Supplementary Information

1. Calibration Curve of Methyl Blue Solution

Table S1. Absorbance of methyl blue solution with different concentrations.
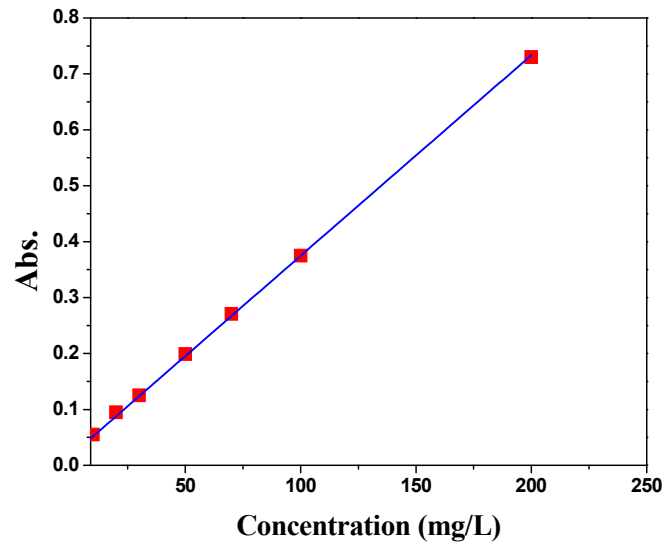
C (mg/L)	0	10	20	30	50	70	100	200
Abs.	0	0.055	0.095	0.125	0.199	0.271	0.375	0.73

The standard curve between concentration and absorbance can be expressed as Equation (1),

$$A = 0.036C + 0.016 \tag{1}$$

where A is absorbance of the methyl blue solution, C is the concentration of the methyl blue solution. The R^2 for the linear relation is 0.9991.

Figure S1. Calibration curve of methyl blue solution.
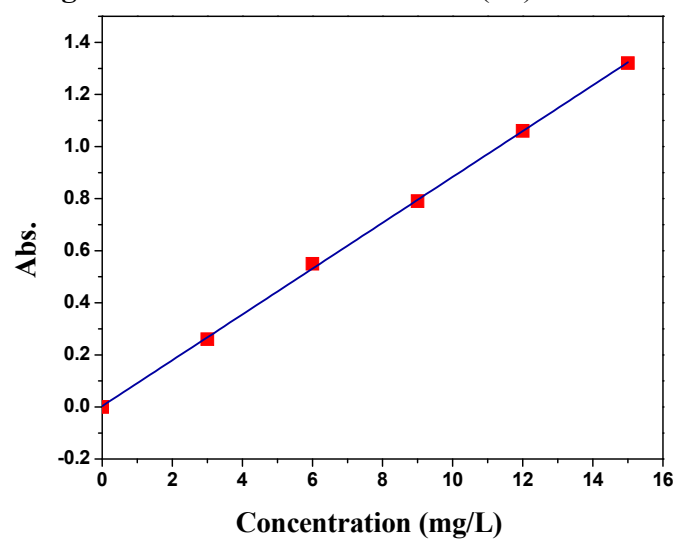

2. Calibration Curve of Cr(VI) Solution

Table S2. Absorbance of Cr(VI) solution with different concentrations.

C (mg/L)	0	3	6	9	12	15
Abs.	0	0.26	0.55	0.79	1.06	1.32

The standard curve between concentration and absorbance can be expressed as Equation (2),

$$A = 0.088C + 0.003 \tag{2}$$

where A is absorbance of the Cr(VI) solution, C is the concentration of the Cr(VI) solution. The R^2 for the linear relation is 0.9995.

Figure S2. Calibration curve of Cr(VI) solution.