

Jan BÄ;rta

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Compositional screening of Ce-doped $(\text{Gd,Lu,Y})_3(\text{Al,Ga})_5\text{O}_{12}$ ceramics prepared by quenching from melt and their luminescence properties. <i>Journal of Alloys and Compounds</i> , 2022, 889, 161687.	2.8	5
2	Advanced photochemical processes for the manufacture of nanopowders: an evaluation of long-term pilot plant operation. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 968-977.	1.9	3
3	Accurately predicting optical properties of rare-earth, aluminate scintillators: influence of electron-hole correlation. <i>Journal of Materials Chemistry C</i> , 2021, 9, 7292-7301.	2.7	8
4	Tri-arc growth and characterization of U_3Si_2 and U_3Si_5 single crystals. <i>Journal of Crystal Growth</i> , 2021, 558, 126025.	0.7	4
5	Ternary sulfides $\text{AlnS}_2:\text{Eu}^{2+}$ ($\text{A}=\text{Alkaline Metal}$, $\text{Ln}=\text{Rare-earth element}$) for lighting: Correlation between the host structure and Eu^{2+} emission maxima. <i>Chemical Engineering Journal</i> , 2021, 418, 129380.	6.6	9
6	Peculiarities and the red shift of Eu^{2+} luminescence in Gd^{3+} -admixed YAG phosphors. <i>Optical Materials</i> , 2021, 120, 111464.	1.7	2
7	Variability of Eu^{2+} Emission Features in Multicomponent Alkali-Metal-Rare-Earth Sulfides. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 016007.	0.9	9
8	Probing the ^{91}Zr NMR parameters in the solid state by a combination of DFT calculations and experiments. <i>Chemical Physics Letters</i> , 2020, 738, 136855.	1.2	0
9	Specific absorption in $\text{Y}_3\text{Al}_5\text{O}_{12}:\text{Eu}$ ceramics and the role of stable Eu^{2+} in energy transfer processes. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8823-8839.	2.7	13
10	Synthesis routes of CeO_2 nanoparticles dedicated to organophosphorus degradation: a benchmark. <i>CrystEngComm</i> , 2020, 22, 1725-1737.	1.3	20
11	Luminescence and scintillation properties of strontium hafnate and strontium zirconate single crystals. <i>Optical Materials</i> , 2019, 98, 109494.	1.7	6
12	Highly luminescent cerium-doped YSO/LSO microcrystals prepared via room temperature sol-gel route. <i>Radiation Measurements</i> , 2019, 122, 84-90.	0.7	5
13	Infrared spectroscopic properties of low-phonon lanthanide-doped KLu_2S_2 crystals. <i>Journal of Luminescence</i> , 2019, 211, 100-107.	1.5	10
14	Photochemical synthesis and characterization of multi-component $(\text{Gd,Lu})_3(\text{Ga,Al})_5\text{O}_{12}:\text{Ce}$ garnet powders. <i>Radiation Measurements</i> , 2019, 124, 98-102.	0.7	4
15	Photochemical synthesis of nano- and micro-crystalline particles in aqueous solutions. <i>Applied Surface Science</i> , 2019, 479, 506-511.	3.1	14
16	Luminescence and scintillation properties of rare-earth-doped LaAlO_3 single crystals. <i>Radiation Measurements</i> , 2019, 121, 26-31.	0.7	20
17	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. <i>IEEE Transactions on Nuclear Science</i> , 2018, 65, 2184-2190.	1.2	5
18	Circadian Light Source Based on $\text{KxNa}_{1-x}\text{Lu}_2\text{S}_2:\text{Eu}^{2+}$ Phosphor. <i>ECS Journal of Solid State Science and Technology</i> , 2018, 7, R3182-R3188.	0.9	6

