# Jonas J Joos

List of Publications by Year
in descending order



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|---|---|---|---|
| 41 papers | 1,784 citations | 304743 22 h-index | 302126 39 g-index |
| 49 all docs | 49 docs citations | 49 times ranked | 2027 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 1 | A Standalone, Batteryâ€Free Light Dosimeter for Ultraviolet to Infrared Light. Advanced Functional Materials, 2022, 32, . | 14.9 | 17 |
| 2 | Revealing trap depth distributions in persistent phosphors with a thermal barrier for charging. Physical Review B, 2022, 105, . | 3.2 | 6 |
| 3 | Charge transfer from Eu2+ to trivalent lanthanide co-dopants: Systematic behavior across the series. Journal of Chemical Physics, 2021, 154, 064704. | 3.0 | 20 |
| 4 | Elucidation of the electron transfer mechanism in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Eu</mml:mi></mml:mrow><mml:mrow><m and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Sm</mml:mi></mml:mrow><mml:mrow><m codoped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml. Physical Review B, 2021, 104, . | 3.2 | 18 |
| 5 | Insights into the complexity of the excited states of Eu-doped luminescent materials. Inorganic Chemistry Frontiers, 2020, 7, 871-888. | 6.0 | 49 |
| 6 | Mixed-Valence Lanthanide-Activated Phosphors: Invariance of the Intervalence Charge Transfer (IVCT) Absorption Onset across the Series. Journal of Physical Chemistry C, 2020, 124, 2619-2626. | 3.1 | 15 |
| 7 | On a local (de-)trapping model for highly doped Pr<sup>3+</sup> radioluminescent and persistent luminescent nanoparticles. Nanoscale, 2020, 12, 20759-20766. | 5.6 | 13 |
| 8 | Broadband infrared LEDs based on europium-to-terbium charge transfer luminescence. Nature Communications, 2020, 11, 3647. | 12.8 | 99 |
| 9 | Identification of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Dy</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn><m as Electron Trap in Persistent Phosphors. Physical Review Letters, 2020, 125, 033001. | 7.8 | 64 |
| 10 | The almost hidden role of deep traps when measuring afterglow and thermoluminescence of persistent phosphors. Journal of Luminescence, 2020, 226, 117496. | 3.1 | 18 |
| 11 | A new microwave approach for the synthesis of green emitting Mn2+-doped ZnAl2O4: A detailed study on its structural and optical properties. Journal of Luminescence, 2020, 226, 117482. | 3.1 | 18 |
| 12 | Optically Stimulated Nanodosimeters with High Storage Capacity. Nanomaterials, 2019, 9, 1127. | 4.1 | 26 |
| 13 | Blind spheres of paramagnetic dopants in solid state NMR. Physical Chemistry Chemical Physics, 2019, 21, 10185-10194. | 2.8 | 21 |
| 14 | Direct Evidence of Intervalence Charge-Transfer States of Eu-Doped Luminescent Materials. Journal of Physical Chemistry Letters, 2019, 10, 1581-1586. | 4.6 | 34 |
| 15 | Exploring Lanthanide Doping in UiO-66: A Combined Experimental and Computational Study of the Electronic Structure. Inorganic Chemistry, 2018, 57, 5463-5474. | 4.0 | 51 |
| 16 | 2D and 3D lanthanide metalâ€“organic frameworks constructed from three benzenedicarboxylate ligands: synthesis, structure and luminescent properties. CrystEngComm, 2018, 20, 615-623. | 2.6 | 32 |
| 17 | Insight into the Upconversion Luminescence of Highly Efficient Lanthanide-Doped Bi<sub>2</sub>O<sub>3</sub> Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 7389-7398. | 3.1 | 28 |
| 18 | Microscopic Study of Dopant Distribution in Europium Doped SrGa<sub>2</sub>S<sub>4</sub>: Impact on Thermal Quenching and Phosphor Performance. ECS Journal of Solid State Science and Technology, 2018, 7, R3052-R3056. | 1.8 | 9 |

