

Liangliang Zhang

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Green upconversion luminescence of Er ³⁺ and Yb ³⁺ codoped Gd ₂ Mo ₄ O ₁₅ for optical temperature sensing. Journal of Alloys and Compounds, 2022, 895, 162516. | 5.5 | 10 |
| 2 | Highly efficient and thermally stable far-red-emitting phosphors for plant-growth lighting. Journal of Luminescence, 2022, 244, 118750. | 3.1 | 18 |
| 3 | Cr ³⁺ and Nd ³⁺ co-activated garnet phosphor for NIR super broadband pc-LED application. Materials Research Bulletin, 2022, 151, 111797. | 5.2 | 12 |
| 4 | Efficient Broadband Near-Infrared CaMgGe ₂ O ₆ :Cr ³⁺ Phosphor for pc-LED. Inorganic Chemistry, 2022, 61, 8815-8822. | 4.0 | 38 |
| 5 | Conceptual Ultraviolet Light Source Based on Upconversion Luminescence. Advanced Photonics Research, 2022, 3, . | 3.6 | 5 |
| 6 | Ultra-broadband near-infrared Gd ₃ MgScGa ₂ SiO ₁₂ : Cr, Yb phosphors: Photoluminescence properties and LED applications. Journal of Alloys and Compounds, 2022, 920, 165912. | 5.5 | 28 |
| 7 | Highly efficient and thermally robust cyan-green phosphor-in-glass films for high-brightness laser lighting. Journal of Materials Chemistry C, 2021, 9, 12342-12352. | 5.5 | 16 |
| 8 | Enhanced upconversion luminescence and optical thermometry in Er ³⁺ /Yb ³⁺ heavily doped ZrO ₂ by stabilizing in the monoclinic phase. Materials Chemistry Frontiers, 2021, 5, 5142-5149. | 5.9 | 6 |
| 9 | Cr ³⁺ Activated Garnet Phosphor with Efficient Blue to Far Red Conversion for pcLED. Advanced Optical Materials, 2021, 9, 2101134. | 7.3 | 91 |
| 10 | Efficient and Broadband LiGaP ₂ O ₇ :Cr ³⁺ Phosphors for Smart Near-Infrared Light-Emitting Diodes. Laser and Photonics Reviews, 2021, 15, 2100227. | 8.7 | 117 |
| 11 | Phosphor-SiO ₂ composite films suitable for white laser lighting with excellent color rendering. Journal of the European Ceramic Society, 2020, 40, 2439-2444. | 5.7 | 51 |
| 12 | Enhancing IR to NIR upconversion emission in Er ³⁺ -sensitized phosphors by adding Yb ³⁺ as a highly efficient NIR-emitting center for photovoltaic applications. CrystEngComm, 2020, 22, 229-236. | 2.6 | 7 |
| 13 | Highly efficient and thermally stable luminescence of Ca ₃ Gd ₂ Si ₆ O ₁₈ :Ce ³⁺ , Tb ³⁺ phosphors based on efficient energy transfer. Journal of Materials Chemistry C, 2020, 8, 17176-17184. | 5.5 | 20 |
| 14 | Multi-peaked broad-band red phosphor Y ₃ Si ₆ N ₁₁ :Pr ³⁺ for white LEDs and temperature sensing. Dalton Transactions, 2020, 49, 17779-17785. | 3.3 | 7 |
| 15 | Yolk-shell structured Bi ₂ SiO ₅ :Yb ³⁺ , Ln ³⁺ (Ln = Er, Ho). Tj ETQq1 1 0.784314 rgsB 2020, 22, 4438-4448. | 2.6 | 31 |
| 16 | On the luminescence of Ti ⁴⁺ and Eu ³⁺ in monoclinic ZrO ₂ : high performance optical thermometry derived from energy transfer. Journal of Materials Chemistry C, 2020, 8, 4518-4533. | 5.5 | 29 |
| 17 | Efficient Super Broadband NIR Ca ₂ LuZr ₂ Al ₃ O ₁₂ :Cr ³⁺ , Yb ³⁺ Garnet Phosphor for pcLED Light Source toward NIR Spectroscopy Applications. Advanced Optical Materials. 2020. 8. 1901684. | 7.3 | 175 |
| 18 | Laser-quality Tm:(Lu _{0.8} Sc _{0.2}) ₂ O ₃ mixed sesquioxide ceramics shaped by gelcasting of well-dispersed nanopowders. Journal of the American Ceramic Society, 2019, 102, 4919-4928. | 3.8 | 15 |

