Supporting Information

Hybrid poly(allylamine hydrochloride)-graphene oxide microcapsules: preparation,

characterization and application in textiles with controlled release behavior

Zhiqi Zhao, ab Qiujin Li, *ab Jixian Gong, *ab Zheng Li, ab and Jianfei Zhang abc

^a School of Textile Science and Engineering, Tiangong University, Tianjin 300387, China

^b Key Laboratory of Advanced Textile Composites, Ministry of Education, Tiangong University, Tianjin

300387, China

^c Collaborative Innovation Center for Eco-Textiles of Shandong Province, Shandong, Qingdao 266071,

China

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*Correspondence to Qiujin Li, E-mail: vicmaldini@126.com, Tel. : +86-18622272697; Jixian Gong, Email: gongjixian@126.com; Tel. : +86-18920787809.



Fig. S1 Particle size distribution of the PSS-doped CaCO₃ templates.



Fig. S2 Fitting of the standard curve of Rhodamine B (RhB) solution under the condition of $\lambda = 554$ nm. (0.1 mg/mL RhB solution, take 150 µL, 200 µL, 250 µL, 300 µL, 350 µL and 400 µL RhB solutions with pipette gun respectively, add distilled water to dilute to 10mL, measure the corresponding absorbance, and obtain the concentration absorbance standard curve).



Fig. S3 Fitting of the standard curve of *Atractylodes* solution under the condition of $\lambda = 220$ nm and pH=7.4. (*Atractylodes* powder(5g) was added into a beaker filled with 250mL of distilled water, boiled for 15 min, filter to obtain the supernatant. The resulted *Atractylodes* solution was regarded as the initial solution with the concentration of 20 mg/mL. This setting concentration is a facilitate method to measure a series of *Atractylodes* solutions yielded by different folds of dilution. And then the calibration curve can be obtained through UV-visible spectroscopy of the solutions diluted in different folds. Since the loading efficiency and release rate are the ratios of amounts (or concentrations), this assumed concentration can work. These diluted *Atractylodes* solutions were prepared by taking 100 µL, 200 µL, 300 µL, 400 µL, 500 µL, 600 µL, 700 µL, 800 µL, 900 µL and 1000 µL of the initial *Atractylodes* solution (assumed concentration was 20 mg/mL) respectively, followed by adding into the distilled water to yield the solutions with the final volume of 10mL. The absorbance of these *Atractylodes* solutions were monitored by a UV-visible spectroscope at $\lambda = 220$ nm to make the standard calibration curve.