Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting information

Thin film nanocomposite (TFN) hollow fiber membranes incorporated with functionalized acid-activated bentonite (ABn-NH) clay: Towards enhancement of water vapor permeance and selectivity

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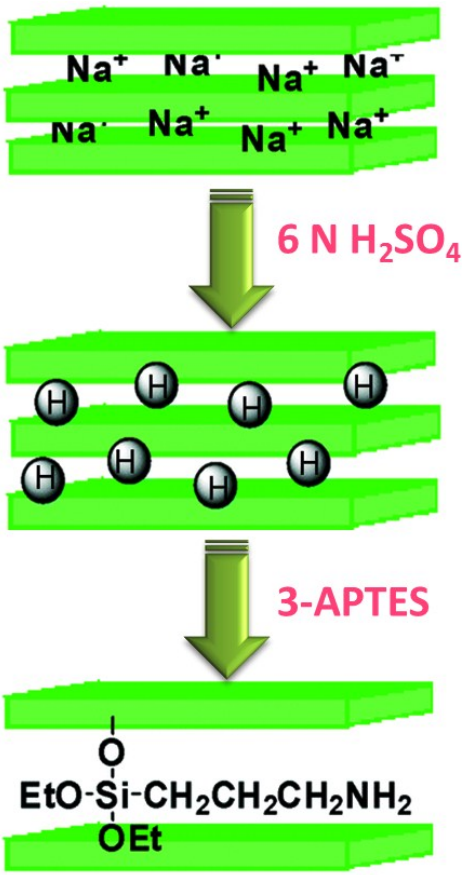

Fig. S1 3-aminopropyltriethoxysilane (3-APTES) functionalization of acid activated bentonite

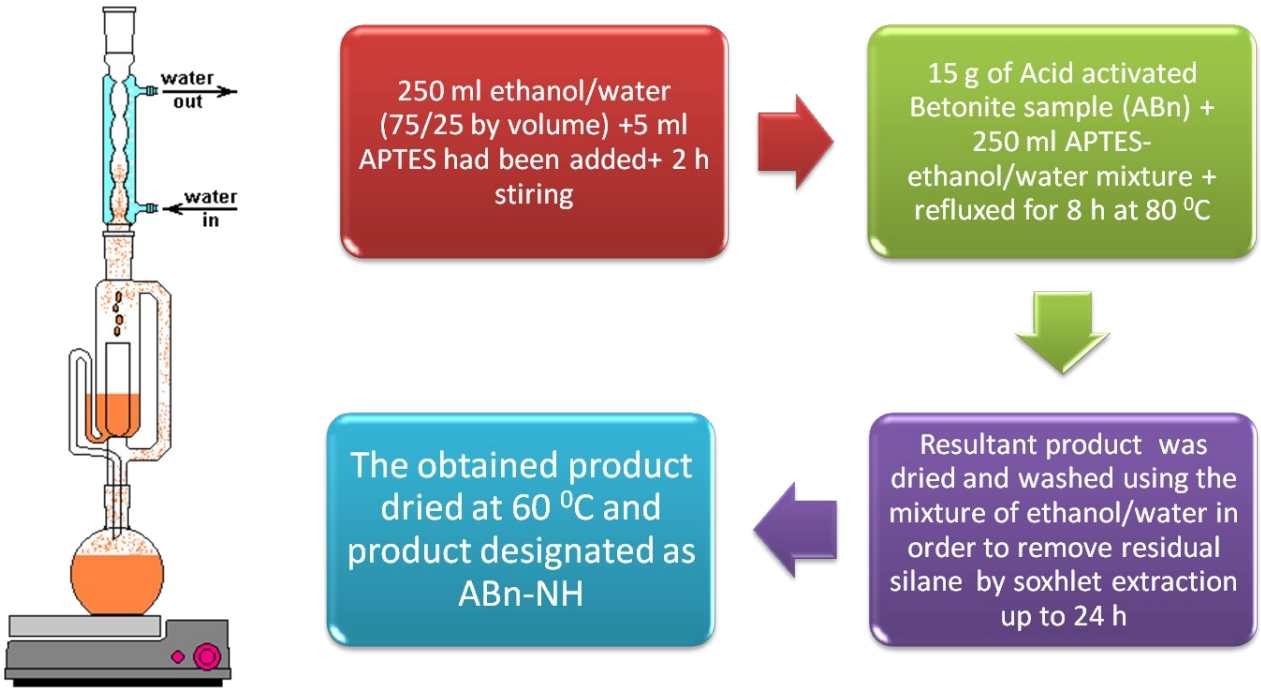

Fig. S2: Schematic representation of synthesis procedure of functionalization of acid activated bentonite.

