

# Vitezslav Jary

## List of Publications by Year in descending order

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95  
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all docs

96  
docs citations

96  
times ranked

1324  
citing authors

#	ARTICLE	IF	CITATIONS
1	Acceleration of the yellow band luminescence in GaN layers via Si and Ge doping. Journal of Alloys and Compounds, 2022, 914, 165255.	5.5	7
2	The potential of $\lambda$ and $\chi$ studies with PANDA at FAIR. European Physical Journal A, 2021, 57, 1.	2.5	5
3	Study of excited $\chi$ baryons with the $\overline{P}$ PANDA detector. European Physical Journal A, 2021, 57, 1.	2.5	2
4	PANDA Phase One. European Physical Journal A, 2021, 57, 1.	2.5	38
5	On the Role of Cs <sub>4</sub> PbBr <sub>6</sub> Phase in the Luminescence Performance of Bright CsPbBr <sub>3</sub> Nanocrystals. Nanomaterials, 2021, 11, 1935.	4.1	7
6	Ternary sulfides A <sub>2</sub> LnS <sub>2</sub> :Eu <sup>2+</sup> (A = Alkaline Metal, Ln = Rare-earth element) for lighting: Correlation between the host structure and Eu <sup>2+</sup> emission maxima. Chemical Engineering Journal, 2021, 418, 129380.	12.7	9
7	Peculiarities and the red shift of Eu <sup>2+</sup> luminescence in Gd <sup>3+</sup> -admixed YAG phosphors. Optical Materials, 2021, 120, 111464.	3.6	2
8	Feasibility studies for the measurement of time-like proton electromagnetic form factors from $\rho \rightarrow \mu^+ \mu^-$ at $\overline{P}$ PANDA at FAIR. European Physical Journal A, 2021, 57, 1.	2.5	7
9	Variability of Eu <sup>2+</sup> Emission Features in Multicomponent Alkali-Metal-Rare-Earth Sulfides. ECS Journal of Solid State Science and Technology, 2020, 9, 016007.	1.8	9
10	Modified vertical Bridgman method: Time and cost effective tool for preparation of Cs <sub>2</sub> HfCl <sub>6</sub> single crystals. Journal of Crystal Growth, 2020, 533, 125479.	1.5	12
11	Relationship Between Li/Ce Concentration and the Luminescence Properties of Codoped Gd <sub>3</sub> (Ga, Al) <sub>5</sub> O <sub>12</sub> :Ce. Physica Status Solidi (B): Basic Research, 2020, 257, 1900504.	1.5	4
12	Thermal analysis of cesium hafnium chloride using DSC-TG under vacuum, nitrogen atmosphere, and in enclosed system. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1101-1107.	3.6	13
13	Specific absorption in Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Eu ceramics and the role of stable Eu <sup>2+</sup> in energy transfer processes. Journal of Materials Chemistry C, 2020, 8, 8823-8839.	5.5	13
14	Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. IEEE Transactions on Nuclear Science, 2020, 67, 974-977.	2.0	5
15	Luminescence and scintillation properties of strontium hafnate and strontium zirconate single crystals. Optical Materials, 2019, 98, 109494.	3.6	6
16	Doping nanoparticles using pulsed laser ablation in a liquid containing the doping agent. Nanoscale Advances, 2019, 1, 3963-3972.	4.6	22
17	Advancement toward ultra-thick and bright InGaN/GaN structures with a high number of QWs. CrystEngComm, 2019, 21, 356-362.	2.6	21
18	Progress in fabrication of long transparent YAG:Ce and YAG:Ce,Mg single crystalline fibers for HEP applications. CrystEngComm, 2019, 21, 1728-1733.	2.6	18

