



**Fig.1S.** Calibration graph of AR-EV system. (a)  $\lambda = 341 \text{ nm}$ ; (b)  $\lambda = 508 \text{ nm}$ ; (c)  $\lambda = 508 \text{ nm}$ ;  $C_{EV} = 1.6 \times 10^{-5} \text{ mol L}^{-1}$ ,  $C_{AR} = 1.0 \times 10^{-6}, 2.0 \times 10^{-6}, 3.0 \times 10^{-6}, 4.0 \times 10^{-6}, 5.0 \times 10^{-6} \text{ mol L}^{-1}$ , pH 10.0.

**Table 1S** Effects of reaction time. ( $C_{EV} = 1.6 \times 10^{-5} \text{ mol L}^{-1}$ ,  $C_{AR} = 5.0 \times 10^{-6} \text{ mol L}^{-1}$ , pH 10.0. )

Time (min)	$\Delta I_{RRS}$	Time (min)	$\Delta I_{RRS}$
5	928.7	30	777.1
10	852.0	40	775.8
15	815.6	50	773.5
20	780.3	60	750.9
25	782.7	70	721.4

**Table 2S** Effects of temperature. ( $C_{EV} = 1.6 \times 10^{-5} \text{ mol L}^{-1}$ ,  $C_{AR} = 5.0 \times 10^{-6} \text{ mol L}^{-1}$ , pH 10.0. )

Temperature (°C)	$\Delta I_{RRS}$
10	781.2
20	783.4
30	774.1
40	780.9
50	776.7