

## Supporting Information

### ZIF-8 self-etching method for Au/Polydopamine hybrid cubic microcapsules with modulating nanostructures

*Qunling Fang<sup>a\*</sup>, Yuhang Sun<sup>a</sup>, Jinyu Duan<sup>a</sup>, Linfeng Bai<sup>b</sup>, Kezhu Xu<sup>a</sup>, Qinshan Xiong<sup>a</sup>,  
Huajian Xu,<sup>a</sup> Ken Cham-Fai Leung<sup>c</sup>, Ailing Hui<sup>d</sup>, Shouhu Xuan<sup>b\*</sup>*

<sup>a</sup> School of Food and Biological Engineering, Hefei University of Technology, Hefei, 230009, PR China

<sup>b</sup> CAS Key Laboratory of Mechanical Behavior and Design of Materials, Department of Modern Mechanics, CAS Center for Excellence in Complex System Mechanics, University of Science and Technology of China, Hefei 230027, PR China

<sup>c</sup> Department of Chemistry, Hong Kong Baptist University, Kowloon, Hong Kong SAR, PR China.

<sup>d</sup> Engineering Research Center of Bio-process, Ministry of Education, Hefei University of Technology, Hefei, Anhui, China

**\*Corresponding author:**

Asso. Prof. **Qunling Fang**

E-mail: [fql.good@hfut.edu.cn](mailto:fql.good@hfut.edu.cn)

