

Alena Bejtlerová

List of Publications by Year in descending order

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times ranked

1102

citing authors

#	ARTICLE	IF	CITATIONS
1	Defect Engineering in Ce-Doped Aluminum Garnet Single Crystal Scintillators. <i>Crystal Growth and Design</i> , 2014, 14, 4827-4833.	3.0	197
2	Scintillation response of Ce-doped or intrinsic scintillating crystals in the range up to 1MeV. <i>Radiation Measurements</i> , 2004, 38, 353-357.	1.4	161
3	Alkali earth co-doping effects on luminescence and scintillation properties of Ce doped $\text{Gd}_3\text{Al}_2\text{Ga}_3\text{O}_{12}$ scintillator. <i>Optical Materials</i> , 2015, 41, 63-66.	3.6	114
4	Towards Bright and Fast $\text{Lu}_{3}\text{Al}_5\text{O}_{12}:\text{Ce},\text{Mg}$ Optical Ceramics Scintillators. <i>Advanced Optical Materials</i> , 2016, 4, 731-739.	7.3	87
5	Temperature dependence of luminescence characteristics of $\text{Lu}_{2(1-x)}\text{Y}_{2x}\text{SiO}_5:\text{Ce}^{3+}$ scintillator grown by the Czochralski method. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	66
6	Preparation and luminescence properties of $\text{ZnO}: \text{Ga}$ polystyrene composite scintillator. <i>Optics Express</i> , 2016, 24, 15289.	3.4	56
7	Luminescence and scintillation of Ce^{3+} -doped high silica glass. <i>Optical Materials</i> , 2012, 34, 1762-1766.	3.6	55
8	Comparison of absorption, luminescence and scintillation characteristics in $\text{Lu}_{1.95}\text{Y}_{0.05}\text{SiO}_5:\text{Ce,Ca}$ and $\text{Y}_2\text{SiO}_5:\text{Ce}$ scintillators. <i>Optical Materials</i> , 2013, 35, 1679-1684.	3.6	48
9	Scintillation Properties of Ce^{3+} - and Pr^{3+} -Doped LuAG, YAG and Mixed $\text{Lu}_{m_x}\text{Y}_{1-m_x}\text{AG}$ Garnet Crystals. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 2120-2125.	2.0	47
10	Scintillation and optical properties of YAG:Ce films grown by liquid phase epitaxy. <i>Radiation Measurements</i> , 2007, 42, 533-536.	1.4	42
11	Composition Tailoring in Ce-Doped Multicomponent Garnet Epitaxial Film Scintillators. <i>Crystal Growth and Design</i> , 2015, 15, 3715-3723.	3.0	41
12	Luminescence and scintillation properties of Mg-codoped LuAG:Pr single crystals annealed in air. <i>Journal of Luminescence</i> , 2017, 181, 277-285.	3.1	37
13	Photoluminescent properties of nanocrystallized zinc borosilicate glasses. <i>Radiation Measurements</i> , 2004, 38, 771-774.	1.4	34
14	Crystal growth and luminescence properties of Ti-doped LiAlO_2 for neutron scintillator. <i>Journal of Crystal Growth</i> , 2011, 318, 828-832.	1.5	34
15	Luminescence of Tb^{3+} -doped high silica glass under UV and X-ray excitation. <i>Optical Materials</i> , 2013, 35, 426-430.	3.6	33
16	InGaN/GaN multiple quantum well for fast scintillation application: radioluminescence and photoluminescence study. <i>Nanotechnology</i> , 2014, 25, 455501.	2.6	33
17	Luminescence Characteristics of the Ce^{3+} -Doped Pyrosilicates: The Case of La-Admixed $\text{Gd}_2\text{Si}_2\text{O}_7$ Single Crystals. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26521-26529.	3.1	33
18	Ce^{3+} -doped scintillators: status and properties of (Y,Lu) aluminium perovskites and garnets. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 537, 271-275.	1.6	30

