

SUPPLEMENTARY INFORMATION

Disentangling magnetic core/shell morphologies in Co-based nanoparticles

Natalia Rinaldi-Montes,^{*,a} Pedro Gorria,^b David Martínez-Blanco,^c Zakariae Amghouz,^c Antonio B. Fuertes,^d Luis Fernández Barquín,^e Jesús Rodríguez Fernández,^e Luca Olivi,^f Guiliana Aquilanti,^f and Jesús A. Blanco^a

^aDepartamento de Física, Universidad de Oviedo, E-33007 Oviedo, Spain

^bDepartamento de Física & IUTA, EPI, Universidad de Oviedo, E-33203 Gijón, Spain

^cServicios Científico-Técnicos, Universidad de Oviedo, E-33006 Oviedo, Spain

^dInstituto Nacional del Carbón (CSIC), E-33080 Oviedo, Spain

^eCITIMAC, Facultad de Ciencias, Universidad de Cantabria, E-39005 Santander, Spain

^fEletra-Sincrotrone Trieste S.C.p.A., 34149 Basovizza, Trieste, Italy

Corresponding author E-mail: nataliarin@gmail.com

1. Size distribution of the nanoparticles

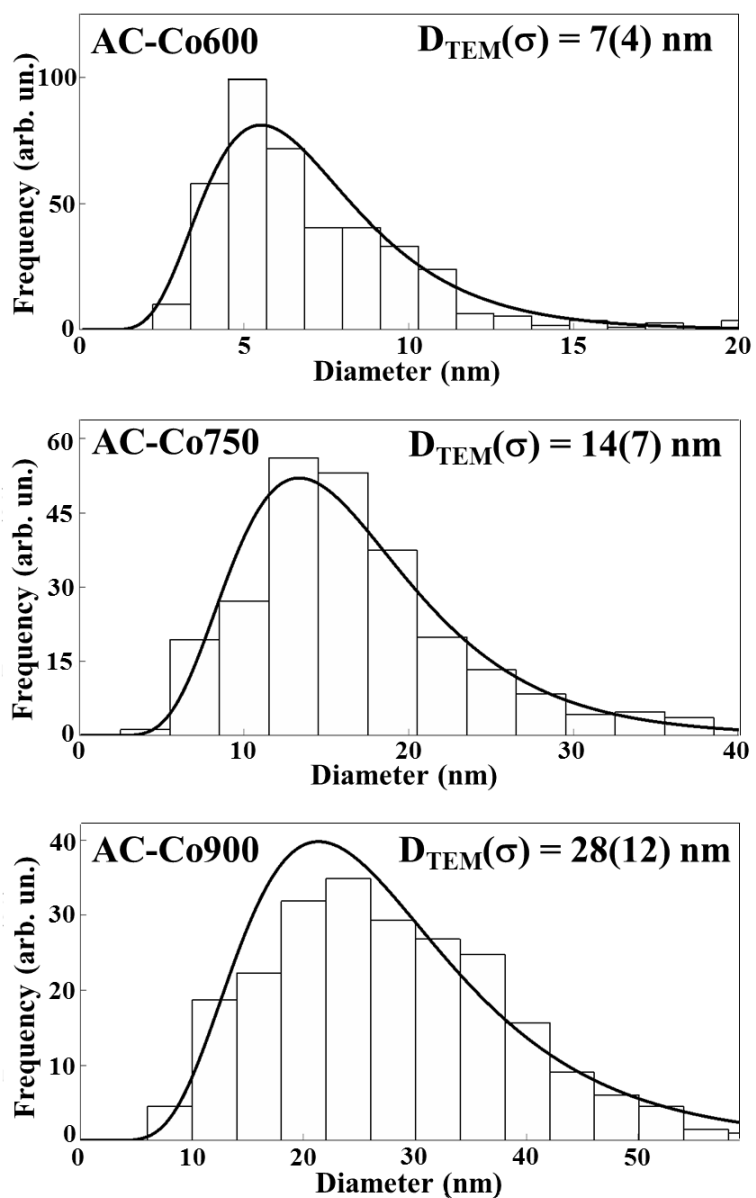


Figure S1. Histograms of the particle size distributions of the samples together with log-normal fits, providing mean NP diameters (D) and standard deviations (σ).

