Witold Ryba-Romanowski

List of Publications by Year
in descending order

123	1,920	279487 23	360668 35
papers	citations	h-index	g-index

125	125	125	1664
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laser spectroscopy of Nd3+ and Dy3+ ions in lead borate glasses. Optics and Laser Technology, 2010, 42, 805-809.	2.2	95
2	Er-Doped Lead Borate Glasses and Transparent Glass Ceramics for Near-Infrared Luminescence and Up-Conversion Applications. Journal of Physical Chemistry B, 2007, 111, 2427-2430.	1.2	66
3	Structural role of rare earth ions in lead borate glasses evidenced by infrared spectroscopy: BO3â†”BO4 conversion. Journal of Molecular Structure, 2005, 744-747, 515-520.	1.8	52
4	Near-infrared ultrabroadband luminescence spectra properties of subvalent bismuth in CsI halide crystals. Optics Letters, 2011, 36, 4551.	1.7	47
5	Thulium-doped vanadate crystals: Growth, spectroscopy and laser performance. Progress in Quantum Electronics, 2011, 35, 109-157.	3.5	46
6	Er3+/Yb3+ co-doped lead germanate glasses for up-conversion luminescence temperature sensors. Sensors and Actuators A: Physical, 2016, 252, 54-58.	2.0	46
7	Spectroscopic properties of Yb3+ and Er3+ ions in heavy metal glasses. Journal of Alloys and Compounds, 2011, 509, 8088-8092.	2.8	45
8	Erbium-doped oxide and oxyhalide lead borate glasses for near-infrared broadband optical amplifiers. Chemical Physics Letters, 2009, 472, 217-219.	1.2	44
9	Synthesis, optical spectra and radiative properties of Sm2O3:PbO:P2O5 glass materials. Optical Materials, 2008, 30, 1571-1575.	1.7	43
10	Sm3+-doped oxyfluorotellurite glasses - spectroscopic, luminescence and temperature sensor properties. Journal of Alloys and Compounds, 2019, 788, 658-665.	2.8	43
11	Effect of erbium concentration on physical properties of fluoroindate glass. Chemical Physics Letters, 2003, 380, 604-608.	1.2	40
12	The Czochralski Growth of (Lu_{1â^'x}Gd_x)₂SiO₅:Dy Single Crystals: Structural, Optical, and Dielectric Characterization. Crystal Growth and Design, 2010, 10, 3522-3530.	1.4	40
13	Sensitive optical temperature sensor based on up-conversion luminescence spectra of Er3+ ions in PbOâ€“Ga2O3â€“XO2 (X=Ge, Si) glasses. Optical Materials, 2016, 59, 87-90.	1.7	38
14	Er-doped and Er, Yb co-doped oxyfluoride glasses and glassâ€“ceramics, structural and optical properties. Optical Materials, 2011, 33, 1630-1637.	1.7	36
15	Near-infrared photoluminescence spectra in Bi-doped CsI crystal: evidence for Bi-valence conversions and Bi ion aggregation. Optical Materials Express, 2012, 2, 757.	1.6	34
16	Thermosensitive Tm3+/Yb3+ co-doped oxyfluorotellurite glasses â€“ spectroscopic and temperature sensor properties. Journal of Alloys and Compounds, 2020, 823, 153753.	2.8	33
17	Luminescence spectroscopy of Er3+-doped and Er3+, Yb3+-codoped LaPO4 single crystals. Journal of Luminescence, 2009, 129, 521-525.	1.5	31
18	Crystal structure and vibrational properties of new luminescent hosts K3YF6 and K3GdF6. Journal of Solid State Chemistry, 2006, 179, 3145-3150.	1.4	28

#	Article	IF	Citations
19	Optical properties of Nd3+ and Er3+ ions in TeO2â€“WO3â€“PbOâ€“La2O3 glasses. Optical Materials, 2012, 34, 2050-2054.	1.7	27
