

SUPPLEMENTARY MATERIALS

Near-infrared Light Triggered Generation of Reactive Oxygen Species from Indocyanine Green Encapsulated Mesoporous Silica-coated Graphene Oxide for Colorectal Therapy

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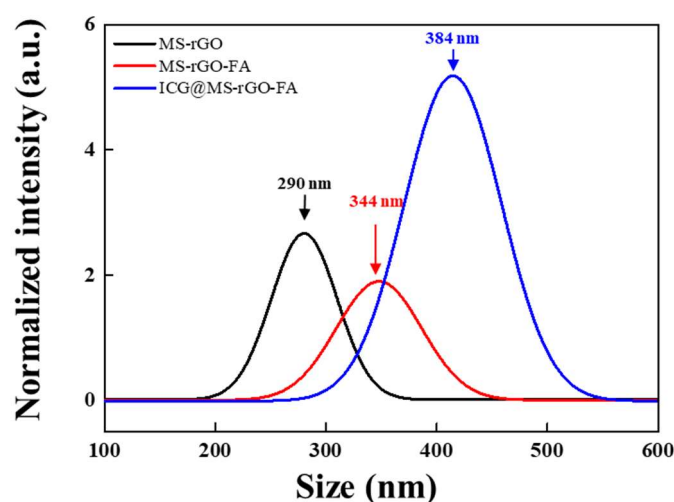


Figure S1. Size distribution of MS-rGO, MS-rGO-FA, and ICG@MS-rGO-FA nanocomposites.

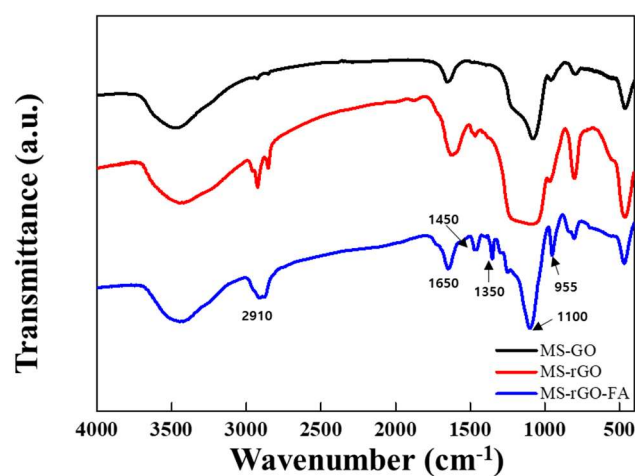


Figure S2. FT-IR spectra of MS-GO, MS-rGO, and MS-rGO-FA nanocomposites.

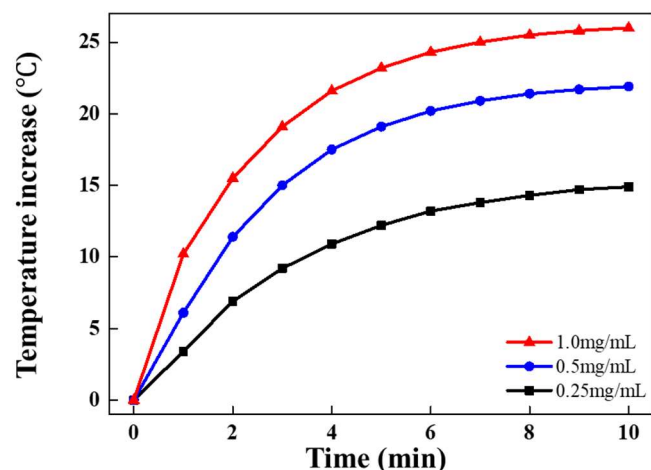


Figure S3. Temperature analysis of ICG@MS-rGO-FA nanocomposites with various concentrations under NIR laser irradiation (0.25-1.0 mg/mL, 1.0 W/cm²).

