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Magnetic properties of $Ba_{1-x}Sr_xFe_{12}O_{19}$ grown by a sol–gel method

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Abstract

$Ba_{1-x}Sr_xFe_{12}O_{19}$ were prepared by a sol–gel method. Apart from the advantage of low-temperature processing, a sol–gel route makes it possible to obtain nano-particle materials. Magnetic and structural properties of $Ba_{1-x}Sr_xFe_{12}O_{19}$ (x=*0.0*, 0.25, 0.5, 0.75, 1.0) were characterized by scanning electron microscopy (SEM), Mössbauer spectroscopy, X-ray diffraction (XRD), and a vibrating sample magnetometry (VSM). © 2002 Elsevier Science B.V. All rights reserved.

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