Magnetic Properties and Magnetocaloric Effect in A_{1.4}Ba_{1.6}Mn₂O₇ (A=La, Pr,Nd) Layered Perovskite Manganites

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In this study, production and characterization of $A_{1.4}Ba_{1.6}Mn_2O_7$ (A=La, Pr, Nd) layered perovskite manganites are investigated. $A_{1.4}Ba_{1.6}Mn_2O_7$ manganites are synthesized by solid state reaction technique. XRD, SEM, EDX, TEM techniques performed to determine mineralogical, chemical and micro-structural properties of samples. Furthermore RT, MT and MH measurement methods applied to characterize magnetic characteristics and Magnetocaloric Effect (MCE) of $A_{1.4}Ba_{1.6}Mn_2O_7$ perovskite manganites are calculated.