

Colloidal LiYF₄:Pr Nanocrystals Downsized to 10 nm –Part 1: Syn- thesis and Micro-Structural Characteristics

Tuesday, 30 August 2022 12:00 (2 hours)

Nanocrystalline LiYF₄:Pr promises exciting design opportunities for composite photonic devices in the visible. Here, we present the spectroscopic properties of monodisperse colloidal LiYF₄:Pr nanocrystals. We observed an unexpected yet intense emission with lifetimes comparable to bulk crystals. These results pave the way for applications in quantum optics and biomedicine.

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Session Classification: Lunch and Poster Session 1