Supplementary materials

for

A novel and rapid approach for the synthesis of biocompatible and highly stable Fe₃O₄/SiO₂ and Fe₃O₄/C core/shell nanocubes and nanorods

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Fig. S1

100 nm

40 nm

20 nm
**Fig S1.** TEM images of Fe₃O₄/SiO₂ nanocubes with 2 mL TEOS; (a) low magnification and (b, c) high magnification.

**Fig S2.** TEM images of Fe₃O₄/SiO₂ nanocubes with 4 mL TEOS; (a) low magnification and (b, c) high magnification.
Fig S3. XPS survey spectra of Fe$_3$O$_4$, Fe$_3$O$_4$/SiO$_2$ and Fe$_3$O$_4$/C core/shell nanocubes
**Fig S4.** FTIR analysis data for both (A) Fe$_3$O$_4$ nanocubes and (B) Fe$_3$O$_4$/C synthesized in the presence of ultrasound.

**Fig S5.** XRD patterns of (A) as-prepared Fe$_3$O$_4$ nanocubes and (B) Fe$_3$O$_4$/C synthesized in the presence of ultrasound.