20	Influence of temperature on up-conversion luminescence in Er3+/Yb3+ doubly doped lead-free fluorogermanate glasses for optical sensing. Sensors and Actuators B: Chemical, 2017, 253, 85-91.	4.0	27
21	Nd3+:CaF2 crystal with controlled photoluminescence spectroscopic properties by codoping Y3+ ions. Optical Materials, 2013, 36, 455-457.	1.7	26
22	Crystal structure and optical study of Tm:Sc2SiO5 single crystal. Applied Physics Letters, 2010, 96, .	1.5	25
23	Growth conditions, structure, Raman characterization and optical properties of Sm-doped (LuxGd1â^'x)2SiO5 single crystals grown by the Czochralski method. Journal of Solid State Chemistry, 2012, 186, 268-277.	1.4	25
24	Silica-based oxyfluoride glass and glass-ceramic doped with Tm3+ and Yb3+ -VUV-VIS-NIR spectroscopy and optical thermometry. Journal of Alloys and Compounds, 2020, 814, 152304.	2.8	25
25	Spectral characterization and laser performance of a mixed crystal Nd:(Lu_xY_1-x)_3Al_5O_12. Optics Express, 2010, 18, 21370.	1.7	23
26	Oxyfluorotellurite glasses doped with neodymium and ytterbium â€•thermal and spectroscopic properties as well as energy transfer phenomena. Journal of Luminescence, 2018, 199, 310-318.	1.5	23
27	Optical properties of Eu3+:CsGd2F7 downconversion phosphor. Journal of Luminescence, 2005, 114, 65-70.	1.5	22
28	Spectroscopy and Calculations for 4f^N â†' 4f^{Nâ€“1}5d Transitions of Lanthanide Ions in K₃YF₆. Journal of Physical Chemistry A, 2012, 116, 9158-9180.	1.1	22
29	Optical study of La3Ga5.5Ta0.5O14 single crystal co-doped with Ho3+ and Yb3+. Applied Physics B: Lasers and Optics, 2014, 116, 183-194.	1.1	22
30	Optical spectroscopy of Er3+-doped LaVO4 crystal. Journal of Luminescence, 2010, 130, 131-136.	1.5	21
31	Spectroscopic characterization of Sm3+ in La3Ga5.5Ta0.5O14 single crystals. Journal of Alloys and Compounds, 2014, 610, 50-54.	2.8	21
32	Er3+,Yb3+-doped oxyfluorotellurite glassesâ€”Impact of temperature on spectroscopic properties and optical sensor qualities. Journal of Non-Crystalline Solids, 2020, 535, 119965.	1.5	21
33	Spectroscopic and laser properties of resonantly (in-band) pumped Er:YVO_4 and Er:GdVO_4 crystals: a comparative study. Optical Materials Express, 2012, 2, 1040.	1.6	20
34	The influence of Pr3+ content on luminescence and optical behavior of TeO2â€“WO3â€“PbOâ€“Lu2O3 glass. Optical Materials, 2015, 47, 231-236.	1.7	20
35	Oxyfluorotellurite glasses doped by dysprosium ions. Thermal and optical properties. Optical Materials, 2015, 42, 538-543.	1.7	20
36	Thermal and optical properties of oxyfluorotellurite glasses doped with europium ions. Journal of Alloys and Compounds, 2017, 704, 180-186.	2.8	20

#	Article	IF	Citations
37	Gd3Ga3Al2O12 single crystal doped with dysprosium: Spectroscopic properties and luminescence characteristics. Journal of Alloys and Compounds, 2016, 689, 733-739.	2.8	19
38	Spectroscopy and CW first laser operation of Yb-doped Gd_3(Al_05Ga_05)_5O_12 crystal. Optical Materials Express, 2017, 7, 170.	1.6	19
39	Optical spectra and crystal field calculation for SrB 4 O 7 :Sm 2+. Journal of Alloys and Compounds, 2016, 661, 419-427.	2.8	18
