

Supplemental materials:

Figure S1. ^{13}C NMR spectrum of condensed tannins extracted from plum pericarp.

Figure S2. The quenching effects of Zn^{2+} , Cu^{2+} , Al^{3+} , and Fe^{3+} on the PCT fluorescence intensity at a pH of 6.0, achieved with an acetate buffer, at 294.82 K; $\lambda_{\text{ex}} = 280 \text{ nm}$.

Figure S3. The quenching effects of Al^{3+} and Fe^{3+} on the PCT fluorescence intensity at a pH of 2.1 or 7.4 at 294.82 K; $\lambda_{\text{ex}} = 280 \text{ nm}$.

Figure S4. The quenching efficiencies of different concentrations of Al^{3+} and Fe^{3+} on PCT. The quenching efficiency was obtained by plotting $[(F_0 - F) \times 100/F_0]$ versus the metal ion concentration.

Figure S5. Modified Stern–Volmer plots for quenching of the PCT fluorescence by (a) Cu^{2+} and (b) Fe^{2+} at a pH of 6.0. (c) Stern–Volmer plot for PCT fluorescence quenching by Al^{3+} or Fe^{3+} at a pH of 2.1 or 7.4. (d) Comparison of Stern–Volmer constants (K_a) of the PCT fluorescence quenching by Al^{3+} or Fe^{3+} at a pH of 2.1, 6.0, or 7.4.

