## Supporting information

## Antiorganic Fouling and Low-Protein Adhesion on Reverse-Osmosis Membranes Made of Carbon Nanotubes and Polyamide Nanocomposite

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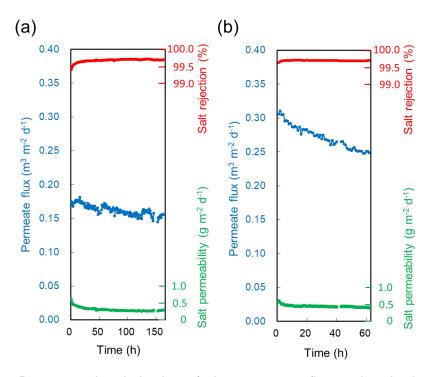
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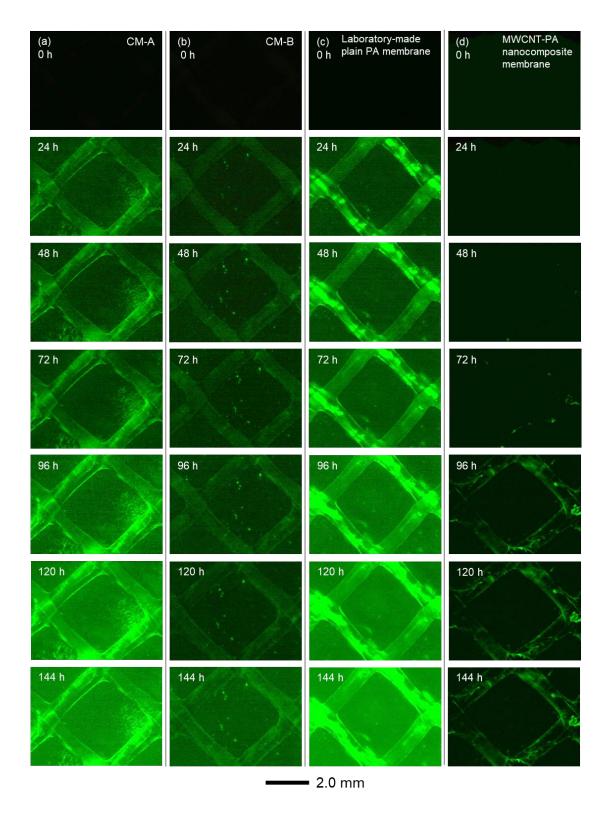
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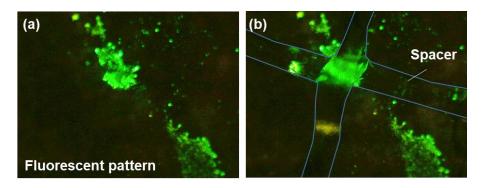
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- **Figure S-6.** (a) MD snapshot of GPA after relaxation. Orange atoms depict the graphene layers and blue atoms represent the PA matrix. (b) Charge transfer mapping from PA to graphene sheet. (c) MD snapshot of the triple-wall carbon nanotube and PA after relaxation. Orange concentric layers are carbon nanotubes walls and blue atoms represent the PA matrix. (d) The charge transfer mapping from PA to carbon nanotube.
- **Figure S-7.** The calculated model of the surface of (**a**) the GPA and (**b**) plain PA and their corresponding interfacial water layer. The blue spheres correspond to the amide bonds of PA molecules. The surface of the GPA is well-covered by hydrogen-bonded water molecules compared with the plain PA suggesting the interfacial water layer of the GPA can prevent the interaction of amide bonds and the proteins in the water source.



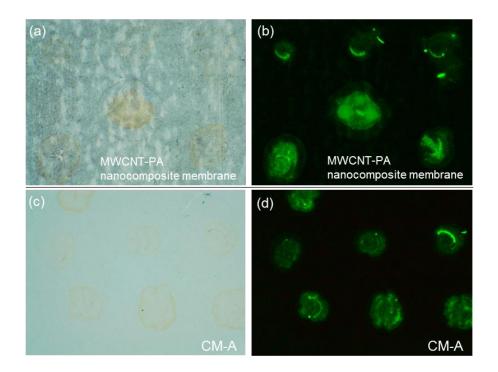
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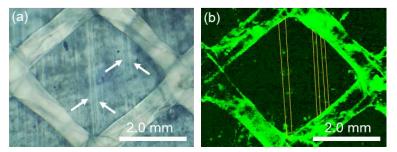
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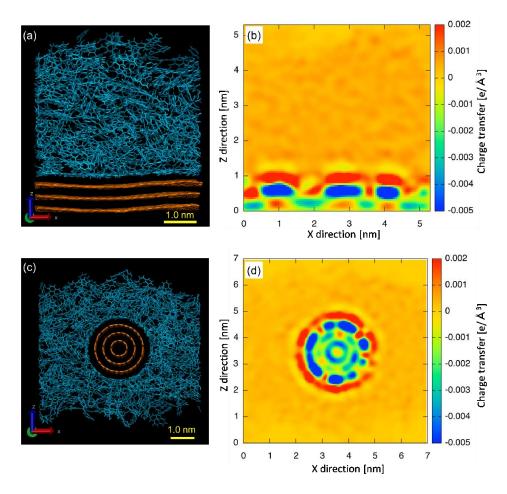
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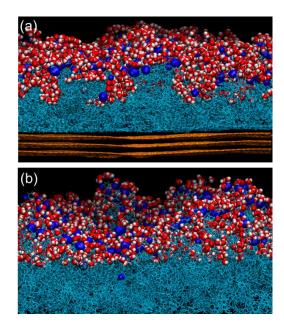
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