1062.	0.4	1
47	Investigation of longitudinal vibrations of -O-H groups in chrysotile asbestos by neutron scattering and polarized infrared spectroscopy. Physics of the Solid State, 2011, 53, 416-420.	0.6	7
48	Two-mode behavior of the PbMg _{1/3} Nb _{2/3} O ₃ relaxor. Physics of the Solid State, 2010, 52, 889-893.	0.6	16
49	Temperature dependences of the order parameter for sodium nitrite embedded into porous glasses and opals. Physics of the Solid State, 2010, 52, 1092-1097.	0.6	13
50	Magnetic phase transition in confined MnO nanoparticles studied by polarized neutron scattering. Physical Review B, 2010, 81, .	3.2	9
51	Inelastic and Quasielastic Neutron Scattering in PbMg _{1/3} Nb _{2/3} O ₃ Above the Burns Temperature. Ferroelectrics, 2010, 400, 372-386.	0.6	3
52	10.1007/s11451-008-3017-5. , 2010, 50, 496.		0
53	Ferroelectric phase transitions in sodium nitrite nanocomposites. Journal of Electroceramics, 2009, 22, 270-275.	2.0	31
54	Acoustic phonons in chrysotile asbestos probed by high-resolution inelastic x-ray scattering. Solid State Communications, 2009, 149, 589-592.	1.9	9

#	ARTICLE	IF	CITATIONS
55	Reassessment of the Burns temperature and its relationship to the diffuse scattering, lattice dynamics, and thermal expansion in relaxor $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$		



#	ARTICLE	IF	CITATIONS
73	Bias-field effect on the temperature anomalies of dielectric permittivity in $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3/\text{PbTiO}_3$ single crystals. <i>Physical Review B</i> , 2005, 72, .	3.2	76
74	Neutron diffraction study of NaNO_2 ferroelectric nanowires. <i>Physica B: Condensed Matter</i> , 2004, 350, E1119-E1121.	2.7	14
75	Na^{23} spin-lattice relaxation of sodium nitrite in confined geometry. <i>Physical Review B</i> , 2004, 70, .	3.2	36
76	Lattice dynamics in $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$. <i>Physical Review B</i> , 2004, 70, .	3.2	102
77	Structure and properties of confined sodium nitrite. <i>European Physical Journal E</i> , 2003, 12, 21-24.	1.6	30
78	Structure of KD_2PO_4 Embedded in a Porous Glass. <i>Ferroelectrics</i> , 2003, 286, 213-219.	0.6	11
79	Lattice Dynamics of $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ (PMN): Shell-Model Calculations. <i>Ferroelectrics</i> , 2003, 282, 21-27.	0.6	6
80	Phonons in $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ Measured by Inelastic Neutron Scattering. <i>Ferroelectrics</i> , 2003, 282, 9-19.	0.6	10
81	Temperature Dependence of the Local Structure in Pb Containing Relaxor Ferroelectrics. <i>AIP Conference Proceedings</i> , 2003, , .	0.4	10
82	Direct evidence of soft mode behavior near the Burns temperature in the $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ relaxor ferroelectric. <i>Physical Review B</i> , 2002, 66, .	3.2	62
83	Temperature Evolution of Sodium Nitrite Structure in a Restricted Geometry. <i>Physical Review Letters</i> , 2002, 89, 175503.	7.8	62
84	Evolution of Structure of $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ in the Vicinity of the Burns Temperature. <i>AIP Conference Proceedings</i> , 2002, , .	0.4	13
85	Inelastic and critical neutron scattering in the ergodic phase of the relaxor ferroelectric $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s989-s991.	2.3	6
86	Structure evolution and formation of a pre-melted state in NaNO_2 confined within porous glass. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s1001-s1003.	2.3	11
87	Local and long range polar order in the relaxor-ferroelectric compounds $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$ and $\text{PbMg}_{0.3}\text{Nb}_{0.6}\text{Ti}_{0.1}\text{O}_3$. <i>Physical Review B</i> , 2001, 65, .	3.2	183
88	Magnetic Ordering and Phase Transition in MnO Embedded in a Porous Glass. <i>Physical Review Letters</i> , 2001, 86, 5783-5786.	7.8	76
89	Structural peculiarities of $(\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3)_{1-x}(\text{PbTiO}_3)_x$ solid solutions. <i>Ferroelectrics</i> , 1999, 235, 143-149.	0.6	8
90	Disorder and anharmonicity in simple and complex perovskites. <i>Ferroelectrics</i> , 1999, 235, 87-96.	0.6	3

