

Vitaliy Mikhailik

List of Publications by Year in descending order

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4218
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth, structure, and temperature dependent emission processes in emerging metal hexachloride scintillators Cs ₂ HfCl ₆ and Cs ₂ ZrCl ₆ . Dalton Transactions, 2022, 51, 6944-6954.	1.6	9
2	Sample Preparation and Transfer Protocol for In-Vacuum Long-Wavelength Crystallography on Beamline I23 at Diamond Light Source. Journal of Visualized Experiments, 2021, , .	0.2	1
3	X-ray tomographic reconstruction and segmentation pipeline for the long-wavelength macromolecular crystallography beamline at Diamond Light Source. Journal of Synchrotron Radiation, 2021, 28, 889-901.	1.0	1
4	Phase and structural behavior and photocatalytic properties of new mixed bismuth-praseodymium vanadates. Journal of Solid State Chemistry, 2021, 296, 122002.	1.4	7
5	Performance of ZnSe-based scintillators at low temperatures. Journal of Luminescence, 2021, 239, 118360.	1.5	6
6	Al ₂ O ₃ co-doped with Cr ³⁺ and Mn ⁴⁺ , a dual-emitter probe for multimodal non-contact luminescence thermometry. Dalton Transactions, 2021, 50, 14820-14831.	1.6	11
7	Luminescent and scintillation properties of perovskite CsPbBr ₃ crystal at cryogenic temperatures. Journal of Physical Studies, 2021, 25, .	0.2	0
8	Luminescence of CsPbBr ₃ microcrystals embedded in the KBr matrix. Journal of Physical Studies, 2021, 25, .	0.2	1
9	Multimodal Non-Contact Luminescence Thermometry with Cr-Doped Oxides. Sensors, 2020, 20, 5259.	2.1	50
10	Mn ²⁺ luminescence of Gd(Zn,Mg)B ₅ O ₁₀ pentaborate under high pressure. Dalton Transactions, 2020, 49, 14268-14279.	1.6	6
11	Time resolved luminescence spectroscopy of CsPbBr ₃ single crystal. Journal of Luminescence, 2020, 225, 117346.	1.5	17
12	Bright and fast scintillations of an inorganic halide perovskite CsPbBr ₃ crystal at cryogenic temperatures. Scientific Reports, 2020, 10, 8601.	1.6	59
13	Low temperature scintillation properties of Ga ₂ O ₃ . Journal of Physical Studies, 2020, 24, .	0.2	0
14	Experimental phasing with vanadium and application to nucleotide-binding membrane proteins. IUCr, 2020, 7, 1092-1101.	1.0	3
15	Low temperature scintillation properties of Ga ₂ O ₃ . Applied Physics Letters, 2019, 115, .	1.5	21
16	Importance of potassium ions for ribosome structure and function revealed by long-wavelength X-ray diffraction. Nature Communications, 2019, 10, 2519.	5.8	124
17	Bright and fast scintillation of organolead perovskite MAPbBr ₃ at low temperatures. Materials Horizons, 2019, 6, 1740-1747.	6.4	105
18	Megahertz non-contact luminescence decay time cryothermometry by means of ultrafast PbI ₂ scintillator. Scientific Reports, 2019, 9, 5274.	1.6	6

