

Electronic Supplementary Information for “Hierarchical magnetic yolk/shell microspheres with mixed barium silicate and barium titanium oxide shells for microwave absorption enhancement”

Jiwei Liu, Junjie Xu, Renchao Che,^{} Huajun Chen, Zhengwang Liu and Feng Xia*

Department of Material Science, Laboratory of Advanced Materials, Fudan University, Shanghai,
200438, P. R. China.

^{*}Address correspondence to rcche@fudan.edu.cn.

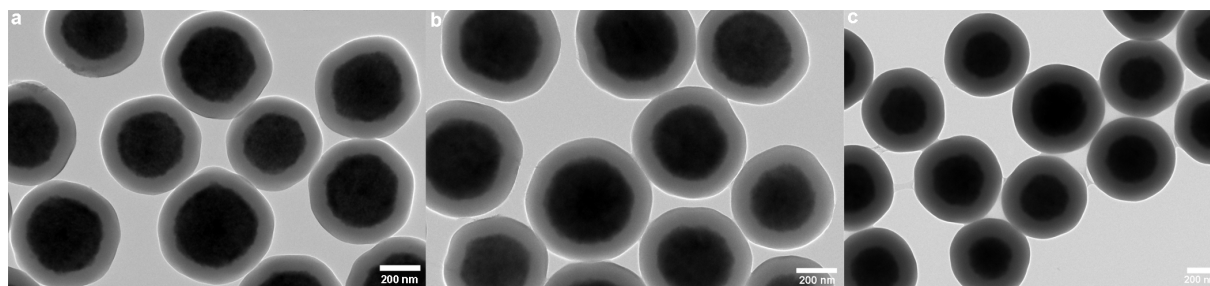


Fig. S1 TEM images of the Fe₃O₄@SiO₂ microspheres with different SiO₂ shell thicknesses: (a) ~81 nm, (b) ~100 nm, and (c) ~135 nm.

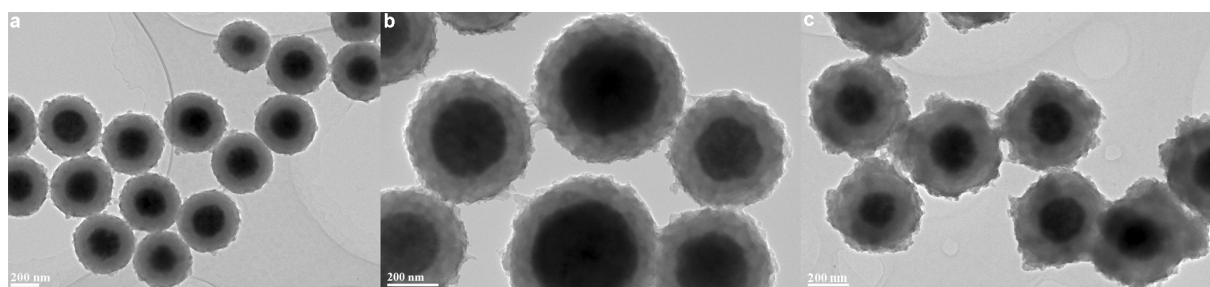


Fig. S2 TEM images of the Fe₃O₄@SiO₂@TiO₂ microspheres with different TiO₂ shell thicknesses: (a) ~11 nm, (b) ~23 nm, and (c) ~35 nm.