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|---|---|---|---|
| 19 | Predicting the afterglow duration in persistent phosphors: a validated approach to derive trap depth distributions. Physical Chemistry Chemical Physics, 2018, 20, 30455-30465. | 2.8 | 39 |
| 20 | Importance of Evaluating the Intensity Dependency of the Quantum Efficiency: Impact on LEDs and Persistent Phosphors. ACS Photonics, 2018, 5, 4529-4537. | 6.6 | 46 |
| 21 | Red Mn<sup>4+</sup>-Doped Fluoride Phosphors: Why Purity Matters. ACS Applied Materials & Interfaces, 2018, 10, 18845-18856. | 8.0 | 74 |
| 22 | (Invited) Eu2+-Doped KxNa1-XLuS2 Ternary Sulfides: Application and Perspectives in White LEDs. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 23 | (Invited) Red Fluoride Phosphors: A Story of Reliability. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 24 | (Invited) Microscopic Study of Dopant Distribution in Phosphors: Impact on Thermal Quenching and Phosphor Performance. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 25 | Stabilizing colour and intensity. Nature Materials, 2017, 16, 500-501. | 27.5 | 88 |
| 26 | Hybrid remote quantum dot/powder phosphor designs for display backlights. Light: Science and Applications, 2017, 6, e16271-e16271. | 16.6 | 133 |
| 27 | Charge transfer induced energy storage in CaZnOS:Mn â€“ insight from experimental and computational spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 9075-9085. | 2.8 | 21 |
| 28 | Oxidation and Luminescence Quenching of Europium in BaMgAl<sub>10</sub>O<sub>17</sub> Blue Phosphors. Chemistry of Materials, 2017, 29, 10122-10129. | 6.7 | 41 |
| 29 | K_2SiF_6:Mn^4+ as a red phosphor for displays and warm-white LEDs: a review of properties and perspectives. Optical Materials Express, 2017, 7, 3332. | 3.0 | 186 |
| 30 | Counting the Photons: Determining the Absolute Storage Capacity of Persistent Phosphors. Materials, 2017, 10, 867. | 2.9 | 47 |
| 31 | Nonequivalent lanthanide defects: Energy level modeling. Optical Materials, 2016, 61, 50-58. | 3.6 | 6 |
| 32 | Investigation of the quenching mechanisms of Tb3+ doped scheelites. Journal of Luminescence, 2016, 173, 263-273. | 3.1 | 12 |
| 33 | First-Principles Study of Antisite Defect Configurations in ZnGa<sub>2</sub>O<sub>4</sub>:Cr Persistent Phosphors. Inorganic Chemistry, 2016, 55, 2402-2412. | 4.0 | 106 |
| 34 | Luminescent Behavior of the K<sub>2</sub>SiF<sub>6</sub>:Mn<sup>4+</sup>Red Phosphor at High Fluxes and at the Microscopic Level. ECS Journal of Solid State Science and Technology, 2016, 5, R3040-R3048. | 1.8 | 80 |
| 35 | Energy level modeling of lanthanide materials: review and uncertainty analysis. Physical Chemistry Chemical Physics, 2015, 17, 19058-19078. | 2.8 | 60 |
| 36 | Absolute determination of photoluminescence quantum efficiency using an integrating sphere setup. Review of Scientific Instruments, 2014, 85, 123115. | 1.3 | 96 |

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|---|---|---|---|
| 37 | Trapping and detrapping in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrAl</mml:mi><mml:mn>2</mml:mn></m mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mo>:</mml:mo><mml:mi>Eu</mml:mi><mml:mo>,</m phosphors: Influence of excitation wavelength and temperature. Physical Review B, 2014, 90, . | 3.2 | 128 |
| 38 | Luminescence of ytterbium in CaS and SrS. Journal of Luminescence, 2014, 154, 445-451. | 3.1 | 18 |
| 39 | Evaluating the use of blue phosphors in white LEDs: the case of Sr0.25Ba0.75Si2O2N2:Eu2+. Journal of Solid State Lighting, 2014, 1, 6. | 2.3 | 17 |
| 40 | Origin of saturated green emission from europium in zinc thiogallate. Optical Materials Express, 2013, 3, 1338. | 3.0 | 17 |
| 41 | Thermal quenching and luminescence lifetime of saturated green Sr1â^'xEuxGa2S4 phosphors. Optical Materials, 2012, 34, 1902-1907. | 3.6 | 30 |