

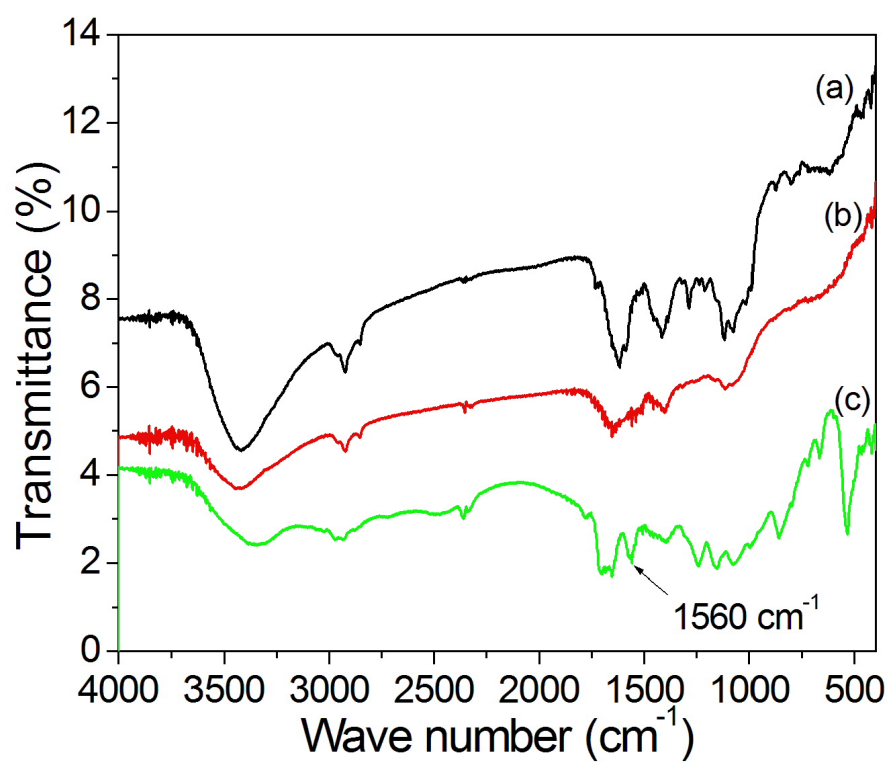


Fig. S1. FTIR spectra of (a) DOX, (b) PGA and (c) PGA–DOX complex.

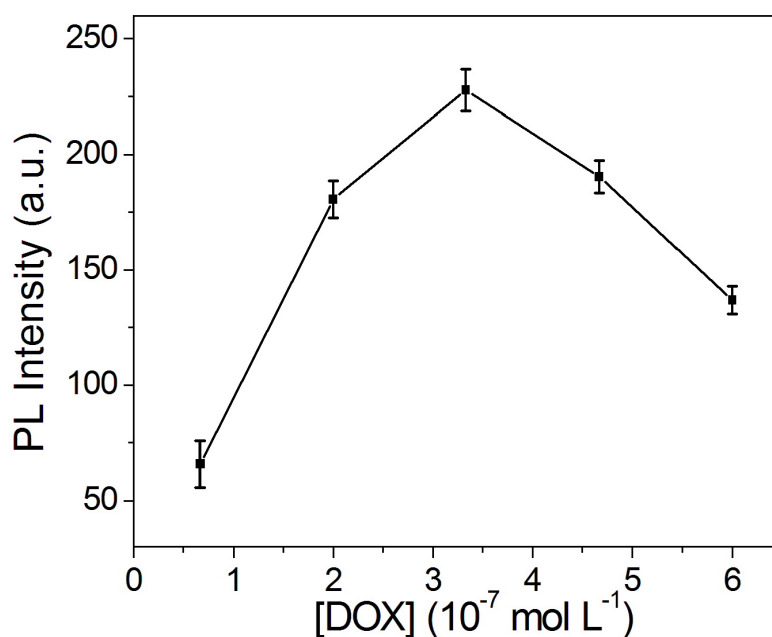


Fig. S2. The fluorescence spectra of PGA in the presence of different concentrations of DOX.

PGA (500 μL , $3.33 \times 10^{-7} \text{ mol L}^{-1}$) and different concentrations of DOX solution were successively added into 2.0 mL calibrated test tubes, then diluted to the mark with phosphate buffer solution and mixed thoroughly for 4 h at the room temperature, followed by recording the fluorescence spectrum of each solution. Fig. S2 showed the fluorescence intensity increased with increasing DOX concentration from 6.67×10^{-8} to $3.33 \times 10^{-7} \text{ M}$ and then decreased with further increasing DOX concentration. This was probably due to that PGA and DOX achieved a complete reaction, when the PGA-to-DOX molar ratio was 1:1.