

Abstract Submitted
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Distribution of Co-dopants in LaFe_{1-x}Co_xAsO single crystals JI-AQIANG YAN, Ames laboratory, US-DOE, Ames, IA 50010, R.W. MCCALLUM, T.A. LOGRASSO — LaFe_{1-x}Co_xAsO single crystals have been grown in NaAs flux under ambient pressure. The content and distribution of Co-dopants were studied with wavelength dispersive x-ray spectroscopy. The plate-like single crystals consist of multilayers with the thickness about 2 μm . No variation of Co content was observed in one single layer. However, Co content was observed to change gradually along the thickness (or z-) direction, which suggests layer-by-layer growth mechanism. The relation between the Co-content in crystals and starting materials was developed and the distribution coefficient of Co-dopants was estimated to be around 0.60.

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