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|----|--|-----|-----------|
| 19 | Cr ³⁺ -Doped Broadband NIR Garnet Phosphor with Enhanced Luminescence and its Application in NIR Spectroscopy. <i>Advanced Optical Materials</i> , 2019, 7, 1900185. | 7.3 | 257 |
| 20 | Observation of a red Ce ³⁺ center in SrLu ₂ O ₄ :Ce ³⁺ phosphor and its potential application in temperature sensing. <i>Dalton Transactions</i> , 2019, 48, 5263-5270. | 3.3 | 22 |
| 21 | First-principles study on OH-functionalized 2D electrides: Ca ₂ NOH and Y ₂ C(OH) ₂ , promising two-dimensional monolayers for metal-ion batteries. <i>Applied Surface Science</i> , 2019, 478, 459-464. | 6.1 | 20 |
| 22 | Tunable luminescence of Na ₃ YSi ₃ O ₉ :Ce ³⁺ , Mn ²⁺ via efficient energy transfer for white LEDs. <i>Journal of Luminescence</i> , 2019, 206, 227-233. | 3.1 | 28 |
| 23 | 2D Nitrogen-Containing Carbon Material C ₅ N as Potential Host Material for Lithium Polysulfides: A First-Principles Study. <i>Advanced Theory and Simulations</i> , 2019, 2, 1800165. | 2.8 | 16 |
| 24 | An efficient blue phosphor Ba ₂ Lu ₅ B ₅ O ₁₇ :Ce ³⁺ stabilized by La ₂ O ₃ : Photoluminescence properties and potential use in white LEDs. <i>Dyes and Pigments</i> , 2018, 154, 121-127. | 3.7 | 30 |
| 25 | Er ³⁺ /Yb ³⁺ codoped phosphor Ba ₃ Y ₄ O ₉ with intense red upconversion emission and optical temperature sensing behavior. <i>Journal of Materials Chemistry C</i> , 2018, 6, 3459-3467. | 5.5 | 99 |
| 26 | A high efficiency broad-band near-infrared Ca ₂ LuZr ₂ Al ₃ O ₁₂ :Cr ³⁺ garnet phosphor for blue LED chips. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4967-4976. | 5.5 | 244 |
| 27 | Phonon Energy Dependent Energy Transfer Upconversion for the Red Emission in the Er ³⁺ /Yb ³⁺ System. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9611-9618. | 3.1 | 42 |
| 28 | An efficient green phosphor of Ce ³⁺ and Tb ³⁺ -codoped Ba ₂ Lu ₅ B ₅ O ₁₇ and a model for elucidating the high thermal stability of the green emission. <i>Journal of Materials Chemistry C</i> , 2018, 6, 5984-5991. | 5.5 | 39 |
| 29 | Highly efficient upconversion emission of Er ³⁺ in Y ₄ Sc ₄ Zr ₃ O ₁₂ and broad-range temperature sensing. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 14461-14468. | 2.8 | 20 |
| 30 | C=O bond activation and splitting behaviours of CO ₂ on a 4H-SiC surface: a DFT study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26846-26852. | 2.8 | 6 |
| 31 | Dye-embedded YAG:Ce ³⁺ @SiO ₂ composite phosphors toward warm wLEDs through radiative energy transfer: preparation, characterization and luminescence properties. <i>Nanoscale</i> , 2018, 10, 22237-22251. | 5.6 | 25 |
| 32 | Two Ce ³⁺ centers induced broadband emission in Y ₃ Si ₆ N ₁₁ :Ce ³⁺ yellow phosphor. <i>Dalton Transactions</i> , 2018, 47, 16723-16728. | 3.3 | 11 |
| 33 | A highly efficient and thermally stable green phosphor (Lu ₂ SrAl ₄ SiO ₁₂ :Ce ³⁺) for full-spectrum white LEDs. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12159-12163. | 5.5 | 73 |
| 34 | Efficient Blue-emitting Phosphor SrLu ₂ O ₄ :Ce ³⁺ with High Thermal Stability for Near Ultraviolet (~400nm) LED-Chip based White LEDs. <i>Scientific Reports</i> , 2018, 8, 10463. | 3.3 | 27 |
| 35 | 11 W continuous-wave laser operation at 209 ¼m in Tm:Lu ₁₆ Sc ₄ O ₃ mixed sesquioxide ceramics pumped by a 796 nm laser diode. <i>Optical Materials Express</i> , 2018, 8, 3615. | 3.0 | 11 |
| 36 | Cooperative Upconversion Luminescence Properties of Yb ³⁺ and Tb ³⁺ Heavily Codoped Silicate Garnet Obtained by Multiple Chemical Unit Cosubstitution. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2998-3006. | 3.1 | 15 |