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19	Crystallography at wavelengths longer than 2.7Å... Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a95-a95.	0.0	0
20	Long-wavelength protein crystallography at Diamond Light Source. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e745-e745.	0.0	0
21	Identifying dynamic, partially occupied residues using anomalous scattering. Acta Crystallographica Section D: Structural Biology, 2019, 75, 1084-1095.	1.1	5
22	Characterization and engineering of a plastic-degrading aromatic polyesterase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4350-E4357.	3.3	632
23	Characterisation of tungstate and molybdate crystals ABO ₄ (A ²⁺ =Ca, Sr, Zn, Cd; B ⁶⁺ =W, Mo) for luminescence lifetime cryothermometry. Materialia, 2018, 4, 287-296.	1.3	28
24	Long-wavelength macromolecular crystallography – First successful native SAD experiment close to the sulfur edge. Nuclear Instruments & Methods in Physics Research B, 2017, 411, 12-16.	0.6	14
25	ZnTe cryogenic scintillator. Journal of Luminescence, 2017, 188, 600-603.	1.5	11
26	Non-contact luminescence lifetime cryothermometry for macromolecular crystallography. Journal of Synchrotron Radiation, 2017, 24, 636-645.	1.0	19
27	First results from the long-wavelength macromolecular crystallography beamline I23 at Diamond Light Source. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, a139-a139.	0.0	0
28	The long-wavelength macromolecular crystallography beamline I23 at Diamond Light Source. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C338-C338.	0.0	0
29	Structure of the cyanobactin oxidase ThcOx from <i>Cyanothece</i> sp. PCC 7425, the first structure to be solved at Diamond Light Source beamline I23 by means of S-SAD. Acta Crystallographica Section D: Structural Biology, 2016, 72, 1174-1180.	1.1	26
30	In-vacuum long-wavelength macromolecular crystallography. Acta Crystallographica Section D: Structural Biology, 2016, 72, 430-439.	1.1	89
31	Cryogenic phonon scintillation detectors with PMT readout for rare event search experiments. Astroparticle Physics, 2016, 79, 31-40.	1.9	5
32	The long-wavelength macromolecular crystallography beamline I23 at Diamond Light Source. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s13-s13.	0.0	0
33	Luminescence and scintillation properties of CsI: A potential cryogenic scintillator. Physica Status Solidi (B): Basic Research, 2015, 252, 804-810.	0.7	31
34	Temperature dependence of scintillation properties of SrMoO ₄ . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 792, 1-5.	0.7	22
35	Studies of scintillation properties of CaMoO ₄ at millikelvin temperatures. Applied Physics Letters, 2015, 106, .	1.5	27
36	Effect of tungsten doping on ZnMoO ₄ scintillating bolometer performance. Optical Materials, 2015, 49, 67-74.	1.7	24

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37	Application of In Situ Diffraction in High-Throughput Structure Determination Platforms. <i>Methods in Molecular Biology</i> , 2015, 1261, 233-253.	0.4	18
38	Challenges and advances of long-wavelength macromolecular crystallography at Diamond Light Source. , 2014, , .		0
39	Optimization of light collection from oxide CaWO ₄ scintillators. , 2014, , .		0
40	Optimization of light collection from crystal scintillators for cryogenic experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 744, 41-47.	0.7	18
41	Impact of geometry on light collection efficiency of scintillation detectors for cryogenic rare event searches. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 336, 26-30.	0.6	23
42	Visualisation of membrane protein crystals using X-ray imaging. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, C351-C351.	0.0	0
43	The Long-Wavelength MX Beamline I23 at Diamond Light Source. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, C605-C605.	0.0	0
44	Towards long-wavelength protein crystallography: keeping a protein crystal frozen in vacuum. <i>Journal of Physics: Conference Series</i> , 2013, 425, 012010.	0.3	9
45	Application of the Monte-Carlo refractive index matching (MCRIM) technique to the determination of the absolute light yield of a calcium molybdate scintillator. <i>Journal of Instrumentation</i> , 2013, 8, P06002-P06002.	0.5	13
46	Investigation of luminescence and scintillation properties of a ZnS:Ag/LiF scintillator in the 7â€“295K temperature range. <i>Journal of Luminescence</i> , 2013, 134, 63-66.	1.5	20
47	Development of techniques for characterisation of scintillation materials for cryogenic application. <i>Radiation Measurements</i> , 2013, 49, 7-12.	0.7	19
48	Visualization of membrane protein crystals in lipid cubic phase using X-ray imaging. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013, 69, 1252-1259.	2.5	22
49	The long-wavelength macromolecular crystallography beamline at Diamond Light Source. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013, 69, s78-s78.	0.3	0
50	Visualisation of membrane protein crystals in lipid cubic phase using X-ray imaging. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013, 69, s363-s363.	0.3	0
51	The long-wavelength macromolecular crystallography beamline at Diamond Light Source. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013, 69, s385-s385.	0.3	0
52	Thermal contact conductance of demountable in vacuum copper-copper joint between 14 and 100 K. <i>Review of Scientific Instruments</i> , 2012, 83, 034902.	0.6	17
53	Studies of concentration dependences in the luminescence of Ti-doped Al ₂ O ₃ . <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	37
54	Low-energy X-ray detection with an in-vacuum PILATUS detector. <i>Journal of Instrumentation</i> , 2011, 6, C11033-C11033.	0.5	5

