

Abstract Submitted
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Ferroelectric **switching**
induced magnetic anisotropy in Fe/BaTiO₃ bilayers¹ CHUN-GANG DUAN,
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— Ferromagnetic/ferroelectric heterostructures have recently attracted significantly
interest due to their potential applications in multifunctional electronic devices. We
have recently predicted a magnetoelectric effect at the Fe/BaTiO₃ interface induced
by ferroelectric polarization reversal [1]. In this report, calculations are being car-
ried out on the magnetic anisotropy of Fe/BaTiO₃ films. Preliminary results show
that the ferroelectric switching of the BaTiO₃ has appreciable effect on the magnetic
anisotropy of magnetic Fe films. This should be of interest in multiferroic device
applications. [1] Chun-gang Duan, S. S. Jaswal, E. Y. Tsympal, Phys. Rev. Lett.
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¹Ferroelectric switching induced magnetic anisotropy in Fe/BaTiO₃ bilayers

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