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19	The γ -particle excited scintillation response of YAG:Ce thin films grown by liquid phase epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 1494-1500. Energy Transfer and Scintillation Properties of γ -doped Lu _{3-x} Y _x Al ₅ O ₁₂ Ceramics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1500-1504.	1.8	29
20	Notation="TeX"> > \${\{LuYCd}\}}_{3+}^{3+} < /tex> < /formula> Doped < formula formulatype="inline"> < /tex> < /formula> Notation="TeX"> > \${\{LuYCd}\}}_{3+}^{3+} < /tex> < /formula> < /formula> Notation="TeX"> > \${\{AlGa}\}}_{5}^{5} {\{O}\}}_{12}^{12} < /tex> < /formula> < /formula> Multicomponent Garnets. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 282-289.	2.0	29
21	Optical, luminescence and scintillation characteristics of non - stoichiometric LuAG:Ce ceramics. <i>Journal of Luminescence</i> , 2016, 169, 72-77.	3.1	24
22	First laser emission of Yb_015:(Lu_05Y_05)_3Al_5O_12 ceramics. <i>Optics Express</i> , 2016, 24, 9611.	3.4	22
23	Electronic band modification for faster and brighter Ce,Mg:Lu _{3-x} Y _x Al ₅ O ₁₂ ceramic scintillators. <i>Journal of Luminescence</i> , 2019, 214, 116545.	3.1	22
24	Co-doping effects on luminescence and scintillation properties of Ce doped Lu ₃ Al ₅ O ₁₂ scintillator. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 782, 9-12.	1.6	21
25	High efficiency laser action in mildly doped Yb:LuYAG ceramics. <i>Optical Materials</i> , 2017, 73, 312-318.	3.6	20
26	Luminescence and scintillation properties of rare-earth-doped LaAlO ₃ single crystals. <i>Radiation Measurements</i> , 2019, 121, 26-31.	1.4	20
27	Luminescence of Tb ³⁺ doped oxide glasses with high Gd ₂ O ₃ concentration under UV and X-ray excitation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 2578-2582.	1.8	19
28	Garnet Scintillators of Superior Timing Characteristics: Material, Engineering by Liquid Phase Epitaxy. <i>Advanced Optical Materials</i> , 2017, 5, 1600875.	7.3	19
29	Spectroscopic and laser characterization of Yb_015:(Lu_xY_1-x)_3Al_5O_12 ceramics with different Lu/Y balance. <i>Optics Express</i> , 2016, 24, 17832.	3.4	18
30	The influence of air annealing on the microstructure and scintillation properties of Ce,Mg:LuAG ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 1805-1813.	3.8	18
31	Tailoring and Optimization of LuAG:Ce Epitaxial Film Scintillation Properties by Mg Co-Doping. <i>Crystal Growth and Design</i> , 2018, 18, 4998-5007.	3.0	17
32	Scintillation Response Comparison Among Ce-Doped Aluminum Garnets, Perovskites and Orthosilicates. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 1142-1147.	2.0	15
33	Radiation induced synthesis of powder yttrium aluminium garnet. <i>Radiation Physics and Chemistry</i> , 2011, 80, 957-962.	2.8	15
34	Luminescence and scintillation properties of Lu ₃ Al ₅ O ₁₂ nanoceramics sintered by SPS method. <i>Optical Materials</i> , 2016, 53, 54-63.	3.6	14
35	Fabrication and optical properties of cerium doped Lu ₃ Ga ₃ Al ₂ O ₁₂ scintillation ceramics. <i>Optical Materials</i> , 2018, 85, 121-126.	3.6	14
36	Growth and scintillation properties of Li and Ce co-doped Lu ₃ Al ₅ O ₁₂ scintillator. <i>Journal of Crystal Growth</i> , 2016, 452, 85-88.	1.5	13

