

# Alena Beitlerová

## List of Publications by Year in descending order

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62  
papers

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304743

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302126

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63  
all docs

63  
docs citations

63  
times ranked

1102  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Temperature dependence of radio- and photoluminescence and scintillation properties of Y <sub>0.6</sub> Gd <sub>2.4</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce,Mg single crystal. Optical Materials, 2022, 131, 112662.	3.6	1
3	Scintillation characteristics and temperature quenching of radio- and photoluminescence of Mg <sup>2+</sup> -codoped (Lu,Gd) <sub>3</sub> Al <sub>2</sub> Ga <sub>2</sub> O <sub>12</sub> :Ce garnet crystals. Optical Materials, 2021, 121, 111595.	3.6	4
4	Gd-admixed (Lu,Gd)AlO <sub>3</sub> single crystals: breakthrough in heavy perovskite scintillators. NPG Asia Materials, 2021, 13, .	7.9	10
5	Composition-Engineered GSAG Garnet: Single-Crystal Host for Fast Scintillators. Crystal Growth and Design, 2021, 21, 7139-7149.	3.0	8
6	Luminescence and scintillation properties of Mo co-doped Y <sub>0.8</sub> Gd <sub>2.2</sub> (Al <sub>5-x</sub> Ga <sub>x</sub> )O <sub>12</sub> : Ce multicomponent garnet crystals. Optical Materials, 2021, 122, 111783.	3.6	2
7	Microstructure evolution in two-step-sintering process toward transparent Ce:(Y,Gd) <sub>3</sub> (Ga,Al) <sub>5</sub> O <sub>12</sub> scintillation ceramics. Journal of Alloys and Compounds, 2020, 846, 156377.	5.5	10
8	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
9	Heavily Ce <sup>3+</sup> -doped Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> thin films deposited by a polymer sol-gel method for fast scintillation detectors. CrystEngComm, 2019, 21, 5115-5123.	2.6	10
10	Electronic band modification for faster and brighter Ce,Mg:Lu <sub>3-x</sub> Y <sub>x</sub> Al <sub>5</sub> O <sub>12</sub> ceramic scintillators. Journal of Luminescence, 2019, 214, 116545.	3.1	22
11	Effect of Si <sup>4+</sup> co-doping on luminescence and scintillation properties of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Ce,Ca epitaxial garnet films. Optical Materials, 2019, 91, 321-325.	3.6	12
12	Luminescence and scintillation characteristics of cerium doped Gd <sub>2</sub> YGa <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> ceramics. Optical Materials, 2019, 90, 20-25.	3.6	6
13	The influence of air annealing on the microstructure and scintillation properties of Ce,Mg:Lu <sub>3-x</sub> Y <sub>x</sub> Al <sub>5</sub> O <sub>12</sub> ceramics. Journal of the American Ceramic Society, 2019, 102, 1805-1813.	3.8	18
14	Luminescence and scintillation properties of rare-earth-doped LaAlO <sub>3</sub> single crystals. Radiation Measurements, 2019, 121, 26-31.	1.4	20
15	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. IEEE Transactions on Nuclear Science, 2018, 65, 2184-2190.	2.0	5
16	Tailoring and Optimization of LuAG:Ce Epitaxial Film Scintillation Properties by Mg Co-Doping. Crystal Growth and Design, 2018, 18, 4998-5007.	3.0	17
17	Fabrication and optical properties of cerium doped Lu <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> scintillation ceramics. Optical Materials, 2018, 85, 121-126.	3.6	14
18	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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19	Improvement of the growth of Li <sub>4</sub> SiO <sub>4</sub> single crystals for neutron detection and their scintillation and luminescence properties. Journal of Crystal Growth, 2017, 457, 143-150.	1.5	4
20	Garnet Scintillators of Superior Timing Characteristics: Material, Engineering by Liquid Phase Epitaxy. Advanced Optical Materials, 2017, 5, 1600875.	7.3	19
21	Luminescence, scintillation, and energy transfer in SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> -B <sub>2</sub> O <sub>3</sub> -Gd <sub>2</sub> O <sub>3</sub> :Ce <sup>3+</sup> , Pr <sup>3+</sup> glasses. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700072.	1.8	3
22	High efficiency laser action in mildly doped Yb:LuYAG ceramics. Optical Materials, 2017, 73, 312-318.	3.6	20
23	Luminescence and scintillation properties of Mg-codoped LuAG:Pr single crystals annealed in air. Journal of Luminescence, 2017, 181, 277-285.	3.1	37
24	Towards Bright and Fast Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Ce, Mg Optical Ceramics Scintillators. Advanced Optical Materials, 2016, 4, 731-739.	7.3	87
25	First laser operation and spectroscopic characterization of mixed garnet Yb:LuYAG ceramics. , 2016, , .		1
26	Growth and scintillation properties of Li and Ce co-doped Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> scintillator. Journal of Crystal Growth, 2016, 452, 85-88.	1.5	13
27	First laser emission of Yb <sub>0.15</sub> (Lu <sub>0.85</sub> Y <sub>0.05</sub> ) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> ceramics. Optics Express, 2016, 24, 9611.	3.4	22
28	Spectroscopic and laser characterization of Yb <sub>0.15</sub> (Lu <sub>1-x</sub> Y <sub>x</sub> ) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> ceramics with different Lu/Y balance. Optics Express, 2016, 24, 17832.	3.4	18
29	Preparation and luminescence properties of ZnO:Ga " polystyrene composite scintillator. Optics Express, 2016, 24, 15289.	3.4	56
30	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
31	Luminescence and scintillation properties of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> nanoceramics sintered by SPS method. Optical Materials, 2016, 53, 54-63.	3.6	14
32	Photo- and radioluminescence of Dy <sup>3+</sup> -doped oxide glass with high Gd <sub>2</sub> O <sub>3</sub> content. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 133-138.	1.8	1
33	Optical, luminescence and scintillation characteristics of non-stoichiometric LuAG:Ce ceramics. Journal of Luminescence, 2016, 169, 72-77.	3.1	24
34	Yb:Lu <sub>2</sub> SiO <sub>5</sub> crystal: characterization of the laser emission along the three dielectric axes. , 2015, , .		0
35	Co-doping effects on luminescence and scintillation properties of Ce doped Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 782, 9-12.	1.6	21
36	Characterization of the lasing properties of a 5%Yb doped Lu <sub>2</sub> SiO <sub>5</sub> crystal along its three principal dielectric axes. Optics Express, 2015, 23, 13210.	3.4	12

