Tomasz Grzyb

List of Publications by Year
in descending order

88	3,658	94433 37	144013 57
papers	citations	h-index	g-index

91	91	91	3309
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Visible light activity of rare earth metal doped (Er3+, Yb3+ or Er3+/Yb3+) titania photocatalysts. Applied Catalysis B: Environmental, 2015, 163, 40-49.	20.2	295
2	Multifunctional Optical Sensors for Nanomanometry and Nanothermometry: High-Pressure and High-Temperature Upconversion Luminescence of Lanthanide-Doped Phosphatesâ€"LaPO₄/YPO₄:Yb³⁺â€"Tm³⁺. ACS Applied Materials & Interfaces, 2018, 10, 17269-17279.	8.0	236
3	Lanthanide co-doped TiO2: The effect of metal type and amount on surface properties and photocatalytic activity. Applied Surface Science, 2014, 307, 333-345.	6.1	139
4	Structural and Spectroscopic Properties of LaOF:Eu³⁺ Nanocrystals Prepared by the Solâ€"Gel Pechini Method. Inorganic Chemistry, 2011, 50, 8112-8120.	4.0	134
5	Lifetime nanomanometry â€" high-pressure luminescence of up-converting lanthanide nanocrystals â€" SrF₂:Yb³⁺,Er³⁺. Nanoscale, 2017, 9, 16030-16037.	5.6	114
6	Photocatalytic activity and luminescence properties of RE3+â€"TiO2 nanocrystals prepared by solâ€"gel and hydrothermal methods. Applied Catalysis B: Environmental, 2016, 181, 825-837.	20.2	101
7	Enhanced photocatalytic properties of lanthanide-TiO2 nanotubes: An experimental and theoretical study. Applied Catalysis B: Environmental, 2017, 205, 376-385.	20.2	87
8	Sr₂LuF₇:Yb³⁺â€"Ho³⁺â€"Er³⁺ Upconverting Nanoparticles as Luminescent Thermometers in the First, Second, and Third Biological Windows. ACS Applied Nano Materials, 2020, 3, 6406-6415.	5.0	80
9	Multifunctionality of GdPO4:Yb3+,Tb3+ nanocrystals â€" luminescence and magnetic behaviour. Journal of Materials Chemistry, 2012, 22, 22989.	6.7	77
10	Influence of Matrix on the Luminescent and Structural Properties of Glycerine-Capped, Tb³⁺-Doped Fluoride Nanocrystals. Journal of Physical Chemistry C, 2012, 116, 17188-17196.	3.1	75
11	Tunable Luminescence of Sr₂CeO₄:M²⁺ (M = Ca, Mg, Ba, Zn) and Sr₂CeO₄:Ln³⁺ (Ln = Eu, Dy, Tm) Nanophosphors. Journal of Physical Chemistry C, 2012, 116, 3219-3226.	3.1	74
12	Structural, Spectroscopic, and Magnetic Properties of Eu³⁺-Doped GdVO₄ Nanocrystals Synthesized by a Hydrothermal Method. Inorganic Chemistry, 2014, 53, 12243-12252.	4.0	71
13	Revision of structural properties of GdBO3 nanopowders doped with Eu3+ ions through spectroscopic studies. Dalton Transactions, 2012, 41, 5824.	3.3	61
14	Are rare earth phosphates suitable as hosts for upconversion luminescence? Studies on nanocrystalline REPO4 (RE=Y, La, Gd, Lu) doped with Yb3+ and Eu3+, Tb3+, Ho3+, Er3+ or Tm3+ ions. Journal of Luminescence, 2017, 181, 411-420.	3.1	61
15	Hydrothermal Synthesis and Structural and Spectroscopic Properties of the New Triclinic Form of GdBO₃:Eu³⁺ Nanocrystals. Inorganic Chemistry, 2013, 52, 4934-4940.	4.0	54
16	Insight into photocatalytic degradation of ciprofloxacin over CeO2/ZnO nanocomposites: Unravelling the synergy between the metal oxides and analysis of reaction pathways. Applied Surface Science, 2021, 563, 150338.	6.1	54
17	Hydrothermal preparation and photoluminescent properties of MgAl2O4: Eu3+ spinel nanocrystals. Journal of Luminescence, 2010, 130, 434-441.	3.1	53
