

## Supplementary Material

# *Improved Fenton Therapy using Cancer Cell Hydrogen Peroxide*

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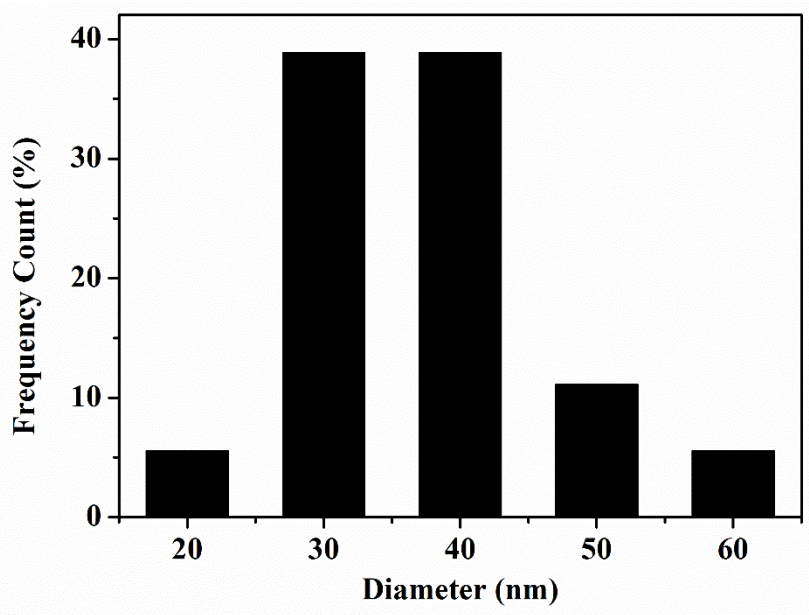


Figure S1: rMOF particle size distribution based on TEM images.