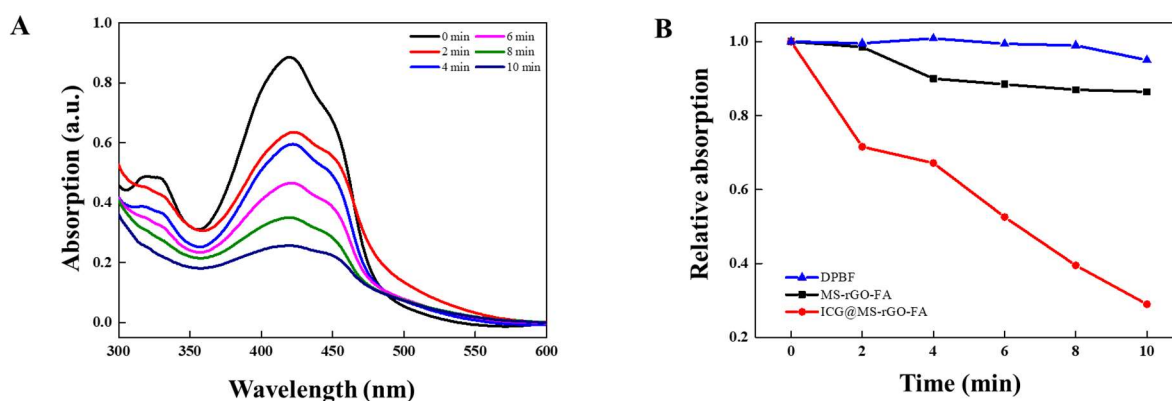


Figure S4. (A) Absorption spectra of DPBF solution including ICG@MS-rGO-FA nanocomposites after different times with 808 nm laser irradiation (1.0 W/cm²). (B) The ROS generation curves of DPBF probe, MS-rGO-FA, and ICG@MS-rGO-FA nanocomposites, respectively.

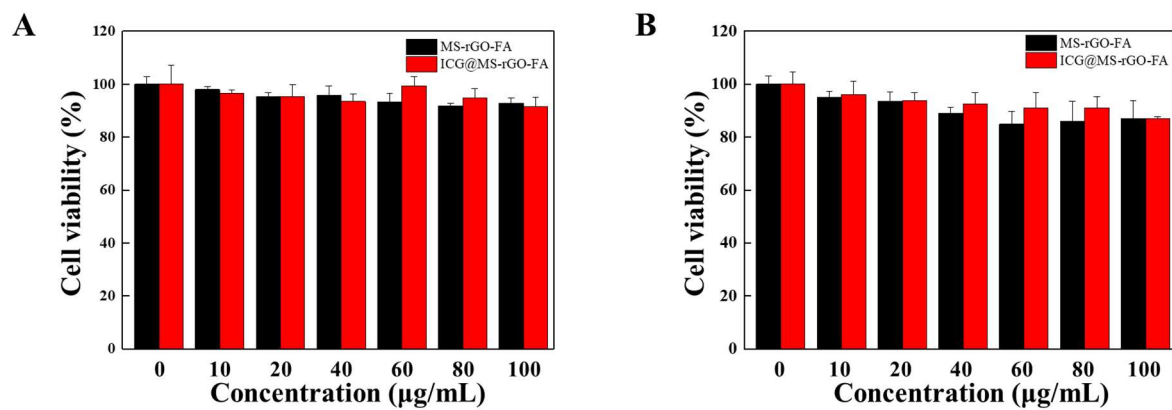


Figure S5. Cytotoxicity analysis of (A) NIH-3T3 fibroblast cells and (B) CT-26 cells treated with MS-rGO-FA and ICG@MS-rGO-FA nanocomposites.

