Jan BÃ¡rta

List of Publications by Year
in descending order

47 papers	694 citations	516215 16 h-index	610482 24 g-index
48 all docs	48 docs citations	48 times ranked	679 citing authors

#	Article	IF	Citations
1	Preparation, luminescence and structural properties of RE-doped RbLaS2 compounds. Acta Materialia, 2011, 59, 6219-6227.	3.8	40
2	Optical, Structural and Paramagnetic Properties of Eu-Doped Ternary Sulfides ALnS2 (A = Na, K, Rb; Ln =) Tj ETQq0 0 0 rgBT /Overlock 10	1.3	38
3	Prospective carriers of 223Ra for targeted alpha particle therapy. Journal of Radioanalytical and Nuclear Chemistry, 2015, 304, 443-447.	0.7	38
4	Luminescence and scintillation properties of Mg-codoped LuAG:Pr single crystals annealed in air. Journal of Luminescence, 2017, 181, 277-285.	1.5	37
5	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
6	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
7	Optical properties of Eu2+-doped KLuS2 phosphor. Chemical Physics Letters, 2013, 574, 61-65.	1.2	34
8	Eu²⁺ Stabilization in YAG Structure: Optical and Electron Paramagnetic Resonance Study. Journal of Physical Chemistry C, 2016, 120, 21751-21761.	1.5	34
9	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
10	Luminescence and structural properties of RbGdS2 compounds doped by rare earth elements. Optical Materials, 2013, 35, 1226-1229.	1.7	27
11	Optical properties of Ce3+-doped KLuS2 phosphor. Journal of Luminescence, 2014, 147, 196-201.	1.5	26
12	Preparation, luminescence and structural properties of rare-earth-doped RbLuS2 compounds. Physica Status Solidi - Rapid Research Letters, 2012, 6, 95-97.	1.2	25
13	Tunable Eu2+ emission in KxNa1âˆ’xLuS2 phosphors for white LED application. Materials and Design, 2016, 106, 363-370.	3.3	22
14	Luminescence and scintillation properties of rare-earth-doped LaAlO3 single crystals. Radiation Measurements, 2019, 121, 26-31.	0.7	20
15	Synthesis routes of CeO₂ nanoparticles dedicated to organophosphorus degradation: a benchmark. CrystEngComm, 2020, 22, 1725-1737.	1.3	20
16	Optical and Structural Properties of ${m RE}^{3+}$-Doped ${m KLnS} _{2}$ Compounds. IEEE Transactions on Nuclear Science, 2014, 61, 385-389.	1.2	17
17	Luminescence characteristics of doubly doped KLuS2:Eu, RE (RE = Pr, Sm, Ce). Optical Materials, 2015, 41, 94-97.	1.7	16
18	Stabilization of Eu²⁺in KLuS₂crystalline host: an EPR and optical study. Physica Status Solidi - Rapid Research Letters, 2014, 08, 801-804.	1.2	15

#	Article	IF	Citations
19	Luminescence and scintillation properties of Lu3Al5O12 nanoceramics sintered by SPS method. Optical Materials, 2016, 53, 54-63.	1.7	14
20	Photochemical synthesis of nano- and micro-crystalline particles in aqueous solutions. Applied Surface Science, 2019, 479, 506-511.	3.1	14
21	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.	2.7	13
22	Preparation of inorganic crystalline compounds induced by ionizing, UV and laser radiations. Radiation Physics and Chemistry, 2012, 81, 1411-1416.	1.4	10
23	Infrared spectroscopic properties of low-phonon lanthanide-doped KLuS2 crystals. Journal of Luminescence, 2019, 211, 100-107.	1.5	10
24	UV radiation: a promising tool in the synthesis of multicomponent nano-oxides. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	9
25	Indirect synthesis of Al2O3 via radiation- or photochemical formation of its hydrated precursors. Materials Research Bulletin, 2014, 49, 633-639.	2.7	9
26	Variability of Eu²⁺Emission Features in Multicomponent Alkali-Metal-Rare-Earth Sulfides. ECS Journal of Solid State Science and Technology, 2020, 9, 016007.	0.9	9
27	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.	6.6	9
28	Radiolytic formation of ferrous and ferric ions in carbon steel â€“ deaerated water system. Radiation Physics and Chemistry, 2011, 80, 440-445.	1.4	8
29	Photo- and radiation-induced preparation of Y2O3 and Y2O3:Ce(Eu) nanocrystals. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	8
30	Accurately predicting optical properties of rare-earth, aluminate scintillators: influence of electronâ€“hole correlation. Journal of Materials Chemistry C, 2021, 9, 7292-7301.	2.7	8
31	Circadian Light Source Based on KxNa1-xLuS2:Eu2+ Phosphor. ECS Journal of Solid State Science and Technology, 2018, 7, R3182-R3188.	0.9	6
32	Influence of Mg-codoping, non-stoichiometry and Ga-admixture on LuAG:Ce scintillation properties. Optical Materials, 2018, 86, 213-232.	1.7	6
33	Luminescence and scintillation properties of strontium hafnate and strontium zirconate single crystals. Optical Materials, 2019, 98, 109494.	1.7	6
34	Gamma-radiolytic preparation of multi-component oxides. Radiation Physics and Chemistry, 2016, 124, 68-74.	1.4	5
35	Photoinduced Preparation of Bandgap-Engineered Garnet Powders. IEEE Transactions on Nuclear Science, 2018, 65, 2184-2190.	1.2	5
36	Afterglow and Quantum Tunneling in Ce-Doped Lutetium Aluminum Garnet. IEEE Transactions on Nuclear Science, 2018, 65, 2085-2089.	1.2	5

#	Article	IF	Citations
37	Highly luminescent cerium-doped YSO/ LSO microcrystals prepared via room temperature sol-gel route. Radiation Measurements, 2019, 122, 84-90.	0.7	5
38	Compositional screening of Ce-doped (Gd,Lu,Y)3(Al,Ga)5O12 ceramics prepared by quenching from melt and their luminescence properties. Journal of Alloys and Compounds, 2022, 889, 161687.	2.8	5
39	Pr-doped Lu 3 Al 5 O 12 scintillation nanopowders prepared by radiation method. Journal of Luminescence, 2016, 179, 21-25.	1.5	4
40	Photochemical synthesis and characterization of multi-component (Gd,Lu)3(Ga,Al)5O12:Ce garnet powders. Radiation Measurements, 2019, 124, 98-102.	0.7	4
41	Tri-arc growth and characterization of U3Si2 and U3Si5 single crystals. Journal of Crystal Growth, 2021, 558, 126025.	0.7	4
42	Nanocrystalline Eu-doped Lu3Al5O12 phosphor prepared by radiation method. Optical Materials, 2015, 40, 102-106.	1.7	3
43	Advanced photochemical processes for the manufacture of nanopowders: an evaluation of long-term pilot plant operation. Reaction Chemistry and Engineering, 2022, 7, 968-977.	1.9	3
44	Peculiarities and the red shift of Eu2+ luminescence in Gd3+-admixed YAG phosphors. Optical Materials, 2021, 120, 111464.	1.7	2
45	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
46	Conference Comments by the Editors. IEEE Transactions on Nuclear Science, 2018, 65, 1976-1976.	1.2	0
47	Probing the 91Zr NMR parameters in the solid state by a combination of DFT calculations and experiments. Chemical Physics Letters, 2020, 738, 136855.	1.2	0