

Preparation of antiferromagnetic Co₃O₄ nanoparticles from two different precursors by pyrolytic method: *In vitro* antimicrobial activity

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*** Supporting Information File**



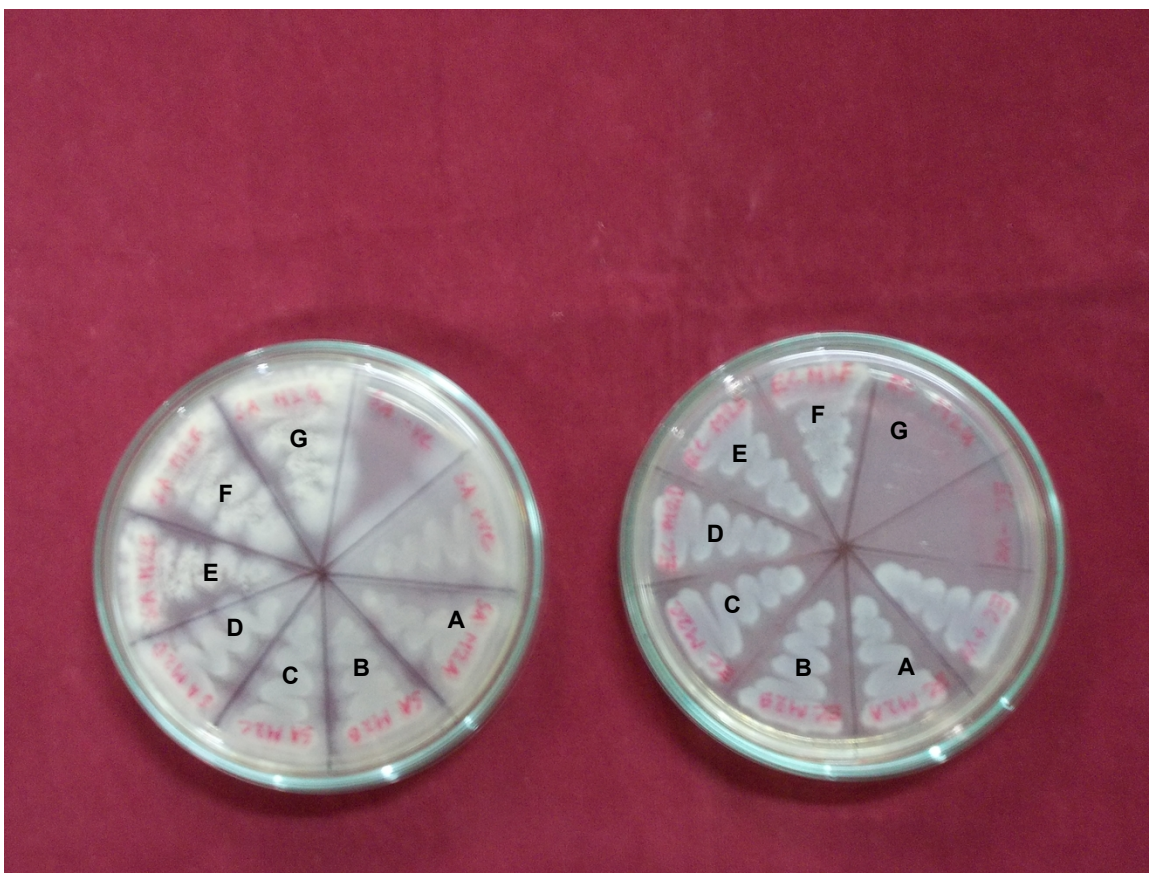
E.C.+ Co₃O₄-II

S1. Minimum inhibitory concentration of Co₃O₄-II nanoparticles against *Escherichia coli*. [Here A = 2μg/ml, B = 4μg/ml, C=8μg/ml, D=16μg/ml, E=32μg/ml, F=64μg/ml.]



