

Supplementary Materials

Hydrotalcite-Embedded Magnetite Nanoparticles for Hyperthermia-Triggered Chemotherapy

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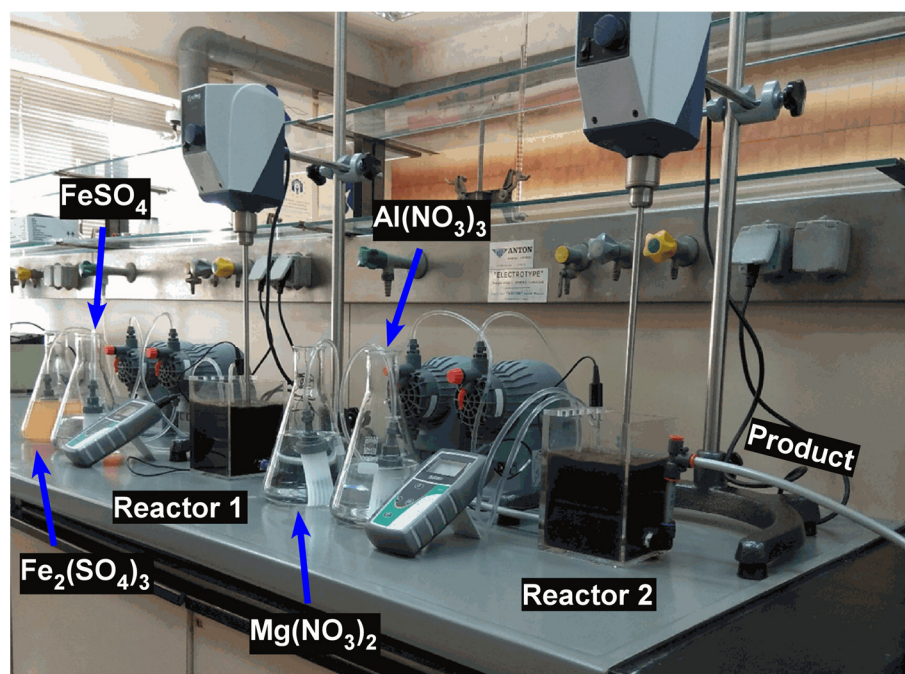


Figure S1. Laboratory setup for the continuous-flow production of the hydrotalcite/magnetite nanocomposites.

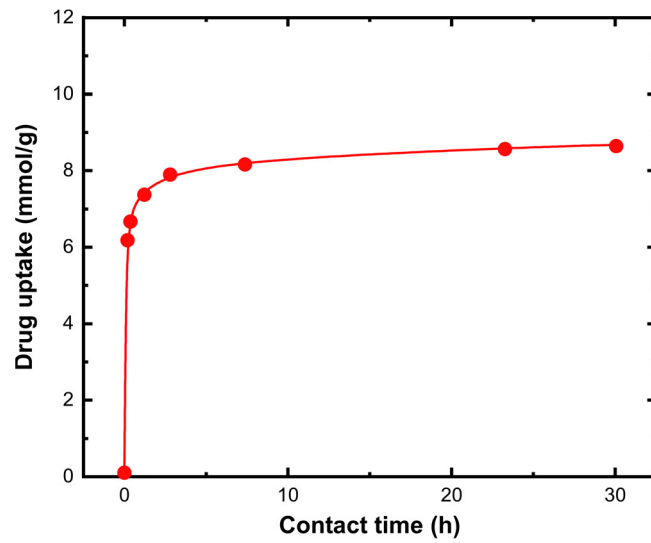


Figure S2. Kinetic of drug loading in the structure of the MGT-35. Experiment was performed in a phosphate-buffered saline (PBS) solution adjusted to pH 9 with 0.5 mM of 5-fluorouracil and 2 g/L of dispersed nanomaterial.

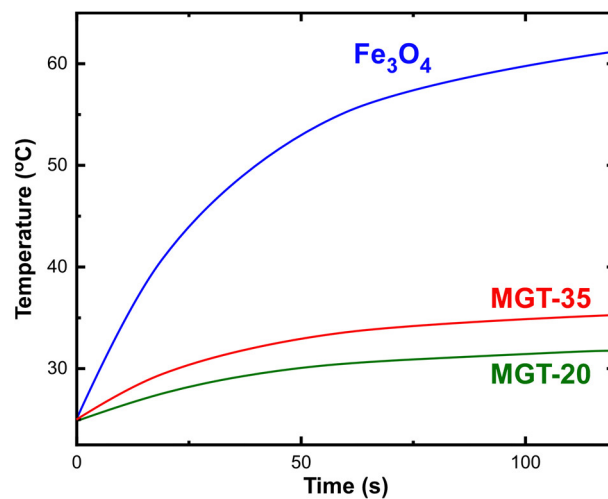


Figure S3. Temperature increase during AC field application (strength 24 kA/m, frequency 765 kHz) on an aqueous dispersion (2 g/L) of MGT-20 and MGT-35, and a corresponding Fe₃O₄ nanoparticles reference sample.

