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Anti-Stokes femtosecond photon echo in dye-doped polymer films and the possibility of coherent optical cooling

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Abstract

An anti-Stokes model is proposed to explain the known experimental data on the femtosecond photon echo in dye-doped polymer films at room temperature. The possibility of implementing the anti-Stokes mode of coherent laser cooling of such films is analyzed. © Allerton Press, Inc. 2008.

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