

Supporting Information

The performance of sulfate radical mediated-advanced oxidation process in the degradation of organic matter from secondary effluents

Dayang Wang, Mingming Wang, Xuezhen Zhang, Dong Xue, Wenjing Zhuo, Lei Zheng, Aizhong Ding*

College of Water Sciences, Beijing Normal University, Beijing 100875, PR China

**corresponding author. Tel.: 86 10 58802736; E-mail address: ading@bnu.edu.cn*

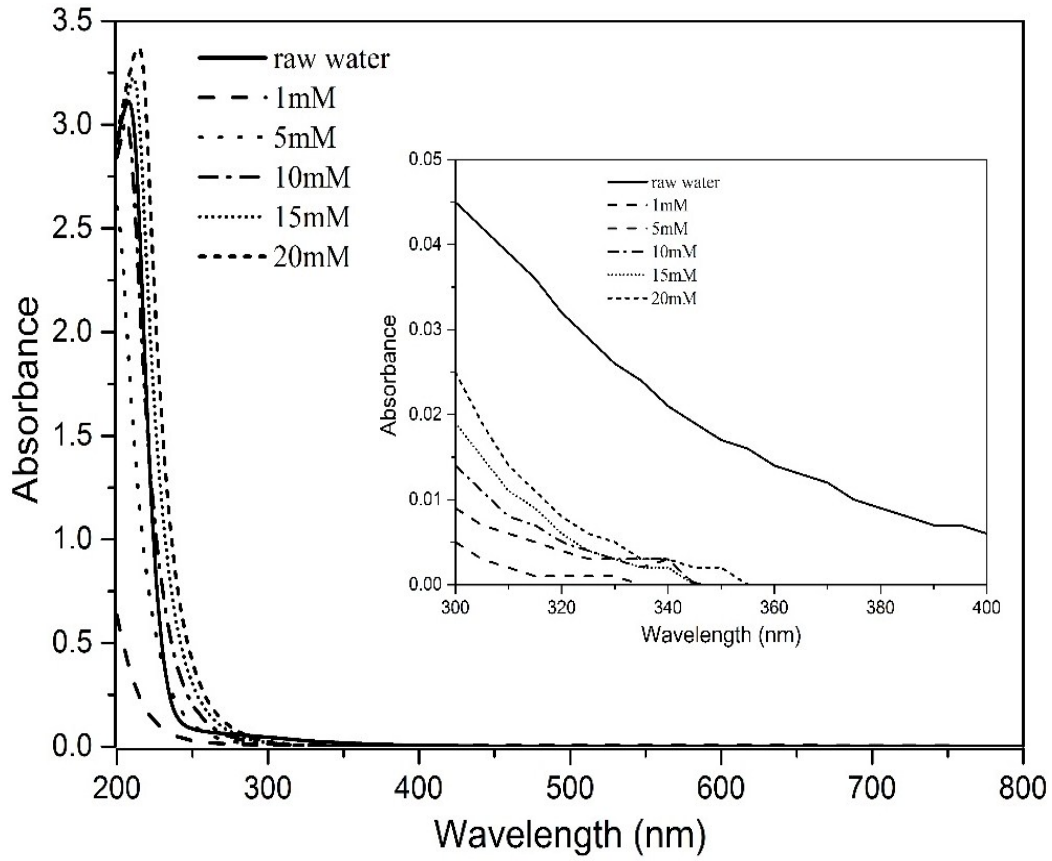


Figure S1 Spectroscopic character of raw water and varying concentrations PS (from 1-20m), insert display enlarged view of wavelength from 300 to 400 nm.

