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# Supporting Information

**Thin Film Nanocomposite Nanofiltration Membranes from Amine Functionalized-Boron Nitride/Polypiperazine Amide with Enhanced Flux and Fouling Resistance**

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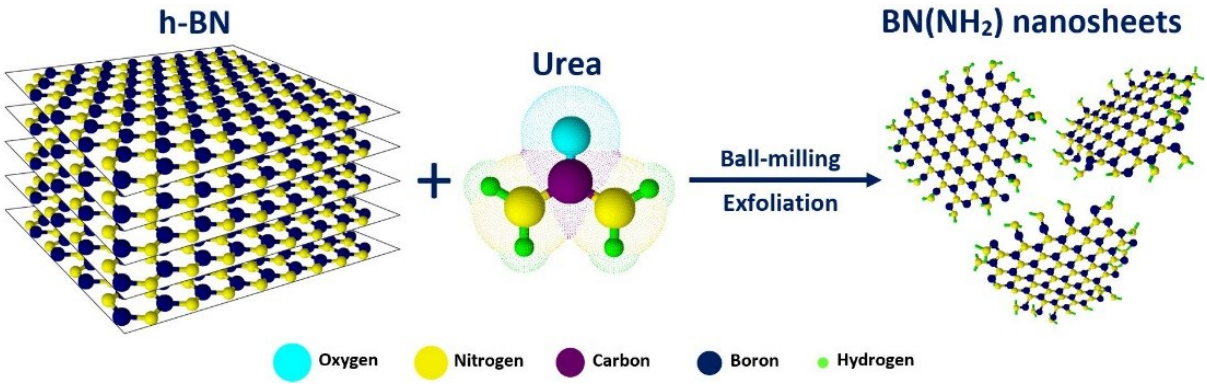


Figure S1. Schematic illustration of the exfoliation and amine functionalization of BN nanosheets.

