

## Electronic Supporting Information

# New strategies based on microfluidics for the synthesis of metal organic frameworks and their membranes

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**Table S1. MOF based hollow fiber membranes synthesis parameters by microfluidics for each case.**

MOF	Hollow Fiber Material	Method of Synthesis	ID (μm)	Feeding Flow (μL/min)	Residence Time (s)	Thickness (μm)	Ref	
ZIF-8	Torlon	IMMP	250	1/6	1800	8.8 ± 1.4	101	
ZIF-8	Torlon* <sup>1</sup>	IMMP* <sup>1</sup>	200	1	90	5 ± 1	37	
ZIF-8	Torlon* <sup>1</sup>	IMMP* <sup>2</sup>	200	10	20	8.1 ± 1.6	102	
ZIF-8	Torlon* <sup>3</sup>	IMMP* <sup>3</sup>	300	130	200	8.5 ± 0.5	103	
ZIF-8	PBI-Bul	Interfacial synthesis	460	-	-	10 – 25	104	
ZIF-8	PSf	LPE	315	100	9.4	3.6 ± 0.9	24	
ZIF-7	PSf	LPE	315	100	9.4	2.4 ± 0.4	24	
ZIF-8	P84	LPE	202	100	3,8	3.6 ± 0.9	23	
ZIF-67	P84	LPE	202	100	3,8	1.2 ± 0.1	26	
ZIF-93	P84	LPE	202	100	3.8	2.6 ± 0.4	22	
ZIF-9	P84	LPE	202	100	3.8	2.4	26	
ZIF-8/ZIF-9	ZIF-8	P84	LPE	202	50	4.7	2.0 ± 0.4	26
	ZIF-9	P84	LPE	202	50	4.7		
ZIF-67/ZIF-9	ZIF-67	P84	LPE	202	50	4.7	1.2 ± 0.1	26
	ZIF-9	P84	LPE	202	50	4.7		
SIM-1	P84	LPE	202	-	-	-	25	
ZIF-9 (III)	Ni	LPE	480	40	0.6	-	25	
CuBTC	PBI-Bul	Interfacial Synthesis	460	-	-	10 – 25	104	
HKUST-1	PVDF	-	600	-	-	6.5	105	
ZIF-90	Carbon	IMMP	280	10	2200	3.1 ± 0.5	112	