

# Predicting the Optical Pressure Sensitivity of ${}^2E_g$ Spin-Flip Transition in $\text{Cr}^{3+}$ -Doped Crystals

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Citation Report

#	ARTICLE	IF	CITATIONS
1	A Near-Infrared Emissive Chromium(III) Complex. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23722-23728.	13.8	52
2	A Near-Infrared Emissive Chromium(III) Complex. <i>Angewandte Chemie</i> , 2021, 133, 23915.	2.0	5
3	Tm <sup>2+</sup> Activated SrB <sub>4</sub> O <sub>7</sub> Bifunctional Sensor of Temperature and Pressure Highly Sensitive, Multi-Parameter Luminescence Thermometry and Manometry. <i>Advanced Optical Materials</i> , 2021, 9, 2101507.	7.3	40
4	Temperature dependence of Fano resonances in CrPS <sub>4</sub> . <i>Journal of Chemical Physics</i> , 2022, 156, 054707.	3.0	5
5	Design of a Novel Near-Infrared Luminescence Material Li <sub>2</sub> Mg <sub>3</sub> TiO <sub>6</sub> :Cr <sup>3+</sup> with an Ultrawide Tuning Range Applied to Near-Infrared Light-Emitting Diodes. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3839-3850.	6.7	43
6	Pressure-driven Eu <sup>2+</sup> -doped K <sub>3</sub> Sc(PO <sub>4</sub> ) <sub>2</sub> : A broad cyan-green emitting phosphor for closing the cyan cavity in solid-state lighting and applying in optical pressure sensor. <i>Journal of Luminescence</i> , 2022, 245, 118798.	3.1	6
7	High-Pressure Photoluminescence Properties of Cr <sup>3+</sup> -Doped LaGaO <sub>3</sub> Perovskites Modulated by Pressure-Induced Phase Transition. <i>Inorganic Chemistry</i> , 2021, 60, 19253-19262.	4.0	12
8	Chromaticity coordinate vector principle for charge-transfer-type thermochromic material design: case of Fe/Cr(co)doped I <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> host. <i>Journal of Materials Chemistry C</i> , 2022, 10, 11354-11370.	5.5	5
9	A super stable Near-Infrared garnet phosphor resistant to thermal Quenching, thermal degradation and hydrolysis. <i>Chemical Engineering Journal</i> , 2022, 449, 137892.	12.7	22
10	ZnAl <sub>2</sub> O <sub>4</sub> :Cr <sup>3+</sup> translucent ceramic phosphor with thermally stable far-red luminescence. <i>Optical Materials</i> , 2022, 133, 112887.	3.6	7
11	Temperature invariant ratiometric luminescence manometer based on Cr <sup>3+</sup> ions emission. <i>Chemical Engineering Journal</i> , 2023, 453, 139632.	12.7	28
12	Recent Advances in Chromium-Doped Near-Infrared Luminescent Materials: Fundamentals, Optimization Strategies, and Applications. <i>Advanced Optical Materials</i> , 2023, 11, .	7.3	54
13	Cr <sup>3+</sup> -Facilitated Ultra-Sensitive Luminescence Ratiometric Thermometry at Cryogenic Temperature. <i>Laser and Photonics Reviews</i> , 2023, 17, .	8.7	13
14	Highly Pressure-Sensitive, Temperature Independent Luminescence Ratiometric Manometer Based on MgO:Cr <sup>3+</sup> Nanoparticles. <i>Laser and Photonics Reviews</i> , 2023, 17, .	8.7	19
15	Modeling the Eu(III)-to-Cr(III) Energy Transfer Rates in Luminescent Bimetallic Complexes. <i>Inorganics</i> , 2023, 11, 38.	2.7	1
16	Improving Accuracy and Sensitivity of Lanthanide-Based Luminescent Manometers by Augmented Spectral Shift Method. , 2023, 1, 1080-1087.		3
17	Analyses of the R <sub>1</sub> -line thermal shifts for Bi <sub>2</sub> Al <sub>4</sub> O <sub>9</sub> :Cr <sup>3+</sup> and Bi <sub>2</sub> Ga <sub>4</sub> O <sub>9</sub> :Cr <sup>3+</sup> crystals with a complete equation. <i>Philosophical Magazine</i> , 2023, 103, 1191-1197.	1.6	0
18	Multimodal, super-sensitive luminescent manometer based on giant pressure-induced spectral shift of Cr <sup>3+</sup> in the NIR range. <i>Chemical Engineering Journal</i> , 2023, 466, 143130.	12.7	17

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19	Bimodal role of Cr <sup>3+</sup> ions: the nanoscaled photothermal agent and luminescence thermometry. <i>Materials Today Chemistry</i> , 2023, 30, 101579.	3.5	3
20	Crystalline-to-semicrystalline transition in lanthanide trifluoroacetates: implications for optical pressure and temperature sensing. <i>Journal of Materials Chemistry C</i> , 2023, 11, 11552-11563.	5.5	0
21	Effect of Ga <sup>3+</sup> substitution on the photoluminescence properties of ZnAl <sub>2</sub> O <sub>4</sub> red phosphor. <i>Optical Materials</i> , 2023, 143, 114262.	3.6	2
22	Ultralow pressure sensing and luminescence thermometry based on the emissions of Er <sup>3+</sup> /Yb <sup>3+</sup> codoped Y <sub>2</sub> Mo <sub>4</sub> O <sub>15</sub> phosphors. <i>Dalton Transactions</i> , 2023, 52, 14904-14916.	3.3	3
23	Piezochromism and Anomalous Near-Infrared Luminescence Evolution of BaCuSi <sub>4</sub> O <sub>10</sub> and BaCuSi <sub>2</sub> O <sub>6</sub> via Pressure-Induced Phase Transition. <i>Journal of Materials Chemistry C</i> , 0, , .	5.5	0
24	High external quantum yield in near-infrared phosphor Bi <sub>2</sub> Ga <sub>4</sub> O <sub>9</sub> :Cr <sup>3+</sup> excited by near-ultraviolet or blue light. <i>Journal of Luminescence</i> , 2024, 268, 120426.	3.1	0
25	Pressure-dependent multiplet-excitation energies of $\Gamma_8$ -Al <sub>2</sub> O <sub>3</sub> :Cr <sup>3+</sup> by the first-principles method. <i>Japanese Journal of Applied Physics</i> , 2024, 63, 032001.	1.5	0
26	A highly sensitive lifetime-based luminescent manometer and bi-functional pressure-temperature sensor based on a spectral shift of the R-line of Mn <sup>4+</sup> in K <sub>2</sub> Ge <sub>4</sub> O <sub>9</sub> . <i>Journal of Materials Chemistry C</i> , 0, , .	5.5	1
27	Bifunctional optical probe based on La <sub>3</sub> Mg <sub>2</sub> SbO <sub>9</sub> :Mn <sup>4+</sup> phosphors for temperature and pressure sensing. <i>Journal of Materials Science and Technology</i> , 2024, 194, 98-109.	10.7	0
28	Optical pressure sensors for luminescence manometry: Classification, development status, and challenges. <i>Coordination Chemistry Reviews</i> , 2024, 507, 215770.	18.8	0