

# Markus Suta

## List of Publications by Year in descending order

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45  
papers

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394286

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h-index

360920

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g-index

46  
all docs

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docs citations

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times ranked

1111  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystallisation of phosphates revisited: a multi-step formation process for SrHPO <sub>4</sub> . Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2022, 77, 263-272.	0.3	3
2	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
3	Pressure-driven configurational crossover between 4f <sup>7</sup> and 4f <sup>6</sup> 5d <sup>1</sup> States – Giant enhancement of narrow Eu <sup>2+</sup> UV-Emission lines in SrB <sub>4</sub> O <sub>7</sub> for luminescence manometry. Acta Materialia, 2022, 231, 117886.	3.8	14
4	How to calibrate luminescent crossover thermometers: a note on “quasi-Boltzmann systems. Journal of Materials Chemistry C, 2022, 10, 13805-13814.	2.7	9
5	On the long decay time of the 7F <sub>5</sub> level of Tb <sup>3+</sup> . Journal of Luminescence, 2022, 248, 118933.	1.5	6
6	A ratiometric and lifetime-based luminescent thermometer exploiting the Co <sup>3+</sup> luminescence in CaAl <sub>2</sub> O <sub>4</sub> :Co <sup>3+</sup> and CaAl <sub>2</sub> O <sub>4</sub> :Co <sup>3+</sup> ,Nd <sup>3+</sup> . Journal of Materials Chemistry C, 2022, 10, 9278-9286.	2.7	7
7	A Ho <sup>3+</sup> -Based Luminescent Thermometer for Sensitive Sensing over a Wide Temperature Range. Advanced Optical Materials, 2021, 9, 2001518.	3.6	70
8	High temperature (nano)thermometers based on LiLuF <sub>4</sub> :Er <sup>3+</sup> ,Yb <sup>3+</sup> nano- and microcrystals. Confounded results for core-shell nanocrystals. Journal of Materials Chemistry C, 2021, 9, 3589-3600.	2.7	38
9	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
10	Structurally induced tuning of the relative sensitivity of LaScO <sub>3</sub> :Cr <sup>3+</sup> luminescent thermometers by co-doping lanthanide ions. Chemical Engineering Journal, 2021, 421, 129757.	6.6	53
11	Chasing Down the Eu <sup>2+</sup> Ions: The Delicate Structure-Property Relationships in the Ultra-Narrow Band Phosphor K <sub>1.6</sub> Na <sub>2.1</sub> Li <sub>0.3</sub> [Li <sub>3</sub> SiO <sub>4</sub> ] <sub>4</sub> :Eu <sup>2+</sup> . Advanced Optical Materials, 2021, 9, 2101643.	3.6	14
12	One ion to catch them all: Targeted high-precision Boltzmann thermometry over a wide temperature range with Gd <sup>3+</sup> . Light: Science and Applications, 2021, 10, 236.	7.7	86
13	A Theoretical Framework for Ratiometric Single Ion Luminescent Thermometers – Thermodynamic and Kinetic Guidelines for Optimized Performance. Advanced Theory and Simulations, 2020, 3, 2000176.	1.3	169
14	Borate Hydrides as a New Material Class: Structure, Computational Studies, and Spectroscopic Investigations on Sr <sub>5</sub> (BO <sub>3</sub> ) <sub>3</sub> H and Sr <sub>5</sub> ( <sup>11</sup> BO <sub>3</sub> ) <sub>3</sub> D. Chemistry - A European Journal, 2020, 26, 11742-11750.	1.7	14
15	Visible and NIR Upconverting Er <sup>3+</sup> -Yb <sup>3+</sup> Luminescent Nanorattles and Other Hybrid PMO-Inorganic Structures for In Vivo Nanothermometry. Advanced Functional Materials, 2020, 30, 2003101.	7.8	83
16	Unterschiedliche Farbzentren: Defekte als natürliche Reduktionsmittel in Lanthanid-dotierten lumineszenten Materialien. Angewandte Chemie, 2020, 132, 11042-11047.	1.6	0
17	Underestimated Color Centers: Defects as Useful Reducing Agents in Lanthanide-Activated Luminescent Materials. Angewandte Chemie - International Edition, 2020, 59, 10949-10954.	7.2	15
18	Making Nd <sup>3+</sup> a Sensitive Luminescent Thermometer for Physiological Temperatures – An Account of Pitfalls in Boltzmann Thermometry. Nanomaterials, 2020, 10, 543.	1.9	94

