Electronic Supplementary Material (ESI) for CrystEngComm.

Supporting information

Single domain growth and charge ordering of epitaxial $YbFe_2O_4$ films

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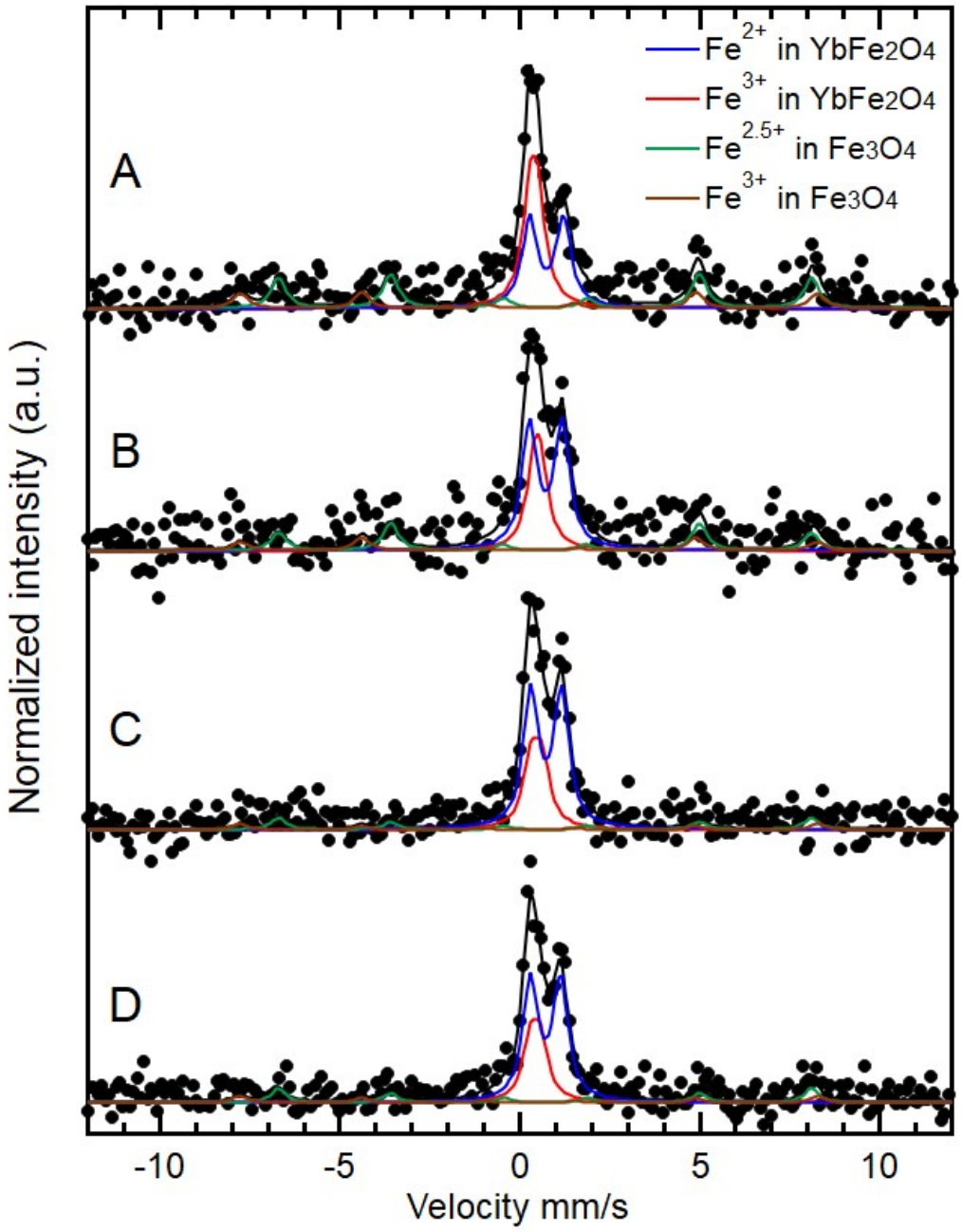

Figure S1. Wide velocity range Mössbauer spectra at RT of $YbFe_2O_{4-\delta}$ films on YSZ (111) substrates at various P_{O2} conditions. For the fitting procedure, Mössbauer hyperfine parameters of Fe_3O_4 impurities were fixed to the literature values[1] of the stoichiometric Fe_3O_4 film due to their small spectral intensity.