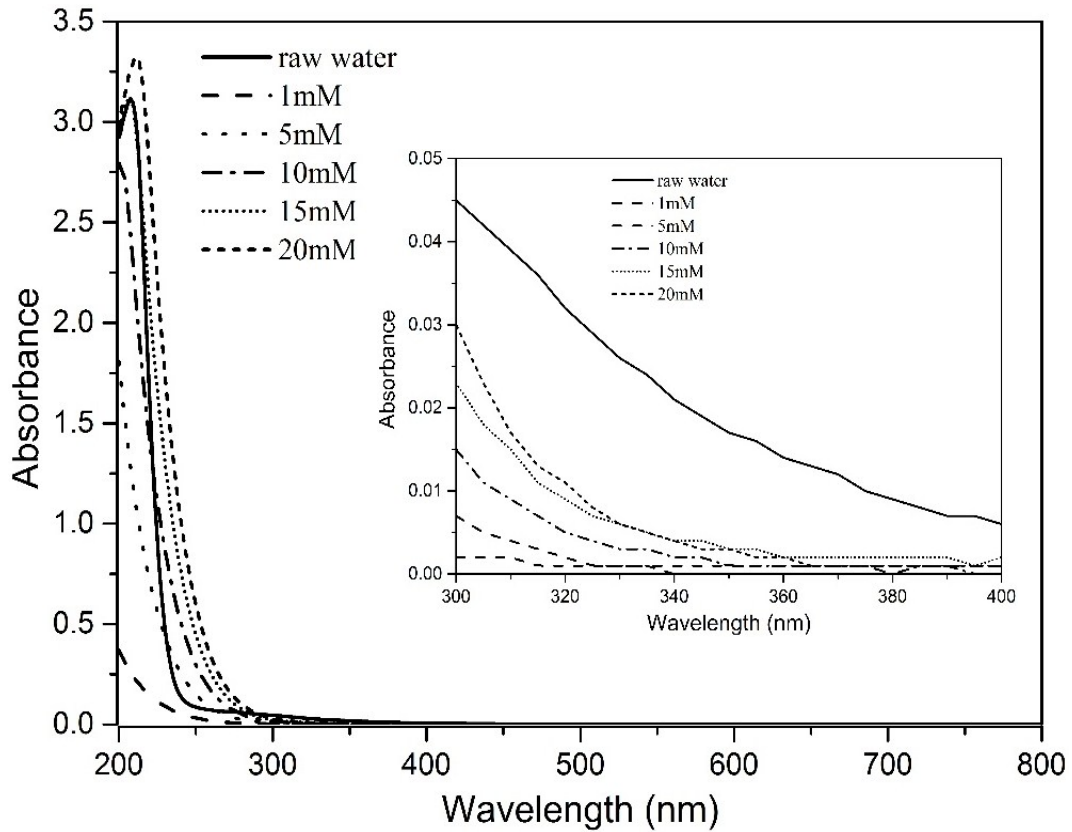


Figure S2 Spectroscopic character of raw water and varying concentrations PMS (from 1-20m), insert display enlarged view of wavelength from 300 to 400 nm.

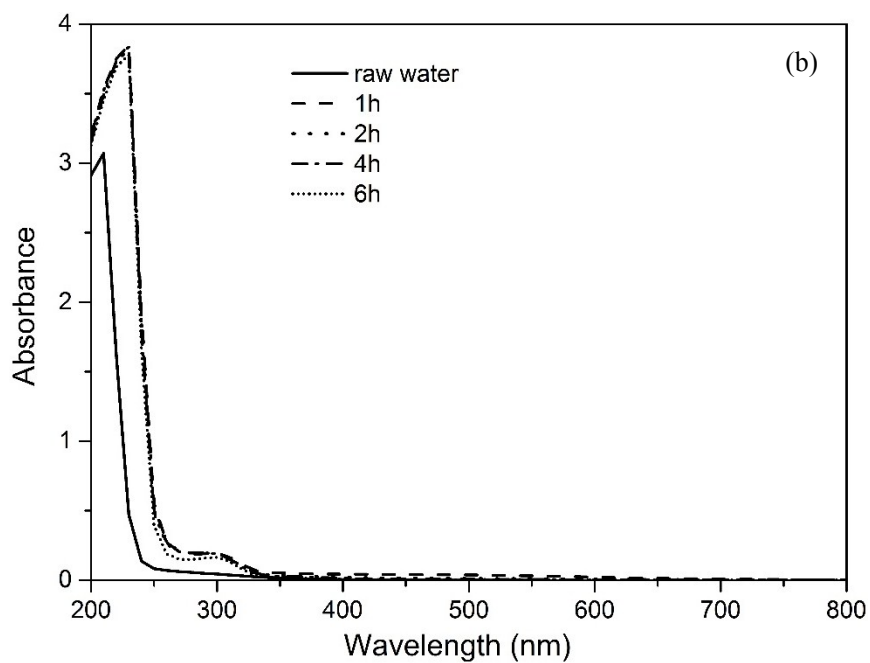
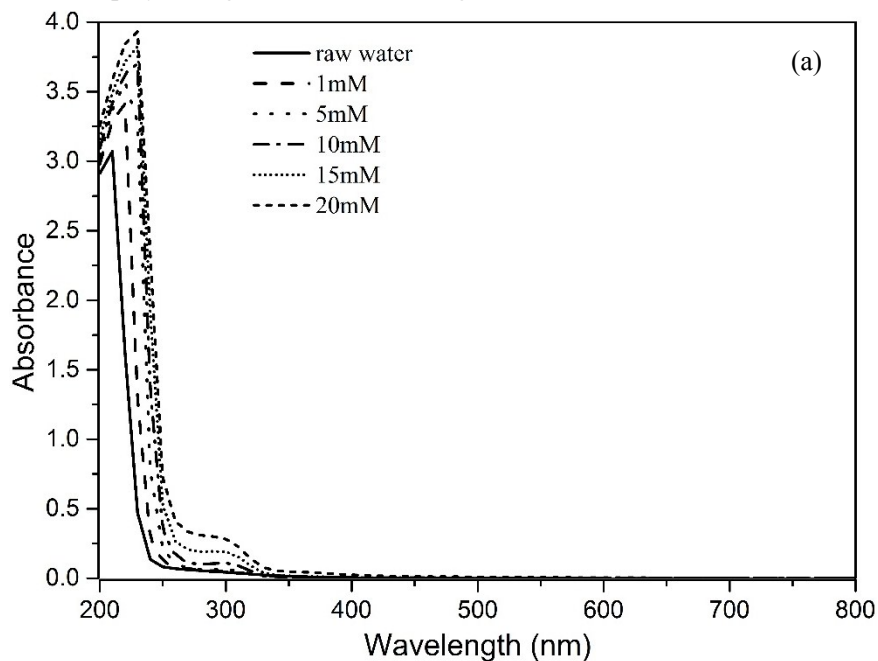