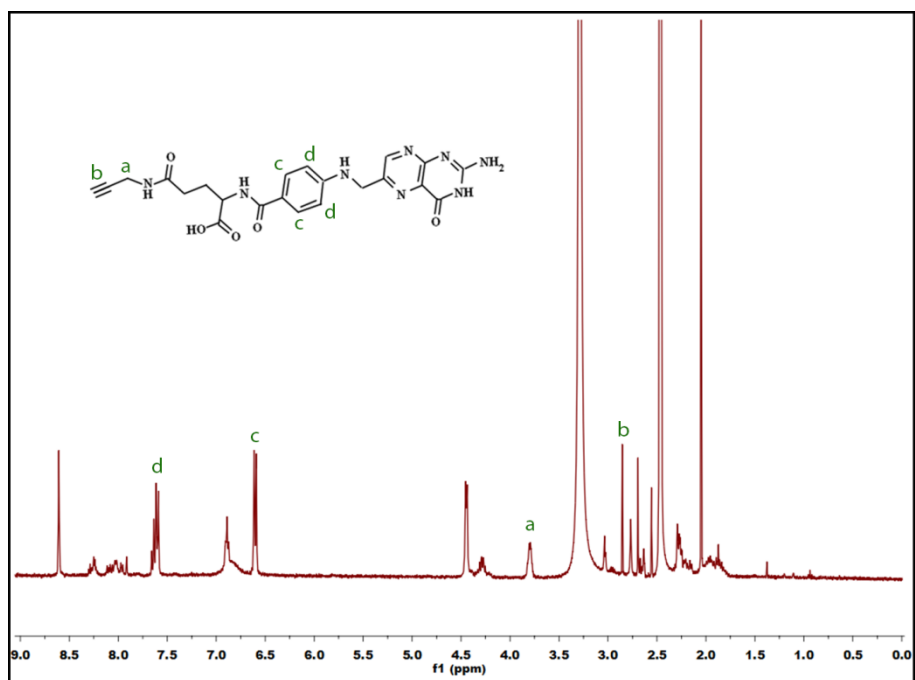


Figure S2:  $^1\text{H}$  NMR spectra of alkyne-functionalized folic acid

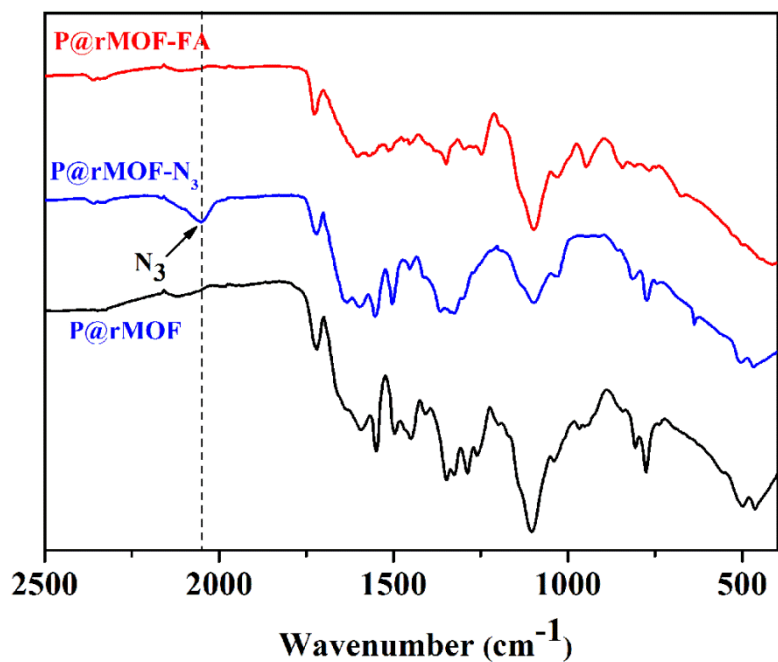


Figure S3: The FTIR spectra of P@rMOF, 2P@rMOF-N<sub>3</sub> and 2P@rMOF-FA.

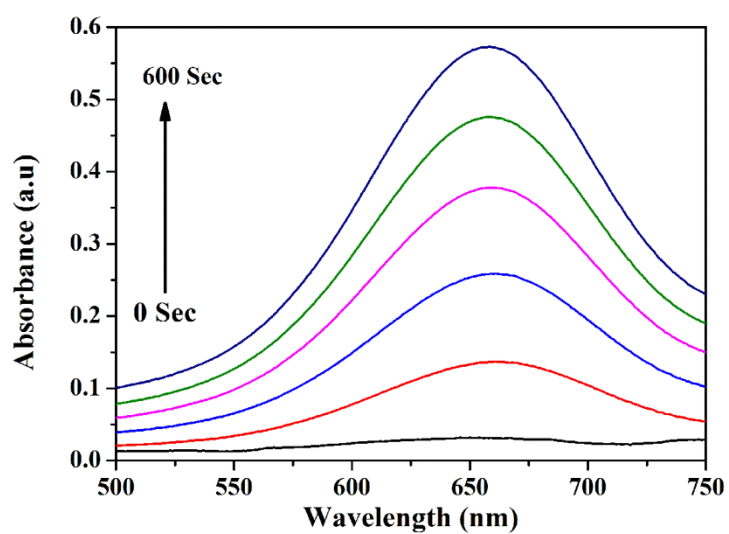


Figure S4: UV-Vis Spectra of a solution of 3P@rMOF-FA nanoparticle (50  $\mu\text{g/mL}$ ), 250  $\mu\text{M}$  TMB and 500  $\mu\text{M}$   $\text{H}_2\text{O}_2$  over time (0-600 sec), in pH 5 buffer solution, 37  $^\circ\text{C}$ .