18	The effects of down- and up-conversion on dual-mode green luminescence from Yb3+- and Tb3+-doped LaPO4 nanocrystals. Journal of Materials Chemistry C, 2013, 1, 5410.	5.5	53

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19	Upconversion luminescence in BaYF5, BaGdF5 and BaLuF5 nanocrystals doped with Yb3+/Ho3+, Yb3+/Er3+ or Yb3+/Tm3+ ions. Journal of Alloys and Compounds, 2015, 649, 606-616.	5.5	53
20	Preparation of Biocompatible, Luminescent-Plasmonic Core/Shell Nanomaterials Based on Lanthanide and Gold Nanoparticles Exhibiting SERS Effects. Journal of Physical Chemistry C, 2016, 120, 23788-23798.	3.1	53
21	Photoluminescent properties of LaF3:Eu3+ and GdF3:Eu3+ nanoparticles prepared by co-precipitation method. Journal of Rare Earths, 2009, 27, 588-592.	4.8	51
22	Eu³⁺and Tb³⁺doped LaPO₄nanorods, modified with a luminescent organic compound, exhibiting tunable multicolour emission. RSC Advances, 2014, 4, 46305-46312.	3.6	50
23	Facile synthesis, structural and spectroscopic properties of GdF3:Ce3+, Ln3+ (Ln3+=Sm3+, Eu3+, Tb3+,) Tj ETQq1 1 0.784314 rgBT /Ov	3.1	48
24	Structural, spectroscopic and cytotoxicity studies of TbF3@CeF3 and TbF3@CeF3@SiO2 nanocrystals. Journal of Nanoparticle Research, 2013, 15, 1958.	1.9	46
25	Synthesis and Organic Surface Modification of Luminescent, Lanthanide-Doped Core/Shell Nanomaterials (LnF₃@SiO₂@NH₂@Organic Acid) for Potential Bioapplications: Spectroscopic, Structural, and in Vitro Cytotoxicity Evaluation. Langmuir, 2014, 30, 9533-9543.	3.5	46
26	Rare earth ions doped K2Ta2O6 photocatalysts with enhanced UVâ€“vis light activity. Applied Catalysis B: Environmental, 2018, 224, 451-468.	20.2	46
27	Core/shell-type nanorods of Tb3+-doped LaPO4, modified with amine groups, revealing reduced cytotoxicity. Journal of Nanoparticle Research, 2013, 15, 2068.	1.9	45
28	Spectroscopic, structural and in vitro cytotoxicity evaluation of luminescent, lanthanide doped core@shell nanomaterials GdVO4:Eu3+5%@SiO2@NH2. Journal of Colloid and Interface Science, 2016, 481, 245-255.	9.4	45
29	Synthesis, spectroscopic and structural studies on YOF, LaOF and GdOF nanocrystals doped with Eu3+, synthesized via stearic acid method. Optical Materials, 2013, 35, 2226-2233.	3.6	44
30	Up-conversion luminescence of Yb3+ and Er3+ doped YPO4, LaPO4 and GdPO4 nanocrystals. Journal of Luminescence, 2016, 175, 21-27.	3.1	43
31	Preparation and photocatalytic activity of Nd-modified TiO2 photocatalysts: Insight into the excitation mechanism under visible light. Journal of Catalysis, 2017, 353, 211-222.	6.2	43
32	Down- and up-converting dual-mode YPO₄:Yb³⁺,Tb³⁺ nanocrystals: synthesis and spectroscopic properties. Dalton Transactions, 2014, 43, 17255-17264.	3.3	42
33	Revised crystal structure and luminescent properties of gadolinium oxyfluoride Gd₄O₃F₆doped with Eu³⁺ions. Dalton Transactions, 2014, 43, 6925-6934.	3.3	42
34	Formation Mechanism, Structural, and Upconversion Properties of Alkaline Rare-Earth Fluoride Nanocrystals Doped With Yb³⁺/Er³⁺ Ions. Inorganic Chemistry, 2018, 57, 6410-6420.	4.0	40
35	Structural, morphological and spectroscopic properties of Eu3+-doped rare earth fluorides synthesized by the hydrothermalmethod. Journal of Solid State Chemistry, 2013, 200, 76-83.	2.9	39
