Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Multiferroic BiFeO3 SANG-WOOK CHEONG — BiFeO3 (BFO) is a unique multiferroic in the sense that the magnitude of ferroelectric polarization is large (about 90 microC/cm) - similar with that of standard ferroelectrics such as BaTiO3 and PbTiO3. In addition, both magnetic and ferroelectric temperatures are much high than room temperature. BFO has been extensively studied, but mostly in the form of films. In order to explore the intrinsic properties of BFO and also properties that cannot be measured in film forms, we have investigated comprehensive physical properties of bulk BFO single crystals using a number of techniques such as neutron scattering, piezoelectric force microcopy and transport property measurement.

Sang-Wook Cheong
Rutgers U.

Date submitted: 30 Nov 2008 Electronic form version 1.4