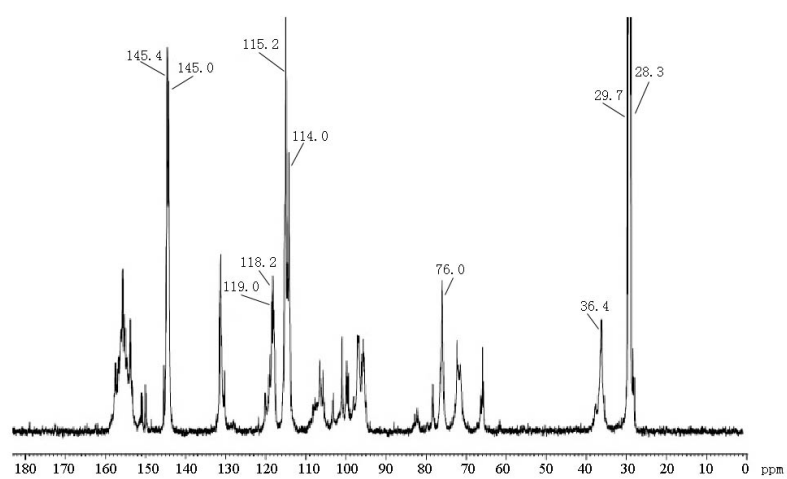


Figure S1

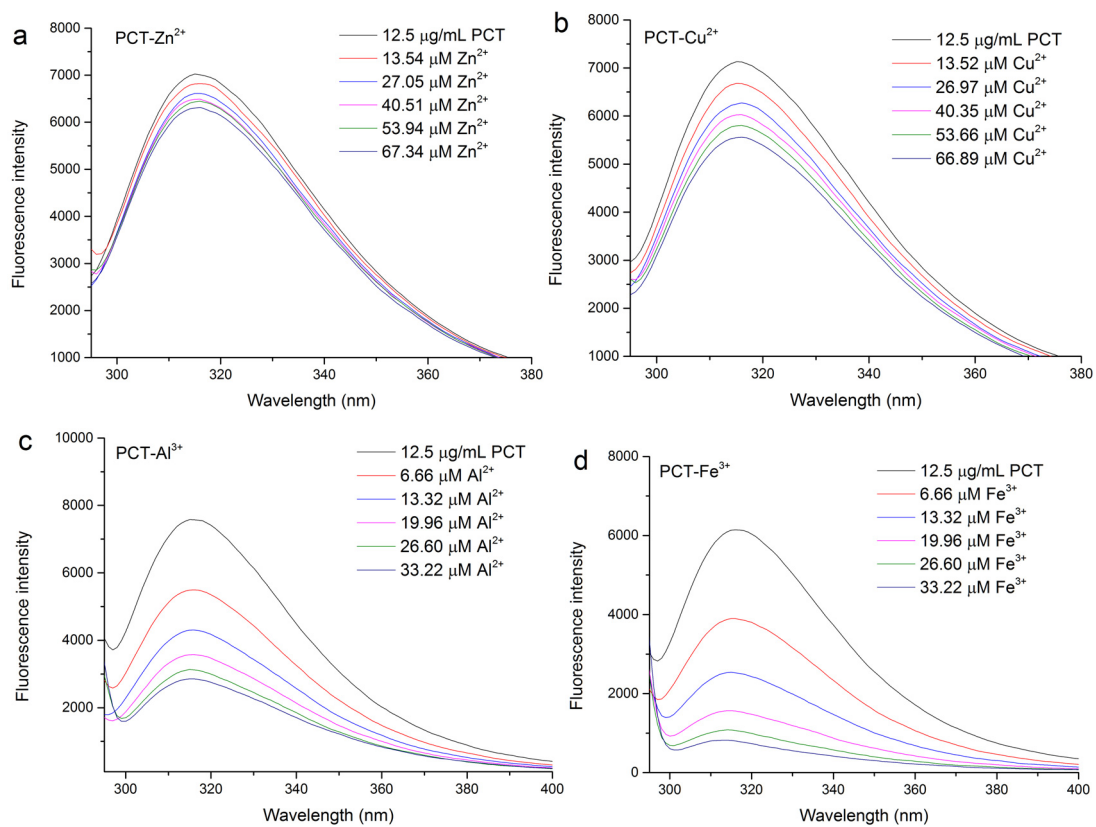


Figure S2

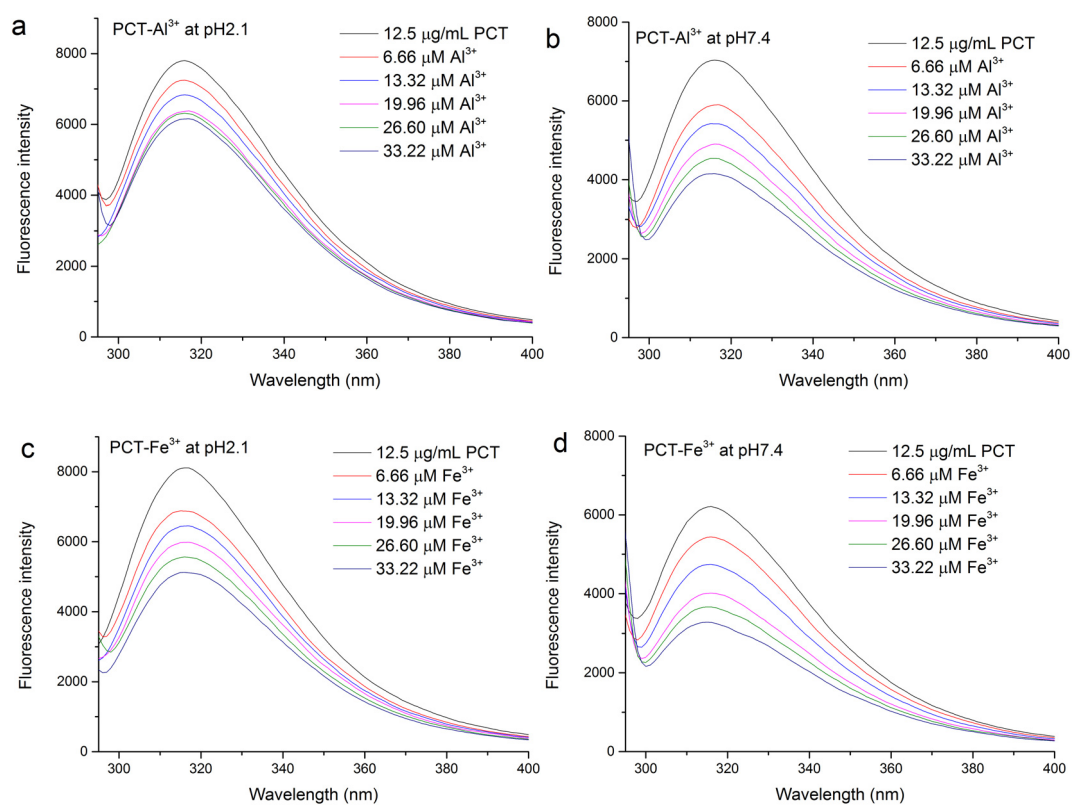


