

Supporting information

Alkaline steaming-assisted conversion: a new strategy for the synthesis of pure NiFe_2O_4 and CoFe_2O_4 spinel ferrite nanoparticles

Hua Li^{*,a,b}, Ralf Brüning^c, Jian Liang^d, Weihui Jiang^{a,d}, Jacques Robichaud^b, Jianmin Liu^d, Yahia Djaoued^{*,b}

^a, Department of Materials Chemistry, School of Materials Science and Engineering, Jingdezhen Ceramic University, Jingdezhen, Jiangxi, 333403, PR China, Tel: +86 798 8499678, E-mail: 201002@jci.edu.cn;

^b, Laboratoire de Recherche en Matériaux et Micro-spectroscopies Raman et FTIR, Université de Moncton-Campus de Shippagan, Shippagan, NB, E8S1P6, Canada. Fax: +1 506 336 3434; Tel: +1 506 336 3412; E-mail: yahia.djaoued@umoncton.ca

^c, Physics Department, Mount Allison University, Sackville, N.B., Canada E4L 1E6

^d, National Engineering Research Center for Domestic & Building Ceramics, Jingdezhen Ceramic Institute, Jingdezhen, Jiangxi, 333001, PR China, Tel: +86 798 8499328.



Figure S1. Washing solution from sample A0 processed at 140°C for 16 h.

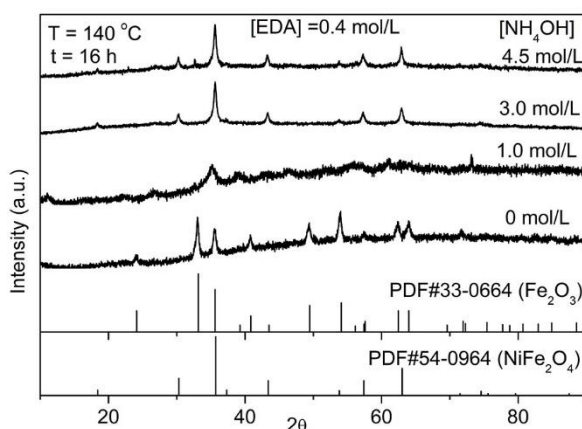


Figure S2. XRD patterns of Samples processed 140°C for 16 h from various concentrations of ammonia and 0.4 mol/L of EDA.

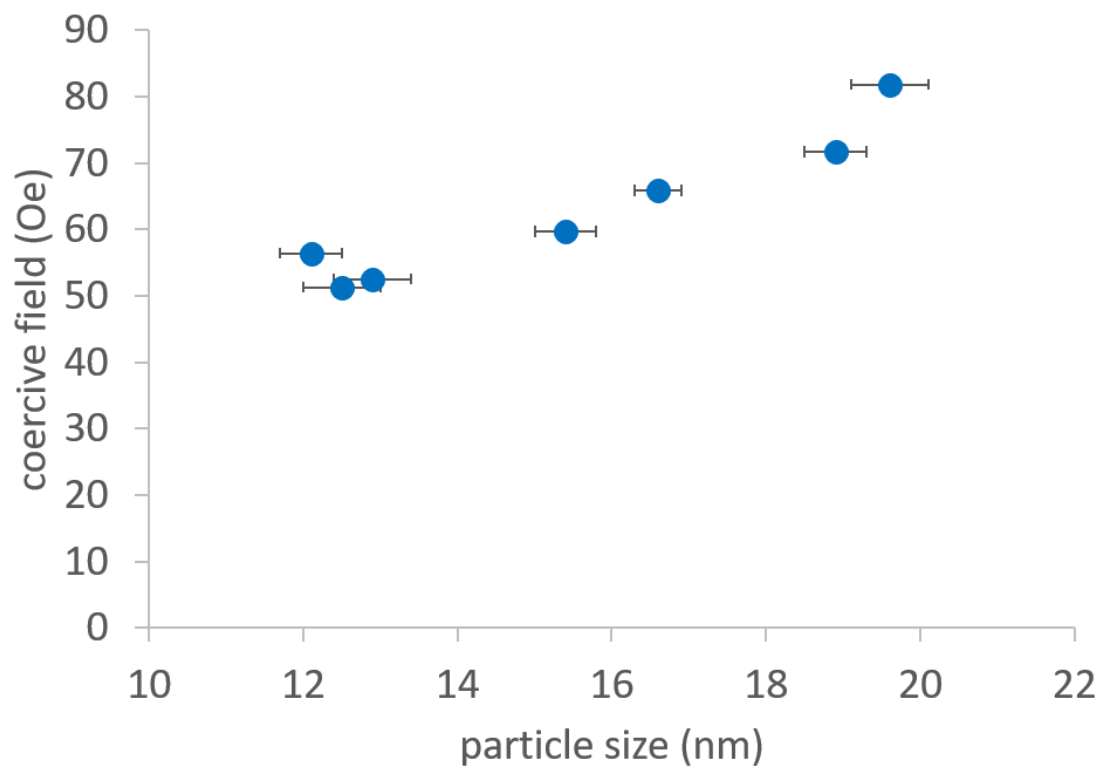


Figure S3. Coercivity of samples with 86.1% or more NiFe_2O_4 as a function of their particle size