

## **Local electronic properties of manganite films studied by STM/STS under ambient conditions**

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Thin films of  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$  and  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  were prepared by different sputtering techniques. All films show a significant magnetoresistive effect. The topographic and electronic properties of the films were studied by STM/STS under ambient conditions. The local conductance of different films and of spatially separated areas on a film was measured. A surprisingly high degree of homogeneity was found in contrast to previous comparable experiments.