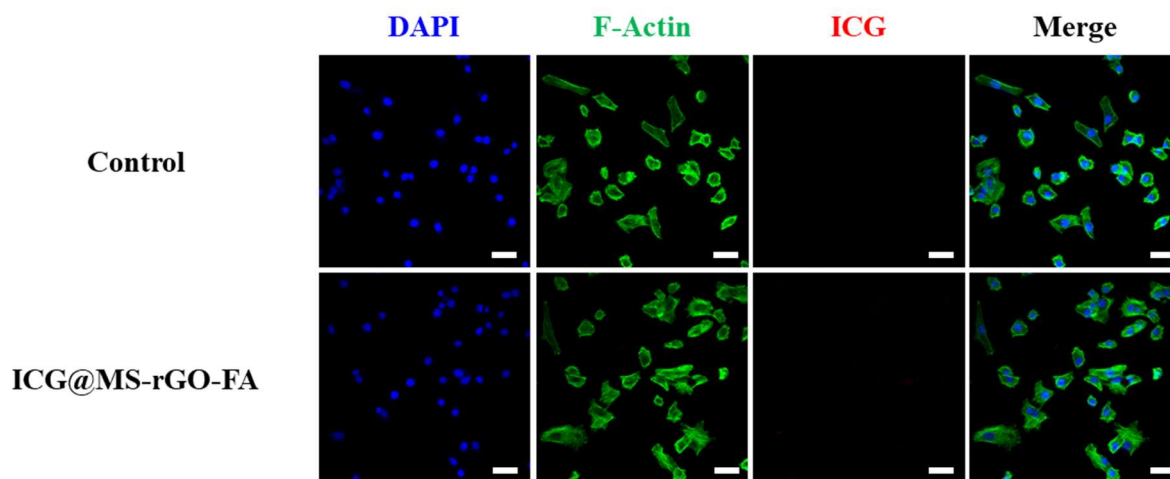


Figure S6. Confocal fluorescence images of NIH-3T3 fibroblast cells treated with ICG@MS-rGO-FA nanocomposites. Scale bars are 20 µm.

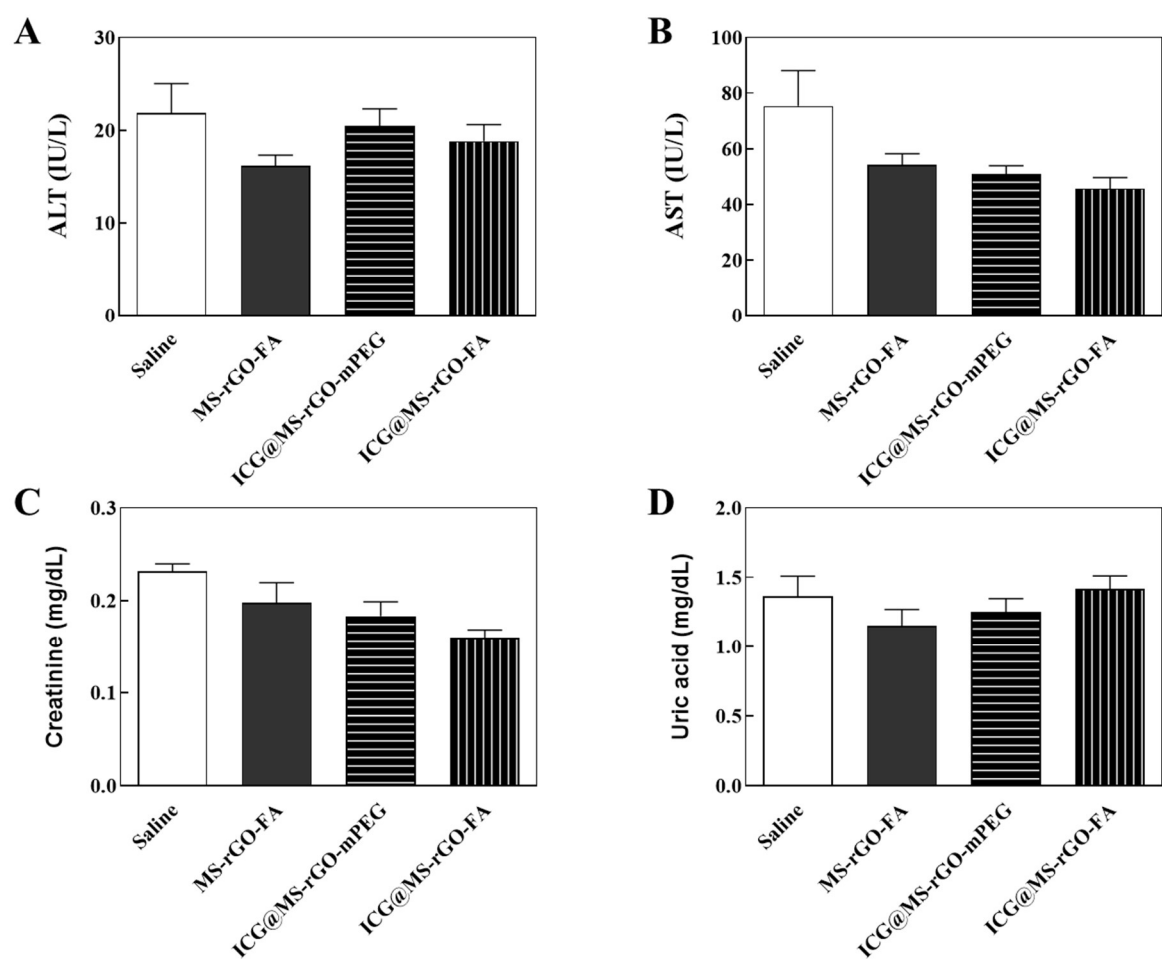


Figure S7. Serum biochemical parameters assay (ALT, AST, creatinine, and uric acid).