Figure S3 Evolution of absorbance spectra of system (Ag(I)/PS) with dosages of precursor and catalyst from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor and catalyst concentration of 15 mM (b).

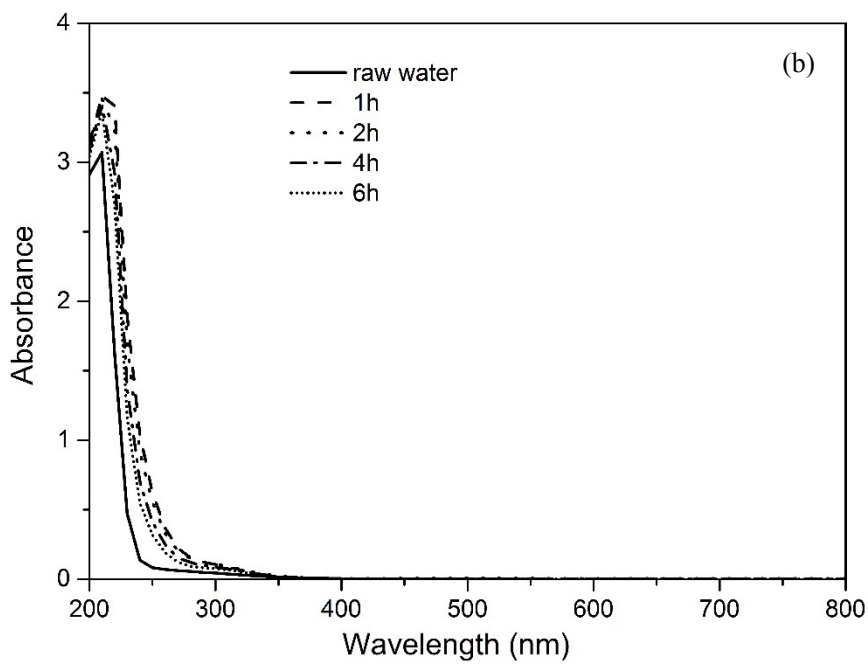
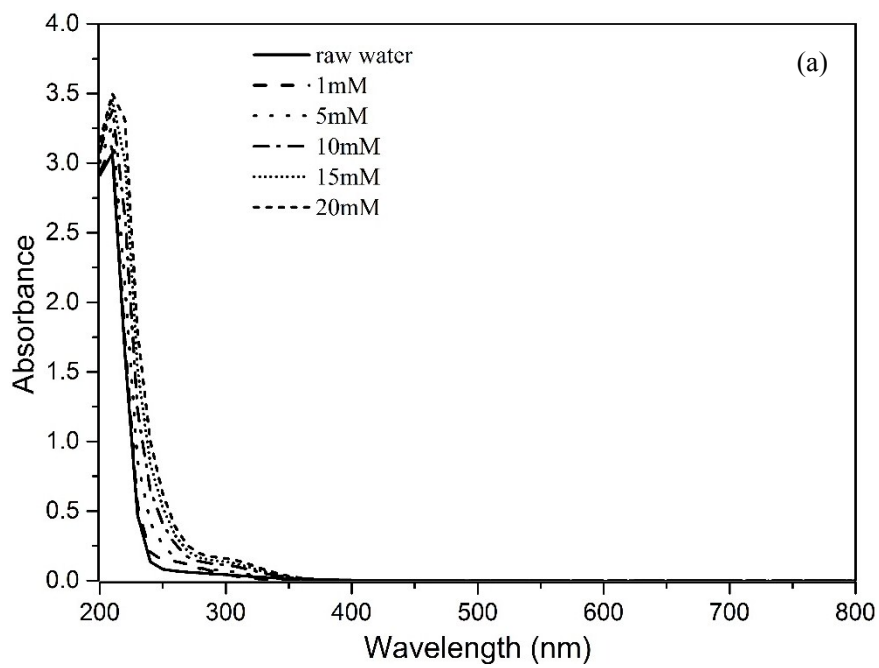


Figure S4 Evolution of absorbance spectra of system (Co (II)/PMS) with dosages of precursor and catalyst from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor and catalyst concentration of 20 mM (b).