36	Synthesis, characterization, and cytotoxicity in human erythrocytes of multifunctional, magnetic, and luminescent nanocrystalline rare earth fluorides. Journal of Nanoparticle Research, 2015, 17, 399.	1.9	38

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37	Up-conversion luminescence of GdOF:Yb 3+ ,Ln 3+ (LnÂ=ÂHo, Tm, Er) nanocrystals. Journal of Alloys and Compounds, 2016, 660, 235-243.	5.5	38
38	Influence of nanocrystals size on the structural and luminescent properties of GdOF:Eu3+. Journal of Alloys and Compounds, 2012, 539, 82-89.	5.5	37
39	The effect of Tb3+ doping on the structure and spectroscopic properties of MgAl2O4 nanopowders. Optical Materials, 2011, 33, 1506-1513.	3.6	36
40	Upconverting SrF₂:Er³⁺ Nanoparticles for Optical Temperature Sensors. ACS Applied Nano Materials, 2021, 4, 10438-10448.	5.0	35
41	Luminescent cellulose fibers activated by Eu3+-doped nanoparticles. Cellulose, 2012, 19, 1271-1278.	4.9	34
42	Influence of the preparation method on the photocatalytic activity of Nd-modified TiO₂. Beilstein Journal of Nanotechnology, 2018, 9, 447-459.	2.8	34
43	Magnetic and luminescent hybrid nanomaterial based on Fe3O4 nanocrystals and GdPO4:Eu3+ nanoneedles. Journal of Nanoparticle Research, 2012, 14, 1188.	1.9	33
44	Upconverting SrF2 nanoparticles doped with Yb3+/Ho3+, Yb3+/Er3+ and Yb3+/Tm3+ ions â€“ optimisation of synthesis method, structural, spectroscopic and cytotoxicity studies. Scientific Reports, 2019, 9, 8669.	3.3	33
45	Tuning luminescence properties of Eu3+ doped CaAl2O4 nanophosphores with Na+ co-doping. Journal of Luminescence, 2013, 133, 102-109.	3.1	31
46	Ultraviolet- and Near-Infrared-Excitable LaPO₄:Yb³⁺/Tm³⁺/Ln³⁺ (Ln = Eu, Tb) Nanoparticles for Luminescent Fibers and Optical Thermometers. ACS Applied Nano Materials, 2020, 3, 6541-6551.	5.0	31
47	Manipulation of up-conversion emission in NaYF₄core@shell nanoparticles doped by Er³⁺, Tm³⁺, or Yb³⁺ions by excitation wavelengthâ€”three ionsâ€”plenty of possibilities. Nanoscale, 2021, 13, 7322-7333.	5.6	31
48	Preparation and Spectroscopy Characterization of Eu:MgAl₂O₄ Nanopowder Prepared by Modified Pechini Method. Journal of Nanoscience and Nanotechnology, 2009, 9, 5803-5810.	0.9	29
49	Comparative studies on structural and luminescent properties of Eu3+:MgAl2O4 and Eu3+/Na+:MgAl2O4 nanopowders and nanoceramics. Optical Materials, 2012, 35, 130-135.	3.6	29
50	Bright and tunable up-conversion luminescence through cooperative energy transfer in Yb³⁺, Tb³⁺and Eu³⁺co-doped LaPO₄nanocrystals. RSC Advances, 2014, 4, 2590-2595.	3.6	27
51	Investigation of Structure, Morphology, and Luminescence Properties in Blueâ€Red Emitter, Europiumâ€Activated ZnAl₂O₄ Nanospinels. European Journal of Inorganic Chemistry, 2012, 2012, 3418-3426.	2.0	26
52	Experimental and computational study of Tm-doped TiO2: The effect of Li+ on Vis-response photocatalysis and luminescence. Applied Catalysis B: Environmental, 2019, 252, 138-151.	20.2	25
53	Preparation of multicolor luminescent cellulose fibers containing lanthanide doped inorganic nanomaterials. Journal of Luminescence, 2016, 169, 520-527.	3.1	24