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19	Afterglow and Quantum Tunneling in Ce-Doped Lutetium Aluminum Garnet. IEEE Transactions on Nuclear Science, 2018, 65, 2085-2089.	1.2	5
20	Sorption properties of selected oxidic nanoparticles for the treatment of spent decontamination solutions based on citric acid. Journal of Radioanalytical and Nuclear Chemistry, 2018, 318, 2443-2448.	0.7	1
21	Influence of Mg-codoping, non-stoichiometry and Ga-admixture on LuAG:Ce scintillation properties. Optical Materials, 2018, 86, 213-232.	1.7	6
22	Conference Comments by the Editors. IEEE Transactions on Nuclear Science, 2018, 65, 1976-1976.	1.2	0
23	Luminescence and scintillation properties of Mg-codoped LuAG:Pr single crystals annealed in air. Journal of Luminescence, 2017, 181, 277-285.	1.5	37
24	Eu ²⁺ Stabilization in YAG Structure: Optical and Electron Paramagnetic Resonance Study. Journal of Physical Chemistry C, 2016, 120, 21751-21761.	1.5	34
25	Pr-doped Lu ₃ Al ₅ O ₁₂ scintillation nanopowders prepared by radiation method. Journal of Luminescence, 2016, 179, 21-25.	1.5	4
26	Tunable Eu ²⁺ emission in K _x Na _{1-x} LuS ₂ phosphors for white LED application. Materials and Design, 2016, 106, 363-370.	3.3	22
27	Luminescence and scintillation properties of Lu ₃ Al ₅ O ₁₂ nanoceramics sintered by SPS method. Optical Materials, 2016, 53, 54-63.	1.7	14
28	Gamma-radiolytic preparation of multi-component oxides. Radiation Physics and Chemistry, 2016, 124, 68-74.	1.4	5
29	ALnS ₂ :RE (A=K, Rb; Ln=La, Gd, Lu, Y): New optical materials family. Journal of Luminescence, 2016, 170, 718-735.	1.5	30
30	Optical, Structural and Paramagnetic Properties of Eu-Doped Ternary Sulfides ALnS ₂ (A = Na, K, Rb; Ln =) Tj ETQq0 0.0 rgBT /Overlock 10	1.3	38
31	Nanocrystalline Eu-doped Lu ₃ Al ₅ O ₁₂ phosphor prepared by radiation method. Optical Materials, 2015, 40, 102-106.	1.7	3
32	Luminescence characteristics of doubly doped KLuS ₂ :Eu, RE (RE = Pr, Sm, Ce). Optical Materials, 2015, 41, 94-97.	1.7	16
33	Prospective carriers of ²²³ Ra for targeted alpha particle therapy. Journal of Radioanalytical and Nuclear Chemistry, 2015, 304, 443-447.	0.7	38
34	Stabilization of Eu ²⁺ in KLuS ₂ crystalline host: an EPR and optical study. Physica Status Solidi - Rapid Research Letters, 2014, 08, 801-804.	1.2	15
35	UV radiation: a promising tool in the synthesis of multicomponent nano-oxides. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	9
36	Optical properties of Ce ³⁺ -doped KLuS ₂ phosphor. Journal of Luminescence, 2014, 147, 196-201.	1.5	26

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37	Optical and Structural Properties of RE^{3+} -Doped KLnS_2 Compounds. IEEE Transactions on Nuclear Science, 2014, 61, 385-389.	1.2	17
38	Indirect synthesis of Al_2O_3 via radiation- or photochemical formation of its hydrated precursors. Materials Research Bulletin, 2014, 49, 633-639.	2.7	9
39	Luminescence and structural properties of RbGdS_2 compounds doped by rare earth elements. Optical Materials, 2013, 35, 1226-1229.	1.7	27
40	Optical properties of Eu^{2+} -doped KLuS_2 phosphor. Chemical Physics Letters, 2013, 574, 61-65.	1.2	34
41	Preparation of inorganic crystalline compounds induced by ionizing, UV and laser radiations. Radiation Physics and Chemistry, 2012, 81, 1411-1416.	1.4	10
42	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
43	Preparation, luminescence and structural properties of rare-earth-doped RbLuS_2 compounds. Physica Status Solidi - Rapid Research Letters, 2012, 6, 95-97.	1.2	25
44	Photo- and radiation-induced preparation of Y_2O_3 and $\text{Y}_2\text{O}_3:\text{Ce}(\text{Eu})$ nanocrystals. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	8
45	Preparation, luminescence and structural properties of RE-doped RbLaS_2 compounds. Acta Materialia, 2011, 59, 6219-6227.	3.8	40
46	Radiolytic formation of ferrous and ferric ions in carbon steel "deaerated water system. Radiation Physics and Chemistry, 2011, 80, 440-445.	1.4	8
47	Photo- and radiation-induced preparation of nanocrystalline copper and cuprous oxide catalysts. Journal of Radioanalytical and Nuclear Chemistry, 2010, 286, 611-618.	0.7	36