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Fabrication of core-shell CoFe₂O₄@HAp nanoparticles: A novel magnetic platform for biomedical applications

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S2

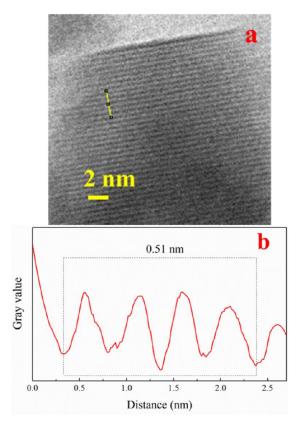


Fig S1. (a) HR-TEM image and (b) line profile map of sample A.

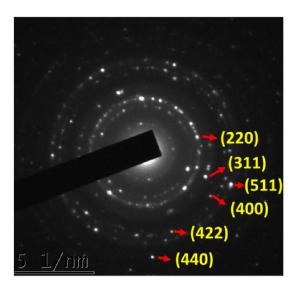


Fig S2. SAED pattern of sample A indexed with corresponding diffraction planes for cobalt ferrite phase.

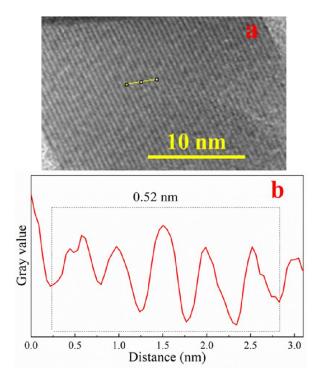


Fig. S3. (a) HRTEM image and (b) line profile map for sample A after heat treatment. S4

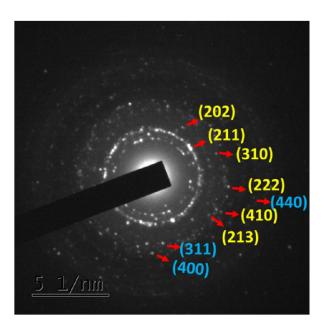


Fig S4. SAED pattern of sample B indexed with corresponding diffraction planes for HAp (yellow color) and cobalt ferrite phases (blue color).

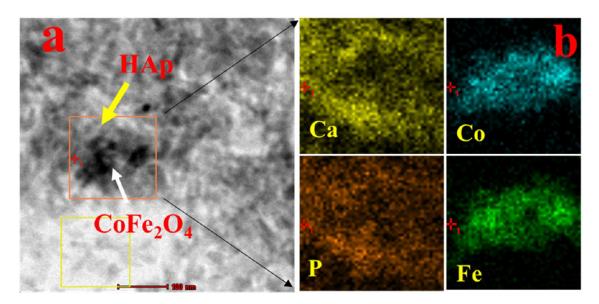


Fig. S5. (a) STEM image and (b) elemental mapping of sample B

Fig S5 (a) and (b) shows the STEM and elemental mapping of sample B. Fig 6 (b) clearly reveals the presence of Ca, P, Co and Fe distribution in sample B. From the elemental mapping study the dark part in fig S5 (a) correspond to cobalt ferrite (marked with white arrow) phase and yellow arrow represent the HAp phase.

S6

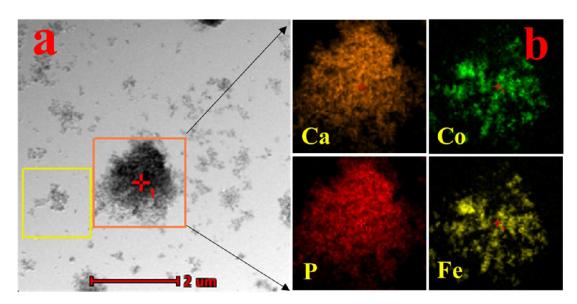


Fig. S6 (a) STEM image and (b) elemental mapping of sample C.

Fig. S6 (a) and (b) shows the STEM image and elemental mapping of sample C. Which clearly indicates the presence of Ca, P, Co and Fe in sample C.