54	Synthesis and spectroscopic properties of Yb³⁺ and Tb³⁺ co-doped GdBO₃ materials showing down- and up-conversion luminescence. Dalton Transactions, 2015, 44, 4063-4069.	3.3	23

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55	<scp>REVO</scp>₄â€Based Nanomaterials (<scp>RE</scp> = Y, La, Gd, and Lu) as Hosts for Yb³⁺/Ho³⁺, Yb³⁺/Er³⁺, and Yb³⁺/Tm³⁺ Ions: Structural and Upâ€Conversion Luminescence Studies. Journal of the American Ceramic Society, 2016, 99, 3300-3308.	3.8	23
56	Structural and spectroscopic properties of YOF:Eu3+ nanocrystals. Journal of Alloys and Compounds, 2013, 576, 345-349.	5.5	22
57	Luminescent cellulose fibers modified with cerium fluoride doped with terbium particles. Polymer Composites, 2016, 37, 153-160.	4.6	22
58	Energy migration in YBO 3 :Yb 3+ ,Tb 3+ materials: Down- and upconversion luminescence studies. Journal of Alloys and Compounds, 2016, 686, 951-961.	5.5	22
59	Synthesis and up-conversion of core/shell SrF2:Yb3+,Er3+@SrF2:Yb3+,Nd3+ nanoparticles under 808, 975, and 1532Ânm excitation wavelengths. Journal of Alloys and Compounds, 2020, 831, 154797.	5.5	22
60	Influence of the synthesis route on the spectroscopic, cytotoxic, and temperature-sensing properties of oleate-capped and ligand-free core/shell nanoparticles. Journal of Colloid and Interface Science, 2022, 606, 1421-1434.	9.4	21
61	Comparative studies of structure, spectroscopic properties and intensity parameters of tetragonal rare earth vanadate nanophosphors doped with Eu(III). Journal of Alloys and Compounds, 2018, 741, 459-472.	5.5	20
62	Bifunctional luminescent and magnetic core/shell type nanostructures Fe3O4@CeF3:Tb3+/SiO2. Journal of Rare Earths, 2011, 29, 1117-1122.	4.8	19
63	Synthesis, photophysical analysis, and in vitro cytotoxicity assessment of the multifunctional (magnetic and luminescent) core@shell nanomaterial based on lanthanide-doped orthovanadates. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	18
64	White and red emitting LaF 3 nanocrystals doped with Eu 2+ and Eu 3+ ions: Spectroscopic and magnetic studies. Journal of Alloys and Compounds, 2016, 686, 489-495.	5.5	18
65	Experimental and theoretical investigations of the influence of carbon on a Ho3+-TiO2 photocatalyst with Vis response. Journal of Colloid and Interface Science, 2019, 549, 212-224.	9.4	18
66	Enhancement of the up-conversion luminescence in LaVO4 nanomaterials by doping with M2+, M4+ (M2+Â= Sr2+, Ba2+, Mg2+; M4+Â= Sn4+) ions. Journal of Alloys and Compounds, 2019, 782, 69-80.	5.5	18
67	Up-converting LuF3 and NaLuF4 fluorides doped with Yb3+/Er3+ or Yb3+/Tm3+ ions for latent fingermarks detection. Journal of Alloys and Compounds, 2019, 784, 641-652.	5.5	16
68	Solâ€“gel synthesis of micro and nanocrystalline BaAl2O4:Eu3+ powders and their luminescence properties. Optical Materials, 2013, 36, 539-545.	3.6	15
69	Upconversion luminescence in cellulose composites (fibres and paper) modified with lanthanide-doped SrF₂ nanoparticles. Journal of Materials Chemistry C, 2020, 8, 11922-11928.	5.5	15
70	On the excitation mechanism of visible responsible Er-TiO2 system proved by experimental and theoretical investigations for boosting photocatalytic activity. Applied Surface Science, 2020, 527, 146815.	6.1	14
