Magnetic State of $\text{La}_{1.36}\text{Sr}_{1.64}\text{Mn}_2\text{O}_7$ Probed by Magnetic Force Microscopy

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Interestingly, the evolution of the FM domain patterns with temperature was seen to coincide with the change in resistivity. We also observed large changes in the magnetic structures upon thermal cycling. We concluded that the formation of FM domains is determined by the competition between the magnetostatic energy and domain-wall energy and is also associated with the 2D character of the system.

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