

Abstract Submitted  
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**Fabrication of  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  Superconductor Nanodevices<sup>1</sup>**

NICHOLAS LITOMBE, Harvard University, ANTHONY BOLLINGER, IVAN BOZOVIC, Brookhaven National Laboratory, JENNY HOFFMAN, Harvard University — In order to investigate dimension-limited superconductivity in cuprates, we explore methods of nanopatterning  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  (LSCO). We use high resolution e-beam and photo-lithographic fabrication techniques, coupled with appropriate chemical and physical pattern transfer techniques. In particular, we focus on quasi-1D LSCO nanowire devices where we study random telegraph noise (RTN) signals from possible nematic domain fluctuation dynamics.

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