Abstract Submitted
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**Growth and properties of single crystalline F-doped and Co-doped NdFeAsO.**[1] M. E. TILLMAN, S. KIM, R. PROZOROV, M. A. TANATAR, S. L. BUD'KO, P. C. CANFIELD, Ames Lab / Iowa State University — We report the results of single crystal growth of F-doped and Co-doped, NdFeAsO. A high pressure furnace using a 19mm truncation edge length cubic anvil capable of reaching 3.3 GPa and 2000 C was used to grow crystals of doped NdFeAsO from on- and off-stoichiometry melts. Single crystals with linear dimensions of >1mm can be grown using this technique. Anisotropic transport, thermodynamic and spectroscopic properties [1-3] have been measured and the results of these measurements as well as crystal size and doping level will be correlated to growth profile and initial stoichiometry. [1] T. Kondo et al., Phys. Rev. Lett. **101**, 147003 (2008), [2] C. Liu, et al., arXiv:0806.2147, [3] C. Martin et al., arXiv: 0807.0776.

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