

Ultrafast magnetoelastic and thermoelastic dynamics in hexagonal YbMnO₃ single crystals observed by femtosecond spectroscopy

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In this poster, the ultrafast dynamics probed by wavelength-tunable femtosecond pump-probe spectroscopy was performed to disclose the coupling among the magnetization, polarization, and strain degrees of freedom simultaneously in the hexagonal YbMnO₃ single crystals. This result implies unambiguously that the electroelastic effect and magnetoelectric effect near T_N are controlled by the giant magnetoelastic effect.

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