

Angular Resolved Photoemission Spectroscopy Study on Layered Pnictide-oxide BaTi₂As₂O

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The electronic structure of a new layered pnictide-oxide, BaTi₂As₂O, has been studied by angular resolved photoemission spectroscopy. Clear band structure and k_z dependence is revealed. Detailed temperature dependence measurements have been conducted around 200K, at which temperature the transport measurements show a SDW/structural like transition that behaves similarly to those observed in parent compounds of high-T_c iron-based pnictide superconductors.