

Electronic Supplementary Information (ESI)

Heat-Generation Behavior of Fe₃O₄ Particles in AC Magnetic Fields: Analysis of Microstructures through Tilting†

Manas Srivastava,^a Ruchi Agrawal,^{a,b} Atom Rajiv Singh,^a Leishangthem Sanatombi Devi,^{a,c} Rashmi Joshi,^a Bheeshma Pratap Singh,^{*d} D. Sarkar,^e Rakesh Kumar Singhal,^f Raghumani Singh Ningthoujam^{*a,b}

^aChemistry Division, Bhabha Atomic Research Centre, Mumbai 400085

^bHomi Bhabha National Institute, Anushaktinagar, Mumbai 400094

^cWaikhom Mani Girls' College, Thoubal 795138

^dDepartment of Physics, GITAM, Visakhapatnam 530045

^eTechnical Physics Division, Bhabha Atomic Research Centre, Mumbai 400085

^fAnalytical Chemistry Division, Bhabha Atomic Research Centre, Mumbai 400085

(*Corresponding authors: bsingh@gitam.edu, and bheeshmapratap@gmail.com (BPS)
rsn@barc.gov.in, and nragnu_mani@yahoo.co.in (RSN))

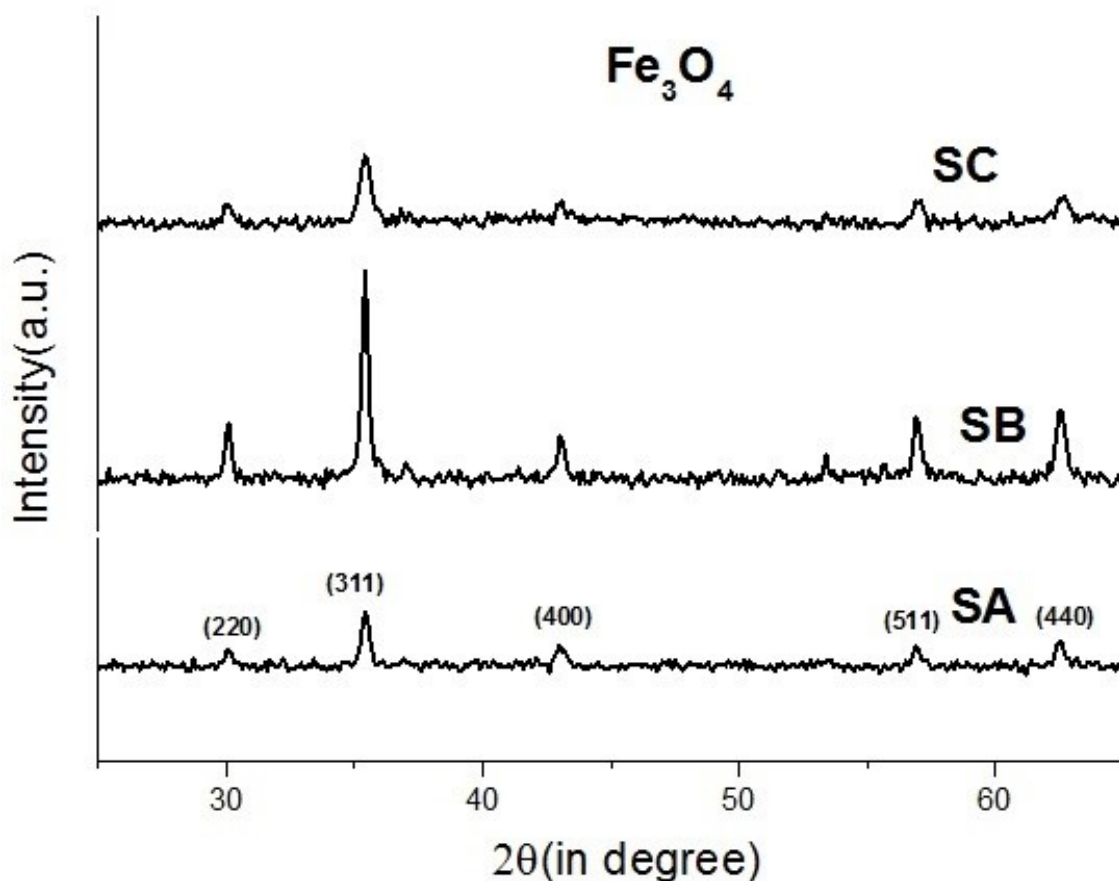


Fig. S1. XRD patterns of products (SA, SB, and SC) obtained during hydrothermal method. Details of reaction conditions are provided in Table 1.

