Nikifor Rakov

List of Publications by Year
in descending order

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40	984	394421	434195
papers	citations	19 h-index	31 g-index

40	40	40	975
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-photon upconversion and optical thermometry characterization of Er3+:Yb3+ co-doped yttrium silicate powders. Sensors and Actuators B: Chemical, 2012, 164, 96-100.	7.8	158
2	Blue upconversion emission of Tm3+â€“Yb3+ in ZrO2 nanocrystals: Role of Yb3+ ions. Chemical Physics Letters, 2005, 407, 477-481.	2.6	86
3	Strong photoluminescence and cathodoluminescence due to fâ€“f transitions in Eu3+ doped Al2O3 powders prepared by direct combustion synthesis and thin films deposited by laser ablation. Applied Physics Letters, 2003, 83, 272-274.	3.3	80
4	Nd^3+-Yb^3+ doped powder for near-infrared optical temperature sensing. Optics Letters, 2014, 39, 3767.	3.3	46
5	Photon conversion in lanthanide-doped powder phosphors: concepts and applications. RSC Advances, 2015, 5, 17283-17295.	3.6	46
6	Spectroscopic analysis of Eu3+ -and Eu3+:Yb3+-doped yttrium silicate crystalline powders prepared by combustion synthesis. Journal of Applied Physics, 2010, 108, 073501.	2.5	41
7	Near-infrared emission and optical temperature sensing performance of Nd3+:SrF2 crystal powder prepared by combustion synthesis. Journal of Applied Physics, 2017, 121, .	2.5	40
8	Enhancement of luminescence efficiency of fâ€“f transitions from Tb3+ due to energy transfer from Ce3+ in Al2O3 crystalline ceramic powders prepared by low temperature direct combustion synthesis. Chemical Physics Letters, 2004, 400, 553-557.	2.6	39
9	Exploring the 4I13/2 â†’ 4I15/2 radiative transition from Er3+ in Y2O3 for temperature sensing. Journal of Luminescence, 2018, 199, 293-297.	3.1	36
10	Strong upconversion from Er3Al5O12 ceramic powders prepared by low temperature direct combustion synthesis. Applied Physics Letters, 2006, 89, 081109.	3.3	32
11	Upconversion emission from Tm3+:Yb3+ and Tm3+:Er3+:Yb3+ doped Y2SiO5 powders prepared by combustion synthesis. Materials Chemistry and Physics, 2010, 123, 199-202.	4.0	28
12	Cooling of Er³⁺with Tm³⁺for accurate temperature sensing using yttrium silicate compact powders. Dalton Transactions, 2014, 43, 16025-16030.	3.3	28
13	Facile fabrication of Eu3+-doped lanthanum oxyfluoride powders by combustion processes and temperature analysis of its fluorescence for thermal sensor application. Sensors and Actuators B: Chemical, 2015, 209, 407-412.	7.8	28
14	Spectroscopic properties of Eu3+- and Eu3+:Yb3+-doped LaOF crystalline powders prepared by combustion synthesis. Journal of Alloys and Compounds, 2012, 534, 32-36.	5.5	24
15	Optical Thermometry Operation within All Three Biological Windows Using Nd³⁺:Er³⁺:Y₂O₃ Nanocomposite Phosphors. ACS Applied Nano Materials, 2020, 3, 10479-10486.	5.0	23
16	Thermometric analysis of the near-infrared emission of Nd3+ in Y2SiO5 ceramic powder prepared by combustion synthesis. Ceramics International, 2020, 46, 12165-12171.	4.8	23
17	Temperature sensing performance of dysprosium doped aluminum oxide powders. Optics Communications, 2012, 285, 1882-1884.	2.1	22
18	Strong infrared-to-visible frequency upconversion in Er3+-doped Sr2CeO4 powders. Journal of Luminescence, 2011, 131, 342-346.	3.1	21