40	Size Effect in Novel Red Efficient Garnet Nanophosphor. Journal of Physical Chemistry C, 2017, 121, 25561-25567.	1.5	18
41	Effect of Temperature on Luminescence of LiNbO3 Crystals Single-Doped with Sm3+, Tb3+, or Dy3+ Ions. Crystals, 2020, 10, 1034.	1.0	18
42	Estimation of low-temperature spectra behavior in Nd-doped Sc_2SiO_5 single crystal. Optics Letters, 2009, 34, 3481.	1.7	17
43	Optical spectra and excited state relaxation dynamics of Nd3+ in CaF2 single crystal. Journal of Alloys and Compounds, 2011, 509, 8880-8884.	2.8	17
44	Luminescence quenching of Dy3+ ions in lead bismuthate glasses. Chemical Physics Letters, 2012, 531, 114-118.	1.2	17
45	Thermal analysis and near-infrared luminescence of Er3+-doped lead phosphate glasses modified by PbF2. Journal of Luminescence, 2015, 160, 57-63.	1.5	17
46	Spectroscopy and laser operation of Ho:CaYAlO_4. Optical Materials Express, 2013, 3, 339.	1.6	16
47	Growth and spectroscopy of Gd3Ga3Al2O12 (GGAG) and evidence of multisite positions of Sm3+ ions in solid solution matrix. Journal of Alloys and Compounds, 2016, 689, 359-365.	2.8	16
48	Contribution of energy transfer processes to excitation and relaxation of Yb3+ ions in Gd3(Al,Ga)5O12:RE3+, Yb3+ (RE3+ = Tm3+, Er3+, Ho3+, Pr3+). Journal of Luminescence, 2019, 211, 54-61.	1.5	16
49	Europium(II) Complexes With Benzo-18-Crown-6. European Journal of Inorganic Chemistry, 2002, 2002, 2344-2347.	1.0	15
50	Spectroscopic properties of Yb-doped CaF₂â€“YF₃solid-solution laser crystal. Laser Physics, 2013, 23, 105805.	0.6	15
51	Luminescence and energy transfer phenomena in Gd3 (Al,Ga)5O12 crystals single doped with thulium and co-doped with thulium and holmium. Journal of Luminescence, 2017, 192, 77-84.	1.5	15
52	Effect of temperature on spectroscopic features relevant to laser performance of YVO_4:Er^3+ and GdVO_4:Er^3+ crystals. Optics Letters, 2009, 34, 3271.	1.7	14
53	Spectroscopic characterization of SrB₄O₇:Tm²⁺, a potential laser material and optical temperature sensor. RSC Advances, 2017, 7, 21085-21092.	1.7	14
54	Exploring the Impact of Structure-Sensitivity Factors on Thermographic Properties of Dy3+-Doped Oxide Crystals. Materials, 2021, 14, 2370.	1.3	14

#	Article	IF	Citations
55	Effect of temperature on spectroscopic features relevant to laser performance of YVO_4:Tm^3+, GdVO_4:Tm^3+, and LuVO_4:Tm^3+ crystals. Optics Letters, 2010, 35, 3940.	1.7	13
56	Luminescence spectroscopy of rare earth-doped oxychloride lead borate glasses. Journal of Luminescence, 2011, 131, 649-652.	1.5	13
57	Spectroscopic peculiarities of praseodymium impurities in Lu3Al5O12 single crystal. Journal of Alloys and Compounds, 2013, 550, 173-178.	2.8	13
58	Spectroscopic characterization of CaNb2O6 single crystal doped with samarium ions. Journal of Luminescence, 2014, 151, 123-129.	1.5	13
59	Spectroscopic properties of new luminescent system based on vanadate(V) crystal doped with erbium ions. Journal of Luminescence, 2010, 130, 567-575.	1.5	12
60	Effect of temperature on optical spectra and relaxation dynamics of Sm3+ in Gd3Ga5O12 single crystals. Journal of Alloys and Compounds, 2014, 582, 208-212.	2.8	12
