

# Fabrication and spectroscopic properties of glass-based erbium activated micro-nano photonic structures

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Abstract: This paper presents optical and spectroscopic assessment, as well as morphological and structural characterization of nanoscaled photonic structures: (i) rare earth-activated oxide and fluoride glass ceramics planar waveguides; (ii) Er<sup>3+</sup>-activated micro-nano silica spheres and core-shell-like structures; (iii) rf sputtering-fabricated planar microcavities. © 2008 IEEE.

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