List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Toward Performance and Applications of Large Area Optical Thermometry Based on the Luminescence of Germaniumâ€Vacancy Defects in Diamond Nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000217.	0.8	2
2	Rare earth ions doped mixed crystals for fast quantum computers with optical frequency qubits. Optics Communications, 2021, 485, 126693.	1.0	14
3	Stable Aqueous Colloidal Solutions of Nd3+: LaF3 Nanoparticles, Promising for Luminescent Bioimaging in the Near-Infrared Spectral Range. Nanomaterials, 2021, 11, 2847.	1.9	5
4	Impurity fluorescence self-quenching in Nd3+: Gd3BWO9 crystalline powders: Experiment and analysis. Journal of Alloys and Compounds, 2020, 822, 153654.	2.8	5
5	Room Temperature Optical Thermometry Based on the Luminescence of the SiV Defects in Diamond. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 126, 59-61.	0.2	2
6	Theoretical and experimental modeling of interstitial laser hyperthermia with surface cooling device using Nd3+-doped nanoparticles. Lasers in Medical Science, 2019, 34, 1421-1431.	1.0	1
7	Analysis of upconversion nanoparticles as an active medium for upconversion light sources. , 2019, , .		1
8	Concentration self-quenching of luminescence in crystal matrices activated by Nd3+ ions: Theory and experiment. Journal of Luminescence, 2018, 198, 138-145.	1.5	15
9	Optomagnetic Nanoplatforms for In Situ Controlled Hyperthermia. Advanced Functional Materials, 2018, 28, 1704434.	7.8	59
10	On the use of twisted photons for spectroscopy of impurity centers in crystals. Physical Review B, 2018, 97, .	1.1	0
11	Comparison of concentration dependence of relative fluorescence quantum yield and brightness in first biological window of wavelengths for aqueous colloidal solutions of Nd3+: LaF3 and Nd3+: KY3F10 nanocrystals synthesized by microwave-hydrothermal treatment. Journal of Alloys and Compounds, 2018, 756, 182-192.	2.8	20
12	Room temperature optical thermometry based on the luminescence of the SiV defects in diamond. EPJ Web of Conferences, 2018, 190, 04024.	0.1	0
13	Heating and Cooling Transients in the DyPO4 Nanocrystals under Femtosecond Laser Irradiation in the NIR Spectral Range. Physics of Wave Phenomena, 2018, 26, 198-206.	0.3	3
14	A Crystal Host Selection for Aqueous Colloidal Luminescent Nanocrystals Doped by Nd ³⁺ Used for Bioimaging in First Biological Window. , 2018, , .		0
15	VISUALIZATION OF Nd3+-DOPED LaF3 NANOPARTICLES FOR NEAR INFRARED BIOIMAGING VIA UPCONVERSION LUMINESCENCE AT MULTIPHOTON EXCITATION MICROSCOPY. Biomedical Photonics, 2018, 7, 4-12.	0.3	2
16	Experimental modeling of local laser hyperthermia using thermosensitive nanoparticles absorbing in NIR. , 2018, , .		0
17	NONINVASIVE ESTIMATION OF THE LOCAL TEMPERATURE OF BIOTISSUES HEATING UNDER THE ACTION OF LASER IRRADIATION FROM THE LUMINESCENCE SPECTRA OF Nd3+ IONS. Biomedical Photonics, 2018, 7, 25-36.	0.3	3
18	Approaches to contactless optical thermometer in the NIR spectral range based on Nd 3+ doped crystalline nanoparticles. Journal of Luminescence, 2017, 183, 478-485.	1.5	14