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37	Specific absorption in Y ₃ Al ₅ O ₁₂ :Eu ceramics and the role of stable Eu ²⁺ in energy transfer processes. Journal of Materials Chemistry C, 2020, 8, 8823-8839.	5.5	13
38	Characterization of the lasing properties of a 5%Yb doped Lu ₂ SiO ₅ crystal along its three principal dielectric axes. Optics Express, 2015, 23, 13210.	3.4	12
39	Effect of Si ⁴⁺ co-doping on luminescence and scintillation properties of Lu ₃ Al ₅ O ₁₂ :Ce,Ca epitaxial garnet films. Optical Materials, 2019, 91, 321-325.	3.6	12
40	Heavily Ce ³⁺ -doped Y ₃ Al ₅ O ₁₂ thin films deposited by a polymer sol-gel method for fast scintillation detectors. CrystEngComm, 2019, 21, 5115-5123.	2.6	10
41	Microstructure evolution in two-step-sintering process toward transparent Ce:(Y,Gd)3(Ga,Al)5O12 scintillation ceramics. Journal of Alloys and Compounds, 2020, 846, 156377.	5.5	10
42	Gd-admixed (Lu,Gd)AlO ₃ single crystals: breakthrough in heavy perovskite scintillators. NPG Asia Materials, 2021, 13, .	7.9	10
43	Scintillation properties of Pr ³⁺ -doped lutetium and yttrium aluminum garnets: Comparison with Ce ³⁺ -doped ones. Optical Materials, 2011, 34, 424-427.	3.6	8
44	Composition-Engineered GSAG Garnet: Single-Crystal Host for Fast Scintillators. Crystal Growth and Design, 2021, 21, 7139-7149.	3.0	8
45	Preparation and luminescent properties of ZnO:Ga(La)/polymer nanocomposite. Radiation Measurements, 2013, 56, 102-106.	1.4	7
46	Ultrafast Zn(Cd,Mg)O:Ga nanoscintillators with luminescence tunable by band gap modulation. Optics Express, 2018, 26, 29482.	3.4	7
47	Influence of calcium doping concentration on the performance of Ce,Ca:LuAG scintillation ceramics. Journal of the European Ceramic Society, 2022, 42, 6075-6084.	5.7	7
48	Ce ³⁺ -doped crystalline garnet films – scintillation characterization using $\bar{\gamma}$ -particle excitation. Radiation Measurements, 2010, 45, 369-371.	1.4	6
49	Efficient X-Ray Phosphors Based on Non-Stoichiometric MeZrO _{{m}_3} (Me _{m} =Ca, Sr,) Tj ETQq1 1 0.784314 rgBT /Overl...	2.0	6
50	Luminescent properties of RE ₂ O ₃ (RE=Lu, Sc, Y) single crystals and ceramics*. European Physical Journal B, 2013, 86, 1.	1.5	6
51	Luminescence and scintillation characteristics of cerium doped Gd ₂ Y ₃ Al ₅ O ₁₂ ceramics. Optical Materials, 2019, 90, 20-25.	3.6	6
52	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. IEEE Transactions on Nuclear Science, 2018, 65, 2184-2190.	2.0	5
53	Pr-doped Lu ₃ Al ₅ O ₁₂ scintillation nanopowders prepared by radiation method. Journal of Luminescence, 2016, 179, 21-25.	3.1	4
54	Improvement of the growth of Li ₄ SiO ₄ single crystals for neutron detection and their scintillation and luminescence properties. Journal of Crystal Growth, 2017, 457, 143-150.	1.5	4

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55	Scintillation characteristics and temperature quenching of radio- and photoluminescence of Mg ²⁺ -codoped (Lu,Gd)3Al ₂ .4Ga _{2.6} O ₁₂ :Ce garnet crystals. Optical Materials, 2021, 121, 111595.		3.6	4
56	Luminescence, scintillation, and energy transfer in SiO ₂ -Al ₂ O ₃ -B ₂ O ₃ -Gd ₂ O ₃ :Ce ³⁺ ,Pr ³⁺ glasses. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700072.		1.8	3
57	Luminescence and scintillation properties of Mo co-doped Y _{0.8} Gd _{2.2} (Al _{5-x} Gax)O ₁₂ : Ce multicomponent garnet crystals. Optical Materials, 2021, 122, 111783.		3.6	2
58	First laser operation and spectroscopic characterization of mixed garnet Yb:LuYAG ceramics. , 2016, , .			1
59	Photo- and radioluminescence of Dy ³⁺ -doped oxide glass with high-Gd ₂ O ₃ content. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 133-138.		1.8	1
60	Temperature dependence of radio- and photoluminescence and scintillation properties of Y _{0.6} Gd _{2.4} Al ₂ Ga ₃ O ₁₂ :Ce,Mg single crystal. Optical Materials, 2022, 131, 112662.		3.6	1
61	Optical monitoring of quantum dots in NaCl:Pb crystal. Optical Materials, 2007, 30, 177-180.		3.6	0
62	Yb:Lu ₂ SiO ₅ crystal : characterization of the laser emission along the three dielectric axes. , 2015, , .			0