61	Spectroscopic characterization of Sm3+ doped (Lu0.4Gd0.6)2SiO5 single crystals. Optical Materials, 2014, 36, 740-745.	1.7	12
62	Luminescence and energy transfer phenomena in YVO4 single crystal co-doped with Tm3+ and Eu3+. Journal of Luminescence, 2015, 162, 134-139.	1.5	12
63	Investigation of intrinsic and extrinsic defects in solid solution Gd3(Al,Ga)5O12 crystals grown by the Czochralski method. Journal of Alloys and Compounds, 2016, 688, 96-103.	2.8	12
64	Electronic Structure of U3+in Cs3Lu2Cl9and Cs3Y2I9Single Crystals. Journal of Physical Chemistry B, 2005, 109, 155-166.	1.2	11
65	Optical spectroscopy of U3+ doped KPb2Cl5 laser crystal. Optical Materials, 2007, 29, 1029-1034.	1.7	11
66	Unusual behavior of Tb^3+ in K_3YF_6 green-emitting phosphor. Optics Letters, 2008, 33, 1786.	1.7	11
67	Thermal and radiative characteristics of oxyfluoride glass singly doped with lanthanide ions. Journal of Rare Earths, 2010, 28, 893-898.	2.5	11
68	Er^3+/Yb^3+ co-doped lead silicate glasses and their optical temperature sensing ability. Optics Express, 2017, 25, 28501.	1.7	11
69	Oxyfluoride silicate glasses and glass-ceramics doped with erbium and ytterbium - An examination of luminescence properties and up-conversion phenomena. Materials and Design, 2017, 126, 174-182.	3.3	10
70	Influence of excitation wavelengths on up-converted luminescence sensing behavior of Er3+ ions in lead-free germanate glass. Journal of Luminescence, 2018, 193, 34-38.	1.5	10
71	Optical spectra and excited state relaxation dynamics of Sm 2+ ions in SrCl 2 , SrBr 2 and SrI 2 crystals. Journal of Luminescence, 2018, 195, 159-165.	1.5	10
72	Spectroscopic peculiarities of excitation and emission processes as well as relaxation dynamic of excited states in doubly and triply doped Gd3Ga3Al2O12:Ln3+ (Ln3+=Eu3+, Tb3+, Ce3+) crystals. Optical Materials, 2019, 88, 492-499.	1.7	10

#	Article	IF	Citations
73	Spectroscopic properties of Dy3+ ions in La3Ga5.5Ta0.5O14 single crystal. Journal of Luminescence, 2020, 220, 116989.	1.5	10
74	Inter- and Intraconfigurational Transitions of Nd³⁺ in Hexafluorocryolite-type K₃YF₆ Lattice. Journal of Physical Chemistry C, 2008, 112, 14196-14201.	1.5	9
75	Multi-component tellurite glasses doped with erbium for multi-model temperature sensing and optical amplification. Materials Research Bulletin, 2020, 132, 110996.	2.7	9
76	Phonon Sideband Analysis and Near-Infrared Emission in Heavy Metal Oxide Glasses. Materials, 2021, 14, 121.	1.3	9
77	Conversion of VUV to visible light and the structure of the 5d levels in K5Li2LaF10:Tb. Optical Materials, 2007, 30, 146-148.	1.7	8
78	PbWO4 formation during controlled crystallization of lead borate glasses. Ceramics International, 2013, 39, 9151-9156.	2.3	8
79	Spectral transformation of infrared ultrashort pulses in laser crystals. Optical Materials, 2014, 36, 1745-1748.	1.7	8
80	Spectral and laser performance of a Tm 3+ :ScYSiO 5 crystal. Journal of Alloys and Compounds, 2017, 712, 412-417.	2.8	8
81	Effect of temperature on up-conversion phenomena in Gd3(Al,Ga)5O12 crystals co-doped with Yb3+ and Tm3+. Journal of Luminescence, 2019, 216, 116721.	1.5	8
