

Abstract Submitted  
for the MAR14 Meeting of  
The American Physical Society

**Probing electronic state at atomic scale on the surface of SrVO<sub>3</sub> film** YOSHINORI OKADA, RYOTA SHIMIZU, SUSUMU SHIRAKI, TARO HITOSUGI, WPI-AIMR Tohoku University, Japan — Probing electronic structure of atomically well controlled surface of Perovskite-type 3d transition-metal oxides have been attracting much interest because of their intriguing emergent physical properties by heterostructure engineering. In this study, we have especially focused on SrVO<sub>3</sub>, where importance of correlation effects has been considered. We successfully obtained atomically flat surfaces of SrVO<sub>3</sub>, which gave us the great opportunity to visualize correlated electronic state at atomic scale by means of spectroscopic imaging scanning tunneling spectroscopy. Based on the experimental data, we discuss spectroscopic signature of many body effects on the surface of SrVO<sub>3</sub> system.

Yoshinori Okada  
WPI-AIMR Tohoku University, Japan

Date submitted: 15 Nov 2013

Electronic form version 1.4