Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Facile *in-situ* growth of Fe_3O_4 nanoparticles on hydroxyapatite nanorods for pH dependent adsorption and controlled release of proteins

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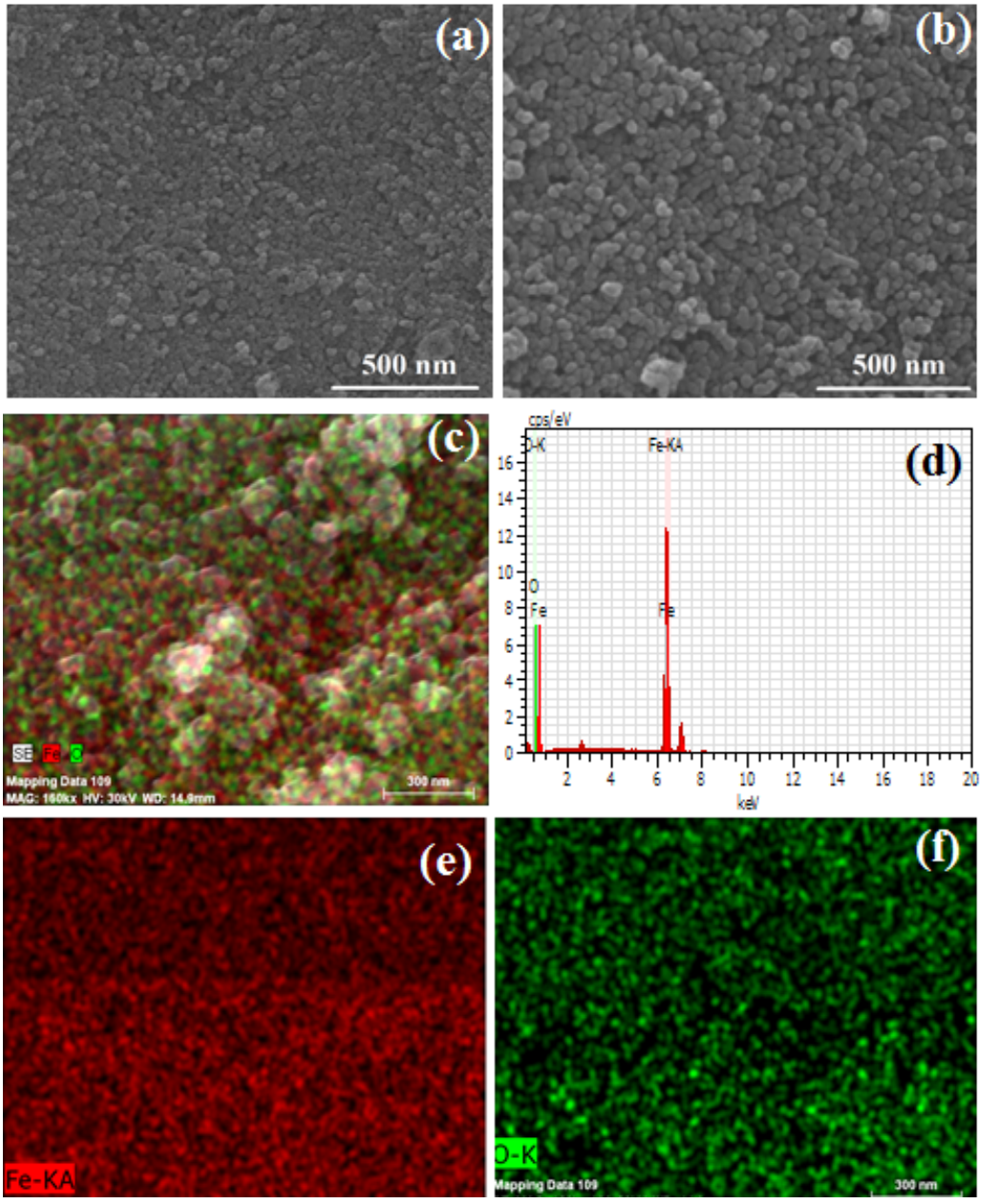
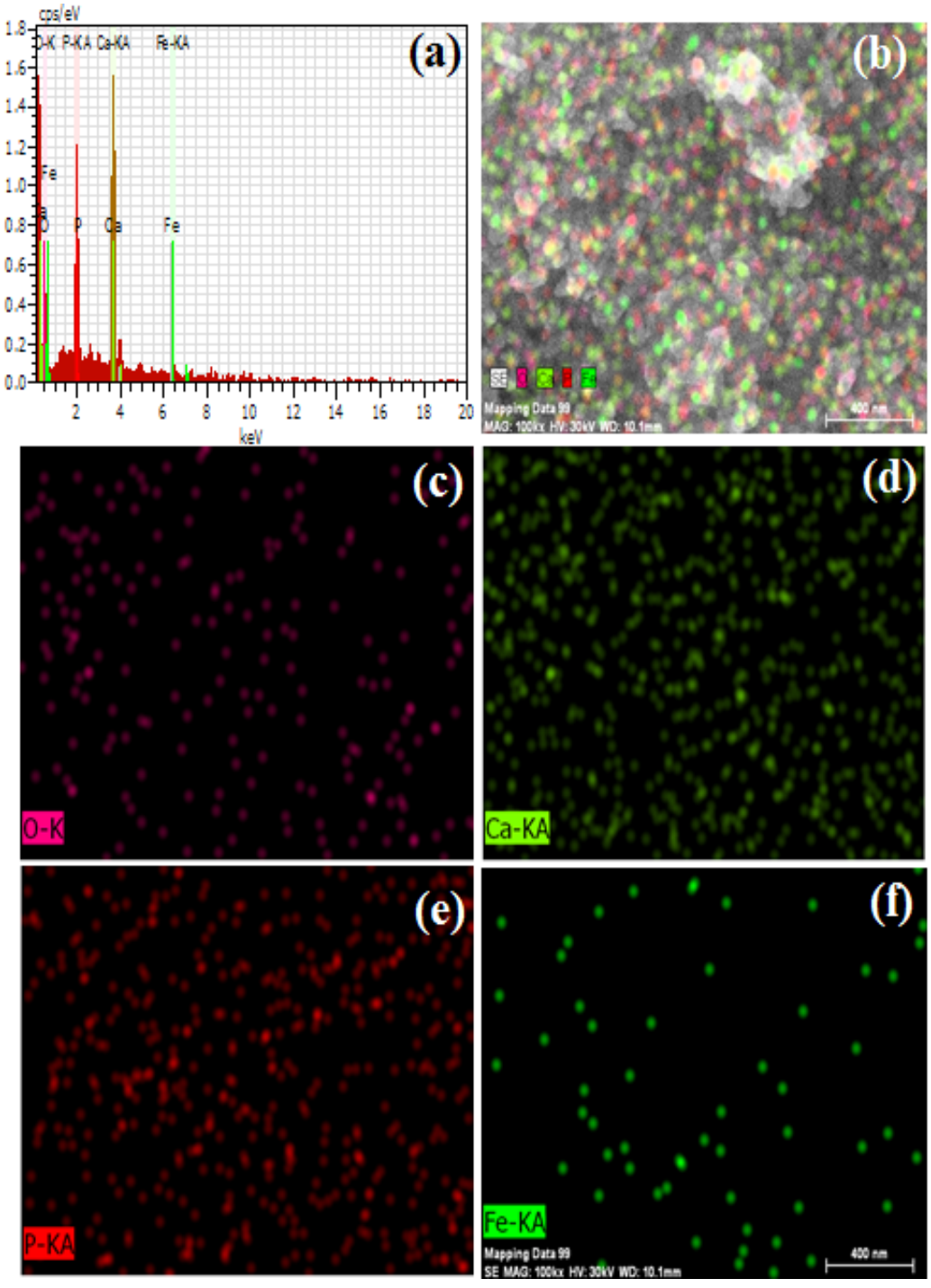


SI Fig. 1. FESEM images of two different molar concentrations of (Fe^{2+} + Fe^{3+} = 0.5 and 1.0 mM) Fe_3O_4 nanoparticles synthesized by coprecipitation techinique. (a) 0.5 mM and (b) 1.0 mM of Fe_3O_4. (c-f) EDX and elemental distributions of Fe and O species.



SI Fig. 2 EDS spectrum and elemental mapping of Fe_3O_4/HAp-1 (0.5 mM Fe_3O_4), (a) EDX spectrum and (b-f) distributions of elements (Ca, P, O and Fe) over the nanocomposites. (f) Higher Fe ions distributions on Fe_3O_4/HAp-2 (1.0 mM Fe_3O_4) nanocomposite.