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55	Thermal structural properties of calcium tungstate. Journal of Applied Crystallography, 2011, 44, 319-326.	1.9	21
56	Growth and characterization of isotopically enriched $^{40}\text{Ca}^{100}\text{MoO}_4$ single crystals for rare event search experiments. Crystal Research and Technology, 2011, 46, 1223-1228.	0.6	27
57	Effect of recrystallisation on the radioactive contamination of CaWO_4 crystal scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 631, 44-53.	0.7	22
58	The CRESST dark matter search. Progress in Particle and Nuclear Physics, 2011, 66, 202-207.	5.6	8
59	The long-wavelength MX beamline I23 at Diamond Light Source. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C481-C482.	0.3	0
60	Direct dark matter search with CRESST and EURECA. Progress in Particle and Nuclear Physics, 2010, 64, 457-459.	5.6	4
61	Electron and gamma background in CRESST detectors. Astroparticle Physics, 2010, 32, 318-324.	1.9	14
62	First test of a cryogenic scintillation module with a CaWO_4 scintillator and a low-temperature photomultiplier down to 6 K. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 621, 395-400.	0.7	10
63	Feasibility study of PbWO_4 and PbMoO_4 crystal scintillators for cryogenic rare events experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 622, 608-613.	0.7	63
64	Discrimination of recoil backgrounds in scintillating calorimeters. Astroparticle Physics, 2010, 33, 60-64.	1.9	16
65	Enhancement through sensitization of VUV-excited luminescence in red-emitting pentaborate phosphors. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2339-2343.	0.8	9
66	Performance of scintillation materials at cryogenic temperatures. Physica Status Solidi (B): Basic Research, 2010, 247, 1583-1599.	0.7	156
67	Feasibility Study of VUV Sensitization Effect of Tb^{3+} . Spectroscopy Letters, 2010, 43, 350-356.	0.5	5
68	EURECA – The Future of Cryogenic Dark Matter Detection in Europe. EAS Publications Series, 2009, 36, 249-255.	0.3	3
69	CRESST. EAS Publications Series, 2009, 36, 231-236.	0.3	2
70	VUV sensitization of Mn^{2+} emission by Tb^{3+} in strontium aluminate phosphor. Materials Letters, 2009, 63, 803-805.	1.3	22
71	ZnWO_4 scintillators for cryogenic dark matter experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 600, 594-598.	0.7	33
72	Scintillating and optical spectroscopy of AlO_3 for dark matter searches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 545-551.	0.7	18

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73	MgWO ₄ – A new crystal scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 107-115.	0.7	43
74	VUV sensitisation of Eu ³⁺ emission by Tb ³⁺ in Ba ₃ Tb(PO ₄) ₃ – Eu. Journal of Luminescence, 2009, 129, 945-947.	1.5	23
75	Commissioning run of the CRESST-II dark matter search. Astroparticle Physics, 2009, 31, 270-276.	1.9	121
76	Efficient VUV sensitization of Eu ³⁺ emission by Tb ³⁺ in potassium rare-earth double phosphate. Physica Status Solidi - Rapid Research Letters, 2009, 3, 13-15.	1.2	26
77	Tungstate and Molybdate Scintillators to Search for Dark Matter and Double Beta Decay. IEEE Transactions on Nuclear Science, 2009, 56, 2513-2518.	1.2	86
78	Large Volume ZnWO_4 Crystal Scintillators With Excellent Energy Resolution and Low Background. IEEE Transactions on Nuclear Science, 2009, 56, 994-997.	1.2	27
79	Crystal structure of ZnWO ₄ scintillator material in the range of 3 – 1423 K. Journal of Physics Condensed Matter, 2009, 21, 325402.	0.7	39
80	Composite CaWO ₄ Detectors for the CRESST-II Experiment. , 2009, , .		7
81	Status of the CRESST Dark Matter Search. , 2009, , .		5
82	Scintillation studies of Bi ₄ Ge ₃ O ₁₂ (BGO) down to a temperature of 6K. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 594, 358-361.	0.7	55
83	Scintillation properties of pure and Ca-doped ZnWO ₄ crystals. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 335-339.	0.8	20
84	Effect of thermo-chemical treatments on the luminescence and scintillation properties of CaWO ₄ . Optical Materials, 2008, 30, 1630-1634.	1.7	19
85	Optical anisotropy and electronic structures of CdMoO_4 . CdMoO_4 and MgMoO_4 systems. Journal of Physics Condensed Matter, 2008, 20, 365219.	1.1	64
86	Structure, luminescence and scintillation properties of the MgMoO ₄ system. Journal of Physics Condensed Matter, 2008, 20, 365219.	0.7	50
87	SQUID magnetometry for the cryoEDM experiment – Tests at LSBB. Journal of Instrumentation, 2008, 3, P11003-P11003.	0.5	9
88	Scintillation studies of CaWO ₄ in the millikelvin temperature range. Physical Review B, 2007, 75, .	1.1	57
89	The 66-channel SQUID readout for CRESST II. Journal of Instrumentation, 2007, 2, P11003-P11003.	0.5	9
90	The Monte-Carlo refractive index matching technique for determining the input parameters for simulation of the light collection in scintillating crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 570, 529-535.	0.7	20