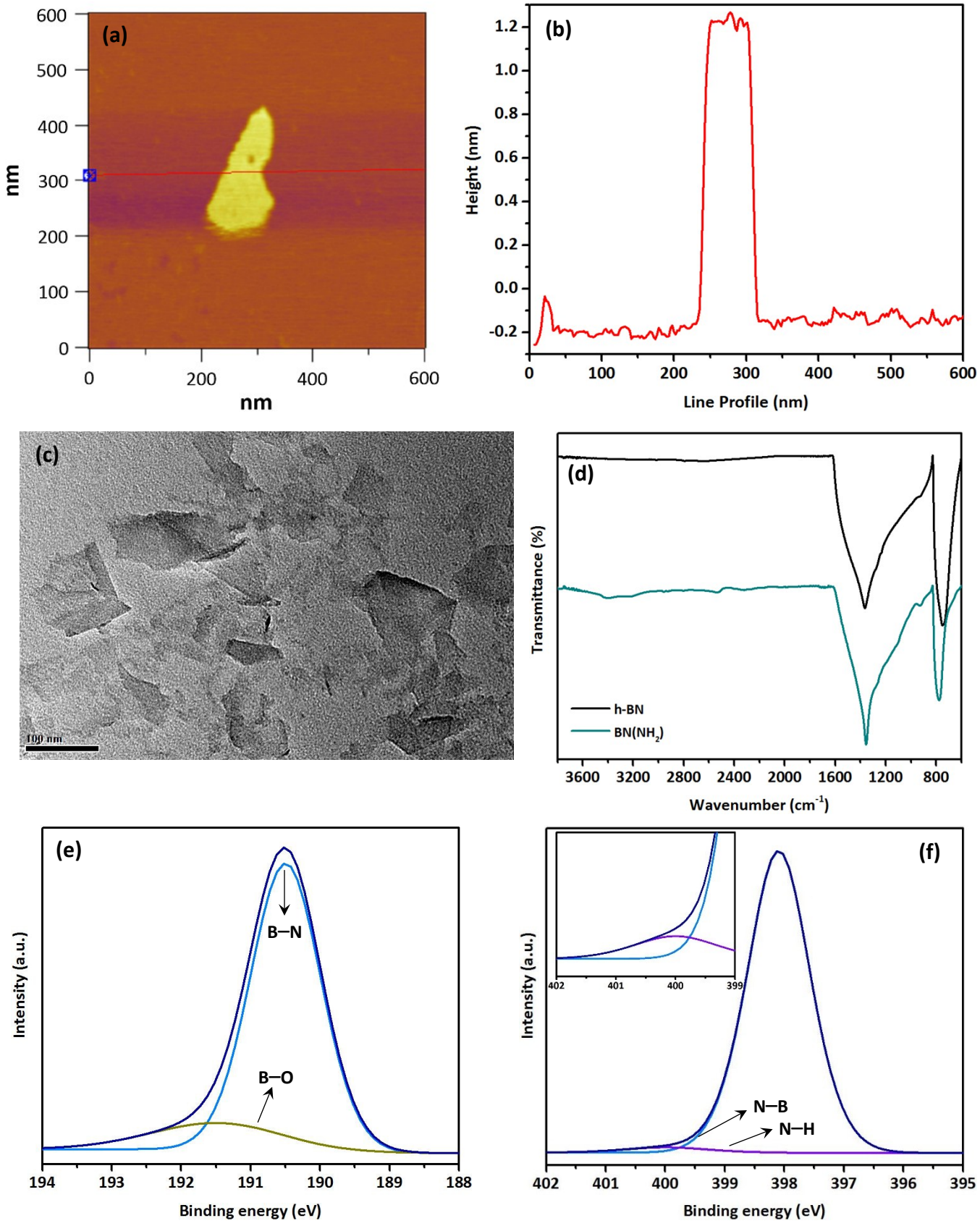


Figure S2. Characterization results of the as-prepared $BN(NH_2)$ nanosheets: (a) AFM image, (b) the corresponding height profile of $BN(NH_2)$ nanosheet along the red scan line, (c) TEM image, (d) FTIR spectra, and XPS high resolution (e) B1s, and (f) N1s scans.