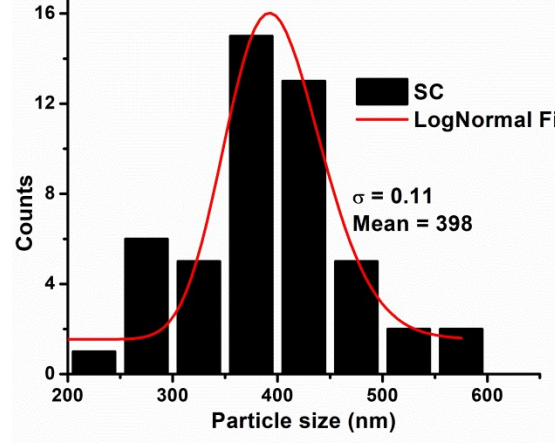
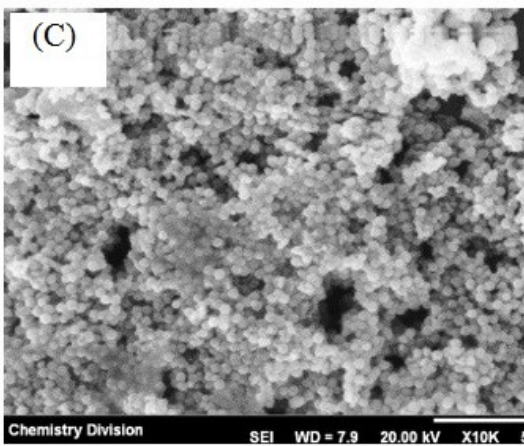
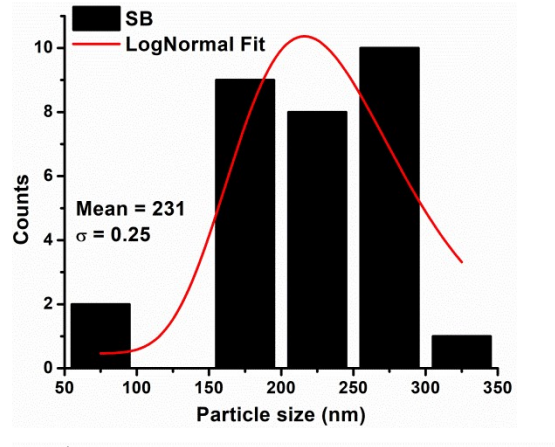
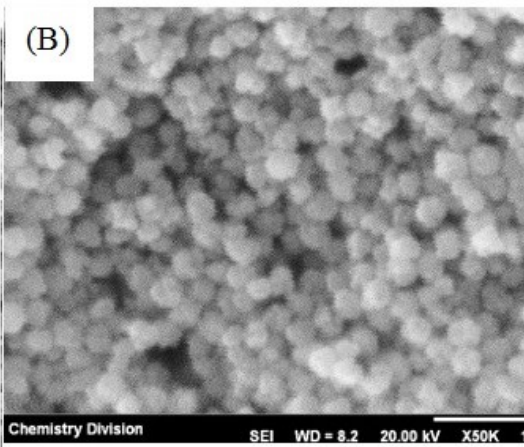
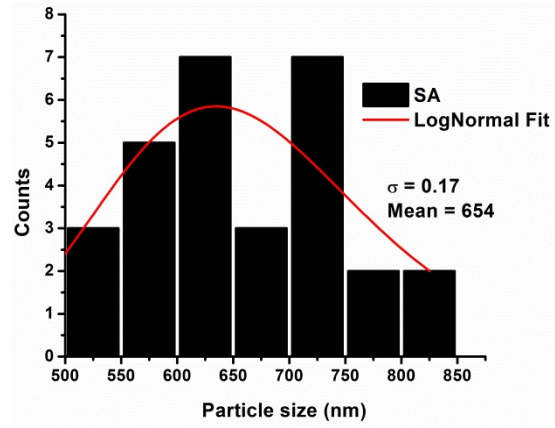
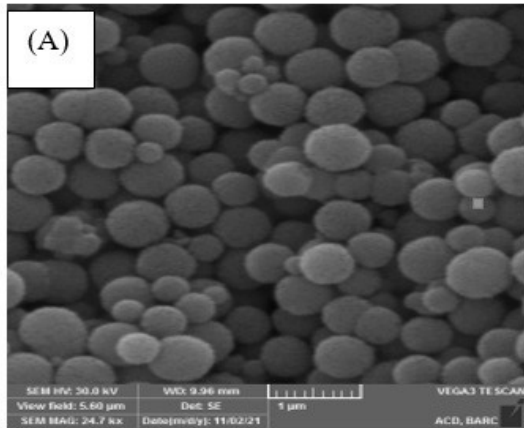


Fig. S2 Scanning electron microscope of the following samples: (A) SA, (B) SB and (C) SC with respective particle size distribution (nm), which is indicated using histogram. This is fitted by LogNormal distribution (solid red curve). σ = Standard Deviation.