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19	Scintillation properties of Y-Admixed Gd <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> scintillator. Radiation Measurements, 2019, 126, 106123.	1.4	1
20	Luminescence study of rare-earth (RE)-doped low-energy phonon RbPb <sub>2</sub> Cl <sub>5</sub> crystals for mid-infrared (IR) lasers emitting above 4.5 $\mu$ m wavelength. Laser Physics, 2019, 29, 075801.	1.2	3
21	Infrared spectroscopic properties of low-phonon lanthanide-doped KLu <sub>2</sub> crystals. Journal of Luminescence, 2019, 211, 100-107.	3.1	10
22	Precision resonance energy scans with the PANDA experiment at FAIR. European Physical Journal A, 2019, 55, 1.	2.5	27
23	InGaN/GaN multiple quantum well for superfast scintillation application: Photoluminescence measurements of the picosecond rise time and excitation density effect. Journal of Luminescence, 2019, 208, 119-124.	3.1	7
24	Garnet Crystal Growth in Non-precious Metal Crucibles. Springer Proceedings in Physics, 2019, , 83-95.	0.2	11
25	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. IEEE Transactions on Nuclear Science, 2018, 65, 2184-2190.	2.0	5
26	Circadian Light Source Based on KxNa <sub>1-x</sub> LuS <sub>2</sub> :Eu <sup>2+</sup> Phosphor. ECS Journal of Solid State Science and Technology, 2018, 7, R3182-R3188.	1.8	6
27	Scintillating ceramics based on non-stoichiometric strontium hafnate. Optical Materials, 2018, 77, 246-252.	3.6	6
28	Influence of cerium doping concentration on the optical properties of Ce,Mg:LuAG scintillation ceramics. Journal of the European Ceramic Society, 2018, 38, 3246-3254.	5.7	23
29	Radio- and photoluminescence properties of Ce/Tb co-doped glasses with huntite-like composition. Optical Materials, 2018, 78, 247-252.	3.6	7
30	Ultrafast Zn(Cd,Mg)O:Ga nanoscintillators with luminescence tunable by band gap modulation. Optics Express, 2018, 26, 29482.	3.4	7
31	Defect states and temperature stability of Eu <sup>2+</sup> center in Eu-doped yttrium aluminum garnet. Journal of Luminescence, 2017, 190, 309-313.	3.1	8
32	Crystal growth and optical properties of indium doped LiCaAlF <sub>6</sub> scintillator single crystals. Optical Materials, 2017, 65, 69-72.	3.6	3
33	Growth and Luminescence Properties of Single Crystals Prepared by Modified Micro-Pulling-Down Method. IEEE Transactions on Nuclear Science, 2016, 63, 453-458.	2.0	10
34	Growth and radioluminescence of metal elements doped LiCaAlF <sub>6</sub> single crystals for neutron scintillator. Radiation Measurements, 2016, 90, 170-173.	1.4	3
35	Eu <sup>2+</sup> Stabilization in YAG Structure: Optical and Electron Paramagnetic Resonance Study. Journal of Physical Chemistry C, 2016, 120, 21751-21761.	3.1	34
36	Preparation and luminescence properties of ZnO:Ga @ polystyrene composite scintillator. Optics Express, 2016, 24, 15289.	3.4	56