S.A.+ Co₃O₄-II

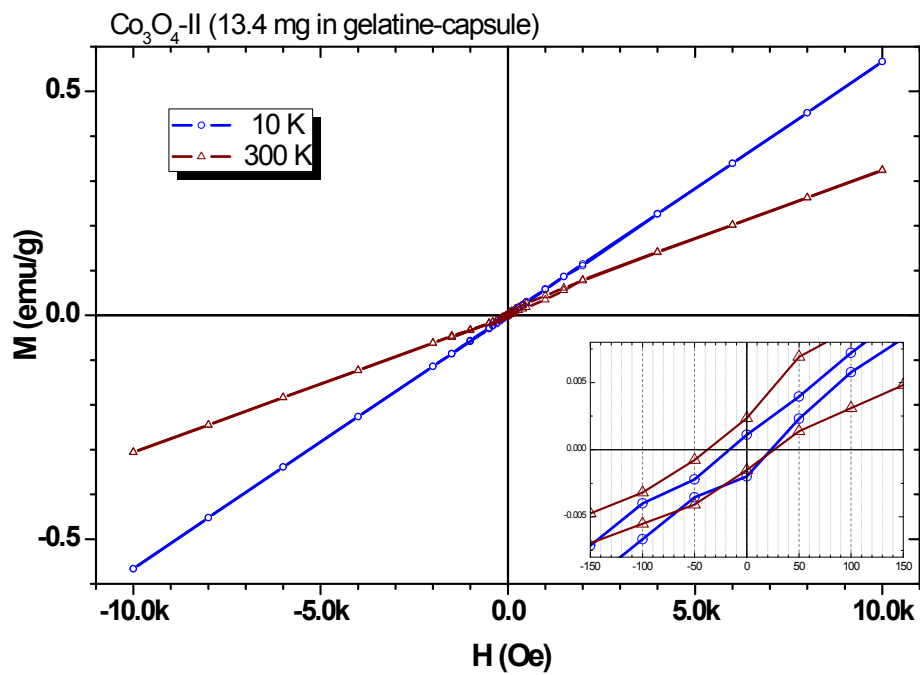
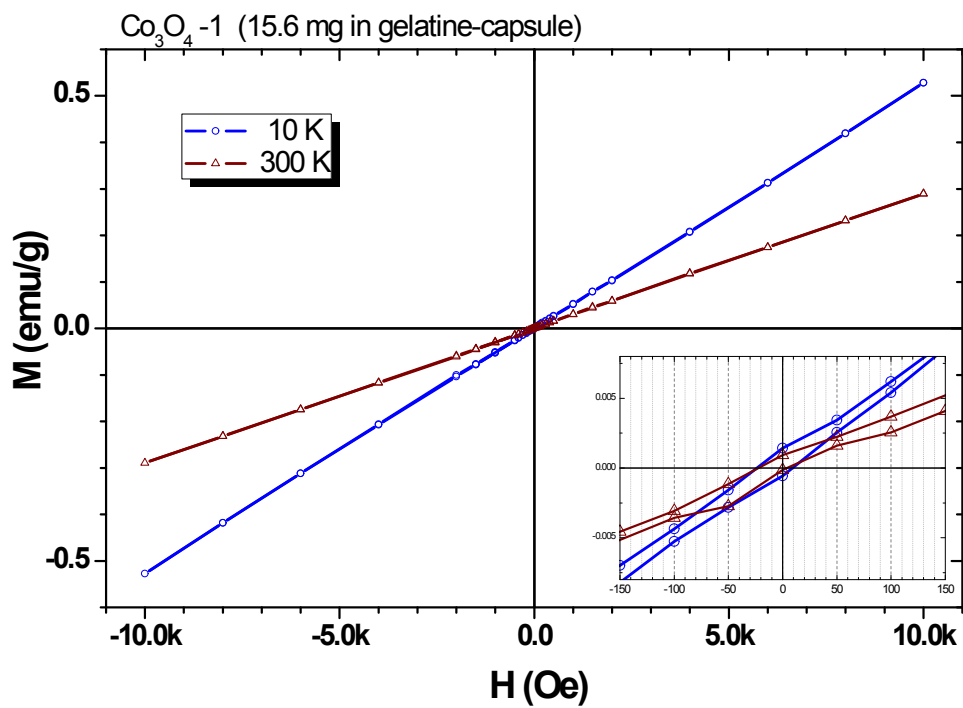
S2. Minimum inhibitory concentration of Co₃O₄-II nanoparticles against
(a) *Staphylococcus aureus* [Here A = 2μg/ml, B = 4μg/ml, C=8μg/ml, D=16μg/ml,
E=32μg/ml, F=64μg/ml.]



