

Recording and reproducing information with various encoding schemes, using stimulated photon echo in a three-level system

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Abstract

This paper discusses how external spatially inhomogeneous electric fields affect information reproduction in the stimulated-photon-echo response in a three-level system when the information is encoded in the temporal shape of the object pulse and in the time intervals of an echelon of laser pulses taken as the object pulse. The information-locking effect for various encoding schemes is investigated for various unequal spacings of the spectrum of a three-level system. © 2014 Optical Society of America.

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