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19	Relation of Crystallinity and Fluorescent Properties of LaF ₃ :Nd ³⁺ Nanoparticles Synthesized with Different Water-Based Techniques. ChemistrySelect, 2017, 2, 4874-4881.	0.7	19
20	From near IR to terahertz photon emission in the LaF3 crystals heavily doped by Nd3+; the use of the Dicke and the Purcell effects. Journal of Luminescence, 2017, 181, 88-90.	1.5	0
21	Rare-earth doped nanocrystals as an active medium for terahertz stimulated emission. , 2016, , .		0
22	Subtissue Imaging and Thermal Monitoring of Gold Nanorods through Joined Encapsulation with Ndâ€Doped Infraredâ€Emitting Nanoparticles. Small, 2016, 12, 5394-5400.	5.2	37
23	NIR fluorescence quenching by OH acceptors in the Nd 3+ doped KY 3 F 10 nanoparticles synthesized by microwave-hydrothermal treatment. Journal of Alloys and Compounds, 2016, 661, 312-321.	2.8	13
24	Testing nanocrystalline CdWO4 doped with Yb3+ as a possible down-conversion phosphor. Radiation Measurements, 2016, 90, 329-333.	0.7	9
25	Fluorescence quenching mechanism for water-dispersible Nd3+:KYF4 nanoparticles synthesized by microwave-hydrothermal technique. Journal of Luminescence, 2016, 169, 722-727.	1.5	17
26	Neodymium-doped nanoparticles for infrared fluorescence bioimaging: The role of the host. Journal of Applied Physics, 2015, 118, .	1.1	102
27	Phase composition and morphology of nanoparticles of yttrium orthophosphates synthesized by microwave-hydrothermal treatment: The influence of synthetic conditions. Journal of Alloys and Compounds, 2015, 639, 415-421.	2.8	39
28	Laser heating of the Y_1-xDy_xPO_4 nanocrystals. Optical Materials Express, 2015, 5, 1230.	1.6	6
29	Nanoscaled Rare-Earth Doped Crystals Heater. , 2014, , .		0
30	Vacuum ultraviolet spectroscopic analysis of Ce3+-doped hexagonal YPO4·0.8H2O based on exchange charge model. Journal of Luminescence, 2014, 152, 70-74.	1.5	15
31	Nanosecond fluctuation kinetics of luminescence hopping quenching originated from the 5d1 level in the Ce3+:YPO4·0.8H2O nanocrystals. Journal of Luminescence, 2014, 145, 774-778.	1.5	6
32	An energy transfer kinetic probe for OH-quenchers in the Nd ³⁺ :YPO ₄ nanocrystals suitable for imaging in the biological tissue transparency window. Physical Chemistry Chemical Physics, 2014, 16, 26806-26815.	1.3	28
33	Luminescent properties of doped dielectric nanocrystals. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314	rgBT /Ov	erlock 10 Tf
34	Fluctuation kinetics of fluorescence hopping quenching in the Nd3+:Y2O3 spherical nanoparticles. Journal of Luminescence, 2013, 139, 91-97.	1.5	25
35	Effect of synthesis conditions of the micro- and mesostructure of monodisperse Y(OH)CO3 powders. Doklady Chemistry, 2012, 446, 207-211.	0.2	2
36	First-principles study of the local structure and crystal field of Yb 2+ in sodium and potassium halides. Chinese Physics B, 2012, 21, 037102.	0.7	1

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37	Radiative properties of lanthanide and transition metal ions in nanocrystals. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2011, 111, 386-392.	0.2	5
38	Synthesis and study of the properties of K2Y1 â^' x â^' y Eu x Tb y (MoO4)(PO4) and K2Y1 â^' x â^' y Eu x Tb y (MoO4)(PO4)1â^'Î (VO4)δ solid solutions. Russian Journal of Inorganic Chemistry, 2011, 56, 1943-1950.	0.3	4
39	Energy transfer probe for the characterization of luminescent photonic crystals morphology. Journal of Luminescence, 2011, 131, 449-452.	1.5	5
40	Fluctuation kinetics of the hopping fluorescence quenching in disordered solid solutions: A theoretical model and experimental evidence. Journal of Luminescence, 2011, 131, 2409-2413.	1.5	9
41	Low-phonon BaF2: Ho3+, Tm3+ doped crystals for 3.5–4μm lasing. Optical Materials, 2010, 32, 599-611.	1.7	11
42	Microwave synthesis of monodisperse luminescent Y2 â^' x Eu x O3 powders with spherical particles of predetermined size. Doklady Chemistry, 2010, 435, 289-293.	0.2	3
43	Kinetics of the direct energy transfer of optical excitation in crystalline nanoparticles: Theory and Monte Carlo computer simulation. Nanotechnologies in Russia, 2009, 4, 722-731.	0.7	12
44	Spontaneous and induced emission in dielectric nanoparticles. Nanotechnologies in Russia, 2008, 3, 551-559.	0.7	13
45	Multiphonon relaxation in fluoride and ternary sulfide laser crystals with neodymium ions. Journal of Experimental and Theoretical Physics, 2008, 106, 661-667.	0.2	1
46	Spontaneous emission in dielectric nanoparticles. JETP Letters, 2008, 88, 12-18.	0.4	48
47	Conversion of the luminescence of laser dyes in opal matrices to stimulated emission. Quantum Electronics, 2008, 38, 665-669.	0.3	11
48	Optical fluoride nanoceramic. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2008, 75, 728.	0.2	5
49	Light-controlled band shift in synthetic opals filled with an optically nonlinear dye solution. Quantum Electronics, 2008, 38, 37-40.	0.3	Ο
50	Stimulated emission of laser dyes in opal - like matrix (photonic crystal) under nanosecond pulsed laser excitation. , 2008, , .		0
51	Bistable response from synthetic opal photonic crystals: schemes of realization. Proceedings of SPIE, 2007, , .	0.8	Ο
52	Oxysulfide optical ceramics doped by Nd3+ for one micron lasing. Journal of Luminescence, 2007, 125, 201-215.	1.5	25
53	Mid-IR transitions of trivalent neodymium in low phonon laser crystals. Optical Materials, 2007, 29, 1115-1128.	1.7	25
54	New Regularity of Multiphonon Relaxation in Rare Earth Doped Laser Crystals. , 2007, , .		0

