

Long-lived triggering optical superradiance in doped Van Vleck paramagnetics

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Abstract

The theory of long-lived optical triggering optical superradiance is developed by the method of non-equilibrium statistical Zubarev-Peletminsky operator. Excitation and formation of long-lived optical triggering optical superradiance in a three-level system inherent in of Van Vleck paramagnetic crystals doped with rareearth ions are thoroughly investigated for the first time. We analyze the reverse generation of the triggering superradiance signal, analogous to the regime of reverse time-delayed free-induction decay. Copyright © 1999 by MAHK "Hayka/Interperiodica".