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91	Temperature dependence of CaMoO ₄ scintillation properties. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 583, 350-355.	0.7	79
92	Effect of Ca doping on the structure and scintillation properties of ZnWO ₄ . Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 730-736.	0.8	28
93	EURECA " the European Future of Dark Matter Searches with Cryogenic Detectors. Nuclear Physics, Section B, Proceedings Supplements, 2007, 173, 168-171.	0.5	36
94	CRESST " status and future. Nuclear Physics, Section B, Proceedings Supplements, 2007, 173, 104-107.	0.5	2
95	Excited states of molybdenum oxyanion in scheelite and wolframite structures. Radiation Measurements, 2007, 42, 767-770.	0.7	15
96	Multiple photon counting technique for detection and analysis of slow scintillation processes. Radiation Measurements, 2007, 42, 921-924.	0.7	10
97	Cryogenic scintillators in searches for extremely rare events. Journal Physics D: Applied Physics, 2006, 39, 1181-1191.	1.3	114
98	EURECA " the European future of cryogenic dark matter searches. Journal of Physics: Conference Series, 2006, 39, 139-141.	0.3	25
99	Results and status of the CRESST experiment. Journal of Physics: Conference Series, 2006, 39, 75-81.	0.3	1
100	Optical and luminescence studies of ZnMoO ₄ using vacuum ultraviolet synchrotron radiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 562, 513-516.	0.7	63
101	Scintillation properties of pure CaF ₂ . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 566, 522-525.	0.7	34
102	Dark-matter search with CRESST. European Physical Journal D, 2006, 56, 535-542.	0.4	6
103	Thermal properties of CaMoO ₄ : Lattice dynamics and synchrotron powder diffraction studies. Physical Review B, 2006, 73, .	1.1	45
104	CaWO ₄ crystals as scintillators for cryogenic dark matter search. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 537, 339-343.	0.7	25
105	Characterization of CaWO ₄ scintillator at room and liquid nitrogen temperatures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 553, 578-591.	0.7	63
106	Feasibility study of a ZnWO ₄ scintillator for exploiting materials signature in cryogenic WIMP dark matter searches. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 610, 37-44.	1.5	76
107	Multiple photon counting coincidence (MPCC) technique for scintillator characterisation and its application to studies of CaWO ₄ and ZnWO ₄ scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 553, 522-534.	0.7	47
108	Low-temperature spectroscopic and scintillation characterisation of Ti-doped Al ₂ O ₃ . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 546, 523-534.	0.7	29

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109	Studies of electronic excitations in MgMoO ₄ , CaMoO ₄ and CdMoO ₄ crystals using VUV synchrotron radiation. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, R17-R19.	0.7	93
110	THE CRESST DARK MATTER SEARCH. , 2005, , .		2
111	Luminescence studies of Ti-doped Al ₂ O ₃ using vacuum ultraviolet synchrotron radiation. <i>Applied Physics Letters</i> , 2005, 86, 101909.	1.5	25
112	Luminescence of CaWO ₄ , CaMoO ₄ , and ZnWO ₄ scintillating crystals under different excitations. <i>Journal of Applied Physics</i> , 2005, 97, 083523.	1.1	226
113	Radiative decay of self-trapped excitons in CaMoO ₄ and MgMoO ₄ crystals. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 7209-7218.	0.7	65
114	CRESST II BACKGROUND DISCRIMINATION: DETECTION OF 180W NATURAL DECAY IN A PURE $\hat{1}\pm$ -SPECTRUM. , 2005, , .		0
115	EXPLOITING THE MATERIALS SIGNATURE IN CRYOGENIC WIMP DETECTORS. , 2005, , .		1
116	Lattice dynamics and thermal properties of CaWO ₄ . <i>Physical Review B</i> , 2004, 70, .	1.1	51
117	Detection of the natural $\hat{1}\pm$ decay of tungsten. <i>Physical Review C</i> , 2004, 70, .	1.1	90
118	The use of calcium silicate bricks for retrospective dosimetry. <i>Radiation Measurements</i> , 2004, 38, 91-99.	0.7	10
119	Two-photon excitation and luminescence of a CaWO ₄ scintillator. <i>Radiation Measurements</i> , 2004, 38, 585-588.	0.7	43
120	One- and two-photon excited luminescence and band-gap assignment in CaWO ₄ . <i>Physical Review B</i> , 2004, 69, .	1.1	128
121	Optimization of Light Collection from Crystal Scintillators for Cryogenic Rare Decay Experiments. <i>Solid State Phenomena</i> , 0, 230, 199-204.	0.3	0