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37	Pr-doped Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> scintillation nanopowders prepared by radiation method. Journal of Luminescence, 2016, 179, 21-25.	3.1	4
38	Tunable Eu <sup>2+</sup> emission in K <sub>x</sub> Na <sub>1-x</sub> Lu <sub>2</sub> S <sub>2</sub> phosphors for white LED application. Materials and Design, 2016, 106, 363-370.	7.0	22
39	Scintillation properties of Zr co-doped Ce:(Gd, La) <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> grown by the Czochralski process. Radiation Measurements, 2016, 90, 162-165.	1.4	8
40	Preparation of Zn(Cd)O:Ga@SiO <sub>2</sub> composite scintillating materials. Radiation Measurements, 2016, 90, 59-63.	1.4	5
41	Preliminary study on singlet oxygen production using CeF <sub>3</sub> :Tb <sup>3+</sup> @SiO <sub>2</sub> -PpIX. Radiation Measurements, 2016, 90, 325-328.	1.4	14
42	ALnS <sub>2</sub> :RE (A=K, Rb; Ln=La, Gd, Lu, Y): New optical materials family. Journal of Luminescence, 2016, 170, 718-735.	3.1	30
43	Monitoring tools of COMPASS experiment at CERN. Journal of Physics: Conference Series, 2015, 664, 082054.	0.4	0
44	Optical, Structural and Paramagnetic Properties of Eu-Doped Ternary Sulfides ALnS <sub>2</sub> (A = Na, K, Rb; Ln =) Tj ETQq0 0,0 rgBT /Overlock 10	2.9	38
45	Luminescence characteristics of doubly doped KLuS <sub>2</sub> :Eu, RE (RE = Pr, Sm, Ce). Optical Materials, 2015, 41, 94-97.	3.6	16
46	Diamond contact-less micrometric temperature sensors. Applied Physics Letters, 2015, 106, .	3.3	15
47	Fabrication of highly efficient ZnO nanoscintillators. Optical Materials, 2015, 47, 67-71.	3.6	31
48	Origin of slow low-temperature luminescence in undoped and Ce-doped Y <sub>2</sub> SiO <sub>5</sub> and Lu <sub>2</sub> SiO <sub>5</sub> single crystals. Physica Status Solidi (B): Basic Research, 2015, 252, 274-281.	1.5	9
49	Stabilization of Eu <sup>2+</sup> in KLuS <sub>2</sub> crystalline host: an EPR and optical study. Physica Status Solidi - Rapid Research Letters, 2014, 08, 801-804.	2.4	15
50	UV radiation: a promising tool in the synthesis of multicomponent nano-oxides. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	9
51	Investigation of the luminescence, crystallographic and spatial resolution properties of LSO:Tb scintillating layers used for X-ray imaging applications. Radiation Measurements, 2014, 62, 28-34.	1.4	13
52	Low Temperature Delayed Recombination Decay in Complex Oxide Scintillating Crystals. IEEE Transactions on Nuclear Science, 2014, 61, 257-261.	2.0	9
53	Comparison of the scintillation and luminescence properties of the (Lu <sub>1-x</sub> Gd <sub>x</sub> ) <sub>2</sub> SiO <sub>5</sub> :Ce single crystal scintillators. Journal Physics D: Applied Physics, 2014, 47, 365304.	2.8	16
54	Luminescence Characteristics of the Ce <sup>3+</sup> -Doped Pyrosilicates: The Case of La-Admixed Gd <sub>2</sub> SiO <sub>7</sub> Single Crystals. Journal of Physical Chemistry C, 2014, 118, 26521-26529.	3.1	33

