

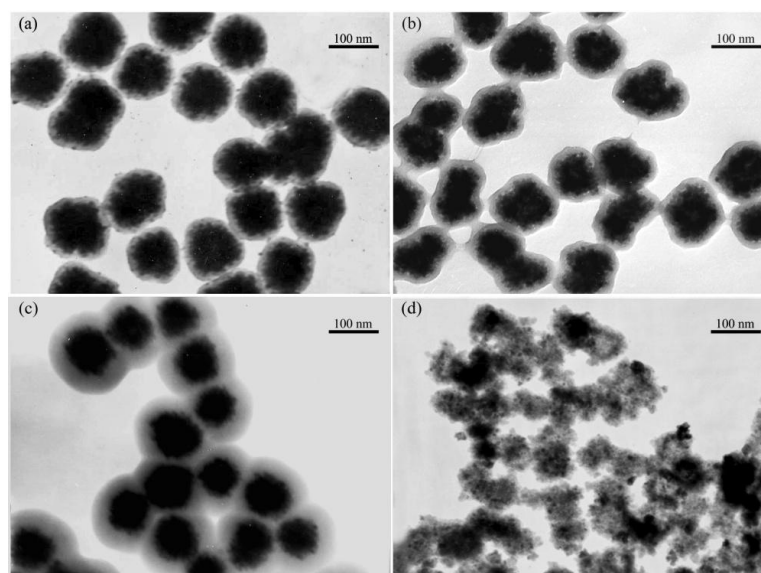
## Supporting Information

# Silver-Coated Magnetite/Carbon Core/Shell Microspheres as Substrate-Enhanced SERS Probes for Detection of Trace Persistent Organic Pollutants

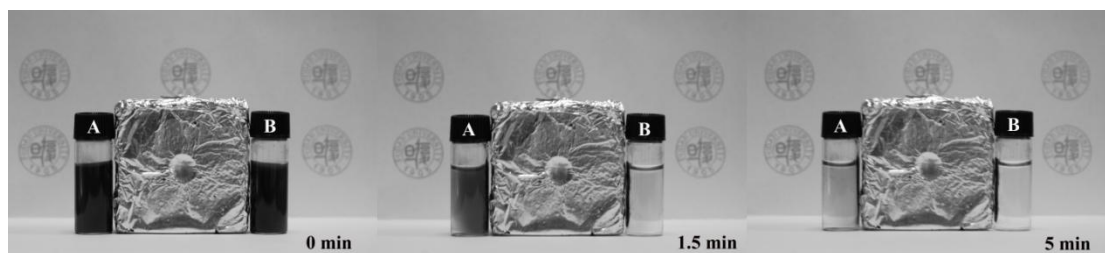
Qiao An,<sup>a</sup> Full Name<sup>a</sup> and Jia Guo,<sup>a</sup> Jun Hu,<sup>b</sup> and Chang-Chun Wang<sup>a,\*</sup>

<sup>a</sup> State Key Laboratory of Molecular Engineering of Polymers, and Department of Macromolecular Science, Laboratory of Advanced Materials, Fudan University, Shanghai 200433, China.

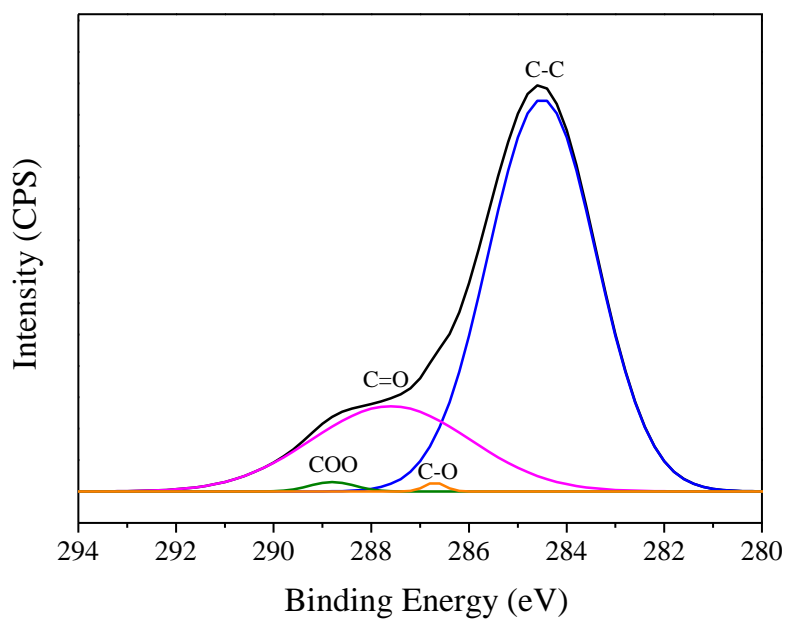
<sup>b</sup> Department of Chemistry and Integrated Biosciences, The University of Akron, Akron, OH 44325-3601, USA



**Figure S1.** TEM images of Fe<sub>3</sub>O<sub>4</sub>@carbon composite microspheres synthesized with various amounts of hydrogen peroxide: (a) 1.5, (b) 2.0, (c) 2.5, and (d) 3.0 mL. All scale bars in TEM are 100 nm.



**Figure S2.** Separation behaviors of the two  $\text{Fe}_3\text{O}_4$ @carbon composite microspheres to the applied magnetic field (the magnetic field strength of the magnet is 2000 G).



**Figure S3.** C 1s XPS spectrum of  $\text{Fe}_3\text{O}_4$ @carbon composite microspheres.