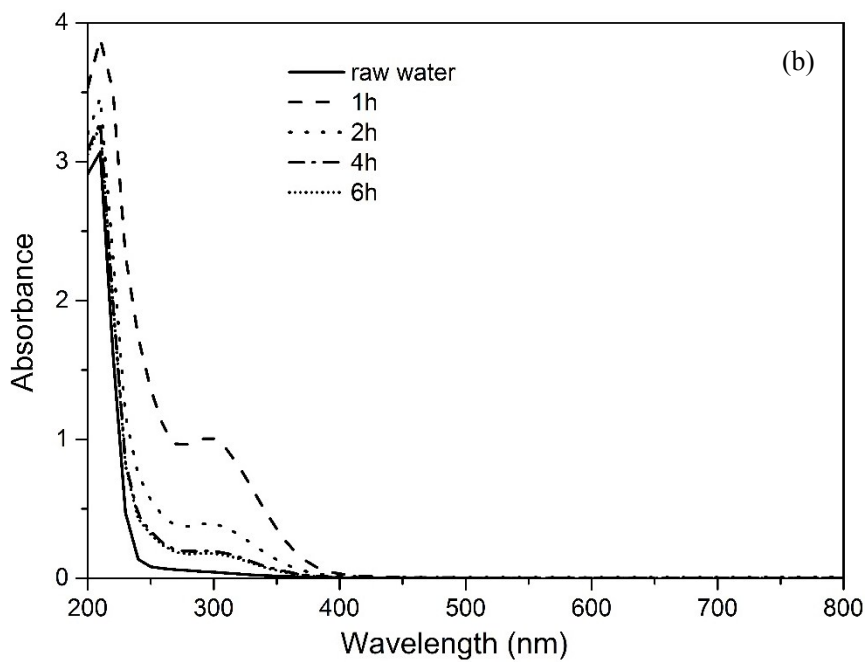
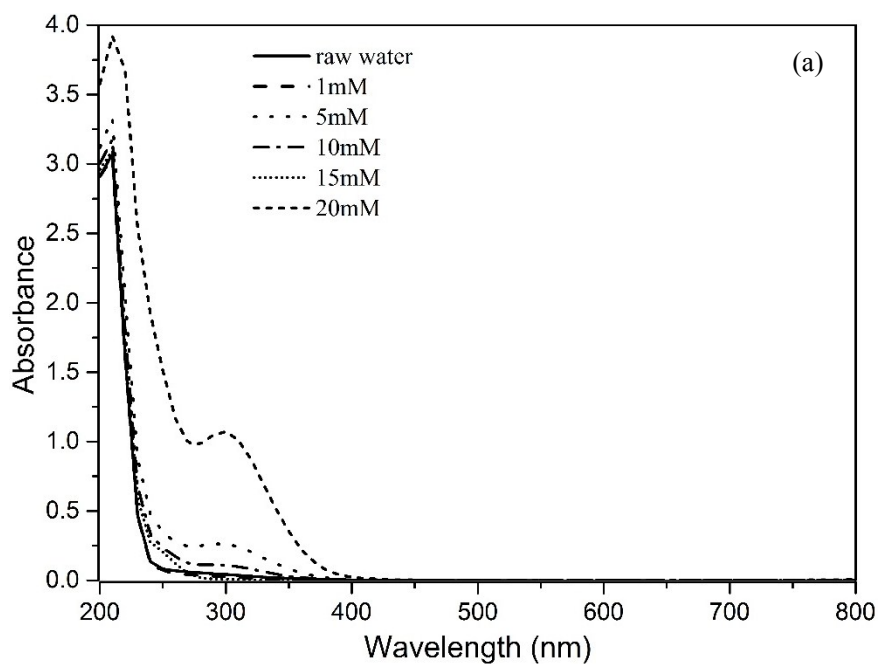


Figure S5 Evolution of absorbance spectra of system (ZVI/PS) with dosages of precursor and catalyst from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor and catalyst concentration of 5 mM (b).

