A Stable Anti-Fouling Coating on PVDF Membrane Constructed of Polyphenol Tannic Acid, Polyethyleneimine and Metal Ion

Figure S1. FESEM images of the pristine and TA/PEI modified PVDF MF membrane.

Figure S2. The influence of modification time of Zr⁴⁺ on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S3. The influence of modification time of Zr⁺ on WF of the TA/PEI/M modified PVDF MF membranes.

Figure S4. The influence of modification time of Fe³⁺ on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S5. The influence of modification time of Fe$^{3+}$ on WF of the TA/PEI/M modified PVDF MF membranes.

Figure S6. The influence of modification time of Al$^{3+}$ on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S7. The influence of modification time of Al\(^{3+}\) on WF of the TA/PEI/M modified PVDF MF membranes.

Figure S8. The influence of modification time of Cu\(^{2+}\) on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S9. The influence of modification time of Cu$^{2+}$ on WF of the TA/PEI/M modified PVDF MF membranes.

Figure S10. The influence of modification time of Zn$^{2+}$ on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S11. The influence of modification time of Zn$^{2+}$ on WF of the TA/PEI/M modified PVDF MF membranes.

Figure S12. The influence of modification time of Mn$^{2+}$ on WCA and OCA of the TA/PEI/M modified PVDF MF membranes.
Figure S13. The influence of modification time of Mn$^{2+}$ on WF of the TA/PEI/M modified PVDF MF membranes.