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# Near-infrared-sensitive photorefractive Sn<sub>2</sub>P<sub>2</sub>S<sub>6</sub> crystals grown by the Bridgman method

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## ABSTRACT

Ferroelectric tin hypthiodiphosphate ( $\text{Sn}_2\text{P}_2\text{S}_6$ ) crystals are well-known for their significant piezoelectric, electro-optic, and nonlinear optical properties. These crystals have usually been grown by a vapor transport technique. We report in this paper on the first study of photorefractive nonlinearity in  $\text{Sn}_2\text{P}_2\text{S}_6$  crystals grown by the Bridgman method. Pronounced photorefraction is observed in the near-infrared region of the spectrum even with no preliminary optical sensitizing.

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