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37	Composition Tailoring in Ce-Doped Multicomponent Garnet Epitaxial Film Scintillators. Crystal Growth and Design, 2015, 15, 3715-3723.	3.0	41
38	Alkali earth co-doping effects on luminescence and scintillation properties of Ce doped Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> scintillator. Optical Materials, 2015, 41, 63-66.	3.6	114
39	InGaN/GaN multiple quantum well for fast scintillation application: radioluminescence and photoluminescence study. Nanotechnology, 2014, 25, 455501.	2.6	33
40	Energy Transfer and Scintillation Properties of Ce <sup>3+</sup> -Doped LuY <sub>3</sub> Gd <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> Multicomponent Garnets. IEEE Transactions on Nuclear Science, 2014, 61, 282-289.	2.0	29
41	Luminescence Characteristics of the Ce <sup>3+</sup> -Doped Pyrosilicates: The Case of La-Admixed Gd <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> Single Crystals. Journal of Physical Chemistry C, 2014, 118, 26521-26529.	3.1	33
42	Defect Engineering in Ce-Doped Aluminum Garnet Single Crystal Scintillators. Crystal Growth and Design, 2014, 14, 4827-4833.	3.0	197
43	Luminescence of Tb <sup>3+</sup> -doped high silica glass under UV and X-ray excitation. Optical Materials, 2013, 35, 426-430.	3.6	33
44	Preparation and luminescent properties of ZnO:Ga(La)/polymer nanocomposite. Radiation Measurements, 2013, 56, 102-106.	1.4	7
45	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.	1.5	6
46	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
47	Luminescence of Tb <sup>3+</sup> -doped oxide glasses with high Gd <sub>2</sub> O <sub>3</sub> concentration under UV and X-ray excitation. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2578-2582.	1.8	19
48	Efficient X-Ray Phosphors Based on Non-Stoichiometric MeZrO <sub>3</sub> (Me={Ca, Sr})	2.0	6
49	Luminescence and scintillation of Ce <sup>3+</sup> -doped high silica glass. Optical Materials, 2012, 34, 1762-1766.	3.6	55
50	Scintillation Properties of Ce <sup>3+</sup> - and Pr <sup>3+</sup> -Doped LuAG, YAG and Mixed Lu <sub>x</sub> Y <sub>1-x</sub> Al <sub>3</sub> G <sub>5</sub> O <sub>12</sub> Garnet Crystals. IEEE Transactions on Nuclear Science, 2012, 59, 2120-2125.	2.0	47
51	Scintillation properties of Pr <sup>3+</sup> -doped lutetium and yttrium aluminum garnets: Comparison with Ce <sup>3+</sup> -doped ones. Optical Materials, 2011, 34, 424-427.	3.6	8
52	Crystal growth and luminescence properties of Ti-doped LiAlO <sub>2</sub> for neutron scintillator. Journal of Crystal Growth, 2011, 318, 828-832.	1.5	34
53	Radiation induced synthesis of powder yttrium aluminium garnet. Radiation Physics and Chemistry, 2011, 80, 957-962.	2.8	15
54	Temperature dependence of luminescence characteristics of Lu <sub>2</sub> (1-x)Y <sub>2x</sub> SiO <sub>5</sub> :Ce <sup>3+</sup> scintillator grown by the Czochralski method. Journal of Applied Physics, 2010, 108, .	2.5	66

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55	Ce <sup>3+</sup> -doped crystalline garnet films – scintillation characterization using $\beta$ -particle excitation. Radiation Measurements, 2010, 45, 369-371.	1.4	6
56	The $\beta$ -particle excited scintillation response of YAG:Ce thin films grown by liquid phase epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1494-1500.	1.8	29
57	Scintillation Response Comparison Among Ce-Doped Aluminum Garnets, Perovskites and Orthosilicates. IEEE Transactions on Nuclear Science, 2008, 55, 1142-1147.	2.0	15
58	Optical monitoring of quantum dots in NaCl:Pb crystal. Optical Materials, 2007, 30, 177-180.	3.6	0
59	Scintillation and optical properties of YAG:Ce films grown by liquid phase epitaxy. Radiation Measurements, 2007, 42, 533-536.	1.4	42
60	Ce <sup>3+</sup> -doped scintillators: status and properties of (Y,Lu) aluminium perovskites and garnets. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 537, 271-275.	1.6	30
61	Photoluminescent properties of nanocrystallized zinc borosilicate glasses. Radiation Measurements, 2004, 38, 771-774.	1.4	34
62	Scintillation response of Ce-doped or intrinsic scintillating crystals in the range up to 1MeV. Radiation Measurements, 2004, 38, 353-357.	1.4	161