Marcin Runowski

List of Publications by Year in Descending Order

79 papers	1,871 citations	27 h-index	40 g-index
85 ext. papers	2,408 ext. citations	5.5 avg, IF	5.65 L-index

#	Paper	IF	Citations
79	Eu2+ emission from thermally coupled levels – new frontiers for ultrasensitive luminescence thermometry. *Journal of Materials Chemistry C*, **2022**, 10, 1220-1227	7.1	6
78	Optically active plasmonic cellulose fibers based on Au nanorods for SERS applications.. *Carbohydrate Polymers*, **2022**, 279, 119010	10.3	2
77	Dual-center thermochromic Bi2MoO6:Yb3+, Er3+, Tm3+ phosphors for ultrasensitive luminescence thermometry. *Journal of Alloys and Compounds*, **2022**, 890, 161830	5.7	12
76	Boltzmann vs. non-Boltzmann (non-linear) thermometry - Yb3+-Er3+ activated dual-mode thermometer and phase transition sensor via second harmonic generation. *Journal of Alloys and Compounds*, **2022**, 906, 164329	5.7	1
75	Pressure-driven configurational crossover between 4f7 and 4f65d1 States – Giant enhancement of narrow Eu2+ UV-Emission lines in SrB4O7 for luminescence manometry. *Acta Materialia*, **2022**, 231, 117886	8.4	1
74	Pressure-triggered enormous redshift and enhanced emission in Ca2Gd8Si6O26:Ce3+ phosphors: Ultrasensitive, thermally-stable and ultrafast response pressure monitoring. *Chemical Engineering Journal*, **2022**, 443, 136414	14.7	2
73	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	8.1	1
72	Tailoring of polychromatic emissions in Tb3+/Eu3+ codoped NaYbF4 nanoparticles via energy transfer strategy for white light-emitting diodes. *Materials Today Chemistry*, **2022**, 24, 100916	6.2	0
71	Highly-efficient double perovskite Mn4+-activated Gd2ZnTiO6 phosphors: A bifunctional optical sensing platform for luminescence thermometry and manometry. *Chemical Engineering Journal*, **2022**, 446, 136839	14.7	4
70	Stress to distress: Triboluminescence and pressure luminescence of lanthanide diketonates. *Chemical Engineering Journal Advances*, **2022**, 100326	3.6	
69	Ratiometric Upconversion Temperature Sensor Based on Cellulose Fibers Modified with Yttrium Fluoride Nanoparticles. *Nanomaterials*, **2022**, 12, 1926	5.4	1
68	Nonlinear Optical Thermometry – A Novel Temperature Sensing Strategy via Second Harmonic Generation (SHG) and Upconversion Luminescence in BaTiO3:Ho3+,Yb3+ Perovskite. *Advanced Optical Materials*, **2021**, 9, 2100386	8.1	10
67	Multiple ratiometric nanothermometry operating with Stark thermally and non-thermally-coupled levels in upconverting Y2□MoO6:xEr3+ nanoparticles. *Journal of Alloys and Compounds*, **2021**, 864, 158891	5.7	6
66	Optical pressure sensing in vacuum and high-pressure ranges using lanthanide-based luminescent thermometer–manometer. *Journal of Materials Chemistry C*, **2021**, 9, 4643-4651	7.1	16
65	NIR emission of lanthanides for ultrasensitive luminescence manometry-Er-activated optical sensor of high pressure. *Dalton Transactions*, **2021**, 50, 14864-14871	4.3	3
64	Improving performance of luminescent nanothermometers based on non-thermally and thermally coupled levels of lanthanides by modulating laser power. *Nanoscale*, **2021**, 13, 14139-14146	7.7	6
63	Surface Modification of Luminescent Ln Fluoride Core-Shell Nanoparticles with Acetylsalicylic acid (Aspirin): Synthesis, Spectroscopic and in Vitro Hemocompatibility Studies. *ChemMedChem*, **2020**, 15, 1490-1496	3.7	3

