

# **Abstract**

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**Performance Characteristics of Rare-Earth Doped Optical Amplifiers Pumped at 0.98  $\mu\text{m}$ , 10.5  $\mu\text{m}$  and 1.48  $\mu\text{m}$  in Unsaturated Gain Regime**

This paper gives a numerical investigation for the performance of optical amplifiers in the unsaturated gain regime.