

Figure S1 The installation diagram of MBR system

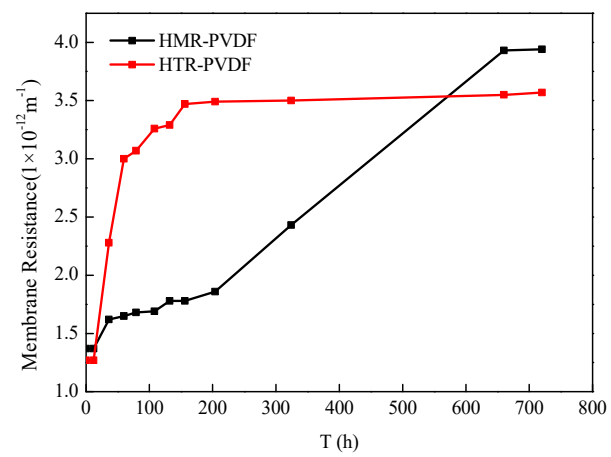


Figure S2. The change of membrane resistance during adsorption process

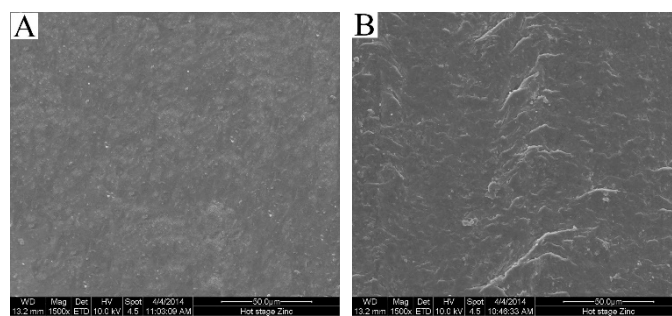


Figure S3. Outer surface SEM morphology of the HTR-PVDF membrane (A) initial, (B) adsorption

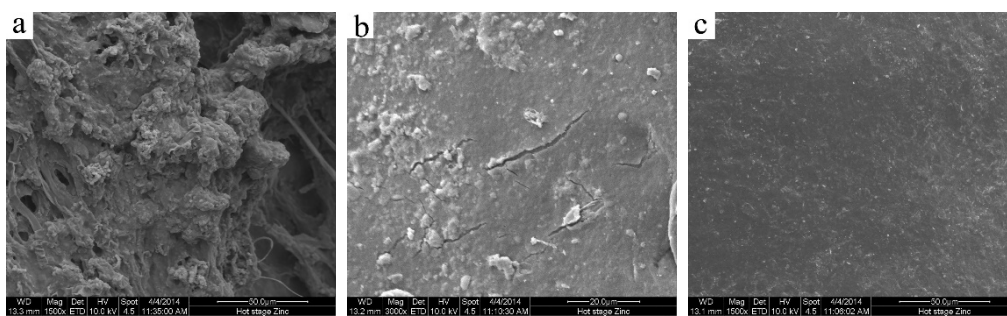


Figure S4. Outer surface SEM morphology of the HMR-PVDF membrane(a) initial, (b) cleaned with NaClO (20min) + citric acid (20min), (c) cleaned with citric acid (20min) + NaClO (20min)

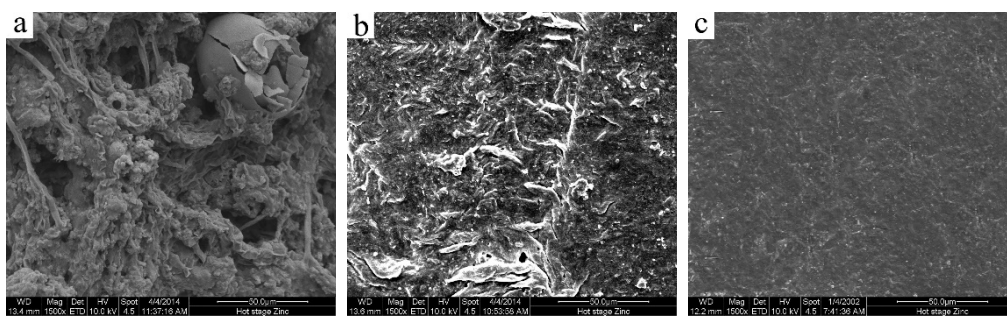


Figure S5. Outer surface SEM morphology of the HTR-PVDF membrane(a) initial, (b) cleaned with NaClO (60min) + critric acid (60min), (c) cleaned with critric acid (60min) + NaClO (60min)

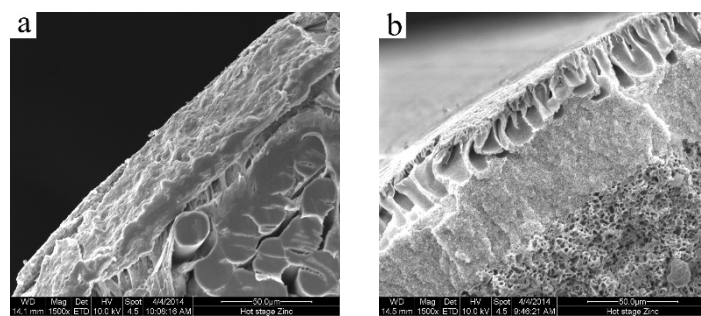


Figure S6. Cross-sectional SEM morphology of hollow fiber membranes (a) HTR-PVDF (b)HMR-PVDF