Markus Suta

List of Publications by Year
in descending order

45 papers	1,277 citations	394286 19 h-index	360920 35 g-index
46 all docs	46 docs citations	46 times ranked	1111 citing authors

#	ARTICLE	IF	CITATIONS
1	A Theoretical Framework for Ratiometric Single Ion Luminescent Thermometersâ€"Thermodynamic and Kinetic Guidelines for Optimized Performance. Advanced Theory and Simulations, 2020, 3, 2000176.	1.3	169
2	Making Nd3+ a Sensitive Luminescent Thermometer for Physiological Temperaturesâ€"An Account of Pitfalls in Boltzmann Thermometry. Nanomaterials, 2020, 10, 543.	1.9	94
3	One ion to catch them all: Targeted high-precision Boltzmann thermometry over a wide temperature range with Gd3+. Light: Science and Applications, 2021, 10, 236.	7.7	86
4	Visible and NIR Upconverting Er³⁺â€"Yb³⁺ Luminescent Nanorattles and Other Hybrid PMOâ€Inorganic Structures for In Vivo Nanothermometry. Advanced Functional Materials, 2020, 30, 2003101.	7.8	83
5	A Ho³⁺â€Based Luminescent Thermometer for Sensitive Sensing over a Wide Temperature Range. Advanced Optical Materials, 2021, 9, 2001518.	3.6	70
6	Synthesis, spectroscopic properties and applications of divalent lanthanides apart from Eu2+. Journal of Luminescence, 2019, 210, 210-238.	1.5	65
7	Structurally induced tuning of the relative sensitivity of LaScO3:Cr3+ luminescent thermometers by co-doping lanthanide ions. Chemical Engineering Journal, 2021, 421, 129757.	6.6	53
8	Photoluminescence properties of Yb²⁺ ions doped in the perovskites CsCaX₃ and CsSrX₃ (X = Cl, Br, and I) â€" a comparative study. Physical Chemistry Chemical Physics, 2016, 18, 13196-13208.	1.3	50
9	Photoluminescence of CsMI3:Eu2+ (M = Mg, Ca, and Sr) â€" a spectroscopic probe on structural distortions. Journal of Materials Chemistry C, 2015, 3, 5233-5245.	2.7	44
10	Photoluminescence of CsMBr3:Eu2+ (M=Mg, Ca, Sr)â€"A novel strategy for the development of low-energy emitting phosphors. Journal of Luminescence, 2014, 149, 35-44.	1.5	40
11	Prospecting Lighting Applications with Ligand Field Tools and Density Functional Theory: A First-Principles Account of the 4f⁷â€"4f⁶5d¹ Luminescence of CsMgBr₃:Eu²⁺. Inorganic Chemistry, 2015, 54, 8319-8326.	1.9	39
12	High temperature (nano)thermometers based on LiLuF₄:Er³⁺,Yb³⁺ nano- and microcrystals. Confounded results for coreâ€"shell nanocrystals. Journal of Materials Chemistry C, 2021, 9, 3589-3600.	2.7	38
13	Spin Crossover of Yb²⁺ in CsCaX₃ and CsSrX₃ (X = Cl, Br, I) â€" A Guideline to Novel Halideâ€Based Scintillators. Advanced Functional Materials, 2017, 27, 1602783.	7.8	35
14	Red, Green, and Blue Photoluminescence of Ba2SiO4:M (M = Eu3+, Eu2+, Sr2+) Nanophosphors. Materials, 2013, 6, 3079-3093.	1.3	34
15	Investigation of the â€œbent sandwich-likeâ€• divalent lanthanide hydro-tris(pyrazolyl)borates Ln(Tp^{iPr2})₂ (Ln = Sm, Eu, Tm, Yb). New Journal of Chemistry, 2015, 39, 7617-7625.	1.4	30
16	Green Synthesis of A₂SiF₆ (A=Liâ€"Cs) Nanoparticles using Ionic Liquids as Solvents and as Fluorine Sources: A Simple Approach without HF. Chemistry - A European Journal, 2017, 23, 12092-12095.	1.7	29
17	SrAl₂O₄:Eu²⁺(,Dy³⁺) Nanosized Particles: Synthesis and Interpretation of Temperature-Dependent Optical Properties. Journal of Spectroscopy, 2015, 2015, 1-12.	0.6	28
18	One Ion, Many Facets: Efficient, Structurally and Thermally Sensitive Luminescence of Eu²⁺ in Binary and Ternary Strontium Borohydride Chlorides. Chemistry of Materials, 2019, 31, 8957-8968.	3.2	24

