

Thermomagnetic properties of ferromagnetic perovskite manganites

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Detailed measurements of the magnetization as a function of temperature and magnetic field for $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$, $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$, and $\text{La}_{0.67}\text{Ba}_{0.33}\text{MnO}_3$ bulk samples were carried out. Significant entropy changes near the Curie temperature are obtained from the magnetization data. The magnetocaloric effects and potential applications in magnetic cooling of these materials are discussed.