71	Systematic and detailed examination of NaYF4-Er-Yb-TiO2 photocatalytic activity under Visâ€“NIR irradiation: Experimental and theoretical analyses. Applied Surface Science, 2021, 536, 147805.	6.1	14
72	Electrochemiluminescence Study of Europium (III) Complex with Coumarin3-Carboxylic Acid. International Journal of Photoenergy, 2008, 2008, 1-6.	2.5	13

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73	Up-conversion green emission of Yb 3+ /Er 3+ ions doped YVO 4 nanocrystals obtained via modified Pechini's method. Optical Materials, 2017, 74, 128-134.	3.6	13
74	Emission colour changes in the CaF2 sub-microspheres doped with Yb3+, Er3+ and Mn2+ ions. Journal of Alloys and Compounds, 2020, 817, 152718.	5.5	13
75	Upconversion in Detail: Multicolor Emission of Yb/Er/Tmâ€Doped Nanoparticles under 800, 975, 1208, and 1532 nm Excitation Wavelengths. Particle and Particle Systems Characterization, 2020, 37, 2000068.	2.3	13
76	An impact of sintering temperature and doping level on structural and spectral properties of Eu-doped strontium aluminium oxide. Journal of Rare Earths, 2011, 29, 1105-1110.	4.8	10
77	Structural and optical investigation of nanocrystalline lithium lanthanum praseodymium tetraphosphate powders. Journal of Alloys and Compounds, 2016, 687, 733-740.	5.5	10
78	Lanthanide-organic-frameworks modified ZnIn2S4 for boosting hydrogen generation under UVâ€“Vis and visible light. International Journal of Hydrogen Energy, 2022, 47, 16065-16079.	7.1	10
79	Functionalization of cellulose fibers and paper with lanthanide-based luminescent core/shell nanoparticles providing 3-level protection for advanced anti-counterfeiting purposes. Materials and Design, 2022, 218, 110684.	7.0	10
80	Multifunctional cellulose fibers: Intense red upconversion under 1532Ânm excitation and temperature-sensing properties. Carbohydrate Polymers, 2022, 294, 119782.	10.2	10
81	Tailoring structure, morphology and up-conversion properties of CaF2:Yb3+,Er3+ nanoparticles by the route of synthesis. Journal of Materials Science, 2020, 55, 14166-14178.	3.7	9
82	Improvement of ligand-free modification strategy to obtain water-stable up-converting nanoparticles with bright emission and high reaction yield. Scientific Reports, 2021, 11, 18846.	3.3	8
83	NIR-to-NIR and NIR-to-Vis up-conversion of SrF₂:Ho³⁺ nanoparticles under 1156 nm excitation. Methods and Applications in Fluorescence, 2022, 10, 024001.	2.3	7
84	Spectroscopic properties of Y1â^'xEuxBO3 and Y1â^'xTbxBO3 nanopowders obtained by the solâ€“gel Pechini method. Journal of Luminescence, 2014, 155, 374-383.	3.1	6
85	Tunable yellow-green up-conversion emission and luminescence lifetimes in Yb3+-Er3+-Ho3+ multi-doped Î²-NaLuF4 crystals. Journal of Alloys and Compounds, 2019, 793, 96-106.	5.5	5
86	Unraveling the Origin of Photocatalytic Deactivation in CeO₂/Nb₂O₅ Heterostructure Systems during Methanol Oxidation: Insight into the Role of Cerium Species. Journal of Physical Chemistry C, 2021, 125, 12650-12662.	3.1	4
87	Estimation of Fibre Orientation in Paper Products by an Image Analysis On-line System. Fibres and Textiles in Eastern Europe, 2016, 24, 107-112.	0.5	3
88	Improvement in Luminescence Intensity of Î²-NaYF4: 18%Yb3+, 2%Er3+@Î²-NaYF4 Nanoparticles as a Result of Synthesis in the Presence of Stearic Acid. Nanomaterials, 2022, 12, 319.	4.1	2