

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

Sorting Category: 05.17.1 (E)

**Superconductivity and enhanced susceptibility in SrFe<sub>2</sub>As<sub>2</sub> single crystals** S. R. SAHA, N. P. BUTCH, K. KIRSHENBAUM, J. PAGLIONE, Center for Nanophysics and Advanced Materials, Department of Physics, University of Maryland — Single crystals of SrFe<sub>2</sub>As<sub>2</sub> grown using a self-flux solution method were characterized via x-ray, transport, magnetization and specific heat studies, revealing a superconducting transition at 21 K which appears far below the magnetostructural transition at 198 K as evidenced by transitions in resistivity and susceptibility. We present experiments which probe the nature of this phase and its relation to the enhancement of magnetic susceptibility in superconducting samples.

Prefer Oral Session  
 Prefer Poster Session

Shanta Saha  
srsaha@umd.edu

Date submitted: 20 Nov 2008

Electronic form version 1.4