62	Sr2LuF7:Yb3+,Ho3+,Er3+ Upconverting Nanoparticles as Luminescent Thermometers in the First, Second, and Third Biological Windows. *ACS Applied Nano Materials*, **2020**, 3, 6406-6415	5.6	37
61	Huge enhancement of Sm2+ emission via Eu2+ energy transfer in a SrB4O7 pressure sensor. *Journal of Materials Chemistry C*, **2020**, 8, 4810-4817	7.1	18
60	Bifunctional magnetic-upconverting luminescent cellulose fibers for anticounterfeiting purposes. *Journal of Alloys and Compounds*, **2020**, 829, 154456	5.7	8
59	3,5-Dihydroxy Benzoic Acid-Capped CaF:Tb Nanocrystals as Luminescent Probes for the WO Ion in Aqueous Solution. *ACS Omega*, **2020**, 5, 4568-4575	3.9	2
58	UV-Vis-NIR absorption spectra of lanthanide oxides and fluorides. *Dalton Transactions*, **2020**, 49, 2129-2137	4.3	22
57	Optical Vacuum Sensor Based on Lanthanide Upconversion Luminescence Thermometry as a Tool for Ultralow Pressure Sensing. *Advanced Materials Technologies*, **2020**, 5, 1901091	6.8	60
56	High-pressure luminescence of monoclinic and triclinic GdBO3: Eu3+. *Ceramics International*, **2020**, 46, 26368-26376	5.1	5
55	Pressure and temperature optical sensors: luminescence of lanthanide-doped nanomaterials for contactless nanomanometry and nanothermometry **2020**, 227-273		10
54	Influence of matrix on the luminescence properties of Eu2+/Eu3+ doped strontium borates: SrB4O7, SrB2O4 and Sr3(BO3)2, exhibiting multicolor tunable emission. *Journal of Alloys and Compounds*, **2020**, 822, 153511	5.7	7
53	Adenosine capped CaF2:Eu3+ nanocrystals and their applications in permanganate detection. *Optical Materials*, **2020**, 107, 110048	3.3	2
52	Improving temperature resolution of luminescent nanothermometers working in the near-infrared range using non-thermally coupled levels of Yb3+ & Tm3+. *Journal of Luminescence*, **2020**, 228, 117643	3.8	10
51	Luminescent Nd3+-Based Microresonators Working as Optical Vacuum Sensors. *Advanced Optical Materials*, **2020**, 8, 2000678	8.1	15
50	Lanthanide Upconverted Luminescence for Simultaneous Contactless Optical Thermometry and Manometry-Sensing under Extreme Conditions of Pressure and Temperature. *ACS Applied Materials & Interfaces*, **2020**, 12, 40475-40485	9.5	38
49	Er3+, Yb3+ co-doped Sr3(PO4)2 phosphors: A ratiometric luminescence thermometer based on Stark levels with tunable sensitivity. *Journal of Luminescence*, **2020**, 227, 117517	3.8	14
48	Upconversion luminescence in cellulose composites (fibres and paper) modified with lanthanide-doped SrF2 nanoparticles. *Journal of Materials Chemistry C*, **2020**, 8, 11922-11928	7.1	8
47	Luminescent Nanothermometer Operating at Very High Temperature-Sensing up to 1000 K with Upconverting Nanoparticles (Yb/Tm). *ACS Applied Materials & Interfaces*, **2020**, 12, 43933-43941	9.5	48
46	Praseodymium doped YF3:Pr3+ nanoparticles as optical thermometer based on luminescence intensity ratio (LIR) Studies in visible and NIR range. *Journal of Luminescence*, **2019**, 214, 116571	3.8	41
45	Synthesis of highly luminescent nanocomposite LaF3:Ln3+/Q-dots-CdTe system, exhibiting tunable red-to-green emission. *Chemical Papers*, **2019**, 73, 2907-2911	1.9	1