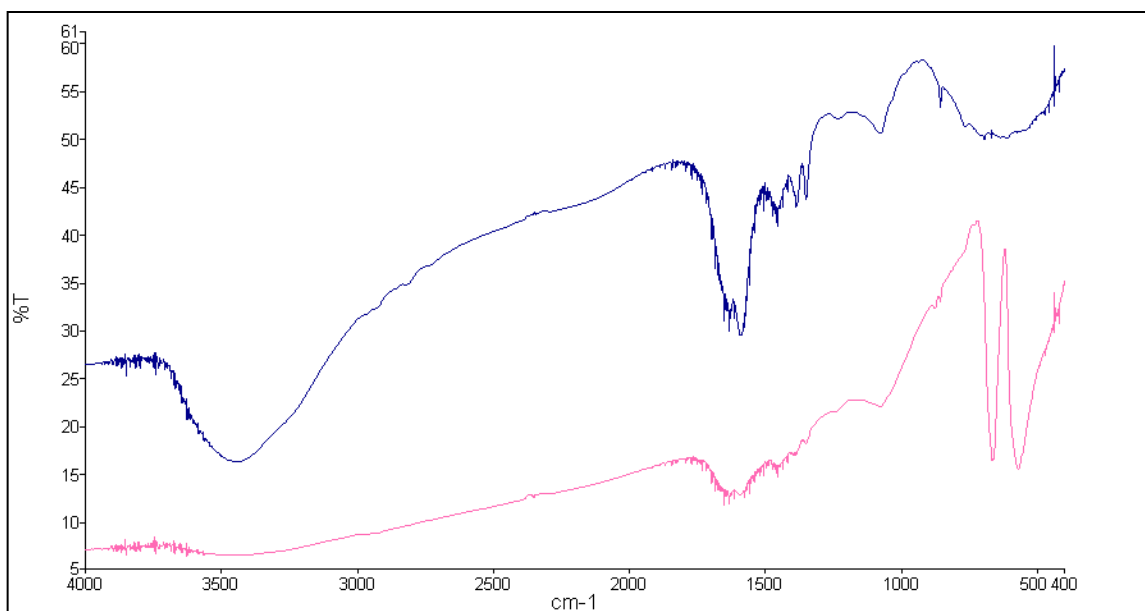
S.A.+ Co₃O₄-II

E.C.+ Co₃O₄-II

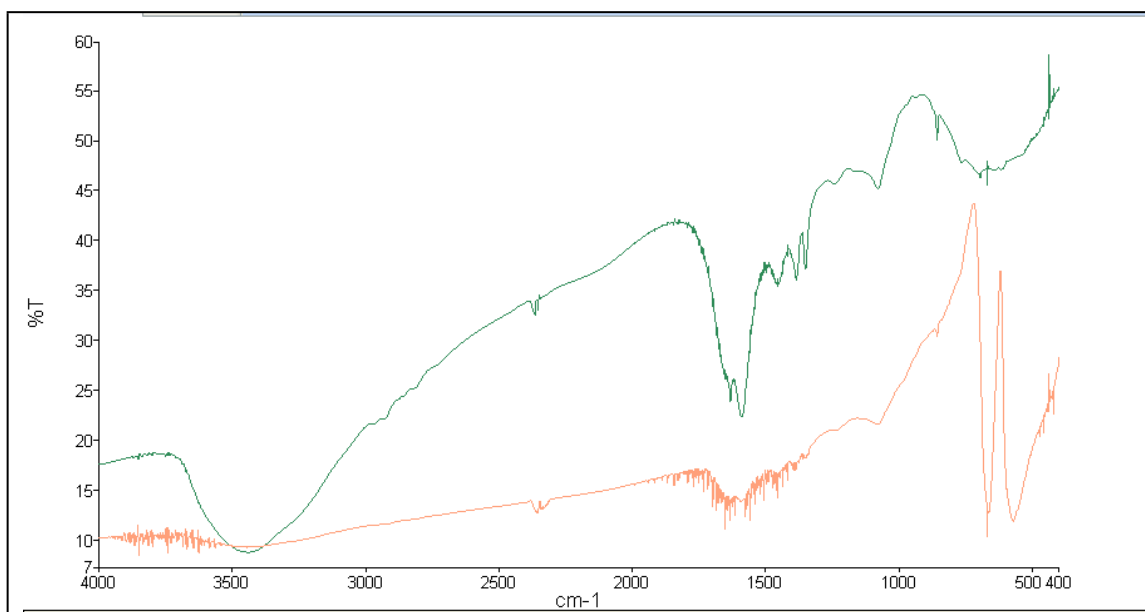
S3. Minimum bactericidal concentration of Co₃O₄-II nanoparticles against (a) *Staphylococcus aureus* and (b) *Escherichia coli*. [Here A=2μg/ml, B=4μg/ml, C=8μg/ml, D=16μg/ml, E=32μg/ml, F=64μg/ml and G=128μg/ml.]



S 4. Hysteresis measurements for (a) Co₃O₄-I and (b) Co₃O₄-II samples at 10 K and 300K.



S5. IR spectra of *Escherichia coli* (blue line) and *Escherichia coli* + Co₃O₄ nanoparticles (pink line)



S6. IR spectra of *Staphylococcus aureus* (green line) and *Staphylococcus aureus* + Co₃O₄ nanoparticles (pink line)