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19	From quencher to potent activator â€“ Multimodal luminescence thermometry with Fe³⁺ in the oxides MAl₄O₇ (M = Ca, Sr, Ba). Journal of Materials Chemistry C, 0, , .	2.7	24
20	Photoluminescence properties of the â€œbent sandwich-likeâ€•compounds [Eu(Tp iPr2) 2] and [Yb(Tp iPr2) 2] â€“ Intermediates between nitride-based phosphors and metallocenes. Journal of Luminescence, 2017, 187, 62-68.	1.5	20
21	Decay times of the spin-forbidden and spin-enabled transitions of Yb²⁺ doped in CsCaX₃ and CsSrX₃ (X = Cl, Br, I). Physical Chemistry Chemical Physics, 2017, 19, 7188-7194.	1.3	20
22	Bright Photoluminescence of [{(Cp)₂Ce(<i>Î¼</i>â€Cl)}₂]: A Valuable Technique for the Determination of the Oxidation State of Cerium. Chemistry - an Asian Journal, 2018, 13, 1038-1044.	1.7	18
23	The angular overlap model of ligand field theory for f elements: An intuitive approach building bridges between theory and experiment. Coordination Chemistry Reviews, 2021, 441, 213981.	9.5	17
24	From ligand exchange to reaction intermediates: what does really happen during the synthesis of emissive complexes?. Physical Chemistry Chemical Physics, 2018, 20, 7428-7437.	1.3	16
25	Underestimated Color Centers: Defects as Useful Reducing Agents in Lanthanideâ€Activated Luminescent Materials. Angewandte Chemie - International Edition, 2020, 59, 10949-10954.	7.2	15
26	A ligand field theory-based methodology for the characterization of the Eu 2+ [Xe]4f 6 5d 1 excited states in solid state compounds. Chemical Physics Letters, 2015, 622, 120-123.	1.2	14
27	Borate Hydrides as a New Material Class: Structure, Computational Studies, and Spectroscopic Investigations on Sr₅(BO₃)₃H and Sr₅(¹¹BO₃)₃D. Chemistry - A European Journal, 2020, 26, 11742-11750.	1.7	14
28	Chasing Down the Eu²⁺ Ions: The Delicate Structureâˆ'Property Relationships in the Ultraâ€Narrow Band Phosphor K_{1.6}Na_{2.1}Li_{0.3}[Li₃SiO₄]₄:Eu²⁺. Advanced Optical Materials, 2021, 9, 2101643.	3.6	14
29	Pressure-driven configurational crossover between 4f7 and 4f65d1 States â€“ Giant enhancement of narrow Eu2+ UV-Emission lines in SrB4O7 for luminescence manometry. Acta Materialia, 2022, 231, 117886.	3.8	14
30	Beyond the Energy Gap Law: The Influence of Selection Rules and Host Compound Effects on Nonradiative Transition Rates in Boltzmann Thermometers. Advanced Optical Materials, 2022, 10, .	3.6	11
31	How to calibrate luminescent crossover thermometers: a note on â€œquasiâ€•Boltzmann systems. Journal of Materials Chemistry C, 2022, 10, 13805-13814.	2.7	9
32	Bonding Scheme and Optical Properties in BiM₂O₂(PO₄) (M=Cd,) Tj ETQq0 0 0 rgBT /Overlock 1	1.7	8
33	Nature of Localized Excitons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>CsMg</mml:mi><mml:msub><mml:mrow><mml:mi>X</mml:mi></mml:mrow><mml:mrow><m (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 182 Td (display="inli Review Applied, 2018, 9,	1.5	8
34	Completing the Series: New Coordination Networks of Composition ³_{âˆž}[<i>RE</i>₂(ADC)₃(H₂O)₆]Â·2H₂O with <i>RE</i> = Pr, Nd, Sm, Eu, Tb, Dy, Ho, Er, Y and ADC^{2â€“} = Acetylenedicarboxylate (^{â€“}O₂Câ€“Câ‰¡Câ€“CO₂^{â€“}). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2018, 644, 127-135.	0.6	7
35	Synthesis, structure, complexation, and luminescence properties of the first metal-organic curcumin compound Bis(4-triphenylsiloxy)curcumin. Journal of Luminescence, 2019, 211, 243-250.	1.5	7
36	Eu(O 2 Câ€Câ‰¡Câ€CO 2): An Eu II Containing Anhydrous Coordination Polymer with High Stability and Negative Thermal Expansion. Chemistry - A European Journal, 2020, 26, 2726-2734.	1.7	7

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37	A ratiometric and lifetime-based luminescent thermometer exploiting the Co³⁺ luminescence in CaAl₂O₄:Co³⁺ and CaAl₂O₄:Co³⁺,Nd³⁺. Journal of Materials Chemistry C, 2022, 10, 9278-9286.	2.7	7
38	On the long decay time of the 7F5 level of Tb3+. Journal of Luminescence, 2022, 248, 118933.	1.5	6
39	New Scandiumâ€containing Coordination Polymers with Linear Linker Molecules: Crystal Structures and Luminescence Properties. European Journal of Inorganic Chemistry, 2020, 2020, 2737-2743.	1.0	5
40	Crystallisation of phosphates revisited: aÂmulti-step formation process for SrHPO₄. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2022, 77, 263-272.	0.3	3
41	Frontispiece: Green Synthesis of A₂SiF₆ (A=Liâ€“Cs) Nanoparticles using Ionic Liquids as Solvents and as Fluorine Sources: A Simple Approach without HF. Chemistry - A European Journal, 2017, 23, .	1.7	1
42	Das Rezept fÃ¼r schmalbandige Leuchtstoffe. Nachrichten Aus Der Chemie, 2020, 68, 54-58.	0.0	1
43	Dynamical symmetries hidden in the form of the potential. Physical Review A, 2019, 99, .	1.0	0
44	UnterschÃ¤tzte Farbzentren: Defekte als nÃ¼tzliche Reduktionsmittel in Lanthanidâ€dotierten lumineszenten Materialien. Angewandte Chemie, 2020, 132, 11042-11047.	1.6	0
45	Sieh mal, seltene Erden. Nachrichten Aus Der Chemie, 2019, 67, 71-75.	0.0	0