

标题: Ultrafast Coherent Control of Spin Precession Motion by Terahertz Magnetic Pulses

作者: Nakajima, M (Nakajima, M.); Yamaguchi, K (Yamaguchi, K.); Suemoto, T (Suemoto, T.)

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摘要: We demonstrated coherent control of spin precession motion due to the ferromagnetic resonance induced by magnetic field component of ultrashort terahertz pulses. The amplitude of the precession can be controlled by the pulse separation time of the double pulse excitation technique. We succeeded in observing the energy transfer between spin and photon systems, and the energy of the spin system is returned to the second terahertz pulses instantaneously when the precession amplitude is cancelled.

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地址: [Nakajima, M.; Yamaguchi, K.; Suemoto, T.] Univ Tokyo, Inst Solid State Phys, Chiba 2778581, Japan

通讯作者地址: Nakajima, M (通讯作者), Univ Tokyo, Inst Solid State Phys, Kashiwanoha 5-1-5, Chiba 2778581, Japan

电子邮件地址: nak@issp.u-tokyo.ac.jp

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