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## The Influence of Ti Doping at the Mn Site on Magnetoresistance and Thermopower Properties of $\text{Nd}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$

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Nd-Ca-based manganite  $\text{Nd}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  and 10% Ti-doped manganite  $\text{Nd}_{0.5}\text{Ca}_{0.5}\text{Ti}_{0.1}\text{Mn}_{0.9}\text{O}_3$  denoted by N and  $\text{N}_{0.1}$ , respectively, were prepared using solid-state reaction method. Resistivity gets increased for the Ti-doped sample. The parent compound N has remarkably high magnetoresistance. The highest value of Seebeck coefficient for N is  $-97 \mu\text{VK}^{-1}$  at 143 K and for  $\text{N}_{0.1}$  is  $-207 \mu\text{VK}^{-1}$  at 203 K. Variable range hopping mechanism successfully explains the high temperature resistivity and thermopower data.

**Keywords:** magnetoresistance, thermoelectric power, rare-earth based manganites, manganites.