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55	Optical properties of Ce <sup>3+</sup> -doped KLu <sub>2</sub> S <sub>2</sub> phosphor. Journal of Luminescence, 2014, 147, 196-201.	3.1	26
56	Optical and Structural Properties of $\{m RE\}^{3+}$ -Doped $\{m KLnS\}_2$ Compounds. IEEE Transactions on Nuclear Science, 2014, 61, 385-389.	2.0	17
57	Luminescent and scintillation properties of Bi <sup>3+</sup> doped Y <sub>2</sub> SiO <sub>5</sub> and Lu <sub>2</sub> SiO <sub>5</sub> single crystalline films. Journal of Luminescence, 2014, 154, 525-530.	3.1	18
58	Photoluminescence properties of non-stoichiometric strontium zirconate powder phosphor. Optical Materials, 2013, 35, 1019-1022.	3.6	12
59	Preparation and characterization of pure and Pr(III)-doped lead chloride single crystals grown by modified micro-pulling-down method. Journal of Crystal Growth, 2013, 375, 57-61.	1.5	5
60	Luminescent properties of RE <sub>2</sub> O <sub>3</sub> (RE = Lu, Sc, Y) single crystals and ceramics*. European Physical Journal B, 2013, 86, 1.	1.8	6
61	Luminescence and structural properties of RbGd <sub>2</sub> compounds doped by rare earth elements. Optical Materials, 2013, 35, 1226-1229.	3.6	27
62	Comparison of absorption, luminescence and scintillation characteristics in Lu <sub>1.95</sub> Y <sub>0.05</sub> SiO <sub>5</sub> :Ce,Ca and Y <sub>2</sub> SiO <sub>5</sub> :Ce scintillators. Optical Materials, 2013, 35, 1679-1684.	3.6	48
63	Rare-earth-free luminescent non-stoichiometric phases formed in SrO-HfO <sub>2</sub> ternary compositions. Journal of Alloys and Compounds, 2013, 580, 468-474.	5.5	7
64	Quantum tunneling and low temperature delayed recombination in scintillating materials. Chemical Physics Letters, 2013, 578, 66-69.	2.6	18
65	Trapping states and excited state ionization of the Ce <sup>3+</sup> activator in the SrHfO <sub>3</sub> host. Chemical Physics Letters, 2013, 556, 89-93.	2.6	7
66	Bi <sup>3+</sup> -Ce <sup>3+</sup> energy transfer and luminescent properties of LuAG:Bi,Ce and YAG:Bi,Ce single crystalline films. Journal of Luminescence, 2013, 134, 539-543.	3.1	13
67	Bi <sup>3+</sup> -Pr <sup>3+</sup> energy transfer processes and luminescent properties of LuAG:Bi,Pr and YAG:Bi,Pr single crystalline films. Journal of Luminescence, 2013, 141, 137-143.	3.1	14
68	Optical properties of Eu <sup>2+</sup> -doped KLu <sub>2</sub> S <sub>2</sub> phosphor. Chemical Physics Letters, 2013, 574, 61-65.	2.6	34
69	Thermally induced ionization of 5d <sub>1</sub> state of Ce <sup>3+</sup> ion in Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> host. Chemical Physics Letters, 2013, 574, 56-60.	2.6	35
70	Delayed recombination and excited state ionization of the Ce <sup>3+</sup> activator in the SrHfO <sub>3</sub> host. Physica Status Solidi - Rapid Research Letters, 2013, 7, 228-231.	2.4	25
71	Thallium-doped sulphate potassium crystals as materials for radiation detectors. Functional Materials, 2013, 20, 295-299.	0.1	2
72	LPE growth and luminescent properties of Ce doped A <sub>2</sub> SiO <sub>5</sub> :Ce (A = Lu, Gd, Y) single crystalline films. , 2012, , .		0