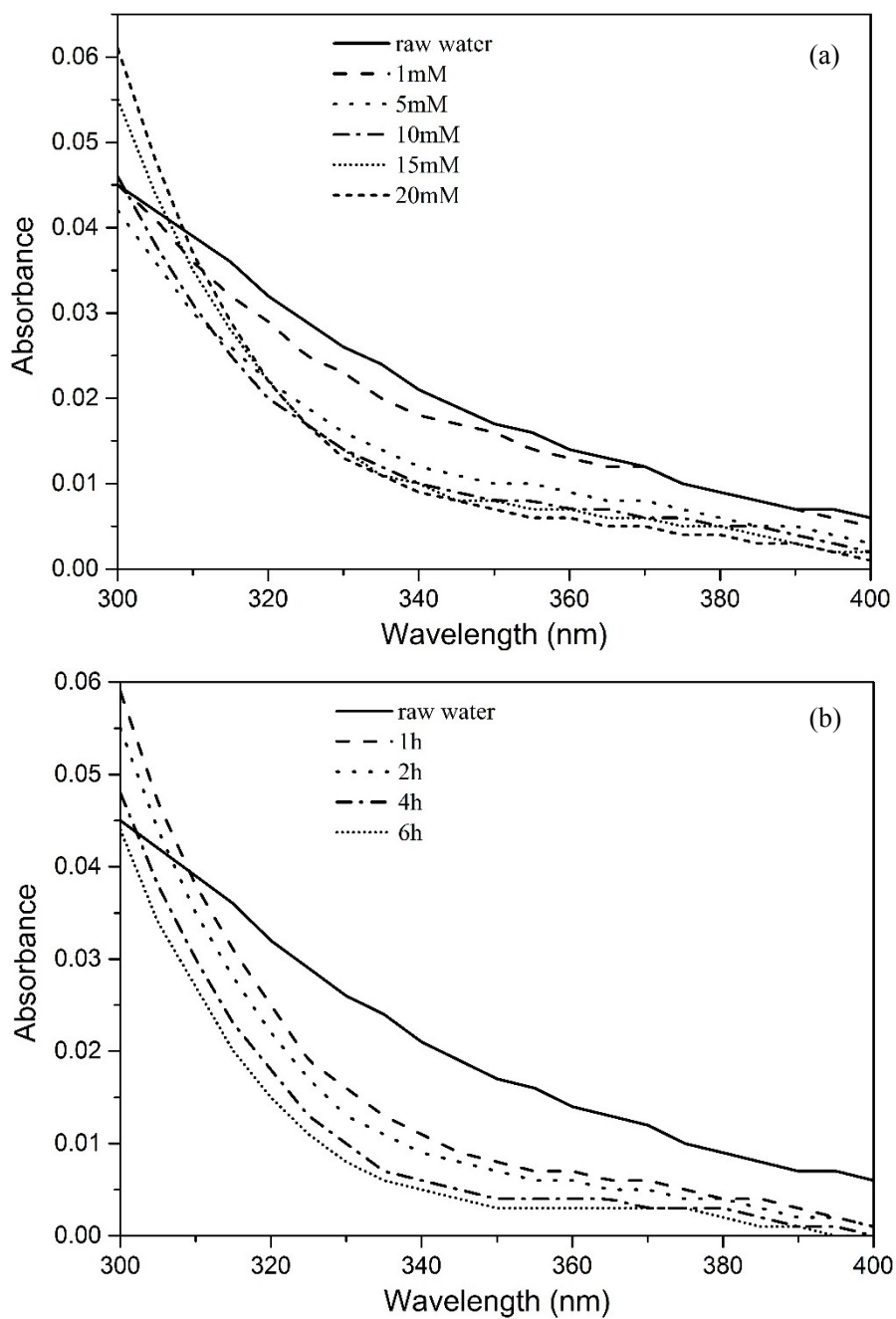


Figure S6 Evolution of absorbance spectra of system ($40^{\circ}\text{C}/\text{PS}$) with dosages of precursor from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor concentration of 20 mM (b).

