

Supporting Information:

Preparation of $\text{SiO}_2@\text{TiO}_2:\text{Eu}^{3+}@\text{TiO}_2$ Core Double-Shell Microspheres for Photodegradation of Polyacrylamide

Haoyang Zou,^a Lan Wang,^d Huaizhi Tao,^d Yi Liu,^{a*} Meiqi Chang,^{b*} Shiyu Yao^{c*}

^aState Key Laboratory of Supramolecular Structure and Materials, Jilin University, Changchun 130012, P. R. China. *

^bState Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, P. R. China. *

^cCollege of Physics, Jilin University, Changchun 130012, P. R. China. *

^dResearch Institute of Drilling and Production Engineering Technology, CNPC Chuanqing Drilling Engineering Co., Ltd, Guanghan 618300, P. R. China.

Fig. S1 XPS spectra of (a) Ti 2p of ST and STT-1.2, (b) O 1s of ST and STT-1.2.

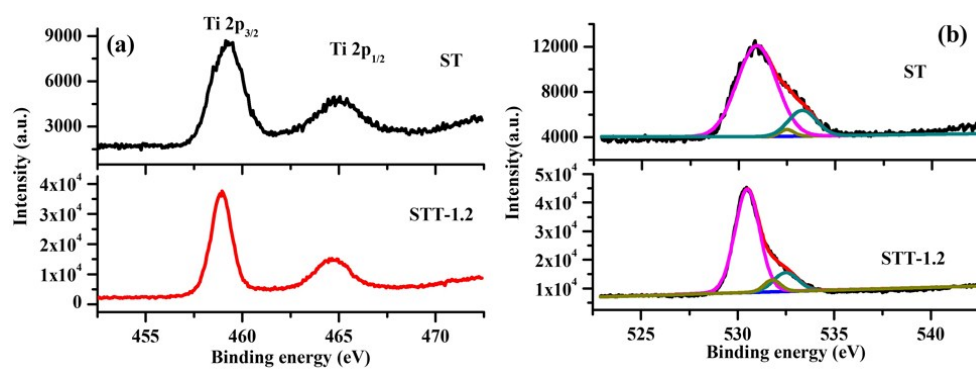


Fig. S2 XRD patterns of ST without and with calcination at different temperature.

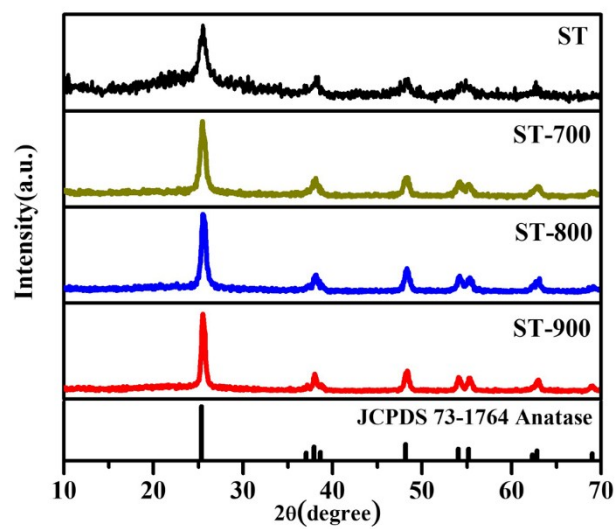


Fig. S3 Standard curve of absorbance versus concentration of HPAM.

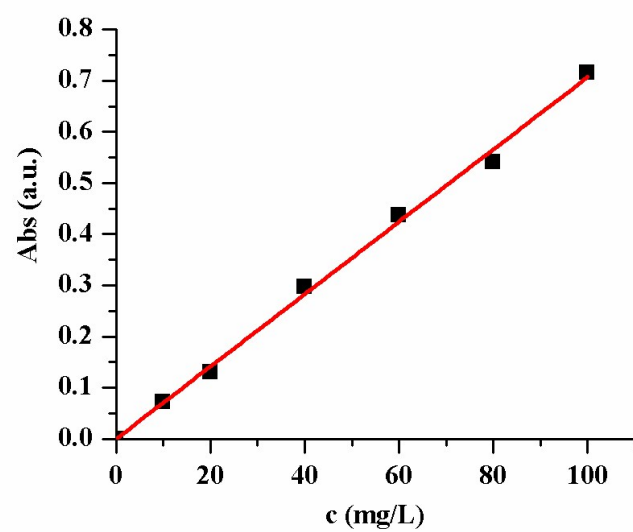


Fig. S4 Temporal evolution of UV-vis absorption spectra during the photocatalytic degradation of HPAM in the presence of the (a) STT, (b) STT-700, (c) STT-800 and (d) STT-900.

