

Supporting Information for

Synthesis of MIL-88B(Fe)/Matrimid mixed-matrix membranes with high hydrogen permselectivity

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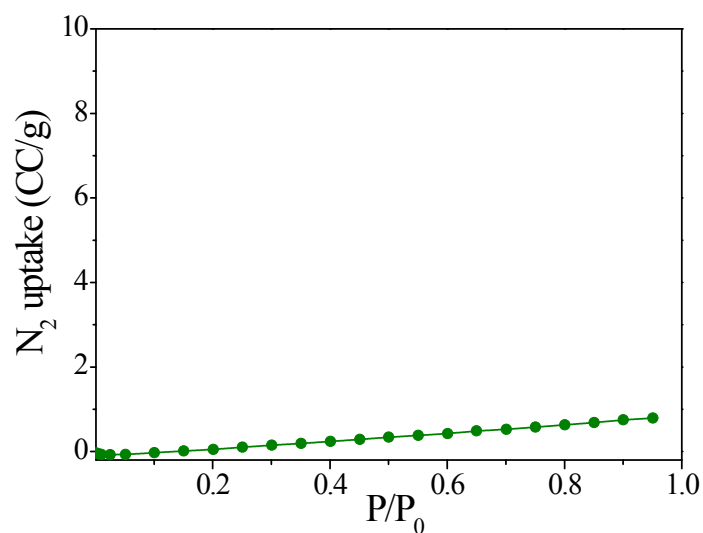


Fig. S1 N₂ adsorption isotherm in MIL-88B(Fe) at 298 K.

Table S1. Comparison of the H₂ permeability and H₂/CH₄ separation factor of different MMMs in this work and literature.

MMMs	Loading (%)	Testing condition	H ₂ permeability	H ₂ /CH ₄ separation factor	Ref.
ZIF-71/6FDA-Durene ^a	10	308 K, 3.5 bar	1563	14	1
Silicalite-1/Matrimid	8	308 K, 2.8 bar	38	180	2
MWCNT/PBMPI	10	299 K, 2.0 bar	12	8	3
Cu-BPY-HFS/Matrimid ^a	10	308 K, 2.0 bar	17	69	4
MOF-5/Matrimid ^a	10	308 K, 2.6 bar	30	137	5
ZIF-8/PSF	16	308 K, 2.8 bar	40	120	6
ZIF-8/Matrimid ^a	10	294 K, 4.0 bar	53	118	7
MCM-41/PSF	8	308 K, 3.2 bar	25	30	8

JDF-L1/Copolyimide	10	308 K, 3.5 bar	150	35	9
MIL-88B(Fe)/Matrimid	10	298 K, 3.0 bar	440	96	This work

^a Permeability data were taken from the single gas measurements.

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