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|----|---|-----|-----------|
| 37 | The dominant role of excitation diffusion in energy transfer upconversion of Lu ₂ O ₃ : Tm ³⁺ , Yb ³⁺ . Journal of Alloys and Compounds, 2017, 704, 206-211. | 5.5 | 7 |
| 38 | Observation and photoluminescence properties of two Er ³⁺ centers in CaSc ₂ O ₄ :Er ³⁺ , Yb ³⁺ upconverting phosphor. Journal of Alloys and Compounds, 2017, 708, 827-833. | 5.5 | 9 |
| 39 | Luminescence properties and its red shift of blue-emitting phosphor Na ₃ YSi ₃ O ₉ :Ce ³⁺ for UV LED. RSC Advances, 2017, 7, 27422-27430. | 3.6 | 40 |
| 40 | Enhanced emission of Tm ³⁺ : ³ F ₄ → ³ H ₆ transition by backward energy transfer from Yb ³⁺ in Y ₂ O ₃ for mid-infrared applications. Journal of Alloys and Compounds, 2017, 722, 48-53. | 5.5 | 8 |
| 41 | Near-infrared quantum cutting and energy transfer mechanism in Lu ₂ O ₃ : Tm ³⁺ /Yb ³⁺ phosphor for high-efficiency photovoltaics. Journal of Materials Science: Materials in Electronics, 2017, 28, 8017-8022. | 2.2 | 6 |
| 42 | Synthesis and photoluminescence properties of Eu ²⁺ activated CaO ceramic powders for near-ultraviolet chip based white light emitting diodes. Optical Materials, 2017, 71, 1-4. | 3.6 | 6 |
| 43 | Highly Efficient Green-Emitting Phosphors Ba ₂ Y ₅ B ₅ O ₁₇ with Low Thermal Quenching Due to Fast Energy Transfer from Ce ³⁺ to Tb ³⁺ . Inorganic Chemistry, 2017, 56, 4538-4544. | 4.0 | 93 |
| 44 | Simultaneously tuning the emission color and improving thermal stability <i>via</i> energy transfer in apatite-type phosphors. Journal of Materials Chemistry C, 2017, 5, 11910-11919. | 5.5 | 55 |
| 45 | Enhanced ¹ / ₂ ¹ / ₄ m Emission of Tm ³⁺ in Lu ₂ O ₃ by Addition of a Trace Amount of Er ³⁺ . Inorganic Chemistry, 2017, 56, 13062-13069. | 4.0 | 3 |
| 46 | Inhomogeneous-Broadening-Induced Intense Upconversion Luminescence in Tm ³⁺ and Yb ³⁺ Codoped Lu ₂ O ₃ ∕ZrO ₂ Disordered Crystals. Inorganic Chemistry, 2017, 56, 12291-12296. | 4.0 | 4 |
| 47 | The Inductive Effect of Neighboring Cations in Tuning Luminescence Properties of the Solid Solution Phosphors. Inorganic Chemistry, 2017, 56, 9938-9945. | 4.0 | 20 |
| 48 | Enhanced ³ H ₄ - ³ F ₄ nonradiative relaxation of Tm ³⁺ through energy transfer to Yb ³⁺ and efficient back transfer in lowly Tm ³⁺ doped Lu _{1.6} Sc _{0.4} O ₃ :Tm ³⁺ , Yb ³⁺ . Journal of Alloys and Compounds, 2017, 696, 627-631. | 5.5 | 7 |
| 49 | Low-Concentration Eu ²⁺ -Doped SrAlSi ₄ N ₇ : Ce ³⁺ Yellow Phosphor for wLEDs with Improved Color-Rendering Index. Inorganic Chemistry, 2016, 55, 9736-9741. | 4.0 | 30 |
| 50 | Site distortion in Li ₂ SrSiO ₄ : Influence on Pr ³⁺ emission and application in wLED. Journal of Luminescence, 2016, 180, 158-162. | 3.1 | 14 |
| 51 | Red emission generation through highly efficient energy transfer from Ce ³⁺ to Mn ²⁺ in CaO for warm white LEDs. Dalton Transactions, 2016, 45, 1539-1545. | 3.3 | 33 |
| 52 | Luminescence properties and high thermal stability of tunable blue∕green-emitting phosphor Gd _{4.67} Si ₃ O ₁₃ :Ce ³⁺ , Tb ³⁺ . Ceramics International, 2016, 42, 3309-3316. | 4.8 | 24 |
| 53 | Yellow-Emitting Sr ₉ Sc(PO ₄) ₇ :Eu ²⁺ , Mn ²⁺ Phosphor with Energy Transfer for Potential Application in White Light-Emitting Diodes. European Journal of Inorganic Chemistry, 2014, 2014, 870-874. | 2.0 | 36 |
| 54 | New Yellow-Emitting Nitride Phosphor SrAlSi ₄ N ₇ :Ce ³⁺ and Important Role of Excessive AlN in Material Synthesis. ACS Applied Materials & Interfaces, 2013, 5, 12839-12846. | 8.0 | 87 |

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| 55 | Formation condition of red Ce ³⁺ in Ca ₃ Sc ₂ Si ₃ O ₁₂ :Ce ³⁺ , N ³⁺ as a full-color-emitting light-emitting diode phosphor. Optics Letters, 2013, 38, 884. | 3.3 | 10 |