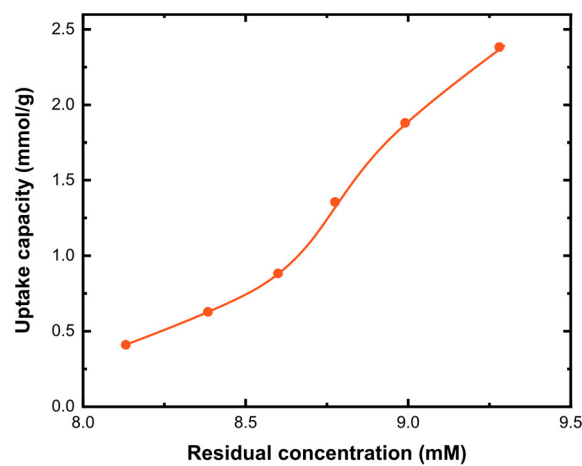


Figure S4. Uptake capacity versus residual 5-fluorouracil concentration for Magnother-35. Experiments were carried out in a phosphate-buffered saline (PBS) solution adjusted to pH 9.

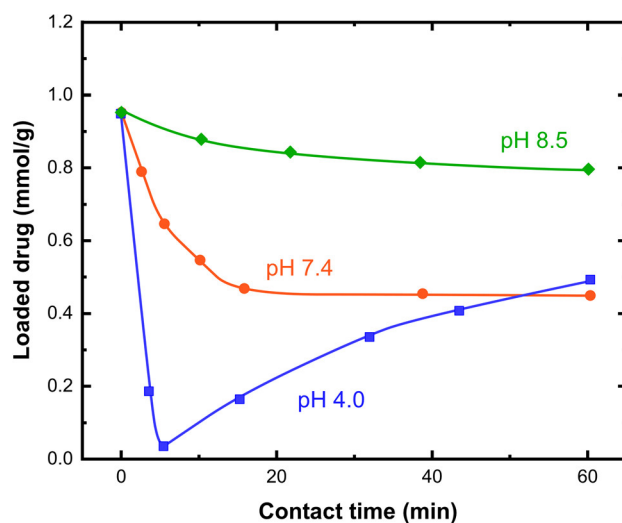


Figure S5. Time dependent leaching behavior of 5-fluorouracil from initially loaded MGT-35 (~1 mmol/g) dispersed in a phosphate-buffered saline (PBS) solution adjusted to various pH values.

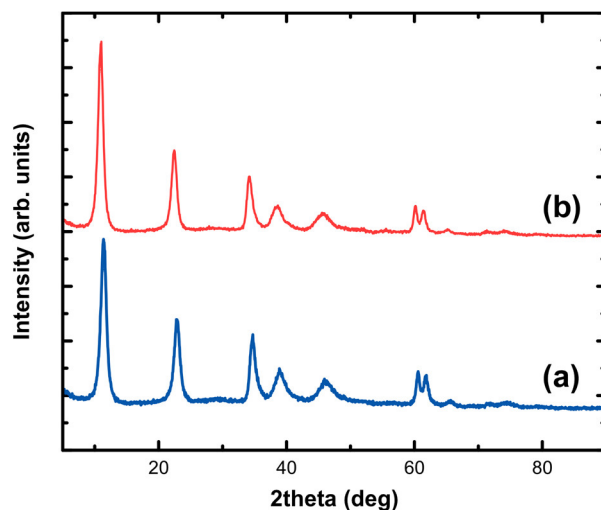


Figure S6. XRD diagrams of pure hydroxycalcite before (a) and after loading with 5-fluorouracil (b).

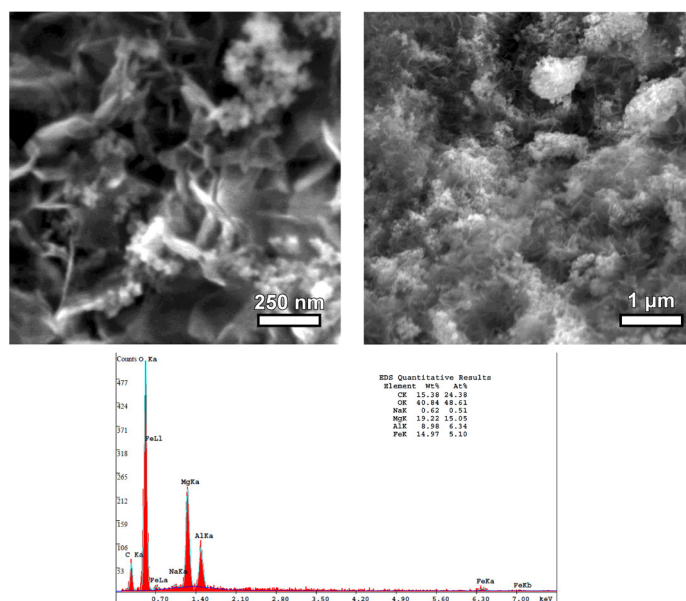


Figure S7. Scanning electron microscopy images and elemental analysis of sample MGT-35.