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**Photo-darkening In Thulium-Doped Alumino-Silicate Fibres Pumped At 1.07  $\mu\text{m}$ : Effect of Co-Doping with Lanthanum or Cerium** — •JEAN-FRANÇOIS LUPI, MANUEL VERMILLAC, WILFRIED BLANC, and BERNARD DUSSARDIER — Université Nice Sophia Antipolis, CNRS, Laboratoire de Physique de la Matière Condensée, Nice, France

The photo-darkening process in thulium-doped alumino-silicate optical fibres under 1.07  $\mu\text{m}$  up-conversion pumping is strongly reduced by co-doping with lanthanum or cerium. This would allow for laser and amplifier operation at new wavelengths.

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