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High Pressure Structure and Transport Studies of LaxMnO3 ZHIQIANG CHEN, New Jersey Institute of Technology, TREVOR TYSON, New Jersey Institute of Technology — High pressure structural and transport measurements on the self- doped system $LaxMnO_3$(x=0.9 and x=0.8) were performed. The monoclinic space group is maintained to pressures of 11 Gpa. The compression of the unit cell is not isotropioc. While these space group places constraints on the Mn-O-Mn bond angle and Mn-O bond lengths significant compression of the Mn-O1 distance is found to occur with pressure (tracking the reduction of the a lattice parameter). Transport measurements are being conducted in order to correlate the changes in structure with changes in the resistivity. Comparison with large and small bandwidth manganites will be made.

Zhiqiang Chen
New Jersey Institute of Technology

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