سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
گواهی ثبت مقاله در سیویلیکا
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عنوان مقاله:
Production and characterization of nanostructured (FeCoNb)WC composite powder

محل انتشار:
دومین کنفرانس بین المللی کامپوزیت (سال: 1389)

تعداد صفحات اصل مقاله: 6

نویسندگان:
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خلاصه مقاله:
WC reinforced FeCoNb matrix composite powders were produced by mechanical alloying of WC and elemental powder mixtures of Fe, Co, and Nb. The effect of WC content and milling time on the alloy formation in the (Fe-Co-Nb) system was investigated. Phase analysis, and microstructure of the samples were evaluated using XRD and SEM, techniques. The XRD results indicated that Co dissolves into iron after 5 hours milling. After 10 hr milling the grain size of carbide phase was reduced to less than 30 nm. Scanning Electron micrograph of the as milled samples showed that; well dispersed WC in the matrix phase was obtained after 10 hr of milling and each particle represented .a fully homogenous nano grain (FeCo-Nb)WC composite

کلمات کلیدی:
composite powder, Fe-Co alloy, mechanical alloying, tungsten carbide

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