Tel: 86-551-62904353

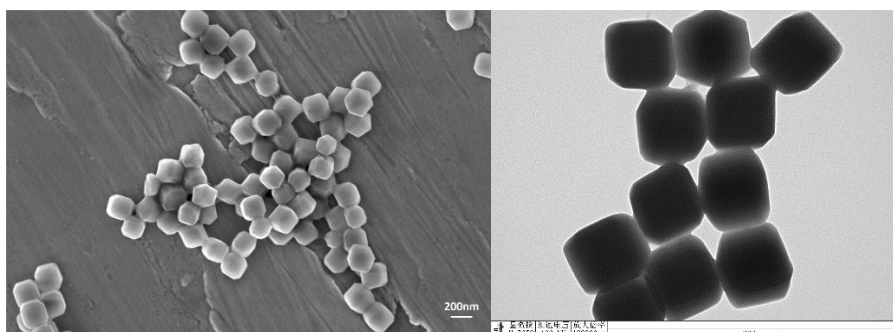
Fax: 86-551-62904353

Prof. **Shouhu Xuan**

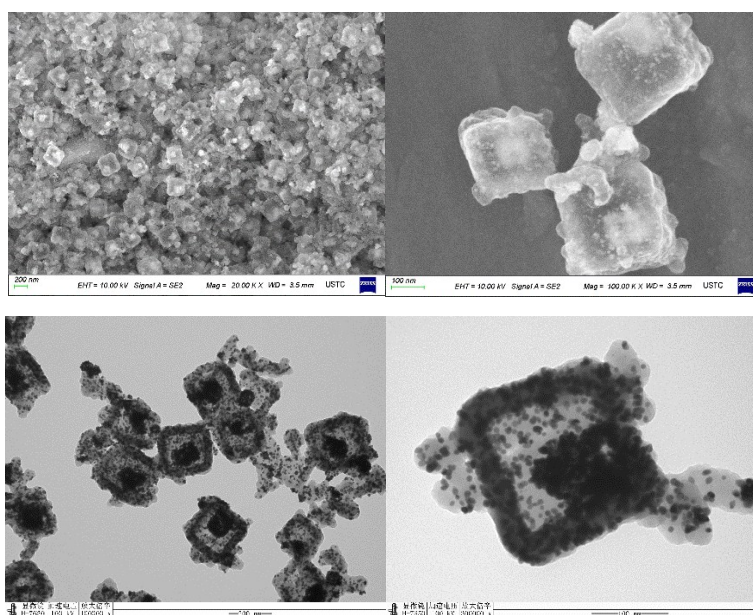
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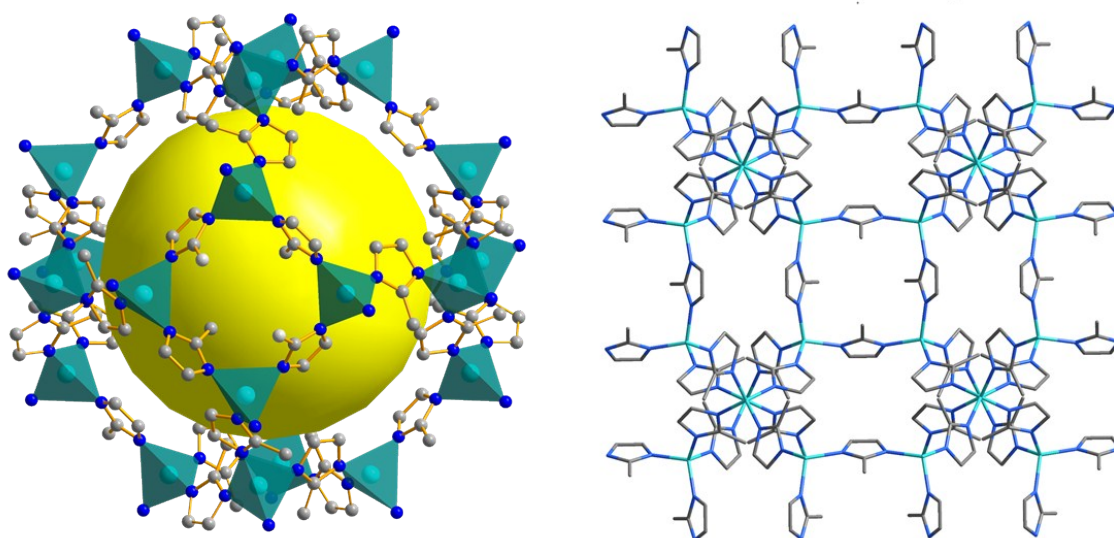
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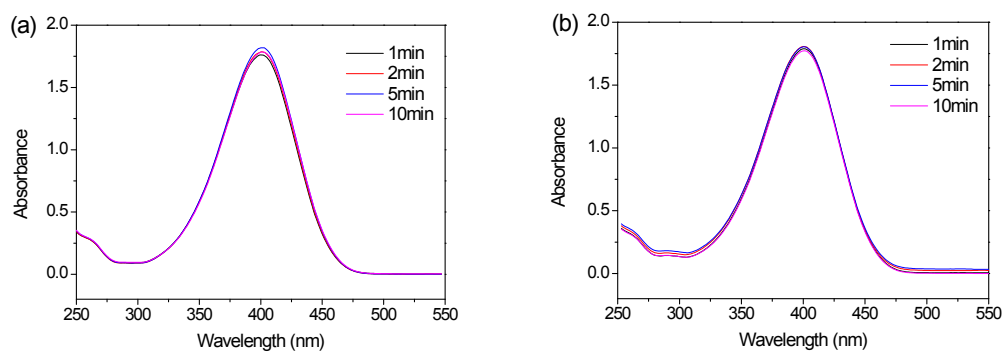
**Figure S11.** SEM image and TEM image of the ZIF-8 microcubes



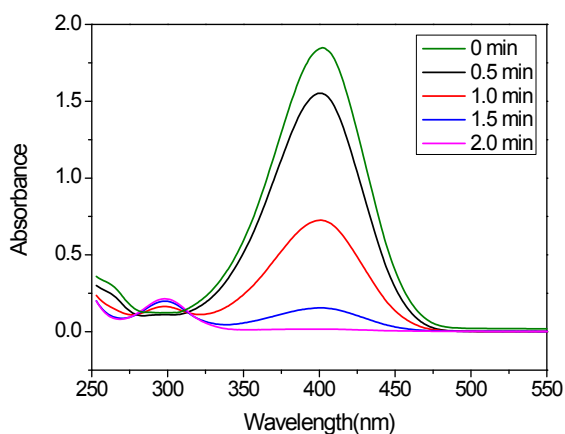
**Figure S12.** SEM image and TEM image of the yolk-like Au/PDA cubic microcapsules



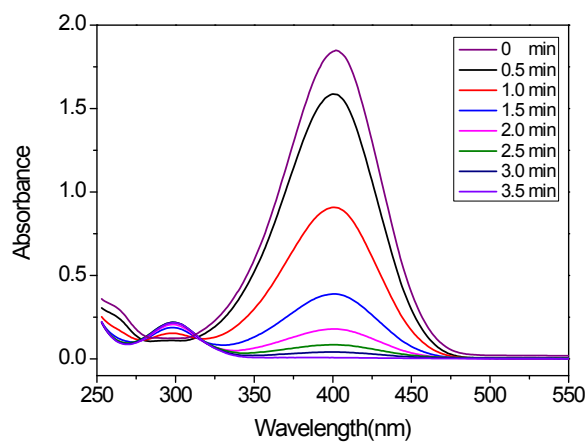
**Figure S13.** Crystal structure of the ZIF-8



**Figure S14.** UV-vis spectra of the p-nitrophenol by statically treating with ZIF-8 (a) and ZIF-8@PDA (b)



**Figure S15.** UV-vis spectra of the reduction of p-nitrophenol during the reduction catalyzed by 0.75 mg yolk-like Au/PDA hybrid cubic microcapsules nanocatalysts



**Figure S16.** UV-vis spectra of the reduction of p-nitrophenol during the reduction catalyzed by 0.5 mg yolk-like Au/PDA hybrid cubic microcapsules nanocatalysts