2. Zero-field-cooling and field-cooling magnetization curves

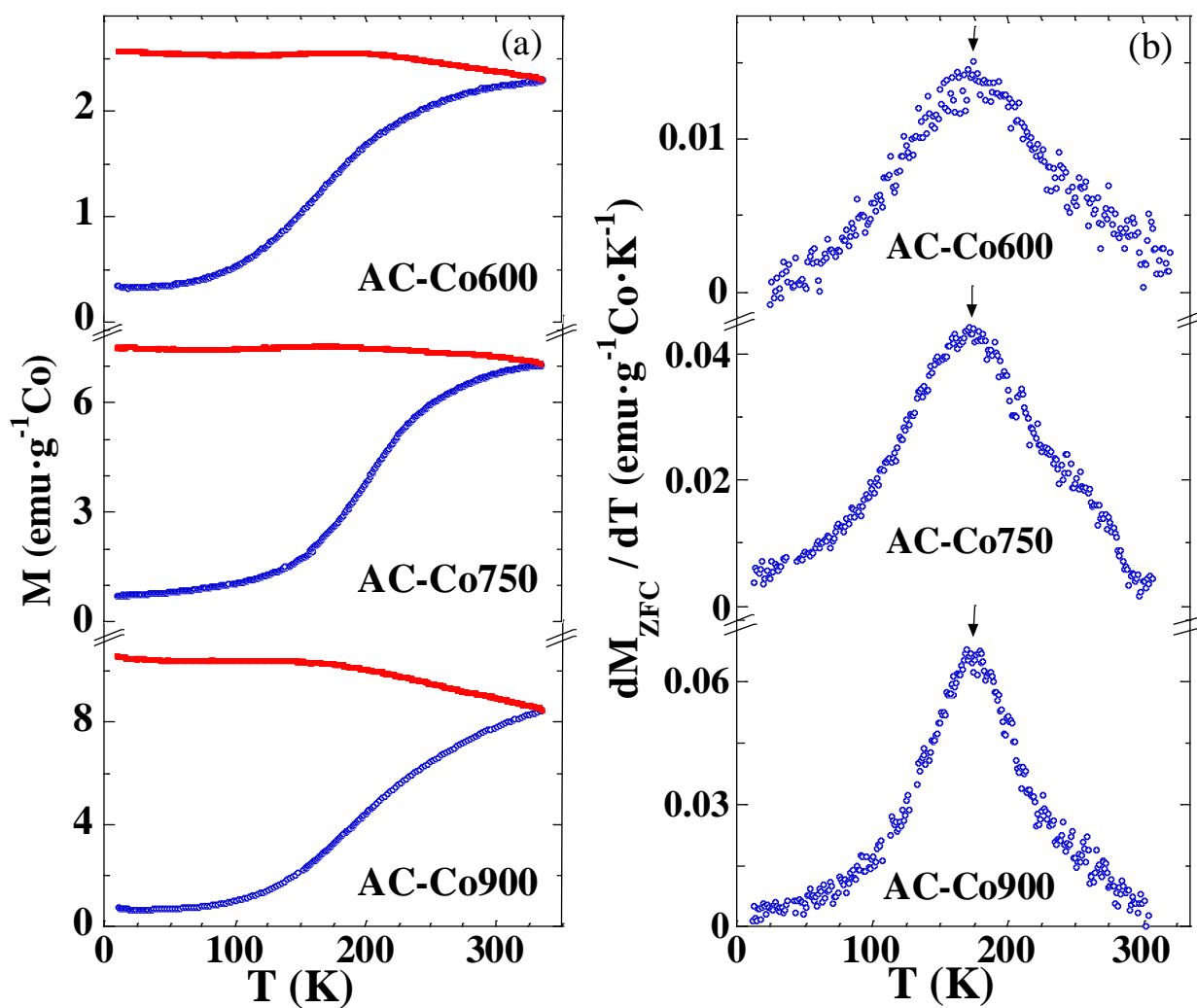


Figure S2. (a) ZFC (blue) and FC (red) magnetization curves for samples AC-Co600 (top), AC-Co750 (middle) and AC-Co900 (bottom), measured under an applied magnetic field of 100 Oe. (b) Temperature derivatives of the ZFC magnetization curves (dM_{ZFC}/dT).