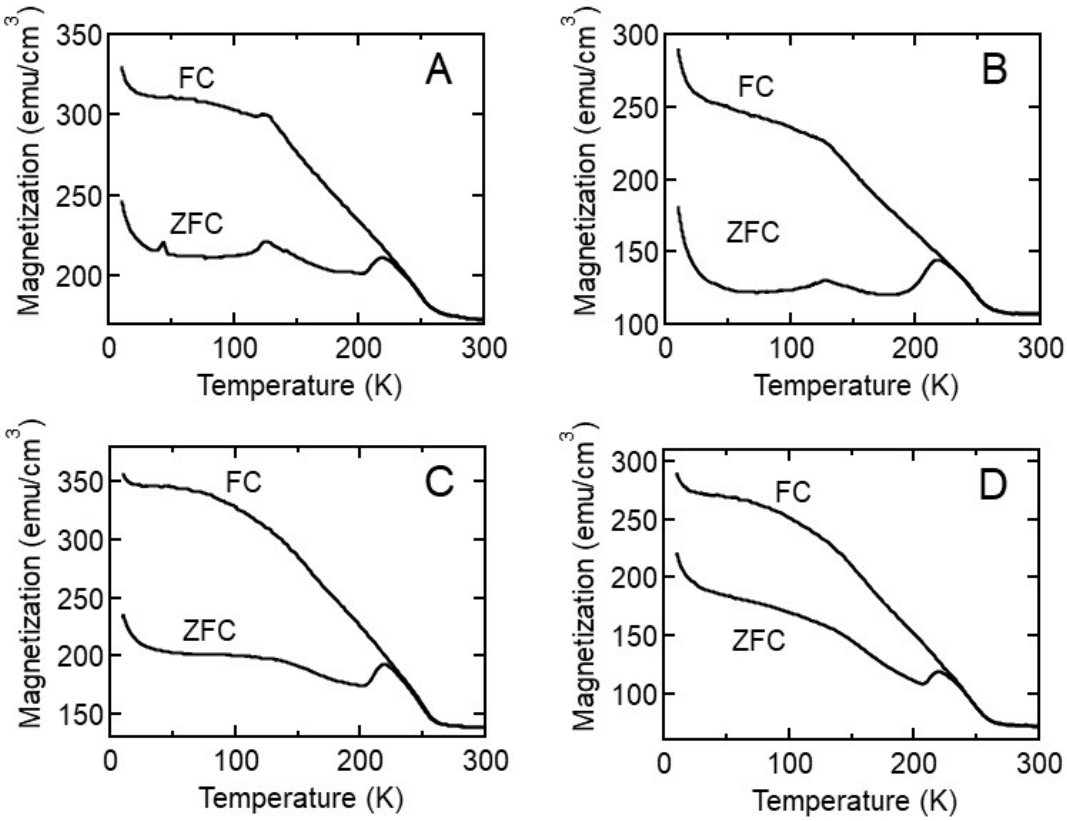

Figure S2. Field-cooled (FC) and zero-field-cooled (ZFC) magnetization curves of $YbFe_2O_{4-\delta}$ films on YSZ (111) substrates at various P_{O2} conditions. External magnetic field of 5 kOe was applied perpendicular to the film plane.

Reference

1. T. Fujii, M. Takano, R. Katano, Y. Bando and Y. Isozumi, *J. Appl. Phys.*, 1990, **68**, 1735-1740.