

Control of magnetic and ferroelectric phase in multiferroic
(Tb, Bi)MnO₃ system

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Bi-substitution effects of multiferroic TbMnO₃ polycrystalline system on magnetic and ferroelectric phase transition have been studied. Random replacement of Tb³⁺ with Bi³⁺ induces low frequency relaxation in magnetic susceptibility reminiscent of relaxor behavior. Controllability of both magnetic and ferroelectric phase by the combination of Bi-substitution and driving frequency suggests a new exciting possibility for getting two transitions having different origin at the same temperature point.