

Nikifor Rakov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9097478/publications.pdf>

Version: 2024-02-01

40
papers

984
citations

394421

19
h-index

434195

31
g-index

40
all docs

40
docs citations

40
times ranked

975
citing authors

#	ARTICLE	IF	CITATIONS
1	Tm ³⁺ ,Yb ³⁺ : Y ₂ SiO ₅ up-conversion phosphors: Exploration of temperature sensing performance by monitoring the luminescence emission. <i>Physica B: Condensed Matter</i> , 2022, 628, 413572.	2.7	10
2	Nd ³⁺ -doped amorphous calcium yttrium silicate ceramic powder for near-infrared thermometry. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	2.3	3
3	Highly sensitive optical thermometry operation using Eu ³⁺ :Y ₂ O ₃ powders excited under low-intensity LED light source at 395Ånm. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 23285-23292.	2.2	6
4	Tm ³⁺ /Yb ³⁺ -co-doped SrF ₂ up-conversion phosphors for non-invasive optical thermometry: ratiometric approach using thermal and non-thermal coupled fluorescent emission bands. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	2.3	2
5	Broadband light emission induced by laser absorption and optimized by thermal injection in Nd ³⁺ :Y ₂ SiO ₅ ceramic powder. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1782-1788.	3.8	4
6	Optical Thermometry Operation within All Three Biological Windows Using Nd ³⁺ :Er ³⁺ :Y ₂ O ₃ Nanocomposite Phosphors. <i>ACS Applied Nano Materials</i> , 2020, 3, 10479-10486.	5.0	23
7	Thermometric analysis of the near-infrared emission of Nd ³⁺ in Y ₂ SiO ₅ ceramic powder prepared by combustion synthesis. <i>Ceramics International</i> , 2020, 46, 12165-12171.	4.8	23
8	Evaluation of the energy transfer mechanism leading to tunable green-to-red cooperative up-conversion emission in Eu ³⁺ +Yb ³⁺ co-doped CaF ₂ powders. <i>Journal of Luminescence</i> , 2019, 214, 116561.	3.1	5
9	Managing optical heating via Al ³⁺ -doping in Er ³⁺ :SrF ₂ powder phosphors prepared by combustion synthesis. <i>Dalton Transactions</i> , 2019, 48, 4589-4595.	3.3	3
10	Enhancement of 1.5 μ m fluorescence signal from Er ³⁺ due to Yb ³⁺ in yttrium silicate powders pumped at 975 and 808 nm. <i>Methods and Applications in Fluorescence</i> , 2019, 7, 015003.	2.3	5
11	Upconversion luminescence in europium doped Y ₂ O ₃ powder excited by absorption of three, four, and five infrared photons. <i>Optical Materials Express</i> , 2019, 9, 3952.	3.0	9
12	Exploring the 4I _{13/2} \rightarrow 4I _{15/2} radiative transition from Er ³⁺ in Y ₂ O ₃ for temperature sensing. <i>Journal of Luminescence</i> , 2018, 199, 293-297.	3.1	36
13	Thermometric analysis of the near-infrared emission from Er ³⁺ in yttrium silicate powders containing Mg ²⁺ . <i>Journal of Alloys and Compounds</i> , 2018, 735, 1629-1636.	5.5	3
14	A study of energy transfer phenomenon leading to photon up-conversion in Ho ³⁺ :Yb ³⁺ :CaF ₂ crystalline powders and its temperature sensing properties. <i>Current Applied Physics</i> , 2017, 17, 1223-1231.	2.4	15
15	Near-infrared emission and optical temperature sensing performance of Nd ³⁺ :SrF ₂ crystal powder prepared by combustion synthesis. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	40
16	Photon up-conversion production in Tb ³⁺ +Yb ³⁺ co-doped CaF ₂ phosphors prepared by combustion synthesis. <i>Materials Research Bulletin</i> , 2016, 74, 103-108.	5.2	13
17	Photon conversion in lanthanide-doped powder phosphors: concepts and applications. <i>RSC Advances</i> , 2015, 5, 17283-17295.	3.6	46
18	Yb ³⁺ sensitized Er ³⁺ doped Gd ₂ SiO ₅ powders prepared by combustion synthesis: Up-conversion fluorescence emission at visible from near-infrared. <i>Ceramics International</i> , 2015, 41, 13348-13353.	4.8	7

