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## Structural and electrical properties of the ceramicmanganite Pr0.6Sr0.4Mn1-xCuxO3

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**Abstract :** The ceramics that are the focus of this paper ,have a Perovskite structure (ABO), with the general chemical formula Pr0.6Sr0.4Mn1-xCuxO33(x=0.05) .The compounds are prepared by solid state reaction. The X-ray diffraction data are analyzed and it has been found that all the compounds crystallize in the orthorhombic structure. The observations by SEM show that the grain size decreases by copper doping. The temperature of magneto-resistivity curves are registered from room temperature down to 50K under a magnetic field up to 5Tesla and showed that the undoped sample present a metalin sulator transition (I-M) at a temperature T 210,23 K. Some physical parameters are extracted and their evolution with magnetic field are presented and discussed.

Keywords: manganite, ceramic, Doping, resistivity