44	Luminescent-plasmonic core□shell microspheres, doped with Nd3+ and modified with gold nanoparticles, exhibiting whispering gallery modes and SERS activity. *Journal of Rare Earths*, **2019**, 37, 1152-1156	3.7	9
43	Tunable yellow-green up-conversion emission and luminescence lifetimes in Yb3+-Er3+-Ho3+ multi-doped □NaLuF4 crystals. *Journal of Alloys and Compounds*, **2019**, 793, 96-106	5.7	4
42	Upconverting Lanthanide Fluoride Core@Shell Nanorods for Luminescent Thermometry in the First and Second Biological Windows: □NaYF:Yb- Er@SiO Temperature Sensor. *ACS Applied Materials & Interfaces*, **2019**, 11, 13389-13396	9.5	114
41	Gold nanorods as a high-pressure sensor of phase transitions and refractive-index gauge. *Nanoscale* , **2019**, 11, 8718-8726	7.7	22
40	Emission color tuning and phase transition determination based on high-pressure up-conversion luminescence in YVO4: Yb3+, Er3+ nanoparticles. *Journal of Luminescence*, **2019**, 209, 321-327	3.8	19
39	Preparation, crystal structure and luminescence properties of a novel single-phase red emitting phosphor CaSr(PO):Sm,Li.. *RSC Advances*, **2019**, 9, 4834-4842	3.7	21
38	Modification of cellulose fibers with inorganic luminescent nanoparticles based on lanthanide(III) ions. *Carbohydrate Polymers*, **2019**, 206, 742-748	10.3	29
37	Optical Pressure Sensor Based on the Emission and Excitation Band Width (fwhm) and Luminescence Shift of Ce-Doped Fluorapatite-High-Pressure Sensing. *ACS Applied Materials & Interfaces*, **2019**, 11, 4131-4138	9.5	55
36	Multifunctional Optical Sensors for Nanomanometry and Nanothermometry: High-Pressure and High-Temperature Upconversion Luminescence of Lanthanide-Doped Phosphates-LaPO/YPO:Yb-Tm. *ACS Applied Materials & Interfaces*, **2018**, 10, 17269-17279	9.5	157
35	Upconverting lanthanide doped fluoride NaLuF4:Yb3+-Er3+-Ho3+ - optical sensor for multi-range fluorescence intensity ratio (FIR) thermometry in visible and NIR regions. *Journal of Luminescence*, **2018**, 201, 104-109	3.8	69
34	A novel reddish-orange fluorapatite phosphor, La6-Ba4(SiO4)6F2: xSm3+ - Structure, luminescence and energy transfer properties. *Journal of Alloys and Compounds*, **2018**, 757, 79-86	5.7	30
33	Influence of boric acid/Sr2+ ratio on the structure and luminescence properties (colour tuning) of nano-sized, complex strontium borates doped with Sm2+ and Sm3+ ions. *Optical Materials*, **2018**, 83, 245-251	3.3	8
32	Luminescent-Magnetic Cellulose Fibers, Modified with Lanthanide-Doped Core/Shell Nanostructures. *ACS Omega*, **2018**, 3, 10383-10390	3.9	19
31	Luminescent-plasmonic, lanthanide-doped core/shell nanomaterials modified with Au nanorods □ Up-conversion luminescence tuning and morphology transformation after NIR laser irradiation. *Journal of Alloys and Compounds*, **2018**, 762, 621-630	5.7	23
30	Optical pressure nano-sensor based on lanthanide doped SrB2O4:Sm2+ luminescence □Novel high-pressure nanomanometer. *Sensors and Actuators B: Chemical*, **2018**, 273, 585-591	8.5	37
29	Color-tunable up-conversion emission of luminescent-plasmonic, core/shell nanomaterials □KY 3 F 10 :Yb 3+ ,Tm 3+ /SiO 2 -NH 2 /Au. *Journal of Luminescence*, **2017**, 186, 199-204	3.8	27
28	Luminescent-plasmonic effects in GdPO4:Eu3+ nanorods covered with silver nanoparticles. *Journal of Luminescence*, **2017**, 188, 24-30	3.8	16
27	Up-conversion green emission of Yb 3+ /Er 3+ ions doped YVO 4 nanocrystals obtained via modified Pechini□ method. *Optical Materials*, **2017**, 74, 128-134	3.3	7

