

Abstract Submitted
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Study of the Layered Perovskite $Sr_3Ru_2O_7$ by STS and ARPES.

MILAN ALLAN, J. LEE, University of St. Andrews, UK, Cornell University, M. WANG, A. SCHMIDT, Cornell University, F. BAUMBERGER, A. TAMAI, J. FARRELL, University of St. Andrews, UK, J.C. DAVIS, Cornell University, A. MACKENZIE, University of St. Andrews, UK — The Ruddlesden-Popper series, $Sr_{n+1}Ru_nO_{3n+1}$ exhibits a variety of electronic phases, including triplet superconductivity (n=1) or metamagnetism (n=2). Here we report studies of the electronic structure of the bilayered perovskite $Sr_3Ru_2O_7$ (n=2) by means of scanning tunneling spectroscopy. Special attention is given to the influence of titanium impurity atoms on the local electronic structure. A comparison with angle resolved photoemission experiments on the same set of samples is drawn.

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