New Regularity of Multiphonon Relaxation in Rare Earth Doped Laser Crystals. , 2007, , . 54

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55	Experimental preparation of entangled Bell's vacuum–single exciton and vacuum–biexciton states for pair centers of neodymium ions in a crystal. Optics Communications, 2006, 259, 298-303.	1.0	8
56	Continuously tunable cw lasing near 2.75 μm in diode-pumped Er3+: SrF2and Er3+: CaF2crystals. Quantum Electronics, 2006, 36, 591-594.	0.3	49
57	Pulsed mid-IR Cr2+:ZnS and Cr2+:ZnSe lasers pumped by Raman-shiftedQ-switched neodymium lasers. Quantum Electronics, 2004, 34, 8-14.	0.3	27
58	Nanophotonic structures on the basis of the ordered ensembles bacteriorhodopsin-opal matrix-substrate. , 2004, , .		0
59	Direct nanosecond Nd→Ce nonradiative energy transfer in cerium trifluoride laser crystals. Journal of Luminescence, 2003, 101, 211-218.	1.5	5
60	Cooperative optical phenomena in praseodymium doped CsCdBr 3. , 2002, , .		2
61	Inhomogeneous broadening of the dynamically split Kramers spectral line and up-conversion in the pair and quartet centers in CaF 2 :Nd3+. , 2002, , .		0
62	Temperature dependencies of excited states lifetimes and relaxation rates of 3–5 phonon (4–6 μm) transitions in the YAG, LuAG and YLF crystals doped with trivalent holmium, thulium, and erbium. Optical Materials, 2002, 18, 355-365.	1.7	14
63	Inhomogeneous broadening of the dynamically split Kramers spectral line and up-conversion in the pair and quartet centers in CaF2:Nd3+. Journal of Luminescence, 2002, 99, 223-236.	1.5	10
64	Multiphonon relaxation of mid-IR transitions of rare-earth ions in the crystals with fluorite structure. Journal of Luminescence, 2001, 94-95, 791-795.	1.5	20
65	Dynamic splitting of high-lying excited state of cluster centers in the Nd3+ doped crystals with fluorite structure. Journal of Luminescence, 2001, 94-95, 123-126.	1.5	7
66	Fluorescence line narrowing (FLN) and site-selective fluorescence decay of Nd3+ centers in CaF2. Journal of Luminescence, 1999, 82, 251-258.	1.5	32
67	Nonradiative relaxation and inhomogeneous splitting of aggregated optical centers in the Nd3+-doped CaF2 and SrF2 crystals (FLN and decay study). Journal of Luminescence, 1999, 83-84, 361-366.	1.5	12
68	<title>Laser-induced fluorescence spectrometer based on solid state tunable color-center laser for heavy metal analysis</title> . , 1999, , .		0
69	Novel laser breakdown spectrometer for environmental monitoring. , 1999, 3855, 34.		3
70	Fluorescence quenching of the Nd3+ ions in different optical centers in fluorite-type crystals. Journal of Luminescence, 1998, 76-77, 371-376.	1.5	19
71	Multiphonon relaxation of the electronic excitation energy of rare-earth ions in laser crystals. Journal of Luminescence, 1998, 76-77, 586-590.	1.5	13
72	<title>Laser-induced fluorescence spectrometer based on tunable color center laser for</title>		1

low-impurity-solution diagnostic and analysis</title>. , 1996, , .

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73	Nature of electron excitation-energy transfer Cr3+→TR3+in garnet crystals. , 1996, 2706, 14.		0
74	Multiphonon relaxation rates measurements and theoretical calculations in the frame of non-linear and non-Coulomb model of a rare-earth ion-ligand interaction. Journal of Luminescence, 1996, 68, 241-253.	1.5	33
75	High-order multipole interaction in nanosecond Ndî—,Nd energy transfer. Journal of Luminescence, 1996, 69, 187-202.	1.5	20
76	Nonlinear mechanism of multiphonon relaxation of the energy of electronic excitation in optical crystals doped with rare-earth ions. Optical Materials, 1995, 4, 583-595.	1.7	39
77	Nature of the transfer of the electronic excitation energy from Cr3+to rare-earth ions in garnet crystals. Quantum Electronics, 1995, 25, 729-734.	0.3	4
78	Multiple-phonon nonradiative relaxation: Experimental rates in fluoride crystals doped withEr3+andNd3+ions and a theoretical model. Physical Review B, 1994, 49, 3821-3830.	1.1	60
79	Multiphonon nonradiative relaxation from high-lying levels of Nd3+ ions in flouride and oxide laser materials. Journal of Luminescence, 1992, 53, 19-23.	1.5	31
80	Spontaneous and Stimulated Transitions in Impurity Dielectric Nanoparticles. , 0, , .		2