

Product Information

Core-shell oxide UCNPs

Cat. No.: X26-05-ZQ748

Size: 100 mg; 250 mg; 500 mg; 1 g; 5 g

Synonym: Core/shell structured oxide UCNPs; Shell-passivated oxide upconversion nanoparticles; RE-doped oxide core-shell nanostructures

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	These core-shell oxide upconverting nanoparticles (UCNPs) are oxide-based nanostructures where an upconverting core (e.g., $Y_2O_3:Yb,Er$) is surrounded by an epitaxial oxide shell. The shell layer is designed to minimize surface defects and enhance the environmental stability of the lanthanide-doped core. These materials are used for research into high-stability upconversion in oxide matrices and the study of interfacial effects in all-oxide nanophotonic systems.
Source	Custom synthesis
Form	Solid or powder
Purity	$\geq 95\%$
Impurities	No visible impurities to the naked eye.
Identity	HPLC/MS/NMR
Stability	This product is stable for one year when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Storage	Store at -20°C .