

# Jan Brta

## List of Publications by Citations

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46  
papers

511  
citations

14  
h-index

20  
g-index

48  
ext. papers

620  
ext. citations

3.5  
avg, IF

3.58  
L-index

#	Paper	IF	Citations
46	Preparation, luminescence and structural properties of RE-doped RbLaS <sub>2</sub> compounds. <i>Acta Materialia</i> , <b>2011</b> , 59, 6219-6227	8.4	33
45	Photo- and radiation-induced preparation of nanocrystalline copper and cuprous oxide catalysts. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , <b>2010</b> , 286, 611-618	1.5	32
44	Radiation-induced preparation of pure and Ce-doped lutetium aluminium garnet and its luminescent properties. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 16590		31
43	Prospective carriers of <sup>223</sup> Ra for targeted alpha particle therapy. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , <b>2015</b> , 304, 443-447	1.5	30
42	Luminescence and scintillation properties of Mg-codoped LuAG:Pr single crystals annealed in air. <i>Journal of Luminescence</i> , <b>2017</b> , 181, 277-285	3.8	28
41	Optical, Structural and Paramagnetic Properties of Eu-Doped Ternary Sulfides ALnS <sub>3</sub> (A = Na, K, Rb; Ln = La, Gd, Lu, Y). <i>Materials</i> , <b>2015</b> , 8, 6978-6998	3.5	27
40	Eu <sup>2+</sup> Stabilization in YAG Structure: Optical and Electron Paramagnetic Resonance Study. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 21751-21761	3.8	27
39	Optical properties of Eu <sup>2+</sup> -doped KLuS <sub>2</sub> phosphor. <i>Chemical Physics Letters</i> , <b>2013</b> , 574, 61-65	2.5	26
38	Luminescence and structural properties of RbGdS <sub>2</sub> compounds doped by rare earth elements. <i>Optical Materials</i> , <b>2013</b> , 35, 1226-1229	3.3	24
37	ALnS <sub>2</sub> :RE (A=K, Rb; Ln=La, Gd, Lu, Y): New optical materials family. <i>Journal of Luminescence</i> , <b>2016</b> , 170, 718-735	3.8	22
36	Preparation, luminescence and structural properties of rare-earth-doped RbLuS <sub>2</sub> compounds. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2012</b> , 6, 95-97	2.5	22
35	Optical properties of Ce <sup>3+</sup> -doped KLuS <sub>2</sub> phosphor. <i>Journal of Luminescence</i> , <b>2014</b> , 147, 196-201	3.8	19
34	Tunable Eu <sup>2+</sup> emission in K x Na 1-x LuS <sub>2</sub> phosphors for white LED application. <i>Materials and Design</i> , <b>2016</b> , 106, 363-370	8.1	16
33	Luminescence and scintillation properties of rare-earth-doped LaAlO <sub>3</sub> single crystals. <i>Radiation Measurements</i> , <b>2019</b> , 121, 26-31	1.5	15
32	Optical and Structural Properties of RE <sup>3+</sup> -Doped KLnS <sub>2</sub> Compounds. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 385-389	1.7	14
31	Luminescence characteristics of doubly doped KLuS <sub>2</sub> :Eu, RE (RE = Pr, Sm, Ce). <i>Optical Materials</i> , <b>2015</b> , 41, 94-97	3.3	14
30	Luminescence and scintillation properties of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> nanoceramics sintered by SPS method. <i>Optical Materials</i> , <b>2016</b> , 53, 54-63	3.3	11