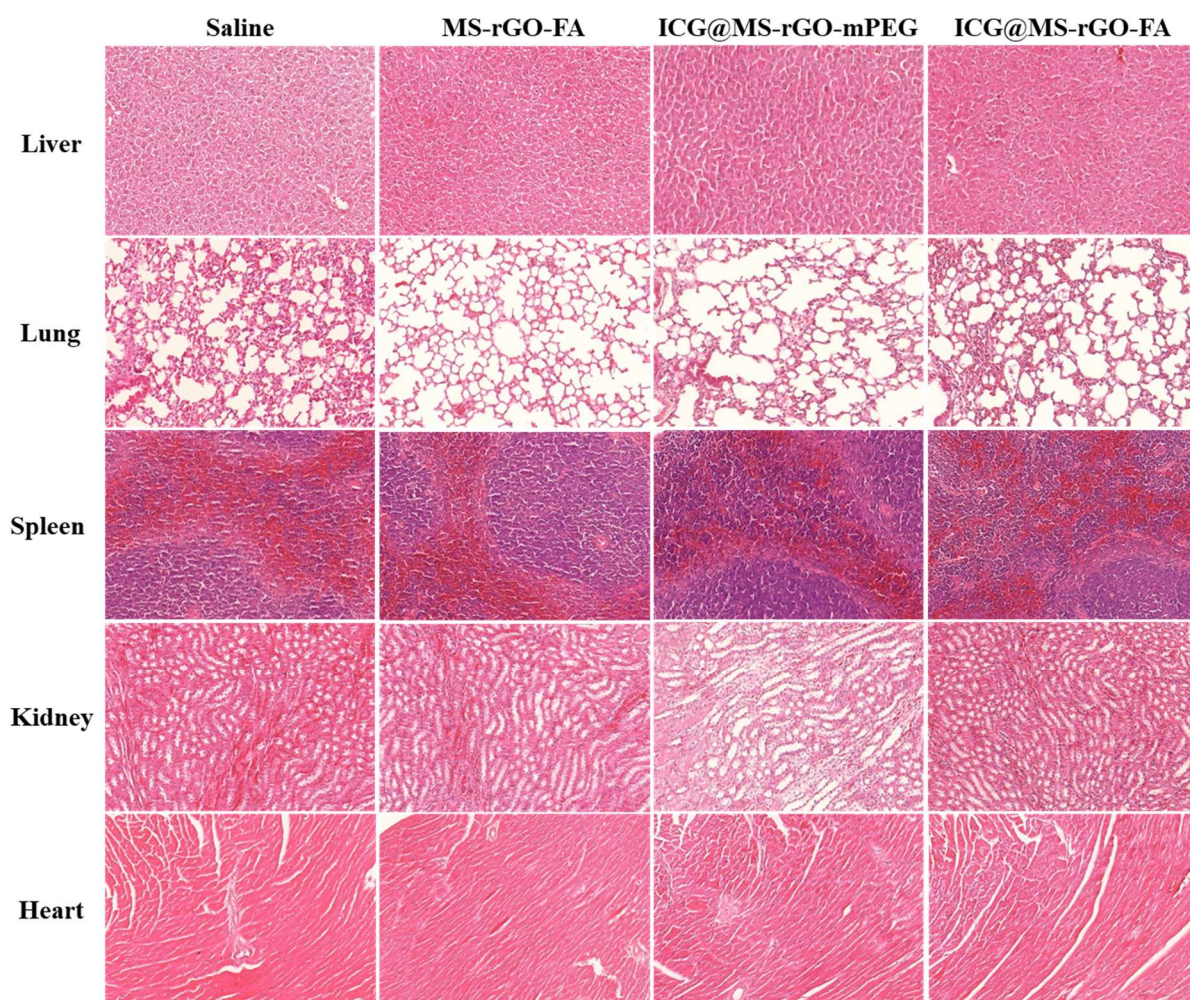


Figure S8. Histological images (H&E staining) obtained in major organs (e.g., liver, lung spleen, kidney, and heart) of the mice after treatment under various conditions.