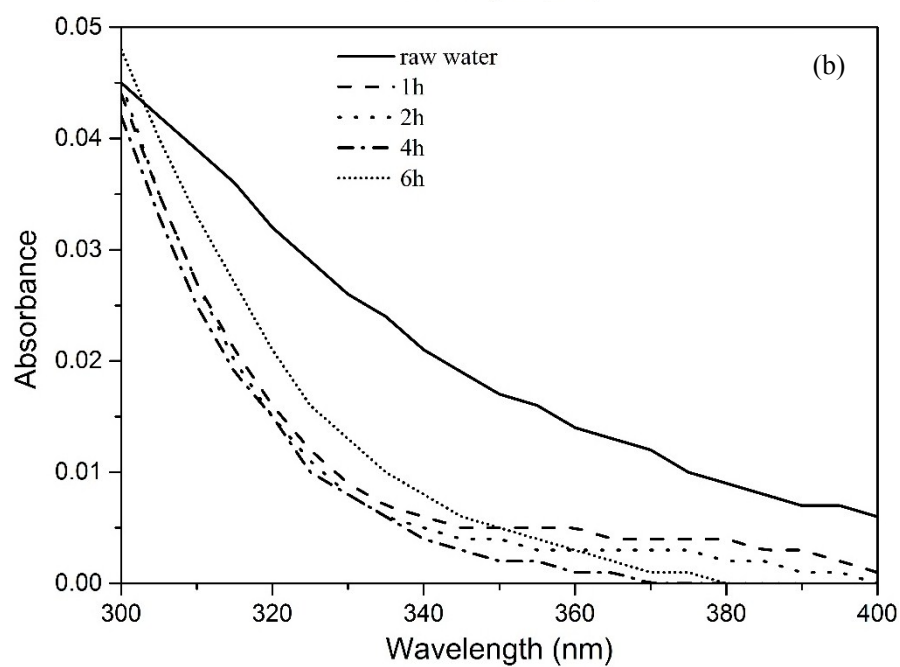
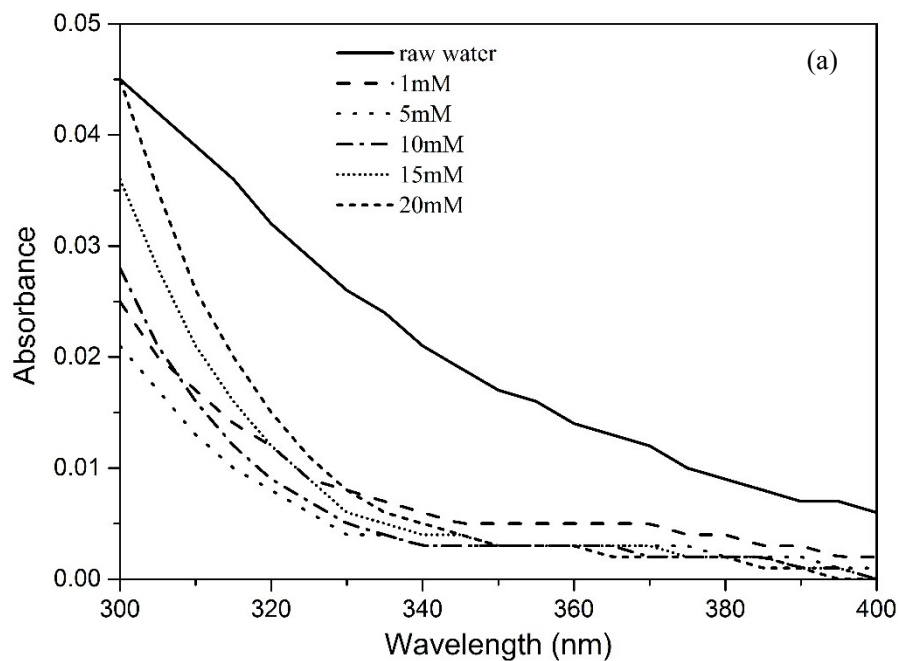


Figure S7 Evolution of absorbance spectra of system (60°C/PS) with dosages of precursor from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor concentration of 20 mM (b).

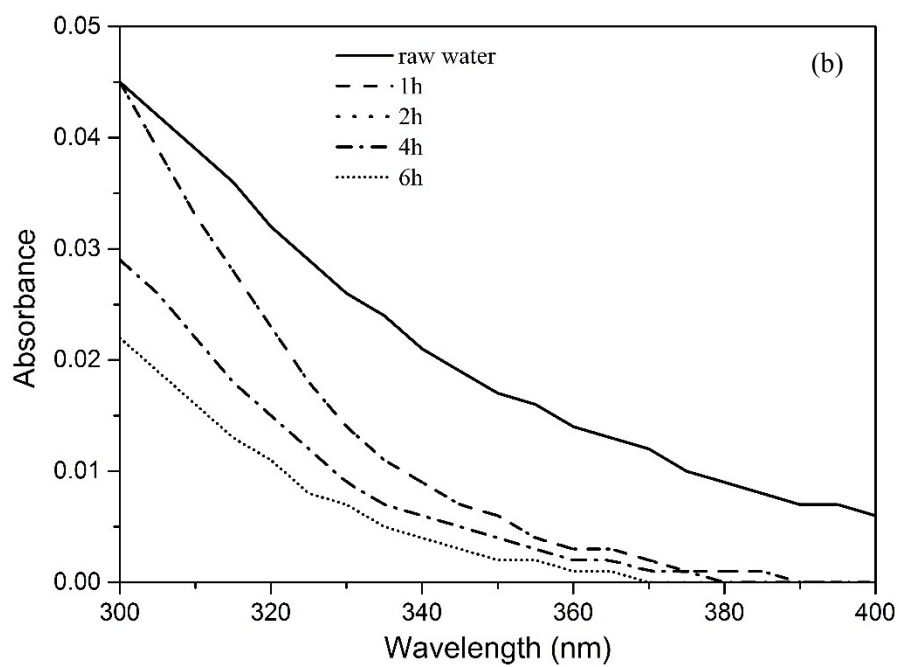
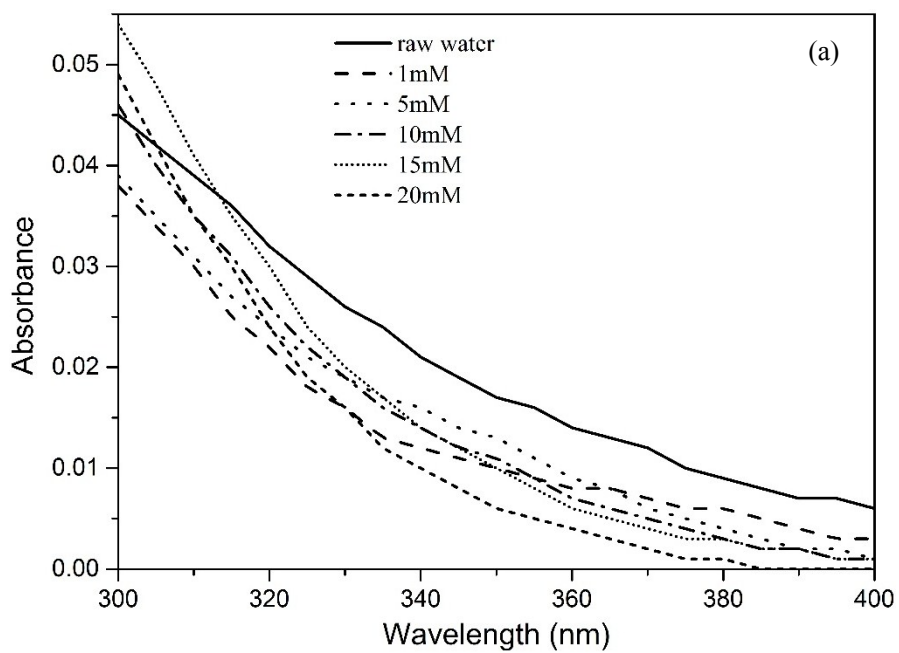


