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Improved Thermo-Mechanical Properties and Reduced Hydrogen Permeation of Short Side-Chain Perfluorosulfonic Acid Membranes Doped with $Ti_3C_2T_x$

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Figure S1. Deconvoluted high-resolution XPS spectra of (**a**) O 1s and (**b**) F 1s of $Ti_3C_2T_x$.