#	ARTICLE	IF	CITATIONS
91	Unique features of the crystal structure of the $(\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3)_{0.6}(\text{PbTiO}_3)_{0.4}$ solid solution. <i>Physics of the Solid State</i> , 1999, 41, 1172-1174.	0.6	3
92	Inelastic neutron scattering study of the relaxor ferroelectric PbMg Nb O at high temperatures. <i>European Physical Journal B</i> , 1999, 11, 13-20.	1.5	129
93	Ferroelectric phase transitions in materials embedded in porous media. <i>Scripta Materialia</i> , 1999, 12, 963-966.	0.5	27
94	Effect of electric field on neutron scattering in lead magnoniobate. <i>Physics of the Solid State</i> , 1998, 40, 1728-1733.	0.6	26
95	Structural study of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ at low temperatures. <i>Ferroelectrics, Letters Section</i> , 1997, 23, 45-53.	1.0	2
96	Local atomic structure of relaxor ferroelectric solids determined by pulsed neutron and x-ray scattering. <i>Ferroelectrics</i> , 1997, 199, 103-113.	0.6	36
97	Structure of disordered lead indoniobate $\text{PbIn}_{1/2}\text{Nb}_{1/2}\text{O}_3$. <i>Journal of Structural Chemistry</i> , 1997, 38, 486-487.	1.0	5
98	X-ray study of the kinetics of field induced transition from the glass-like to the ferroelectric phase in lead magnoniobate. <i>Solid State Communications</i> , 1997, 103, 477-482.	1.9	48
99	Ferroelectric phase transitions in materials embedded in porous media. <i>Ferroelectrics, Letters Section</i> , 1996, 20, 143-147.	1.0	20
100	Synchrotron X-ray scattering study of lead magnoniobate relaxor ferroelectric crystals. <i>Journal of Physics and Chemistry of Solids</i> , 1996, 57, 1517-1523.	4.0	89
101	Field induced kinetic ferroelectric phase transition in lead magnoniobate. <i>Ferroelectrics</i> , 1996, 184, 209-215.	0.6	22
102	X-ray Analysis and Computer Modeling of the Structure of 'Relaxor' Ferroelectrics $\text{Pb}_3\text{MgNb}_2\text{O}_9$ and $\text{Pb}_2\text{ScTaO}_6$ in the Paraelectric State. <i>Journal of Applied Crystallography</i> , 1995, 28, 385-391.	4.5	28
103	Long-Time Relaxation of the Dielectric Response in Lead Magnoniobate. <i>Physical Review Letters</i> , 1995, 74, 1681-1684.	7.8	263
104	Freezing and melting of mercury in porous glass. <i>Physical Review B</i> , 1995, 52, 4772-4774.	3.2	50
105	The high-temperature structure of lead magnoniobate. <i>Journal of Physics Condensed Matter</i> , 1994, 6, 4021-4027.	1.8	57
106	Low-frequency dielectric response of $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 3671-3677.	1.8	113
107	Glassy phenomena in disordered perovskite-like crystals. <i>Ferroelectrics</i> , 1989, 90, 173-176.	0.6	127
108	Anomalous structural behaviour of the high-temperature superconducting compound $\text{La}_{1.8}\text{Sr}_{0.2}\text{CuO}_{4-y}$. <i>Solid State Communications</i> , 1988, 65, 1167-1170.	1.9	3

#	ARTICLE	IF	CITATIONS
109	Phase transitions and soft modes in sodium bismuth titanate. <i>Ferroelectrics</i> , 1985, 63, 153-160.	0.6	268
110	Influence of a Poling Procedure on Dynamics of Ferroelectric Domains in Thin $\text{PbZr}_{0.3}\text{Ti}_{0.7}\text{O}_3$ Film at Low Temperatures. <i>Solid State Phenomena</i> , 0, 245, 217-222.	0.3	1