Figure S3

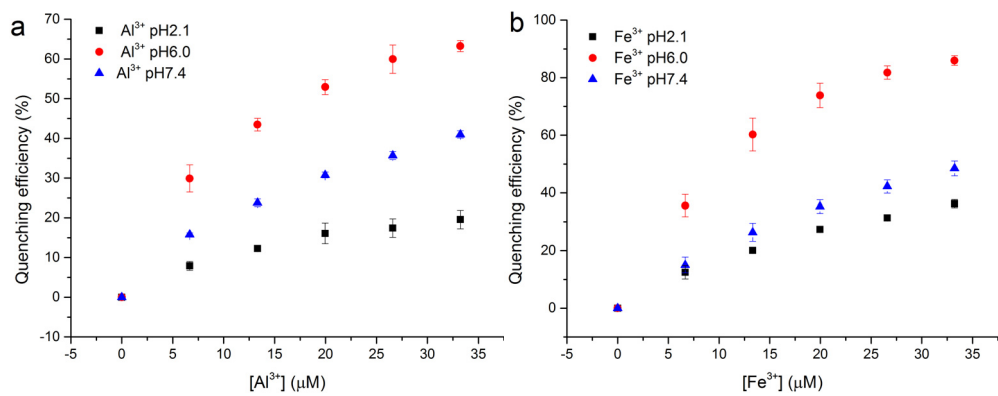


Figure S4

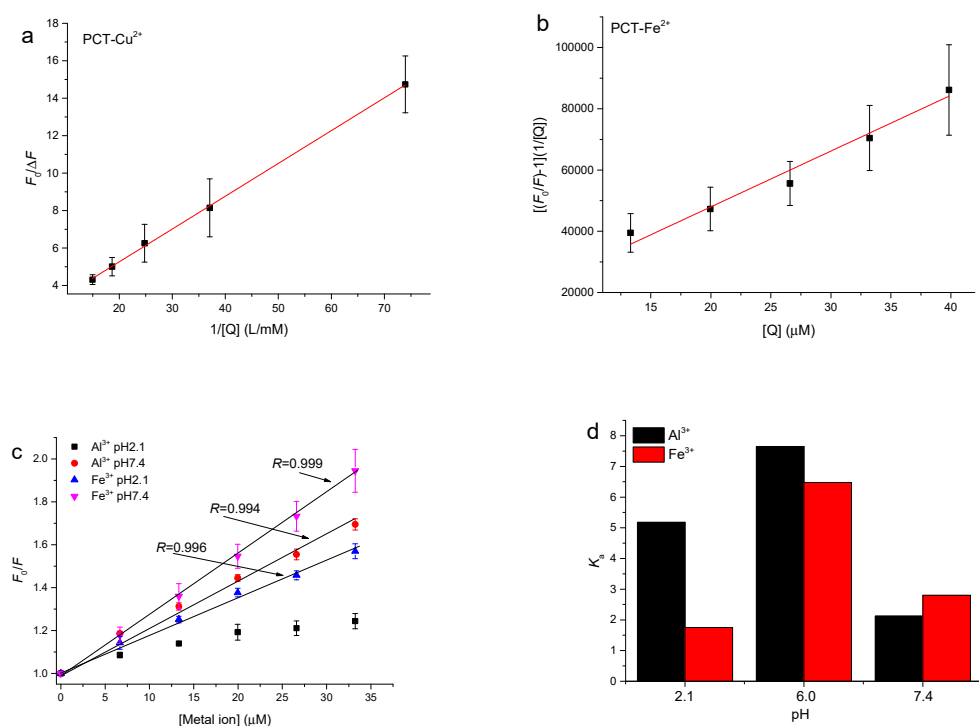


Figure S5