29	Stabilization of Eu <sup>2+</sup> in KLuS <sub>2</sub> crystalline host: an EPR and optical study. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2014</b> , 08, 801-804	2.5	11
28	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. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 8823-8839	7.1	10
27	Synthesis routes of CeO <sub>2</sub> nanoparticles dedicated to organophosphorus degradation: a benchmark. <i>CrystEngComm</i> , <b>2020</b> , 22, 1725-1737	3.3	10
26	Photochemical synthesis of nano- and micro-crystalline particles in aqueous solutions. <i>Applied Surface Science</i> , <b>2019</b> , 479, 506-511	6.7	9
25	Preparation of inorganic crystalline compounds induced by ionizing, UV and laser radiations. <i>Radiation Physics and Chemistry</i> , <b>2012</b> , 81, 1411-1416	2.5	9
24	Infrared spectroscopic properties of low-phonon lanthanide-doped KLuS <sub>2</sub> crystals. <i>Journal of Luminescence</i> , <b>2019</b> , 211, 100-107	3.8	7
23	Indirect synthesis of Al <sub>2</sub> O <sub>3</sub> via radiation- or photochemical formation of its hydrated precursors. <i>Materials Research Bulletin</i> , <b>2014</b> , 49, 633-639	5.1	6
22	UV radiation: a promising tool in the synthesis of multicomponent nano-oxides. <i>Journal of Nanoparticle Research</i> , <b>2014</b> , 16, 1	2.3	6
21	Influence of Mg-codoping, non-stoichiometry and Ga-admixture on LuAG:Ce scintillation properties. <i>Optical Materials</i> , <b>2018</b> , 86, 213-232	3.3	6
20	Circadian Light Source Based on K <sub>x</sub> Na <sub>1-x</sub> LuS <sub>2</sub> :Eu <sup>2+</sup> Phosphor. <i>ECS Journal of Solid State Science and Technology</i> , <b>2018</b> , 7, R3182-R3188	2	5
19	Radiolytic formation of ferrous and ferric ions in carbon steel deaerated water system. <i>Radiation Physics and Chemistry</i> , <b>2011</b> , 80, 440-445	2.5	5
18	Variability of Eu <sup>2+</sup> -Emission Features in Multicomponent Alkali-Metal-Rare-Earth Sulfides. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 016007	2	5
17	Pr-doped Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> scintillation nanopowders prepared by radiation method. <i>Journal of Luminescence</i> , <b>2016</b> , 179, 21-25	3.8	4
16	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. <i>IEEE Transactions on Nuclear Science</i> , <b>2018</b> , 65, 2184-2190	1.7	3
15	Afterglow and Quantum Tunneling in Ce-Doped Lutetium Aluminum Garnet. <i>IEEE Transactions on Nuclear Science</i> , <b>2018</b> , 65, 2085-2089	1.7	3
14	Gamma-radiolytic preparation of multi-component oxides. <i>Radiation Physics and Chemistry</i> , <b>2016</b> , 124, 68-74	2.5	3
13	Nanocrystalline Eu-doped Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> phosphor prepared by radiation method. <i>Optical Materials</i> , <b>2015</b> , 40, 102-106	3.3	3
12	Photo- and radiation-induced preparation of Y <sub>2</sub> O <sub>3</sub> and Y <sub>2</sub> O <sub>3</sub> :Ce(Eu) nanocrystals. <i>Journal of Nanoparticle Research</i> , <b>2012</b> , 14, 1	2.3	3

11	Accurately predicting optical properties of rare-earth, aluminate scintillators: influence of electron-hole correlation. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 7292-7301	7.1	3
10	Highly luminescent cerium-doped YSO/ LSO microcrystals prepared via room temperature sol-gel route. <i>Radiation Measurements</i> , <b>2019</b> , 122, 84-90	1.5	2
9	Photochemical synthesis and characterization of multi-component (Gd,Lu) <sub>3</sub> (Ga,Al) <sub>5</sub> O <sub>12</sub> :Ce garnet powders. <i>Radiation Measurements</i> , <b>2019</b> , 124, 98-102	1.5	2
8	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. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129380	14.7	2
7	Compositional screening of Ce-doped (Gd,Lu,Y) <sub>3</sub> (Al,Ga) <sub>5</sub> O <sub>12</sub> ceramics prepared by quenching from melt and their luminescence properties. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 889, 161687	5.7	2
6	Tri-arc growth and characterization of U <sub>3</sub> Si <sub>2</sub> and U <sub>3</sub> Si <sub>5</sub> single crystals. <i>Journal of Crystal Growth</i> , <b>2021</b> , 558, 126025	1.6	1
5	Luminescence and scintillation properties of strontium hafnate and strontium zirconate single crystals. <i>Optical Materials</i> , <b>2019</b> , 98, 109494	3.3	0
4	Sorption properties of selected oxidic nanoparticles for the treatment of spent decontamination solutions based on citric acid. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , <b>2018</b> , 318, 2443-2448	1.5	0
3	Peculiarities and the red shift of Eu <sup>2+</sup> luminescence in Gd <sup>3+</sup> -admixed YAG phosphors. <i>Optical Materials</i> , <b>2021</b> , 120, 111464	3.3	0
2	Conference Comments by the Editors. <i>IEEE Transactions on Nuclear Science</i> , <b>2018</b> , 65, 1976-1976	1.7	
1	Probing the <sup>91</sup> Zr NMR parameters in the solid state by a combination of DFT calculations and experiments. <i>Chemical Physics Letters</i> , <b>2020</b> , 738, 136855	2.5	