Vitezslav Jary

List of Publications by Year
in descending order

95 papers	1,583 citations	257450 24 h-index	414414 32 g-index
96 all docs	96 docs citations	96 times ranked	1324 citing authors

#	Article	IF	Citations
1	Temperature dependence of luminescence characteristics of Lu2(1â^'x)Y2xSiO5:Ce3+ scintillator grown by the Czochralski method. Journal of Applied Physics, 2010, 108, .	2.5	66
2	Preparation and luminescence properties of ZnO:Ga â€“ polystyrene composite scintillator. Optics Express, 2016, 24, 15289.	3.4	56
3	Comparison of absorption, luminescence and scintillation characteristics in Lu1.95Y0.05SiO5:Ce,Ca and Y2SiO5:Ce scintillators. Optical Materials, 2013, 35, 1679-1684.	3.6	48
4	Preparation, luminescence and structural properties of RE-doped RbLaS2 compounds. Acta Materialia, 2011, 59, 6219-6227.	7.9	40
5	Structural and optical properties of Vernier phase lutetium oxyfluorides doped with lanthanide ions: interesting candidates as scintillators and X-ray phosphors. Journal of Materials Chemistry, 2012, 22, 10639.	6.7	40
6	Optical, Structural and Paramagnetic Properties of Eu-Doped Ternary Sulfides ALnS2 (A = Na, K, Rb; Ln =) Tj ETQq0 0 0 rgBT /Overlock 10	2.9	38
7	PANDA Phase One. European Physical Journal A, 2021, 57, 1.	2.5	38
8	Luminescence and scintillation kinetics of the Pr3+ doped Lu2Si2O7 single crystal. Chemical Physics Letters, 2010, 493, 72-75.	2.6	35
9	Thermally induced ionization of 5d1 state of Ce3+ ion in Gd3Ga3Al2O12 host. Chemical Physics Letters, 2013, 574, 56-60.	2.6	35
10	Radiation-induced preparation of pure and Ce-doped lutetium aluminium garnet and its luminescent properties. Journal of Materials Chemistry, 2012, 22, 16590.	6.7	34
11	Optical properties of Eu2+-doped KLuS2 phosphor. Chemical Physics Letters, 2013, 574, 61-65.	2.6	34
12	Eu²⁺ Stabilization in YAG Structure: Optical and Electron Paramagnetic Resonance Study. Journal of Physical Chemistry C, 2016, 120, 21751-21761.	3.1	34
13	Luminescence Characteristics of the Ce³⁺-Doped Pyrosilicates: The Case of La-Admixed Gd₂Si₂O₇ Single Crystals. Journal of Physical Chemistry C, 2014, 118, 26521-26529.	3.1	33
14	Luminescence spectroscopy of the Bi3+ single and dimer centers in Y3Al5O12:Bi single crystalline films. Journal of Luminescence, 2010, 130, 1963-1969.	3.1	31
15	Fabrication of highly efficient ZnO nanoscintillators. Optical Materials, 2015, 47, 67-71.	3.6	31
16	ALnS 2 :RE (A=K, Rb; Ln=La, Gd, Lu, Y): New optical materials family. Journal of Luminescence, 2016, 170, 718-735.	3.1	30
17	SrHfO3-based phosphors and scintillators. Optical Materials, 2011, 34, 433-438.	3.6	28
18	Incorporation of Ce3+ in crystalline Gd-silicate nanoclusters formed in silica. Journal of Luminescence, 2012, 132, 461-466.	3.1	28

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19	Pr³⁺ luminescence center in Lu₂Si₂O₇ host. Physica Status Solidi - Rapid Research Letters, 2009, 3, 293-295.	2.4	27
20	Influence of yttrium content on the CeLu1 and CeLu2 luminescence characteristics in (Lu1â^'xYx)2SiO5:Ce single crystals. Optical Materials, 2011, 34, 428-432.	3.6	27
21	Luminescence and structural properties of RbGdS2 compounds doped by rare earth elements. Optical Materials, 2013, 35, 1226-1229.	3.6	27
22	Precision resonance energy scans with the PANDA experiment at FAIR. European Physical Journal A, 2019, 55, 1.	2.5	27
23	Ultrafast Transparent Ceramic Scintillators Using the Yb^{3+} Charge Transfer Luminescence in RE$_{2}$O$_{3}$ Host. Applied Physics Express, 2011, 4, 126402.	2.4	26
24	Optical properties of Ce3+-doped KLuS2 phosphor. Journal of Luminescence, 2014, 147, 196-201.	3.1	26
25	Preparation, luminescence and structural properties of rare-earth-doped RbLuS2 compounds. Physica Status Solidi - Rapid Research Letters, 2012, 6, 95-97.	2.4	25
26	Delayed recombination and excited state ionization of the Ce³⁺ activator in the SrHfO₃ host. Physica Status Solidi - Rapid Research Letters, 2013, 7, 228-231.	2.4	25
27	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
28	Influence of yttrium Content on the Ce1 and Ce2 Luminescence Characteristics in $({m Lu}_{1-{m) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2012, 59, 2079-2084.	2.0	22
29	Defect states in Pr3+ doped lutetium pyrosilicate. Optical Materials, 2012, 34, 872-877.	3.6	22
30	Tunable Eu2+ emission in KxNa1â^'xLuS2 phosphors for white LED application. Materials and Design, 2016, 106, 363-370.	7.0	22
31	Doping nanoparticles using pulsed laser ablation in a liquid containing the doping agent. Nanoscale Advances, 2019, 1, 3963-3972.	4.6	22
32	Advancement toward ultra-thick and bright InGaN/GaN structures with a high number of QWs. CrystEngComm, 2019, 21, 356-362.	2.6	21
33	Quantum tunneling and low temperature delayed recombination in scintillating materials. Chemical Physics Letters, 2013, 578, 66-69.	2.6	18
34	Luminescent and scintillation properties of Bi3+ doped Y2SiO5 and Lu2SiO5 single crystalline films. Journal of Luminescence, 2014, 154, 525-530.	3.1	18
35	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
36	Photoluminescence of Pb2+-doped SrHfO3. Radiation Measurements, 2010, 45, 406-408.	1.4	17