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73	Influence of yttrium Content on the Ce1 and Ce2 Luminescence Characteristics in $(\text{Lu}_{1-x}\text{Y}_x)_2\text{SiO}_5$ Single Crystals. <i>Journal of Applied Physics</i> , 2012, 59, 2079-2084.	2.0	22
74	Thermally Stimulated Luminescence in Ce-Doped Yttrium Oxyorthosilicate. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 2085-2088.	2.0	16
75	Efficient X-Ray Phosphors Based on Non-Stoichiometric $\text{MeZrO}_{3-x}$ ( $\text{Me} = \text{Ca, Sr}$ ) Single Crystals. <i>Journal of Applied Physics</i> , 2012, 59, 2089-2094.	2.0	6
76	Luminescence and decay kinetic mechanism of $\text{Pr}^{3+}$ center in $\text{Lu}_{0.8}\text{Sc}_{0.2}\text{BO}_3$ host. <i>Chemical Physics Letters</i> , 2012, 539-540, 35-38.	2.6	6
77	Structural and optical properties of Vernier phase lutetium oxyfluorides doped with lanthanide ions: interesting candidates as scintillators and X-ray phosphors. <i>Journal of Materials Chemistry</i> , 2012, 22, 10639.	6.7	40
78	Radiation-induced preparation of pure and Ce-doped lutetium aluminium garnet and its luminescent properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 16590.	6.7	34
79	Preparation, luminescence and structural properties of rare-earth-doped $\text{RbLu}_2$ compounds. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012, 6, 95-97.	2.4	25
80	Photo- and radiation-induced preparation of $\text{Y}_2\text{O}_3$ and $\text{Y}_2\text{O}_3:\text{Ce}(\text{Eu})$ nanocrystals. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	8
81	Defect states in $\text{Pr}^{3+}$ doped lutetium pyrosilicate. <i>Optical Materials</i> , 2012, 34, 872-877.	3.6	22
82	Photoluminescence and scintillation of LGS ( $\text{La}_3\text{Ga}_5\text{SiO}_{14}$ ), LNCA ( $\text{La}_3\text{Nb}_0.5\text{Ga}_5.3\text{Al}_0.2\text{O}_{14}$ ) and LTGA ( $\text{La}_3\text{Ta}_0.5\text{Ga}_5.3\text{Al}_0.2\text{O}_{14}$ ) single crystals. <i>Optical Materials</i> , 2012, 34, 1513-1516.	3.6	11
83	Incorporation of $\text{Ce}^{3+}$ in crystalline Gd-silicate nanoclusters formed in silica. <i>Journal of Luminescence</i> , 2012, 132, 461-466.	3.1	28
84	Ultrafast Transparent Ceramic Scintillators Using the $\text{Yb}^{3+}$ Charge Transfer Luminescence in $\text{RE}_2\text{O}_3$ Host. <i>Applied Physics Express</i> , 2011, 4, 126402.	2.4	26
85	Influence of yttrium content on the CeLu1 and CeLu2 luminescence characteristics in $(\text{Lu}_{1-x}\text{Y}_x)_2\text{SiO}_5:\text{Ce}$ single crystals. <i>Optical Materials</i> , 2011, 34, 428-432.	3.6	27
86	$\text{SrHfO}_3$ -based phosphors and scintillators. <i>Optical Materials</i> , 2011, 34, 433-438.	3.6	28
87	Prompt and delayed recombination mechanisms in $\text{Lu}_4\text{Hf}_3\text{O}_{12}$ nanophosphors. <i>Optical Materials</i> , 2011, 34, 228-233.	3.6	9
88	Preparation, luminescence and structural properties of RE-doped $\text{RbLa}_2$ compounds. <i>Acta Materialia</i> , 2011, 59, 6219-6227.	7.9	40
89	Luminescence and scintillation kinetics of the $\text{Pr}^{3+}$ doped $\text{Lu}_2\text{Si}_2\text{O}_7$ single crystal. <i>Chemical Physics Letters</i> , 2010, 493, 72-75.	2.6	35
90	Temperature dependence of luminescence characteristics of $\text{Lu}_2(\text{Lu}_x\text{Y}_{1-x})_2\text{SiO}_5:\text{Ce}^{3+}$ scintillator grown by the Czochralski method. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	66

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91	Photoluminescence of Pb <sup>2+</sup> -doped SrHfO <sub>3</sub> . Radiation Measurements, 2010, 45, 406-408.	1.4	17
92	Luminescence spectroscopy of the Bi <sup>3+</sup> single and dimer centers in Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Bi single crystalline films. Journal of Luminescence, 2010, 130, 1963-1969.	3.1	31
93	Thermally-induced ionization of the Ce <sup>3+</sup> excited state in SrHfO <sub>3</sub> microcrystalline phosphor. Optical Materials, 2010, 33, 149-152.	3.6	15
94	Intrinsic and impurity-induced emission bands in $\text{SrHfO}_3$ . Physical Review B, 2010, 82, .	3.2	16
95	Pr <sup>3+</sup> luminescence center in Lu <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> host. Physica Status Solidi - Rapid Research Letters, 2009, 3, 293-295.	2.4	27