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Magnetic properties of Sn0.2Cr1.8-xFexO4 nanooxides.

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Abstract content
 (Max 300 words)

We report the magnetic properties of Sn0.2Cr1.8-xFexO4 (x = 0.3, 0.5, 0.7 and 0.9) compounds. The oxides were produced by hydrothermal process and sintered at 600 °C for 12 hours. The X-ray diffraction (XRD) data indicate formation of single phase corundum structure in all the samples. The Mössbauer spectra recorded at about 300 K show transition from paramagnetic to ordered magnetic spin state at x = 0.5. The magnetization data have been obtained by using a VSM (PPMS) of Quantum design make. The exchange bias effect has been observed at low temperatures in all the samples.

Keywords: Exchange bias, Nanoparticles, Magnetization,

Apply to be
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Level for award
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 PhD)?

PhD

Main supervisor (name and email)
and his / her institution

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Would you like to
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yes

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