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37	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
38	Intrinsic and impurity-induced emission bands in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SrHfO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:r Physical Review B, 2010, 82, .	3.2	16
39	Thermally Stimulated Luminescence in Ce-Doped Yttrium Oxyorthosilicate. IEEE Transactions on Nuclear Science, 2012, 59, 2085-2088.	2.0	16
40	Comparison of the scintillation and luminescence properties of the (Lu_{1â^'x}Gd_x)₂SiO₅:Ce single crystal scintillators. Journal Physics D: Applied Physics, 2014, 47, 365304.	2.8	16
41	Luminescence characteristics of doubly doped KLuS2:Eu, RE (RE = Pr, Sm, Ce). Optical Materials, 2015, 41, 94-97.	3.6	16
42	Thermally-induced ionization of the Ce3+ excited state in SrHfO3 microcrystalline phosphor. Optical Materials, 2010, 33, 149-152.	3.6	15
43	Stabilization of Eu²⁺in KLuS₂crystalline host: an EPR and optical study. Physica Status Solidi - Rapid Research Letters, 2014, 08, 801-804.	2.4	15
44	Diamond contact-less micrometric temperature sensors. Applied Physics Letters, 2015, 106, .	3.3	15
45	Bi3+â€“Pr3+ 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
46	Preliminary study on singlet oxygen production using CeF3:Tb3+@SiO2-PpIX. Radiation Measurements, 2016, 90, 325-328.	1.4	14
47	Bi3+â€“Ce3+ 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
48	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
49	Thermal analysis of cesium hafnium chloride using DSCâ€“TG under vacuum, nitrogen atmosphere, and in enclosed system. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1101-1107.	3.6	13
50	Specific absorption in Y3Al5O12:Eu ceramics and the role of stable Eu2+ in energy transfer processes. Journal of Materials Chemistry C, 2020, 8, 8823-8839.	5.5	13
51	Photoluminescence properties of non-stoichiometric strontium zirconate powder phosphor. Optical Materials, 2013, 35, 1019-1022.	3.6	12
52	Modified vertical Bridgman method: Time and cost effective tool for preparation of Cs2HfCl6 single crystals. Journal of Crystal Growth, 2020, 533, 125479.	1.5	12
53	Photoluminescence and scintillation of LGS (La3Ga5SiO14), LNGA (La3Nb0.5Ga5.3Al0.2O14) and LTGA (La3Ta0.5Ga5.3Al0.2O14) single crystals. Optical Materials, 2012, 34, 1513-1516.	3.6	11
54	Garnet Crystal Growth in Non-precious Metal Crucibles. Springer Proceedings in Physics, 2019, , 83-95.	0.2	11