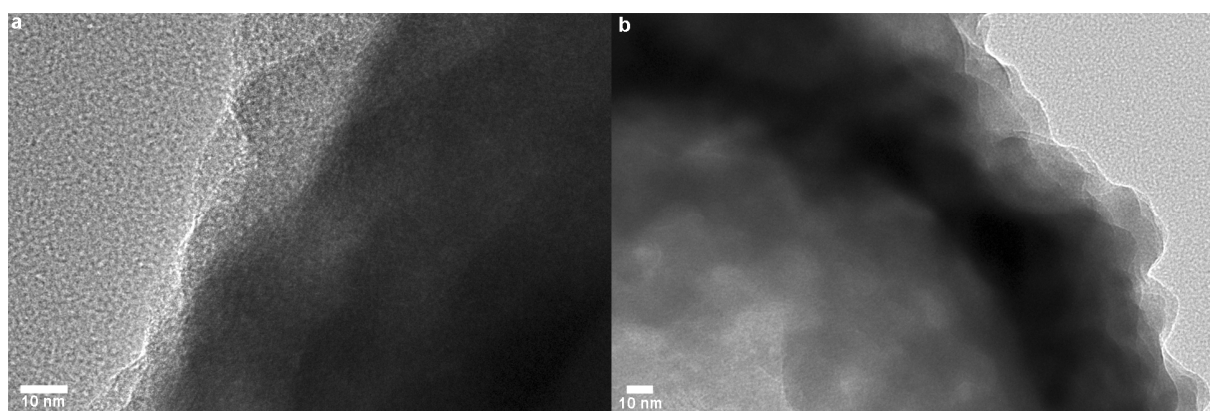


Fig. S3 High-magnification TEM images of the Fe₃O₄@SiO₂@TiO₂ and Fe₃O₄@BS/BTO microspheres.

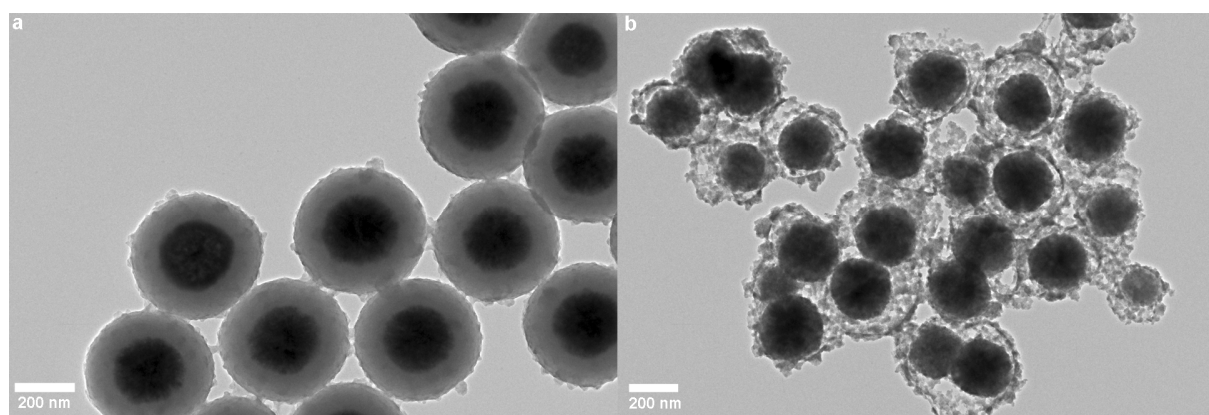


Fig. S4 TEM images of the $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TiO}_2$ microspheres with ~ 11 nm TiO_2 shell thickness (a) and the products synthesized using the $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TiO}_2$ microspheres with ~ 11 nm TiO_2 shell thickness as the templates (b).

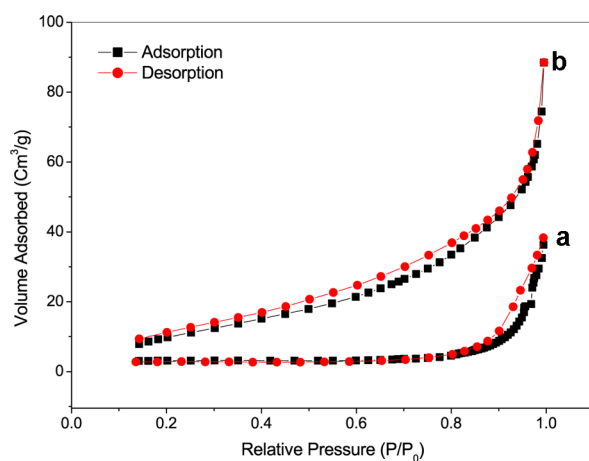


Fig. S5 N_2 adsorption-desorption isotherms of the Fe_3O_4 particles (a) and the $\text{Fe}_3\text{O}_4@\text{BS/BTO}$ microspheres (b).