Supplementary Information

Formation Mechanism of Hollow Microspheres Consisting of ZnO Nanosheets

Yanjun Fang[†], *Zhenbo Xia*[†], *Fengjiao Yu*[‡], *Jian Sha*[†], *Yewu Wang**[†], *and Wuzong Zhou**[‡]

Department of Physics & State Key Laboratory of Silicon Materials, Zhejiang University, Hangzhou 310027, P. R. China. EaStChem, School of Chemistry, University of St Andrews, St Andrews, Fife KY16 9ST, United Kingdom.

† Zhejiang University.

‡ University of St Andrews

CORRESPONDING AUTHOR FOOTNOTE: * To whom correspondence should be addressed. E-mails: yewuwang@zju.edu.cn or wzhou@st-andrews.ac.uk

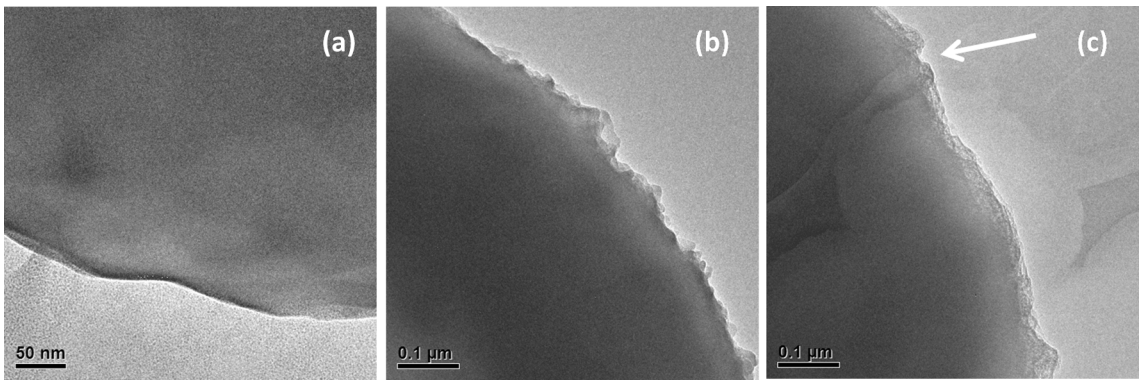

Figure S1: Enlarged view of TEM images of the periphery part of the synthesized microspheres with different growth times: (a) 5 min, (b) 30 min, and (c) 1 h. The arrow in (c) indicates the embedded LBZA nanosheets.

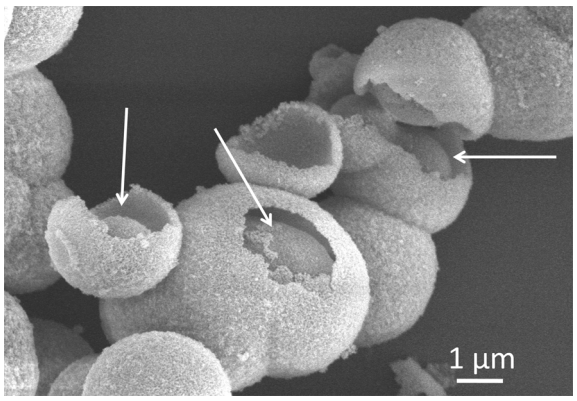

Figure S2: SEM image of LBZA microspheres grown for 30 min showing a small sphere in the cage of a large hollow particle.

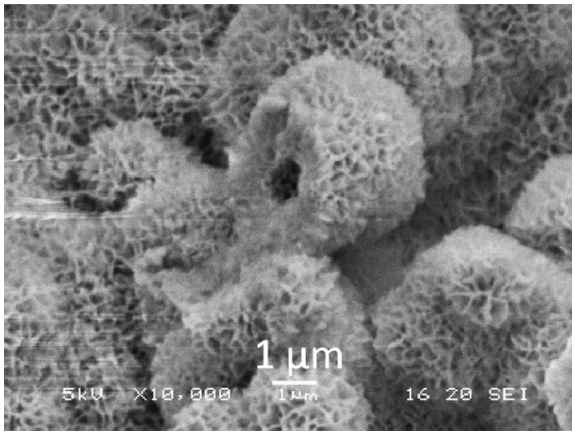

Figure S3: SEM image of LBZA microspheres grown for 3.5 h with magnetic stirring.

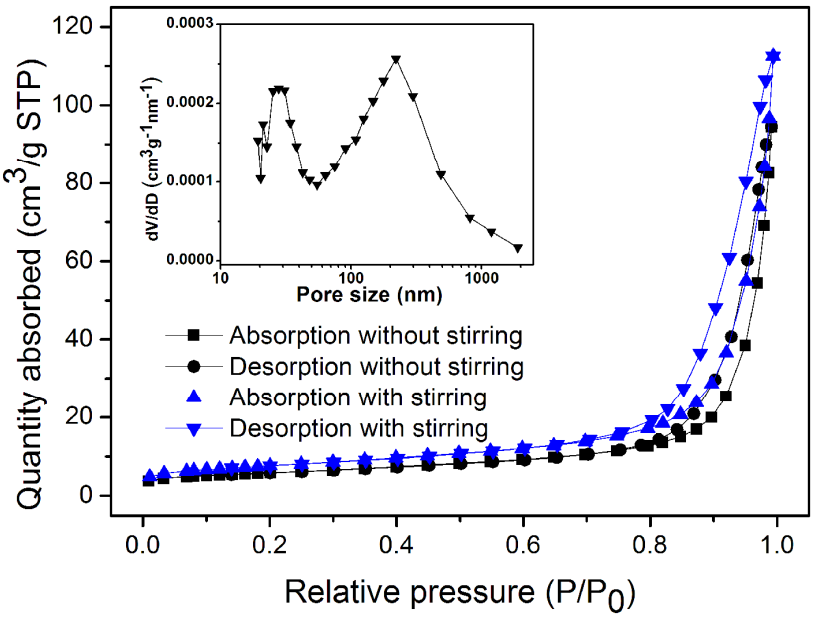

Figure S4: Nitrogen adsorption-desorption isotherms of ZnO microspheres fabricated with and without magnetic stirring with the growth time of 3.5 h. The inset is the pore size distribution curve of the ZnO microspheres fabricated with magnetic stirring, calculated from the adsorption branch using the Barrett-Joyner-Halenda (BJH) algorithm.

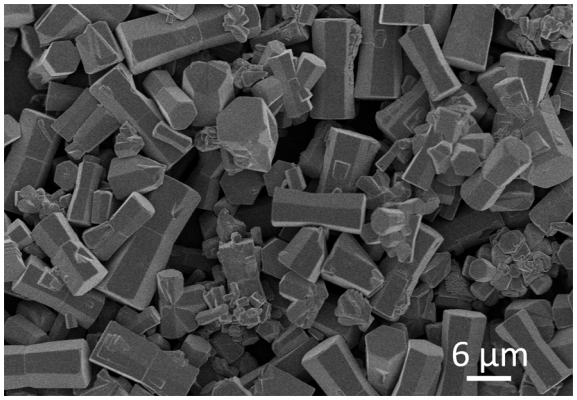

Figure S5: SEM image of single crystalline ZnO microrods fabricated without addition of trisodium citrate.