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55	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
56	Infrared spectroscopic properties of low-phonon lanthanide-doped KLuS2 crystals. Journal of Luminescence, 2019, 211, 100-107.	3.1	10
57	Prompt and delayed recombination mechanisms in Lu4Hf3O12 nanophosphors. Optical Materials, 2011, 34, 228-233.	3.6	9
58	UV radiation: a promising tool in the synthesis of multicomponent nano-oxides. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	9
59	Low Temperature Delayed Recombination Decay in Complex Oxide Scintillating Crystals. IEEE Transactions on Nuclear Science, 2014, 61, 257-261.	2.0	9
60	Origin of slow low-temperature luminescence in undoped and Ce-doped Y₂SiO₅and Lu₂SiO₅single crystals. Physica Status Solidi (B): Basic Research, 2015, 252, 274-281.	1.5	9
61	Variability of Eu²⁺Emission Features in Multicomponent Alkali-Metal-Rare-Earth Sulfides. ECS Journal of Solid State Science and Technology, 2020, 9, 016007.	1.8	9
62	Ternary sulfides ALnS2:Eu2+ (AÂ=ÂAlkaline Metal, LnÂ=Ârare-earth element) for lighting: Correlation between the host structure and Eu2+ emission maxima. Chemical Engineering Journal, 2021, 418, 129380.	12.7	9
63	Photo- and radiation-induced preparation of Y2O3 and Y2O3:Ce(Eu) nanocrystals. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	8
64	Scintillation properties of Zr co-doped Ce:(Gd, La)2Si2O7 grown by the Czochralski process. Radiation Measurements, 2016, 90, 162-165.	1.4	8
65	Defect states and temperature stability of Eu2+ center in Eu-doped yttrium aluminum garnet. Journal of Luminescence, 2017, 190, 309-313.	3.1	8
66	Rare-earth-free luminescent non-stoichiometric phases formed in SrOâ€“HfO2 ternary compositions. Journal of Alloys and Compounds, 2013, 580, 468-474.	5.5	7
67	Trapping states and excited state ionization of the Ce3+ activator in the SrHfO3 host. Chemical Physics Letters, 2013, 556, 89-93.	2.6	7
68	Radio- and photoluminescence properties of Ce/Tb co-doped glasses with huntite-like composition. Optical Materials, 2018, 78, 247-252.	3.6	7
69	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
70	On the Role of Cs4PbBr6 Phase in the Luminescence Performance of Bright CsPbBr3 Nanocrystals. Nanomaterials, 2021, 11, 1935.	4.1	7
71	Feasibility studies for the measurement of time-like proton electromagnetic form factors from $$ar{p}p ightarrow mu ^+mu ^-$$ at $$overline{ext {P}}ext {ANDA}$$ at FAIR. European Physical Journal A, 2021, 57, 1.	2.5	7
72	Ultrafast Zn(Cd,Mg)O:Ga nanoscintillators with luminescence tunable by band gap modulation. Optics Express, 2018, 26, 29482.	3.4	7

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73	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
74	Efficient X-Ray Phosphors Based on Non-Stoichiometric MeZrO${m }_{3}$ (Me${m }={m }$Ca, Sr,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.0	6
75	Luminescence and decay kinetic mechanism of Pr3+ center in Lu0.8Sc0.2BO3 host. Chemical Physics Letters, 2012, 539-540, 35-38.	2.6	6
76	Luminescent properties of RE2O3 (REâ€‰=â€‰Lu,â€‰Sc,â€‰Y) single crystals and ceramics*. European Physical Journal B, 2013, 86, 1.	1.5	6
77	Circadian Light Source Based on KxNa1-xLuS2:Eu2+ Phosphor. ECS Journal of Solid State Science and Technology, 2018, 7, R3182-R3188.	1.8	6
78	Scintillating ceramics based on non-stoichiometric strontium hafnate. Optical Materials, 2018, 77, 246-252.	3.6	6
79	Luminescence and scintillation properties of strontium hafnate and strontium zirconate single crystals. Optical Materials, 2019, 98, 109494.	3.6	6
80	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
81	Preparation of Zn(Cd)O:Gaâ€“SiO2 composite scintillating materials. Radiation Measurements, 2016, 90, 59-63.	1.4	5
82	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. IEEE Transactions on Nuclear Science, 2018, 65, 2184-2190.	2.0	5
83	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
84	The potential of $$varLambda $$ and $$varXi ^-$$ studies with PANDA at FAIR. European Physical Journal A, 2021, 57, 1.	2.5	5
85	Pr-doped Lu 3 Al 5 O 12 scintillation nanopowders prepared by radiation method. Journal of Luminescence, 2016, 179, 21-25.	3.1	4
86	Relationship Between Li/Ce Concentration and the Luminescence Properties of Codoped Gd 3 (Ga, Al) 5 O 12 :Ce. Physica Status Solidi (B): Basic Research, 2020, 257, 1900504.	1.5	4
87	Growth and radioluminescence of metal elements doped LiCaAlF6 single crystals for neutron scintillator. Radiation Measurements, 2016, 90, 170-173.	1.4	3
88	Crystal growth and optical properties of indium doped LiCaAlF 6 scintillator single crystals. Optical Materials, 2017, 65, 69-72.	3.6	3
89	Luminescence study of rare-earth (RE)-doped low-energy phonon RbPb₂Cl₅crystals for mid-infrared (IR) lasers emitting above 4.5Î¼m wavelength. Laser Physics, 2019, 29, 075801.	1.2	3
90	Study of excited $$varvec{varXi }$$ baryons with the $$overline{ext{ P }}$$ANDA detector. European Physical Journal A, 2021, 57, 1.	2.5	2

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91	Peculiarities and the red shift of Eu2+ luminescence in Gd3+-admixed YAG phosphors. Optical Materials, 2021, 120, 111464.	3.6	2
92	Thallium-doped sulphate potassium crystals as materials for radiation detectors. Functional Materials, 2013, 20, 295-299.	0.1	2
93	Scintillation properties of Y-Admixed Gd2Si2O7 scintillator. Radiation Measurements, 2019, 126, 106123.	1.4	1
94	LPE growth and luminescent properties of Ce doped A<inf>2S</inf>iO<inf>5</inf>:Ce (A = Lu, Gd, Y) single crystalline films. , 2012, , .		0
95	Monitoring tools of COMPASS experiment at CERN. Journal of Physics: Conference Series, 2015, 664, 082054.	0.4	0