Supplementary materials for

Poly(vinyl alcohol) electrospun nanofibrous membrane modified with spirolactam-rhodamineine derivatives for visible detection and removal of metal ions

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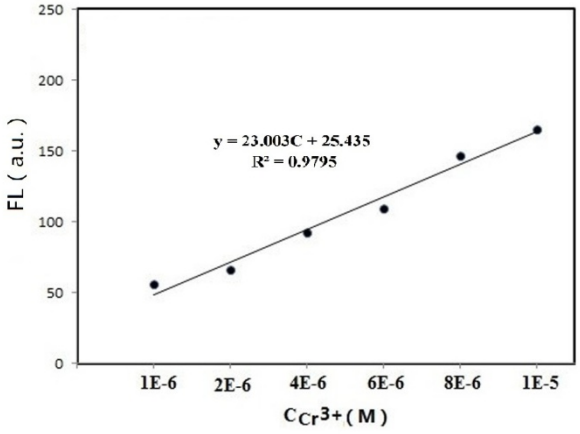
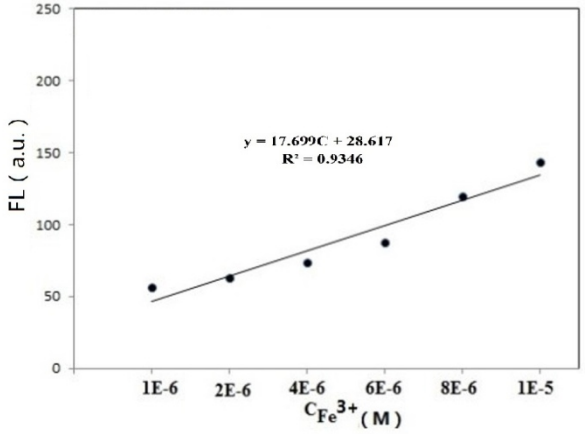

y = 23.003C + 25.435
R² = 0.9795
FL (a.u.)
250
200
150
100
50
0
1E-6
2E-6
4E-6
6E-6
8E-6
1E-5
C Cr3+ (M)


y = 17.699C + 28.617
R² = 0.9346
FL (a.u.)
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200
150
100
50
0
1E-6
2E-6
4E-6
6E-6
8E-6
1E-5
C Fe3+ (M)

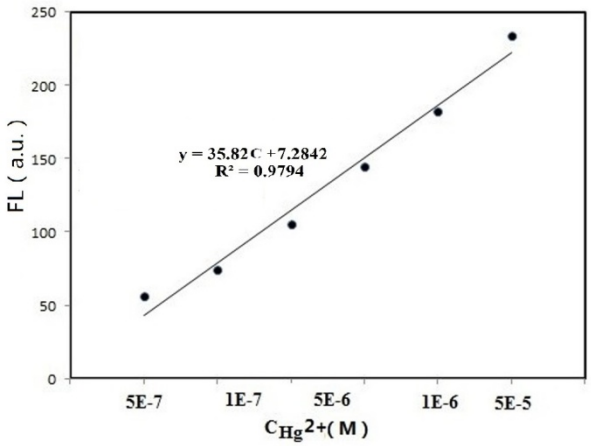

Fig. S1. Linear calibration plot for Cr^{3+}, Fe^{3+} and Hg^{2+} in low concentration of fluorescence spectra.

The limit of detection (LOD) for Cr^{3+}, Fe^{3+}, Hg^{2+} was calculate by the equation LOD = $3S_0/S$, where 3 was the factor at the 97% , 93%, 97% confidence level respectively, S_0 was the (n = 10), and S was the slope of the calibration curve. The detection limit was determined approximately 1.0×10^{-6} M, 1.0×10^{-6} M and 5×10^{-7}M for Cr^{3+}, Fe^{3+} and Hg^{2+} of fluorescence spectra, respectively.