Temperature Dependent Properties of Perovskite Small R-Ion RMnO₃ Systems

HAIYAN CHEN, TIAN YU, PENG GAO, TREVOR TYSON, KEUN HYUK AHN, New Jersey Institute of Technology — Perovskite small ion E-type systems with radii smaller than that of Lu have been synthesized. The structure, heat capacity and magnetic measurements have been used to compare them with standard E-type systems such as LuMnO₃ and HoMnO₃. Analysis of the structure is combined with theoretical estimates to relate the electronically driven polarization with the atomic structure.

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