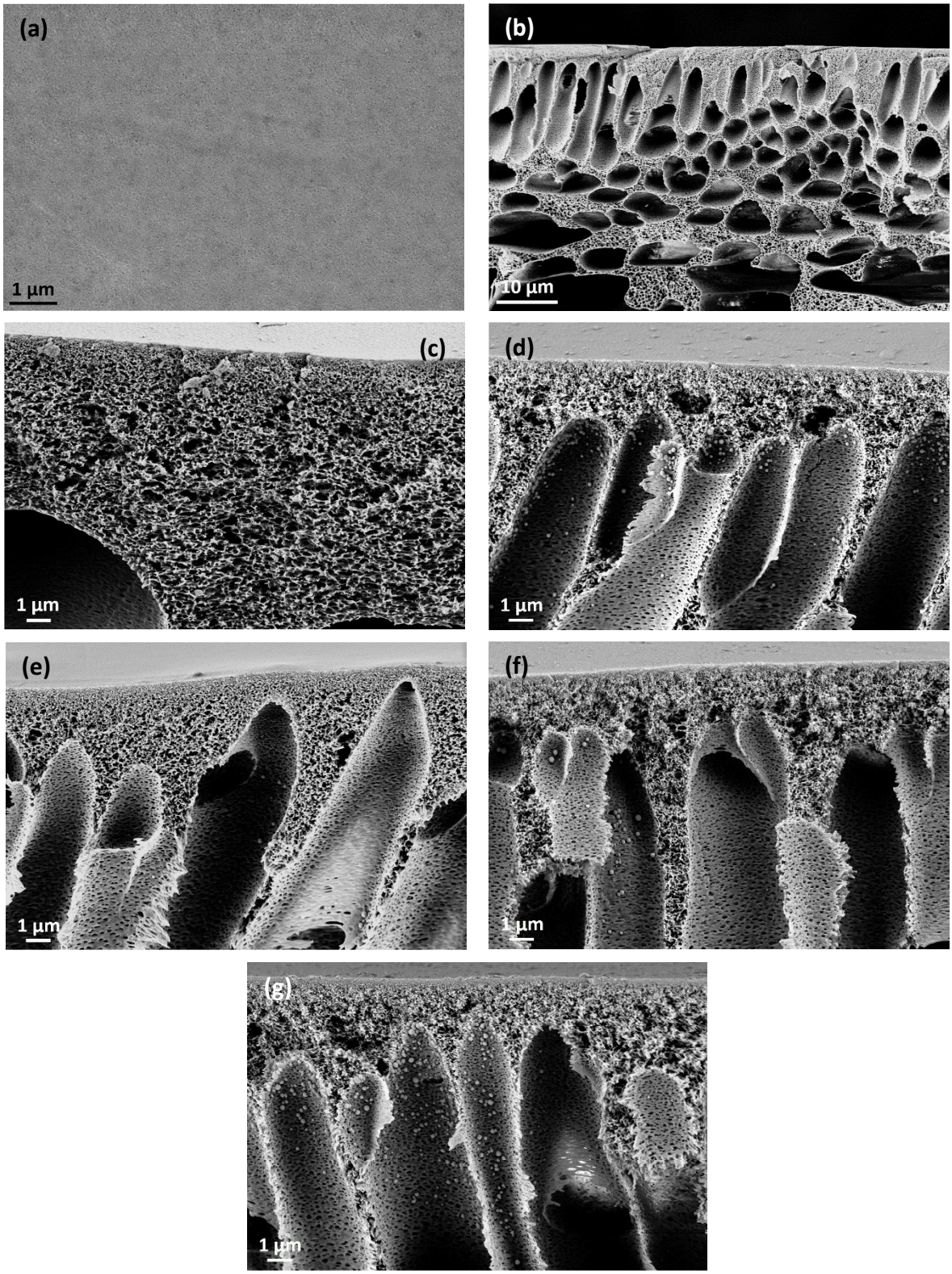


Figure S3. SEM images of the PES membrane (a) surface and (b) cross-section, and cross sections of (c) C-PPA, (d) PPA, (e) PPA-BN-2, (f) PPA-BN-4, and (g) PPA-BN-8 membranes all in low magnification.

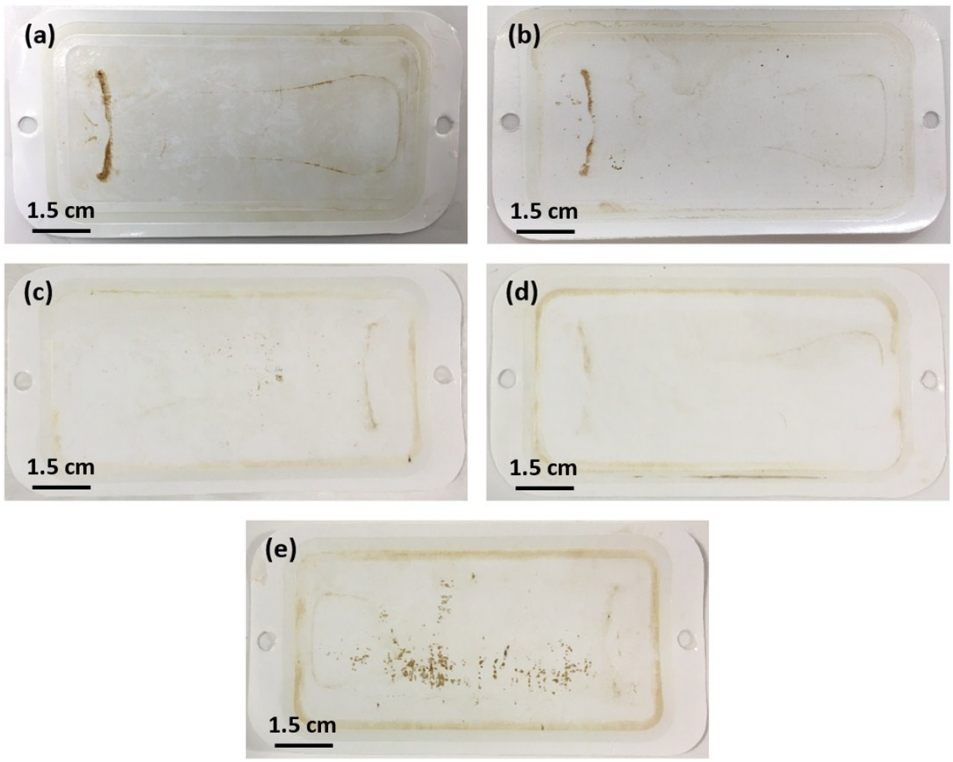


Figure S4. Visual examination of membranes fouled after the 6-h filtration of the HA solution: (a) C-PPA, (b) PPA, (c) PPA-BN-2, (d) PPA-BN-4, and (e) PPA-BN-8.