Supplementary Material for

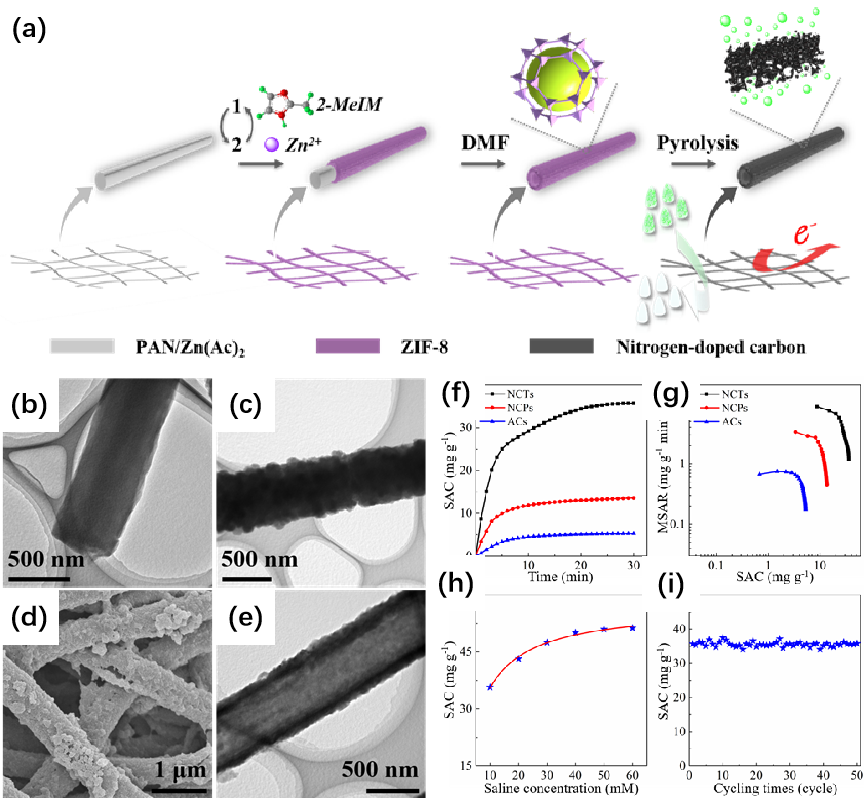
Modification of Metal-organic Frameworks derived Carbon for EnhancedDesalination Performance: A Mini Review