Figure S8 Evolution of absorbance spectra of system ($40^{\circ}\text{C}/\text{PMS}$) with dosages of precursor from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor concentration of 20 mM (b).

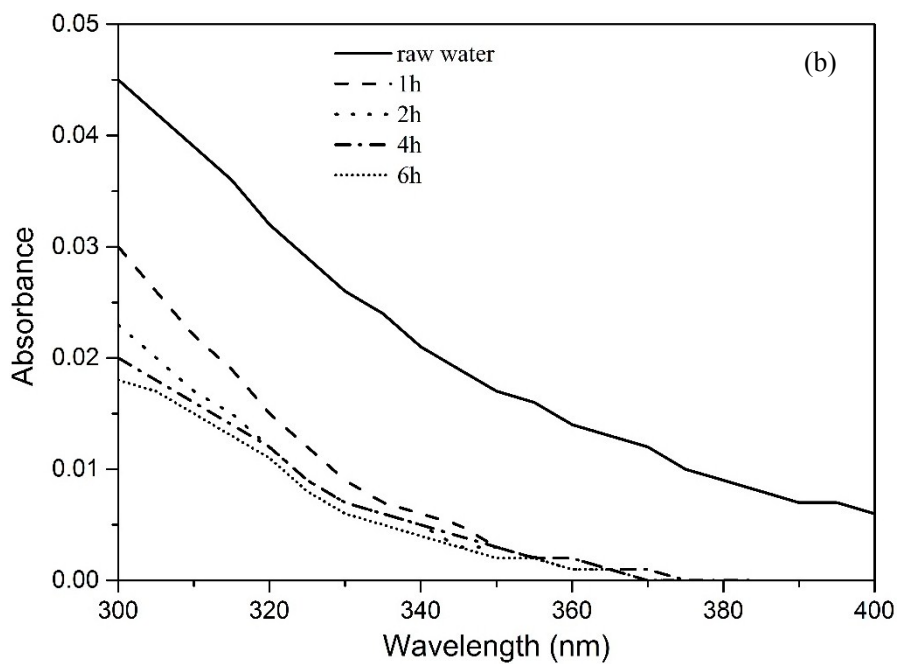
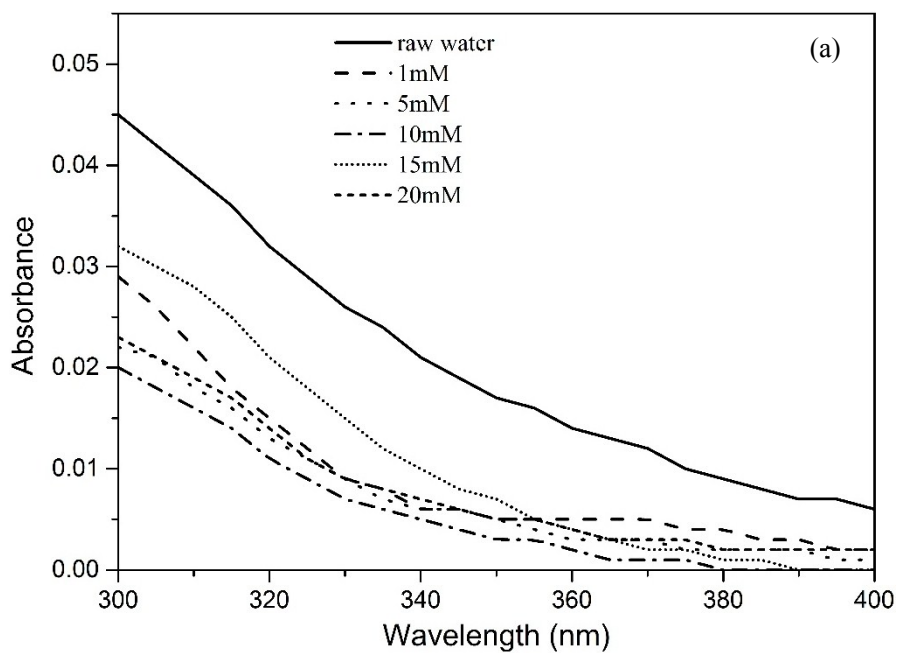


Figure S9 Evolution of absorbance spectra of system (60°C/PMS) with dosages of precursor from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor concentration of 20 mM (b).

