

Abstract Submitted  
for the OSS19 Meeting of  
The American Physical Society

**Evaluating the effectiveness of a cleaning procedure of Au(111) surfaces using a residual gas analyzer** XUAN ZHU, CRAIG HOWALD, Marietta College — In order to perform atomic scale measurements on surfaces, for example with scanning tunneling and atomic force microscopes, it is important to have atomically clean surfaces. We investigate using a residual gas analyzer for determining the effectiveness of cleaning procedures. In particular, we used cycles of argon ion sputtering and annealing with a resistive heater to clean the surface of Au(111) samples. Differences in the measured partial pressures of different masses within the chamber during the sputtering and annealing procedures reveal changes in the sample cleanliness.

Craig Howald  
Marietta College

Date submitted: 08 Mar 2019

Electronic form version 1.4