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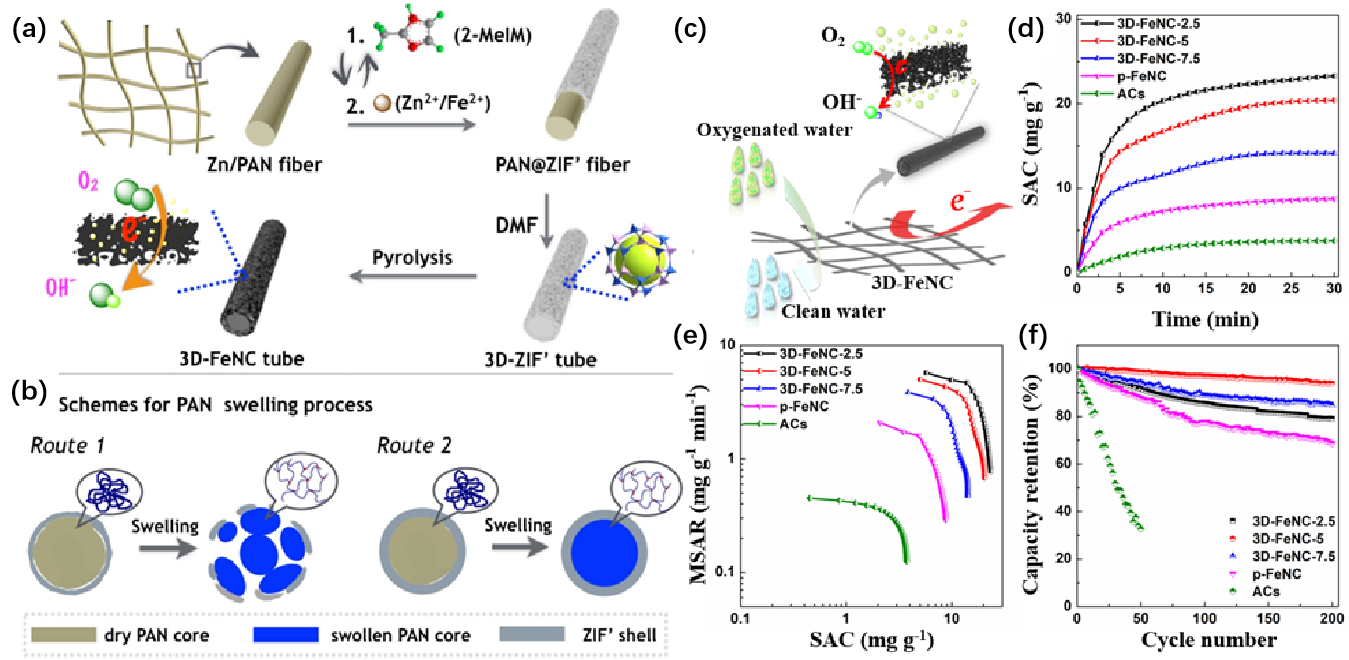
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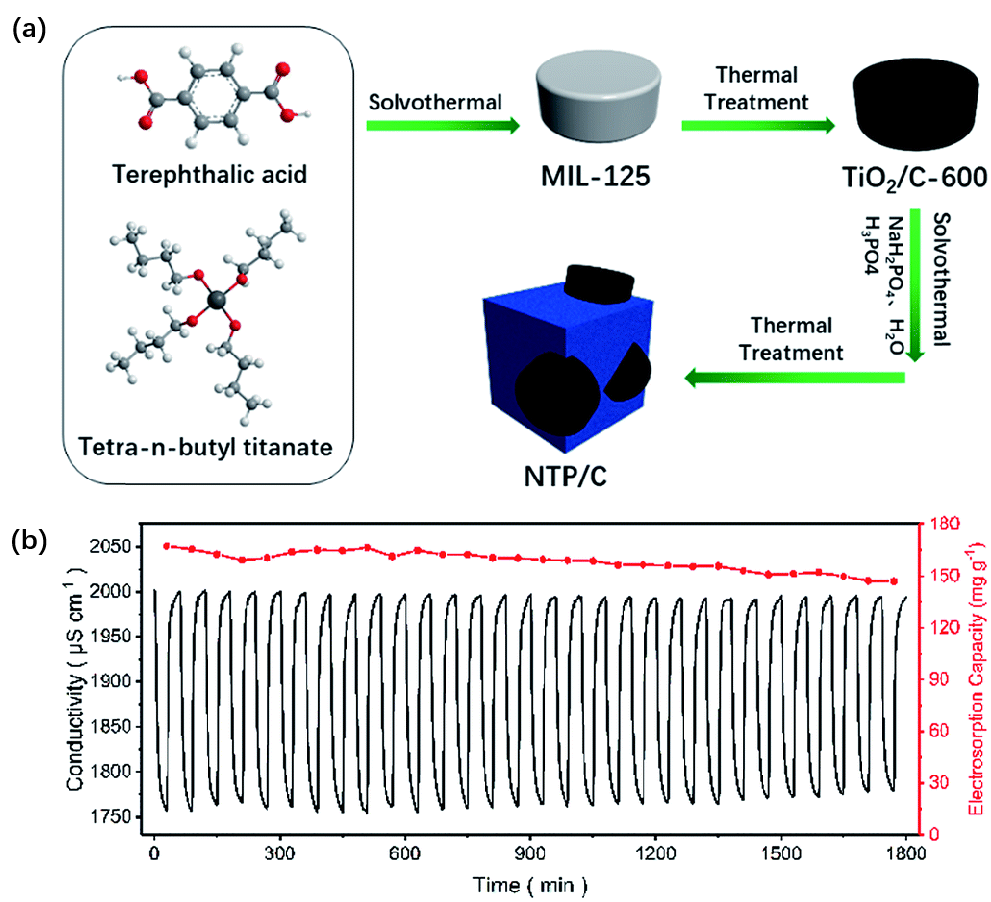
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**Figure S1.** (a) Schematic diagram for the synthetic procedure of MOF-derived NCTs; (b), (c) TEM images of (b) PAN/Zn(Ac)2 composite fiber and (c) PAN@ZIF-8 fibers; (d) FESEM and (e) TEM images of ZIF-8 tubes; (f) SAC variations and (g) CDI Ragone plots of NCTs, NCPs and ACs; (h) SAC value vs. saline concentration and (i) cycling desalination performance of NCTs. (Reproduced with permission from (Xu et al., 2020b))



**Figure S2.** (a) Schematic illustrations showing the syntheses of 3D-ZIF’ and 3D-FeNC; (b) Schematic illustrations showing the syntheses of 3D-ZIF’ and 3D-FeNC. (c) Cross-sectional illustration depicting the dissolution of Zn/PAN core in hot DMF solvent; (d) Schematic representation of CDI process in oxygenated saline water using 3D-FeNC tubes; (e) SAC variations; (f) CDI Ragone plots, and (f) CDI cycling performances of 3D-FeNC-y (y=2.5, 5 and 7.5), pFeNC, and ACs in oxygenated saline water (5 mM). (Reproduced with permission from (Xu et al., 2020a))



**Figure S3.** (a) Schematic illustration of the synthesis process of NTP/C composite; (b) Long-term cycling desalination experiment of HCDI. (Reproduced with permission from (Wang et al., 2019))

**References**

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Xu, X., Tang, J., Kaneti, Y.V., Tan, H., Chen, T., Pan, L., et al. (2020a). Unprecedented capacitive deionization performance of interconnected iron–nitrogen-doped carbon tubes in oxygenated saline water. *Materials Horizons*.

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