82	Room temperature fluorescence and excited state dynamics in the near infrared and visible region of U3+ doped LaBr3 single crystals. Solid State Communications, 2006, 137, 59-62.	0.9	7
83	Near infrared and visible luminescence of U3+-doped PbCl2 single crystals. Journal of Luminescence, 2008, 128, 185-189.	1.5	7
84	Crystal growth and spectroscopic properties of praseodymium and cerium co-doped Y2SiO5. Journal of Luminescence, 2014, 145, 547-552.	1.5	7
85	Spontaneous and stimulated emission in Sm3+-doped YAl3(BO3)4 single crystal. Journal of Luminescence, 2015, 167, 163-166.	1.5	7
86	â€œFrozenâ€•pressure effect in GGAG:Ce3+ white light emitting nanoceramics. Ceramics International, 2019, 45, 21870-21877.	2.3	7
87	Down- and up-conversion of femtosecond light pulses into Pr3+ luminescence in LiTaO3:Pr3+ single crystal. Journal of Luminescence, 2020, 224, 117294.	1.5	7
88	Broadband Near-Infrared Luminescence in Lead Germanate Glass Triply Doped with Yb3+/Er3+/Tm3+. Materials, 2021, 14, 2901.	1.3	7
89	Tunable lasers based on diode pumped Tm-doped vanadates Tm:YVO 4 , Tm:GdVO 4 , and Tm:LuVO 4. Proceedings of SPIE, 2008, , .	0.8	6
90	Effect of temperature on excited state relaxation dynamics and up-conversion phenomena in La3Ga5.5Ta0.5O14:Er3+ single crystals. Journal of Alloys and Compounds, 2014, 610, 451-455.	2.8	6

#	Article	IF	Citations
91	Optical study of Tm-doped solid solution (Sc0.5Y0.5)2SiO5 crystal. Journal of Crystal Growth, 2018, 487, 83-86.	0.7	6
92	Impact of temperature on excitation, emission and cross-relaxation processes of terbium ions in GGAG single crystal. Journal of Alloys and Compounds, 2019, 789, 409-415.	2.8	6
93	Infrared-to-visible conversion luminescence of Er3+ ions in lead borate transparent glass-ceramics. Optical Materials, 2009, 31, 1781-1783.	1.7	5
94	Spectral characteristics of visible luminescence in Gd2SiO5â€“Lu2SiO5 (LGSO) solid solution crystals co-doped with Ce3+ and Dy3+. Optical Materials, 2014, 37, 862-865.	1.7	5
95	Manufacturing of Volumetric Glassâ€“Based Composites with Singleâ€•and Doubleâ€QD Doping. Particle and Particle Systems Characterization, 2019, 36, 1800124.	1.2	5
96	Spectroscopic properties of thulium doped (Lu0.25Gd0.75)2SiO5 (LGSO) single crystals. Journal of Luminescence, 2020, 220, 116962.	1.5	5
97	Thermal, spectroscopic and optical sensor properties of oxyfluorotellurite glasses doped with holmium and ytterbium. Materials Research Bulletin, 2022, 153, 111909.	2.7	5
98	Enhanced and Longâ€Lived Nearâ€Infrared Luminescence of <scp><scp>Er</scp></scp>³⁺ Ions in Lead Borate Glassâ€Ceramics Containing PbWO₄ Nanocrystals. Journal of the American Ceramic Society, 2013, 96, 1685-1687.	1.9	3
99	Investigation of visible emission induced by infrared femtosecond pulses in erbium-doped YVO4 and LuVO4 single crystals. Journal of Luminescence, 2013, 144, 217-222.	1.5	3
100	Spectroscopic peculiarities of CsCaI3:Tm2+ single crystals examined through one-photon and excited state excitation spectroscopy. Journal of Alloys and Compounds, 2018, 740, 1165-1171.	2.8	3
101	Optical absorption and luminescence of LiTaO 3 :Cr and LiTaO 3 :Cr,Nd crystals. , 1999, 3724, 270.		2
