

LOW OXYGEN CONTENT ALLOY
COMPOSITIONS
Abstract of the Disclosure

Alloy compositions include Mn alloys that combine Mn with one element selected from Ga, In, Ni and Zn. Also included are Fe alloys and Co alloys in which Fe or Co are combined with either Pt or Pd. The alloy compositions form ordered compounds having $L1_0$ or $L1_2$ type crystalline structures within specified compositional ranges. In addition, the alloy compositions have low levels of impurities, such as oxygen and sulfur, which provide better performance in magnetic memory applications. The alloy compositions preferably are formed into sputtering targets used for thin film applications.

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