

### عنوان مقاله:

Optimization of magnetic components used in storing radar information

### محل انتشار:

پنجمین همایش بین المللی علوم و تکنولوژی با رویکرد توسعه پایدار (سال: 1398)

تعداد صفحات اصل مقاله: 9

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### خلاصه مقاله:

Mechanical alloying of the FeCo equiatomic-magnetic alloy from elemental powders has been studied. The as-milled powders were characterized using scanning electron microscopy (SEM), x-ray diffraction (XRD) and vibrating sample magnetometry (VSM).  $Fe_{1-x}Co_x$  ( $X = 0.2, 0.25, 0.3, 0.35, 0.4, 0.45$  and  $0.5$ ) powders were prepared by mechanical alloying after 15, 20, 25 and 30 hours. magnetic properties were investigated based on microstructure. The saturation magnetization of the mixtures of Fe and Co increases with milling time, indicating an increasing homogeneity in composition and the phase formation. It is found that the saturation magnetization is also dependent on the Co content, which reaches the highest value of 266 emu/g at Fe<sub>60</sub>Co<sub>40</sub>.

### کلمات کلیدی:

mechanical alloying, FeCo, magnetic properties, application

### لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/967266>

