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标题: Coherent control of terahertz radiation from antiferromagnetic magnons in NiO excited by optical laser pulses

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摘要: We investigated terahertz (THz) radiation from twinned NiO(110) single crystals excited by optical laser pulses with various polarization states. We found that the polarity of THz radiation from optically excited coherent antiferromagnetic (AFM) magnons can be controlled by switching the helicity of circular polarization and by rotating the direction of linear polarization of the laser pulses. The dependence of THz radiation on the polarization of the laser pulses suggests that AFM magnons are excited by the inverse Faraday effect in a twinned crystal with linear magnetic birefringence.

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