

Invited talk, April 24, 2003
University of Kentucky
Lexington, Kentucky

One-Dimensional Magnetic Nanowires

Jian Shen

Abstract: After briefly reviewing the history of 1D magnetism research, I will use several model systems to present some totally unexpected physical properties in magnetic nanowires. These include the single atomic domain walls, disappearance of ferromagnetic order in 1D FeCo alloy, etc. Finally, some new synthesis techniques to prepare 1D nanowires will be described.

Oak Ridge National Laboratory, managed by UT-Battelle, LLC, for the U.S. Dept. of Energy under contract DE-AC05-00OR22725.

"The submitted manuscript has been authored by a contractor of the U.S. Government under contract No. DE-AC05-00OR22725. Accordingly, the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U.S. Government purposes."