#	ARTICLE	IF	CITATIONS
19	Facile fabrication of Eu ³⁺ -doped lanthanum oxyfluoride powders by combustion processes and temperature analysis of its fluorescence for thermal sensor application. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 407-412.	7.8	28
20	Investigation of Eu ³⁺ luminescence enhancement in LaOF powders codoped with Tb ³⁺ and prepared by combustion synthesis. <i>Journal of Alloys and Compounds</i> , 2015, 618, 127-131.	5.5	15
21	Cooling of Er ³⁺ with Tm ³⁺ for accurate temperature sensing using yttrium silicate compact powders. <i>Dalton Transactions</i> , 2014, 43, 16025-16030.	3.3	28
22	Nd ³⁺ -Yb ³⁺ doped powder for near-infrared optical temperature sensing. <i>Optics Letters</i> , 2014, 39, 3767.	3.3	46
23	Upconversion fluorescence and its thermometric sensitivity of Er ³⁺ :Yb ³⁺ co-doped SrF ₂ powders prepared by combustion synthesis. <i>Electronic Materials Letters</i> , 2014, 10, 985-989.	2.2	11
24	Optical temperature sensing by use of band-shape method in Tb ³⁺ -doped oxide powders. <i>Optical Materials</i> , 2014, 37, 635-640.	3.6	8
25	Cooperative upconversion luminescence in Tb ³⁺ :Yb ³⁺ co-doped Y ₂ SiO ₅ powders prepared by combustion synthesis. <i>Journal of Solid State Chemistry</i> , 2014, 211, 32-36.	2.9	17
26	Anomalous up-conversion dynamics in rare-earth doped yttrium oxide powders. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3563.	5.5	7
27	Three- and four-photon excited upconversion luminescence in terbium doped lutetium silicate powders by femtosecond laser irradiation. <i>Optical Materials Express</i> , 2013, 3, 1803.	3.0	15
28	Spectroscopic properties of Eu ³⁺ - and Eu ³⁺ :Yb ³⁺ -doped LaOF crystalline powders prepared by combustion synthesis. <i>Journal of Alloys and Compounds</i> , 2012, 534, 32-36.	5.5	24
29	Analysis of inner filter effect on the up-conversion spectra of erbium doped yttrium oxide close-packed powders. <i>Optics Communications</i> , 2012, 285, 5242-5246.	2.1	3
30	Er:SrF ₂ luminescent powders prepared by combustion synthesis. <i>Materials Chemistry and Physics</i> , 2012, 135, 317-321.	4.0	21
31	Temperature sensing performance of dysprosium doped aluminum oxide powders. <i>Optics Communications</i> , 2012, 285, 1882-1884.	2.1	22
32	Three-photon upconversion and optical thermometry characterization of Er ³⁺ :Yb ³⁺ co-doped yttrium silicate powders. <i>Sensors and Actuators B: Chemical</i> , 2012, 164, 96-100.	7.8	158
33	Temperature Analysis of the Luminescence from Eu ³⁺ Doped Aluminum Oxide Powders Prepared by Combustion Synthesis. <i>Science of Advanced Materials</i> , 2012, 4, 681-685.	0.7	1
34	Strong infrared-to-visible frequency upconversion in Er ³⁺ -doped Sr ₂ CeO ₄ powders. <i>Journal of Luminescence</i> , 2011, 131, 342-346.	3.1	21
35	Upconversion emission from Tm ³⁺ :Yb ³⁺ and Tm ³⁺ :Er ³⁺ :Yb ³⁺ doped Y ₂ SiO ₅ powders prepared by combustion synthesis. <i>Materials Chemistry and Physics</i> , 2010, 123, 199-202.	4.0	28
36	Spectroscopic analysis of Eu ³⁺ and Eu ³⁺ :Yb ³⁺ -doped yttrium silicate crystalline powders prepared by combustion synthesis. <i>Journal of Applied Physics</i> , 2010, 108, 073501.	2.5	41

#	ARTICLE	IF	CITATIONS
37	Strong upconversion from Er ³⁺ /Al ₅ O ₁₂ ceramic powders prepared by low temperature direct combustion synthesis. Applied Physics Letters, 2006, 89, 081109.	3.3	32
38	Blue upconversion emission of Tm ³⁺ /Yb ³⁺ in ZrO ₂ nanocrystals: Role of Yb ³⁺ ions. Chemical Physics Letters, 2005, 407, 477-481.	2.6	86
39	Enhancement of luminescence efficiency of f-f transitions from Tb ³⁺ due to energy transfer from Ce ³⁺ in Al ₂ O ₃ crystalline ceramic powders prepared by low temperature direct combustion synthesis. Chemical Physics Letters, 2004, 400, 553-557.	2.6	39
40	Strong photoluminescence and cathodoluminescence due to f-f transitions in Eu ³⁺ doped Al ₂ O ₃ powders prepared by direct combustion synthesis and thin films deposited by laser ablation. Applied Physics Letters, 2003, 83, 272-274.	3.3	80