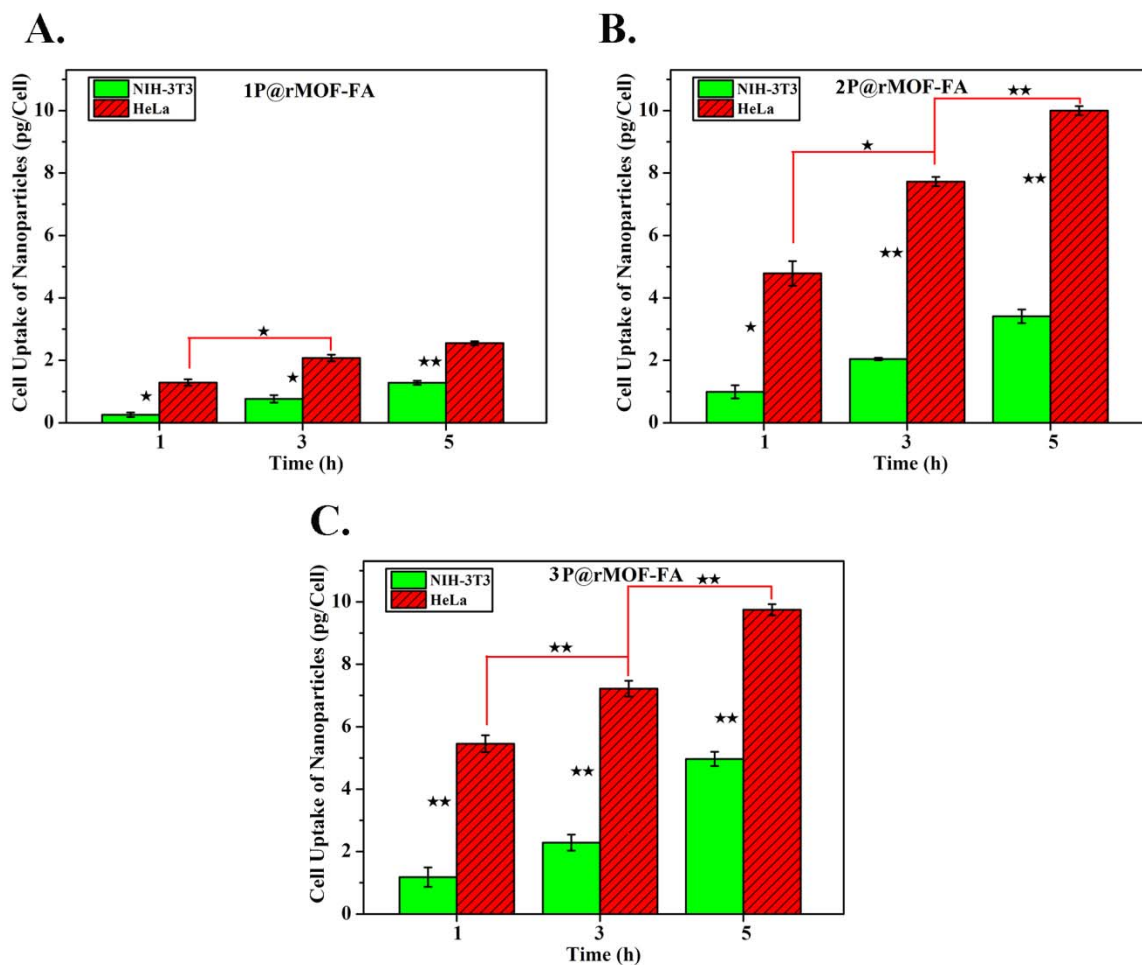


Figure S5: Quantitative analysis of intracellular uptake of internalized nanoparticles (1P@rMOF, 2P@rMOF and 3P@rMOF) in HeLa and NIH-3T3 cells after 1, 3 and 5 h exposure to 50 µg/mL nanoparticles. \* $P < 0.05$  and \*\* $P < 0.01$ .