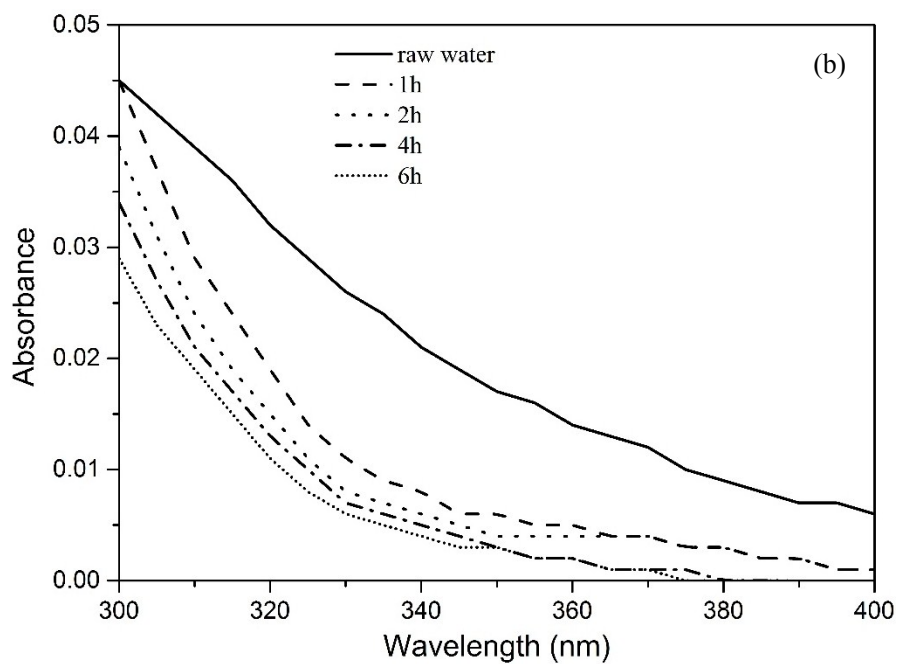
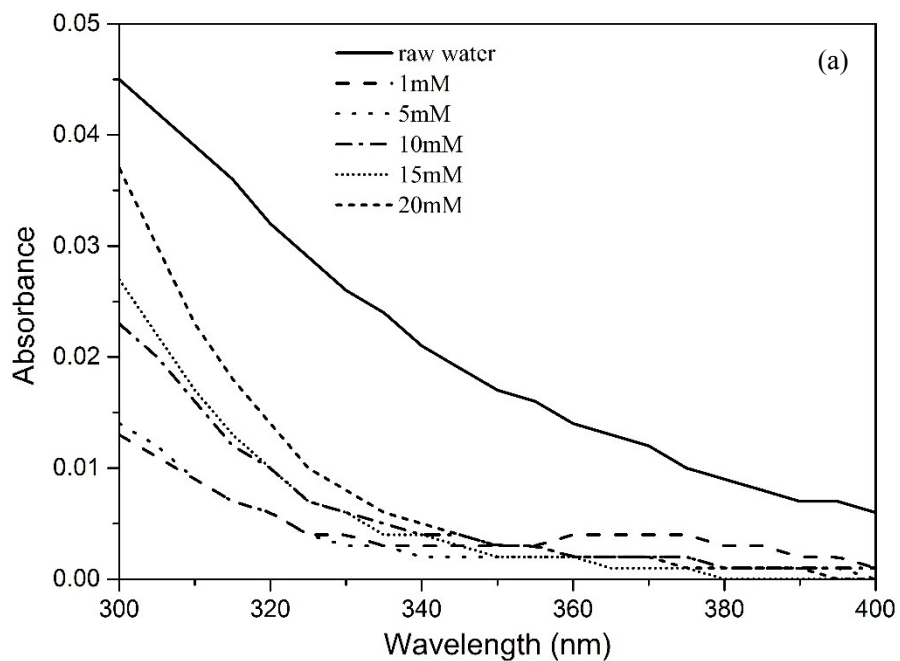


Figure S10 Evolution of absorbance spectra of system (UV/PS/20W) with dosages of precursor from 1-20mM over 3 h (a) and best reaction in system vs time from 1-6 h with precursor concentration of 20 mM (b).