MAR06-2005-004106

Abstract for an Invited Paper for the MAR06 Meeting of the American Physical Society

Multifunctional Multiferroics

SANG-WOOK CHEONG, Rutgers Center for Emergent Materials

Discovery of intriguing phenomena due to significant cross-coupling in multiferroics where magnetic order and ferroelectric structural distortion coexist has drawn enormous attention in materials science and condensed mater physics community for the last about two years, partially due to the possible realization of new multifunctional devices. I will overview the recent progress and discuss the key issues in understanding and optimizing the cross-coupling effects.