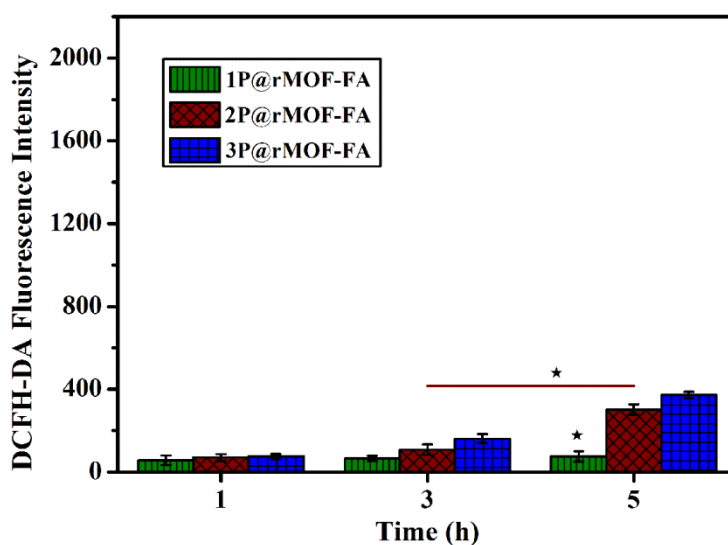


Figure S6: Time dependent fluorescent intensity from DCFH-DA labeled 3T3-NIH cells with 50 µg/mL nanoparticles (1P@rMOF, 2P@rMOF and 3P@rMOF).

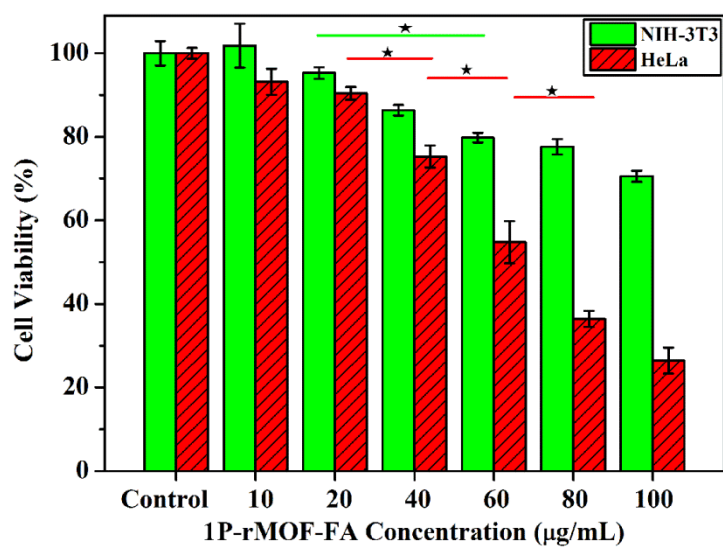


Figure S7: Cytotoxicity of 1P@rMOF-FA toward HeLa and NIH-3T3 cells incubated for 24 h.

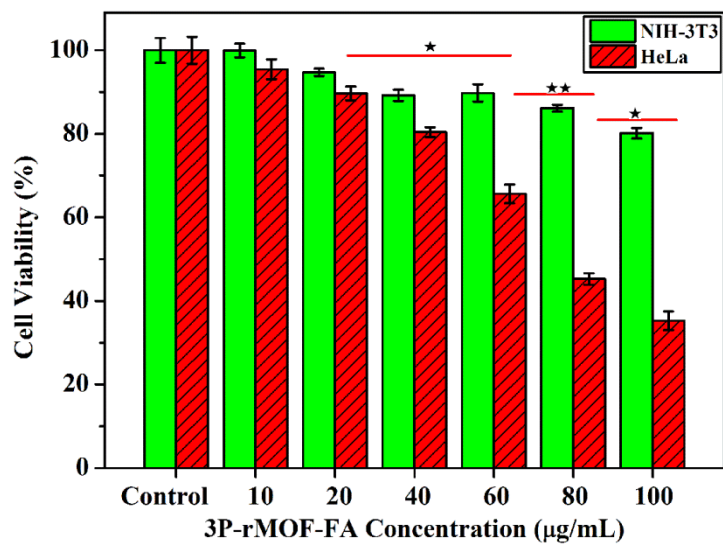


Figure S8: Cytotoxicity of 3P@rMOF-FA toward HeLa and NIH-3T3 cells incubated for 24 h.