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Examining SrFe₂As₂ with a Low Temperature Scanning Tunneling Microscope FRANCIS NIESTEMSKI, Boston College Dept. of Physics, J. GILLETT, SUCHITRA SEBASTIAN, Cavendish Laboratory, University of Cambridge, VIDYA MADHAVAN, Boston College Dept. of Physics — The new pnictide superconductors have generated huge excitement. These materials are the first to add some chemical diversity to the limited high-Tc list previously exclusive to cuprates. We examine the pnictide material parent compound SrFe₂As₂ with a low-temperature ultra-high vacuum scanning tunneling microscope (STM) at 4 K. We find multiple types of topography and spectroscopy with low energy features. We relate our data to results from ARPES and other experiments.

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