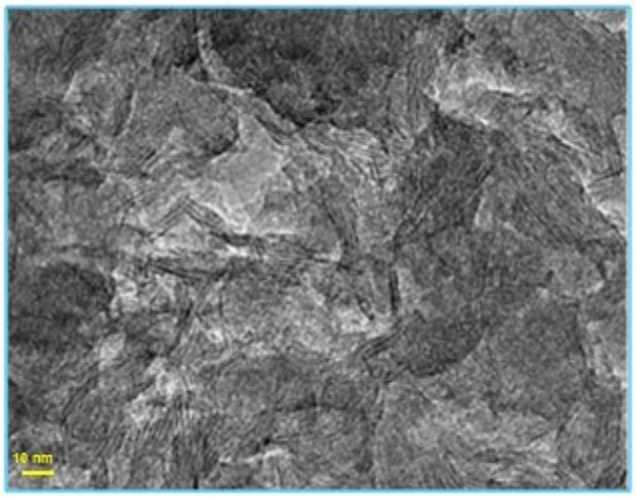

Fig. S3: TEM image of synthetic amino functionalized acid-activated bentonite.

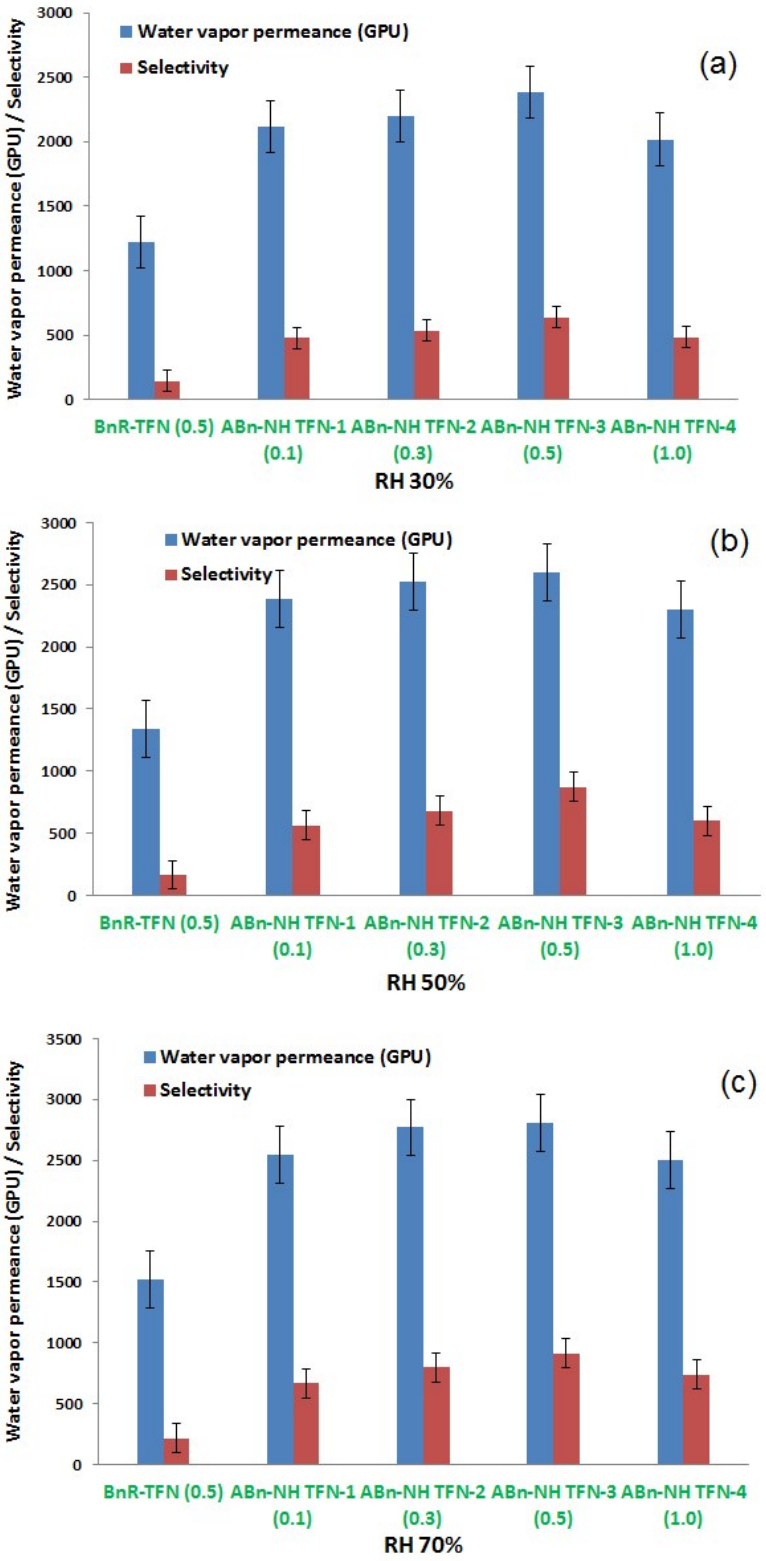

Fig. S4: Effect of relative humidity on the water vapor/N_2 mixture gas separation performance of the TFN membranes (a) relative humidity 30%, (b) relative humidity 50%, and (c) relative humidity 70%.