

Supplementary Materials: Polyetherimide-Montmorillonite Nano-Hybrid Composite Membranes: CO₂ Permeance Study via Theoretical Models

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Table S1. Gas permeance of PEI-f-MMT hollow fibre nano-hybrid composite membranes.

Sr. No	HFM	Pressure bar	Flow Rate		Permeance		Selectivity
			CO ₂	CH ₄	CO ₂	CH ₄	
1	PEI	2	10.9	0.9	146.6	12.2	12.07
2		4	20.9	1.7	141.1	11.7	12.06
3		6	29.8	2.6	134.1	11.5	11.69
4		8	38.8	4.0	130.9	13.5	9.70
5		10	55.3	4.8	157.2	13.6	11.52
1	PEI-f-MMT (1)	2	10.5	0.7	141.2	9.5	14.94
2		4	20.5	1.3	138.5	8.6	16.07
3		6	32.8	2.0	137.6	8.4	16.40
4		8	38.7	3.0	130.8	10.1	13.01
5		10	55.0	3.9	146.3	10.2	14.29
1	PEI-f-MMT (2)	2	10.5	0.6	131.7	7.5	17.50
2		4	21.1	1.2	132.4	7.2	18.35
3		6	30.0	1.8	129.5	7.1	18.23
4		8	41.0	2.3	128.4	7.2	17.90
5		10	50.0	2.8	132.1	7.5	17.54
1	PEI-f-MMT (3)	2	10.2	0.6	127.7	7.8	16.45
2		4	20.2	1.2	126.3	7.6	16.57
3		6	27.8	1.7	125.0	7.7	16.13
4		8	37.7	2.4	127.3	8.0	15.83
5		10	49.5	3.2	130.7	8.3	15.67
1	PEI-f-MMT (4)	2	12.0	1.0	151.3	12.7	11.95
2		4	22.0	1.8	148.6	12.0	12.37
3		6	35.0	2.7	147.5	11.4	12.96
4		8	45.5	3.8	143.6	12.0	11.98
5		10	55.8	4.7	148.6	12.5	11.87