

Theory of Dirty Ferroelectrics

Takeo MATSUBARA

Department of Physics, Kyoto University

and

Kôji YOSHIMITSU

Department of Physics, Kwansei Gakuin University

A review of the experimental facts on the mixed crystals and impurity effects of ferroelectric substances is given. Particular attention is laid on the displacive ferroelectrics mixed with other similar substances, and observed phase diagrams are analyzed on the basis of a phenomenological theory.

A simple microscopic model is proposed and some discussion based on the molecular field approximation (and CPA) is suggested.