سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
گواهی ثبت مقاله در سیویلیکا
CIVILICA.com

عنوان مقاله:

Structural and magnetic properties of Mg-Cu-Zn ferrite nanoparticlesprepared by sol-gel method

محل انتشار:

سومین کنفرانس بین المللی مواد فوق ریزدانه و نانوساختار (سال: 1390)

تعداد صفحات اصل مقاله: 9

نویسندگان:

AZADEH ASHRAFIZADEH - *Steel Institute, Isfahan University of Technology, Isfahan, Iran*

ALI GHASEM - *Maleke Ashtar University, Shahin Shahr, Isfahan, Iran*

AKIMITTSU MORISAKO - *Spin Device Technology Center, Faculty of Engineering, Shinshu University, Nagano, Japan*

خلاصه مقاله:

The MgCuZn ferrite nanoparticles with composition of CuMgos-Znos Fe2O4 (x= 00.5) were prepared by sol-gel method and characterized. The morphologies of nanoparticles were observed by transmission electron microscope (TEM). The Mössbauer spectrsoscopy (MS) was used to determine the site preference of the constitutive elements. Correlation between structural characteristics and magnetic properties are investigated. Vibrating sample magnetometer (VSM) was employed to probe magnetic properties of samples. Magnetic dynamics of the samples was studied by the measurement of AC magnetic susceptibility versus temperature at different frequencies. The phenomenological Néel - Brown and Vogel - Fulcher models were employed to distinguish between interacting or non-interacting system. Results showed that samples were not saturated and it was found that there is .stronginteraction between fine particles

کلمات کلیدی:

Ferrite, Magnetic property, Nanoparticle

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/613222