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19	Eu(O <sub>2</sub> Ca <sub>0.5</sub> CO <sub>2</sub> ): 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
20	New Scandium-containing Coordination Polymers with Linear Linker Molecules: Crystal Structures and Luminescence Properties. European Journal of Inorganic Chemistry, 2020, 2020, 2737-2743.	1.0	5
21	Das Rezept für schmalbandige Leuchtstoffe. Nachrichten Aus Der Chemie, 2020, 68, 54-58.	0.0	1
22	One Ion, Many Facets: Efficient, Structurally and Thermally Sensitive Luminescence of Eu <sup>2+</sup> in Binary and Ternary Strontium Borohydride Chlorides. Chemistry of Materials, 2019, 31, 8957-8968.	3.2	24
23	Dynamical symmetries hidden in the form of the potential. Physical Review A, 2019, 99, .	1.0	0
24	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
25	Synthesis, spectroscopic properties and applications of divalent lanthanides apart from Eu <sup>2+</sup> . Journal of Luminescence, 2019, 210, 210-238.	1.5	65
26	Sieh mal, seltene Erden. Nachrichten Aus Der Chemie, 2019, 67, 71-75.	0.0	0
27	Bright Photoluminescence of [(Cp) <sub>2</sub> Ce( <sup>1/4</sup> Cl)] <sub>2</sub> : A Valuable Technique for the Determination of the Oxidation State of Cerium. Chemistry - an Asian Journal, 2018, 13, 1038-1044.	1.7	18
28	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
29	Completing the Series: New Coordination Networks of Composition RE <sub>3</sub> (ADC) <sub>3</sub> (H <sub>2</sub> O) <sub>6</sub> ·2H <sub>2</sub> O with RE = Pr, Nd, Sm, Eu, Tb, Dy, Ho, Er, Y and ADC = Acetylenedicarboxylate (RE <sub>2</sub> O <sub>2</sub> Ca <sub>0.5</sub> CO <sub>2</sub> ). Zeitschrift Für Anorganische Und Allgemeine Chemie, 2018, 644, 1025-1030.	0.6	7
30	Nature of Localized Excitons in CsMgX (X = Cl, Br, I). Physical Chemistry Chemical Physics, 2018, 20, 1155-1161.	1.5	8
31	Photoluminescence properties of the $\text{Eu}(\text{Tp}^i\text{Pr}_2)_2$ and $[\text{Yb}(\text{Tp}^i\text{Pr}_2)_2]^{2-}$ intermediates between nitride-based phosphors and metallocenes. Journal of Luminescence, 2017, 187, 62-68.	1.5	20
32	Decay times of the spin-forbidden and spin-enabled transitions of Yb <sup>2+</sup> doped in CsCaX <sub>3</sub> and CsSrX <sub>3</sub> (X = Cl, Br, I). Physical Chemistry Chemical Physics, 2017, 19, 7188-7194.	1.3	20
33	Green Synthesis of A <sub>2</sub> SiF <sub>6</sub> (A=Li-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
34	Bonding Scheme and Optical Properties in BiM <sub>2</sub> O <sub>2</sub> (PO <sub>4</sub> ) (M=Cd, I). Physical Chemistry Chemical Physics, 2017, 19, 1155-1161.	1.7	8
35	Frontispiece: Green Synthesis of A <sub>2</sub> SiF <sub>6</sub> (A=Li-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
36	Spin Crossover of Yb <sup>2+</sup> in CsCaX <sub>3</sub> and CsSrX <sub>3</sub> (X = Cl, Br, I): A Guideline to Novel Halide-Based Scintillators. Advanced Functional Materials, 2017, 27, 1602783.	7.8	35

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37	Photoluminescence properties of Yb <sup>2+</sup> ions doped in the perovskites CsCaX <sub>3</sub> and CsSrX <sub>3</sub> (X = Cl, Br, and I) – a comparative study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13196-13208.	1.3	50
38	SrAl <sub>2</sub> O <sub>4</sub> :Eu <sup>2+</sup> (,Dy <sup>3+</sup> ) Nanosized Particles: Synthesis and Interpretation of Temperature-Dependent Optical Properties. <i>Journal of Spectroscopy</i> , 2015, 2015, 1-12.	0.6	28
39	A ligand field theory-based methodology for the characterization of the Eu <sup>2+</sup> [Xe]4f <sup>6</sup> 5d <sup>1</sup> excited states in solid state compounds. <i>Chemical Physics Letters</i> , 2015, 622, 120-123.	1.2	14
40	Photoluminescence of CsMl <sub>3</sub> :Eu <sup>2+</sup> (M = Mg, Ca, and Sr) – a spectroscopic probe on structural distortions. <i>Journal of Materials Chemistry C</i> , 2015, 3, 5233-5245.	2.7	44
41	Investigation of the –bent sandwich-like–divalent lanthanide hydro-tris(pyrazolyl)borates Ln(Tp <sup>iPr</sup> ) <sub>2</sub> (Ln = Sm, Eu, Tm, Yb). <i>New Journal of Chemistry</i> , 2015, 39, 7617-7625.	1.4	30
42	Prospecting Lighting Applications with Ligand Field Tools and Density Functional Theory: A First-Principles Account of the 4f <sup>7</sup> – 4f <sup>6</sup> 5d <sup>1</sup> Luminescence of CsMgBr <sub>3</sub> :Eu <sup>2+</sup> . <i>Inorganic Chemistry</i> , 2015, 54, 8319-8326.	1.9	39
43	Photoluminescence of CsMBr <sub>3</sub> :Eu <sup>2+</sup> (M=Mg, Ca, Sr) – A novel strategy for the development of low-energy emitting phosphors. <i>Journal of Luminescence</i> , 2014, 149, 35-44.	1.5	40
44	Red, Green, and Blue Photoluminescence of Ba <sub>2</sub> SiO <sub>4</sub> :M (M = Eu <sup>3+</sup> , Eu <sup>2+</sup> , Sr <sup>2+</sup> ) Nanophosphors. <i>Materials</i> , 2013, 6, 3079-3093.	1.3	34
45	From quencher to potent activator – Multimodal luminescence thermometry with Fe <sup>3+</sup> in the oxides MA <sub>4</sub> O <sub>7</sub> (M = Ca, Sr, Ba). <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	24