26	Lifetime nanomanometry - high-pressure luminescence of up-converting lanthanide nanocrystals - SrF:Yb,Er. *Nanoscale*, **2017**, 9, 16030-16037	7.7	81
25	Synthesis, surface modification/decoration of luminescent magnetic core/shell nanomaterials, based on the lanthanide doped fluorides (Fe3O4/SiO2/NH2/PAA/LnF3). *Journal of Luminescence*, **2016**, 170, 484-490	3.8	24
24	Effects of Dopant Addition on Lattice and Luminescence Intensity Parameters of Eu(III)-Doped Lanthanum Orthovanadate. *Journal of Physical Chemistry C*, **2016**, 120, 28497-28508	3.8	41
23	Spectroscopic, structural and in vitro cytotoxicity evaluation of luminescent, lanthanide doped core@shell nanomaterials GdVO4:Eu(3+)5%@SiO2@NH2. *Journal of Colloid and Interface Science*, **2016**, 481, 245-55	9.3	40
22	Synthesis of lanthanide doped CeF3:Gd3+, Sm3+ nanoparticles, exhibiting altered luminescence after hydrothermal post-treatment. *Journal of Alloys and Compounds*, **2016**, 661, 182-189	5.7	33
21	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	3.8	49
20	Nanocrystalline rare earth fluorides doped with Pr3+ ions. *Journal of Rare Earths*, **2016**, 34, 802-807	3.7	12
19	Synthesis of luminescent KY3F10 nanopowder multi-doped with lanthanide ions by a co-precipitation method. *Journal of Rare Earths*, **2016**, 34, 808-813	3.7	10
18	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	2.3	16
17	Synthesis, characterization, and cytotoxicity in human erythrocytes of multifunctional, magnetic, and luminescent nanocrystalline rare earth fluorides. *Journal of Nanoparticle Research*, **2015**, 17, 399	2.3	32
16	Synthesis, structural and spectroscopic studies on GdBO3:Yb3+/Tb3+@SiO2 core-shell nanostructures. *Journal of Rare Earths*, **2015**, 33, 1148-1154	3.7	11
15	Semiempirical and DFT computations of the influence of Tb(III) dopant on unit cell dimensions of cerium(III) fluoride. *Journal of Computational Chemistry*, **2015**, 36, 193-9	3.5	4
14	Eu3+ and Tb3+ doped LaPO4 nanorods, modified with a luminescent organic compound, exhibiting tunable multicolour emission. *RSC Advances*, **2014**, 4, 46305-46312	3.7	42
13	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, 9533-43	4	41
12	Nanosized complex fluorides based on Eu3+ doped Sr2LnF7 (Ln=La, Gd). *Journal of Rare Earths*, **2014**, 32, 242-247	3.7	21
11	Facile synthesis, structural and spectroscopic properties of GdF3:Ce3+, Ln3+ (Ln3+=Sm3+, Eu3+, Tb3+, Dy3+) nanocrystals with bright multicolor luminescence. *Journal of Luminescence*, **2014**, 154, 479-486	3.8	42
10	Preparation and photophysical properties of luminescent nanoparticles based on lanthanide doped fluorides (LaF3:Ce3+, Gd3+, Eu3+), obtained in the presence of different surfactants. *Journal of Alloys and Compounds*, **2014**, 597, 63-71	5.7	44
9	Structural, spectroscopic and cytotoxicity studies of TbF@CeF and TbF@CeF@SiO nanocrystals. *Journal of Nanoparticle Research*, **2013**, 15, 1958	2.3	36

8	Core/shell-type nanorods of Tb-doped LaPO, modified with amine groups, revealing reduced cytotoxicity. *Journal of Nanoparticle Research*, **2013**, 15, 2068	2.3	42
7	Structural, morphological and spectroscopic properties of Eu3+-doped rare earth fluorides synthesized by the hydrothermalmethod. *Journal of Solid State Chemistry*, **2013**, 200, 76-83	3.3	35
6	Magnetic and luminescent hybrid nanomaterial based on Fe(3)O(4) nanocrystals and GdPO(4):Eu(3+) nanoneedles. *Journal of Nanoparticle Research*, **2012**, 14, 1188	2.3	29
5	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	3.8	67
4	Unusual solidification and phosphate binding to benzimidazole cations in the presence of water. *New Journal of Chemistry*, **2012**, 36, 823	3.6	1
3	Bifunctional luminescent and magnetic core/shell type nanostructures Fe3O4@CeF3:Tb3+/SiO2. *Journal of Rare Earths*, **2011**, 29, 1117-1122	3.7	18
2	Y2(Ge,Si)O5:Pr phosphors: multimodal temperature and pressure sensors shaped by bandgap management. *Journal of Materials Chemistry C*,	7.1	1
1	Tm2+ Activated SrB4O7 Bifunctional Sensor of Temperature and Pressure□Highly Sensitive, Multi-Parameter Luminescence Thermometry and Manometry. *Advanced Optical Materials*,2101507	8.1	9