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# Investigation of femtosecond photon echo in dye-doped polymer film at room temperature

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## Abstract

Signals of primary and stimulated femtosecond photon echo were found and investigated at room temperature in a polyvinyl butyral film doped with phthalocyanine molecules. The decay curve of relative intensity and the spectrum of the signal of primary femtosecond photon echo were recorded. The physical mechanism of formation of such signals in a system of impurity centers excited through the phonon wing of the optical absorption band was discussed. 