



汪红

讲师

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教育背景

大连海事大学 工学博士（2020）
大连海事大学 理学硕士（2016）
辽宁师范大学 工学学士（2013）

研究领域

固体发光与光电技术，主要从事稀土离子掺杂无机光功能材料及其应用研究。

代表性成果

论文类：

- (1) Engineering Er³⁺-sensitized nanocrystal for enhancing the NIR II-responsive upconversion luminescence, *Nanoscale*, 2022, 14, 962. (SCI)
- (2) Excitation-wavelength-dependent anti-thermal quenching of upconversion luminescence in hexagonal NaGdF₄:Nd³⁺/Yb³⁺/Er³⁺ nanocrystals, *Journal of Materials Chemistry C*, 2022, 10, 5109. (SCI)
- (3) Brightness attenuation mechanisms of Er³⁺ self-sensitized upconversion nanocrystals under 1.5 μm pumping, *Applied Surface Science*, 2021, 538, 148084. (SCI)
- (4) Promising lanthanide-doped BiVO₄ phosphors for highly efficient upconversion luminescence and temperature sensing, *Dalton Transactions*, 2021, 50, 960. (SCI)
- (5) Enhancing upconversion luminescence and thermal sensing properties of Er/Yb co-doped oxysulfide core-shell nanocrystals, *Journal of the American Ceramic Society*, 2021, 104, 985. (SCI)
- (6) Enhancing red luminescence by doping Yb³⁺ into Er³⁺ self-sensitized Gd₂O₂S upconverting nanoparticles under excitation at 1530 nm, *Dalton Transactions*, 2021, 50, 13468. (SCI)

- (7) Thermal effects of Er³⁺/Yb³⁺-doped NaYF₄ phosphor induced by 980/1510 nm laser diode irradiation, Journal of the American Ceramic Society, 2018, 101, 865. (SCI)
- (8) Luminescence property tuning of Yb³⁺-Er³⁺ doped oxysulfide using multiple-band co-excitation, RSC Advances, 2018, 8, 16557. (SCI)
- (9) Investigation on the thermal effects of NaYF₄:Er under 1550 nm irradiation, Physical Chemistry Chemical Physics, 2017, 19, 8465. (SCI)
- (10) K₃LaTe₂O₉:Er: a novel green up-conversion luminescence material, RSC Advances, 2017, 7, 36374. (SCI)
- (11) Preparation of highly crystallized yttrium oxysulfide suspension via a novel colloidal processing, Journal of Nanoscience and Nanotechnology, 2016, 16, 3951. (SCI)
- (12) Up-conversion luminescence of Y₂O₃:Yb, Er under 1.55 μm excitation, Ceramics International, 2015, 141, 259. (SCI)
- (13) Upconversion emission colour modulation of Y₂O₂S:Yb,Er under 1.55 μm and 980 nm excitation, Journal of Alloys and Compounds, 2014, 587, 344. (SCI)

代表性项目

国家自然科学基金青年项目，12004063，Er³⁺敏化近红外二区上转换荧光探针构筑及其在微藻实时监测的应用研究，2021/01-2023/12，在研，主持。

荣誉奖励

大连海事大学“星海工程”第四层次人选

社会兼职

其他