102	<title>Relaxation dynamics of excited states of Er<formula>^{<roman>3+ </roman>}</formula>in YVO<formula><inf><roman>4</roman></inf></formula> single crystals</title>. , 2001, , .		2
103	The crystallization kinetics of Er/Yb co-doped oxyfluoride glasses. Proceedings of SPIE, 2017, , .	0.8	2
104	Europium and potassium co-doped strontium metaborate single crystals grown by the Czochralski method. Journal of Crystal Growth, 2017, 457, 107-111.	0.7	2
105	Growth and characterization of new disordered crystals for the design of all solid state lasers. , 1996, 2780, 371.		1
106	Analysis of broadband near-infrared emission in ABCO 4 and ABC 3 O 7 crystals (A=Sr, Ba; B=La, Gd;) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		1
107	<title>Judd-Ofelt analysis and emission properties of Eu<formula>^{<roman>3+</roman>}</formula> ions in fluorindate glasses</title>. , 2003, 5028, 225.		1
108	Luminescence of K5Li2CeF10 and K5Li2LaF10:Ce3+. Journal of Luminescence, 2007, 122-123, 44-46.	1.5	1

#	Article	IF	Citations
109	Tm-doped vanadates under pulsed pumping with variable duty-cycle: impact on lasing and fluorescence. , 2008, , .		1
110	Near-infrared luminescence and up-conversion processes of lanthanide ions in heavy metal glasses. Proceedings of SPIE, 2011, , .	0.8	1
111	Spectroscopic properties of the Pr3+ ion in TeO2-WO3-PbO-La2O3 and TeO2-WO3-PbO-Lu2O3 glasses. Open Physics, 2014, 12, .	0.8	1
112	Effect of temperature on optical properties and thermal conductivity of vanadate crystals doped with thulium and erbium. Journal of Alloys and Compounds, 2017, 710, 491-500.	2.8	1
113	Intensities and spectral features of the ${}^{4}{m{I}}_{13/2}$â€“${}^{4}{m{I}}_{15/2}$ potential laser transition of Er 3+ centers in CaF 2 â€“CeF 3 disordered crystal. Chinese Physics B, 2017, 26, 114208.	0.7	1
114	<title>Crystal growth and characterization of rare-earth-doped gallates of alkaline earth and lanthanum</title>. , 1991, , .		0
115	Growth and optical properties of chromium-doped LaGaO3 crystal. , 1999, , .		0
116	<title>Stokes and anti-Stokes luminescence in LiTaO<formula><inf><roman>3</roman></inf></formula>:Ho</title>. , 2001, , .		0
117	<title>Some properties of InF<formula><inf><roman>3</roman></inf></formula>-based fluoride glasses doped with Tm<formula>^{<roman>3+</roman>}</formula> and Tm<formula>^{<roman>3+</roman>}</formula>-Tb<formula>^{<roman>3+</roman>}</formula> ions</title>. , 2003, 5028, 181.		0
118	Erratum to â€˜Room temperature fluorescence and excited state dynamics in the near infrared and visible region of U3+ doped LaBr3 single crystalsâ€™. Solid State Communications, 2006, 137, 678-679.	0.9	0
119	<title>Pr-doped lead fluoroborate glasses</title>. , 2006, 6347, 362.		0
120	Diode pumped Er:YVO 4 microchip laser. , 2008, , .		0
121	Comparison of CW diode pumped Er:YVO<inf>4</inf> and Er:GdVO<inf>4</inf> lasers. , 2011, , .		0
122	Structural Peculiarities, Energy Transfer and the Visible Emission in Gd2SiO5 Single Crystal Doped with Pr3+, Sm3+ and Dy3+. , 2011, , .		0
123	Green and red up-conversion luminescence of Er³⁺ in lead silicate glass under excitation of Yb³⁺. Proceedings of SPIE, 2017, , .	0.8	0