#	Article	IF	Citations
19	Er:SrF2 luminescent powders prepared by combustion synthesis. Materials Chemistry and Physics, 2012, 135, 317-321.	4.0	21
20	Cooperative upconversion luminescence in Tb3+:Yb3+ co-doped Y2SiO5 powders prepared by combustion synthesis. Journal of Solid State Chemistry, 2014, 211, 32-36.	2.9	17
21	Three- and four-photon excited upconversion luminescence in terbium doped lutetium silicate powders by femtosecond laser irradiation. Optical Materials Express, 2013, 3, 1803.	3.0	15
22	Investigation of Eu3+ luminescence enhancement in LaOF powders codoped with Tb3+ and prepared by combustion synthesis. Journal of Alloys and Compounds, 2015, 618, 127-131.	5.5	15
23	A study of energy transfer phenomenon leading to photon up-conversion in Ho3+:Yb3+:CaF2 crystalline powders and its temperature sensing properties. Current Applied Physics, 2017, 17, 1223-1231.	2.4	15
24	Photon up-conversion production in Tb3+â€“Yb3+ co-doped CaF2 phosphors prepared by combustion synthesis. Materials Research Bulletin, 2016, 74, 103-108.	5.2	13
25	Upconversion fluorescence and its thermometric sensitivity of Er3+:Yb3+ co-doped SrF2 powders prepared by combustion synthesis. Electronic Materials Letters, 2014, 10, 985-989.	2.2	11
26	Tm3+,Yb3+: Y2SiO5 up-conversion phosphors: Exploration of temperature sensing performance by monitoring the luminescence emission. Physica B: Condensed Matter, 2022, 628, 413572.	2.7	10
27	Upconversion luminescence in europium doped Y₂O₃ powder excited by absorption of three, four, and five infrared photons. Optical Materials Express, 2019, 9, 3952.	3.0	9
28	Optical temperature sensing by use of band-shape method in Tb3+-doped oxide powders. Optical Materials, 2014, 37, 635-640.	3.6	8
29	Anomalous up-conversion dynamics in rare-earth doped yttrium oxide powders. Journal of Materials Chemistry C, 2013, 1, 3563.	5.5	7
30	Yb3+ sensitized Er3+ doped Gd2SiO5 powders prepared by combustion synthesis: Up-conversion fluorescence emission at visible from near-infrared. Ceramics International, 2015, 41, 13348-13353.	4.8	7
31	Highly sensitive optical thermometry operation using Eu3+:Y2O3 powders excited under low-intensity LED light source at 395Ânm. Journal of Materials Science: Materials in Electronics, 2021, 32, 23285-23292.	2.2	6
32	Evaluation of the energy transfer mechanism leading to tunable green-to-red cooperative up-conversion emission in Eu3+-Yb3+ co-doped CaF2 powders. Journal of Luminescence, 2019, 214, 116561.	3.1	5
33	Enhancement of 1.5 Î¼m fluorescence signal from Er³⁺ due to Yb³⁺ in yttrium silicate powders pumped at 975 and 808 nm. Methods and Applications in Fluorescence, 2019, 7, 015003.	2.3	5
34	Broadband light emission induced by laser absorption and optimized by thermal injection in Nd 3+ :Y 2 SiO 5 ceramic powder. Journal of the American Ceramic Society, 2020, 103, 1782-1788.	3.8	4
35	Analysis of inner filter effect on the up-conversion spectra of erbium doped yttrium oxide close-packed powders. Optics Communications, 2012, 285, 5242-5246.	2.1	3
36	Thermometric analysis of the near-infrared emission from Er3+ in yttrium silicate powders containing Mg2+. Journal of Alloys and Compounds, 2018, 735, 1629-1636.	5.5	3

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37	Managing optical heating via Al3+-doping in Er3+:SrF2 powder phosphors prepared by combustion synthesis. Dalton Transactions, 2019, 48, 4589-4595.	3.3	3
38	Nd3+-doped amorphous calcium yttrium silicate ceramic powder for near-infrared thermometry. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	3
39	Tm3+/Yb3+co-doped SrF2 up-conversion phosphors for non-invasive optical thermometry: ratiometric approach using thermal and non-thermal coupled fluorescent emission bands. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
40	Temperature Analysis of the Luminescence from Eu³⁺ Doped Aluminum Oxide Powders Prepared by Combustion Synthesis. Science of Advanced Materials, 2012, 4, 681-685.	0.7	1