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Supporting Information

Activation of Metal–Organic Framework Materials

Joseph E. Mondloch, Olga Karagiaridi, Omar K. Farha* and Joseph T. Hupp*

Department of Chemistry, Northwestern University, 2145 Sheridan Road, Evanston, IL, USA

* o-farha@northwestern.edu; j-hupp@northwestern.edu

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Table S1. To the best of our knowledge these publications have utilized or attempted to utilize supercritical CO_2 ($scCO_2$) to activate their MOF materials. The entries are entered in chronological order based on date submitted. Data are reported as they appear in the original manuscript only. References are self-contained within this Supporting Information document and hence are numbered differently than in the main text.

Entry	*MOF*	*Institute*	*$scCO_2$ BET SA ($m^2\ g^{-1\ NR}$)*	*Other BET SA ($m^2\ g^{-1\ NR}$)*	*$scCO_2$ Pore Volume ($cm^3\ g^{-1\ NR}$)*	*Reference (Year)*
1	IRMOF-3	Northwestern University	2850	C 10, SE 1800	NR	1 (2009)
2	IRMOF-16		1910	C na, SE 470	NR	
3	Zn_4O(napthalenediimide)$_3$		400	C 5, SE 135	NR	
4	Zn_4O(pereylenediimide)$_3$		430	C 5, SE 36	NR	
5	Fe-btc MOF aerogel	Dresden University of Technology	1618	NR	5.62	2 (2009)
6	IRMOF-16	Northwestern University	1912	SE 472	0.82	3 (2009)
7	PCN-12-Si	University of Hamburg	NR	C 2430	0.93	4 (2009)
8	DUT-9	Dresden University of Technology	NR	NR	1.77	5 (2010)
9	IRMOF-77	University of California, Los Angeles	1590	NR	0.57	6 (2010)
10	HKUST-1	Beijing University of Chemical Technology	1587	SE 1138	0.73	7 (2010)
11	PCN-21	Texas A&M University	NR	RT 2718	1.54	8 (2010)
12	(SS)-MOF-1020	Northwestern	NR	NR	NR	9

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13	(RR)-MOF-1020	University				(2010)
14 15	MOF-200 MOF-210	University of California, Los Angeles	4530 6240	NR NR	3.59 3.60	[10] (2010)
16	MFU-5	Ulm University	NR	[C]78	NR	[11] (2010)
17	NU-100	Northwestern University	6143	NR	2.82	[12] (2010)
18	IRMOF-Pro	Massey University	138	NR	NR	[13] (2011)
19	DUT-13	Dresden University of Technology	2532	NR	1.98	[14] (2011)
20	SNU-77	Seoul National University	3660	[HT]3670 [RT]3560	1.52	[15] (2011)
21	FJI-1	Chinese Academy of Sciences	4043	[c]NR	1.43	[16] (2011)
22 23 24 25	IRMOF-2-F IRMOF-2-Cl IRMOF-2-Br IRMOF-2-I	Sandia National Laboratories	594 1000 882 615	[SE]3133 [SE]2672 [SE]2461 [SE]1925	1.28 1.09 0.94 0.77	[17] (2011)
26	SNU-80	Seoul National University	398 (closed) 1035 (open)	[C]NR	0.18 (closed) 0.43 (open)	[18] (2011)
27	Zn-HKUST-1	University of Michigan	55	NR	NR	[19] (2011)
38	SNU-21	Seoul National University	1908	[c]934	0.68	[20] (2011)
29	MnSO-MOF	Northwestern University	NR	NR	NR	[21] (2011)
30	HCC-1	Hanwha Chemical Research & Development Center	4724	[c]NR	NR	[22] (2011)
31	$H[Mg(HCOO)_3]\bullet NHMe_2$	National Research Council (Italy)	NA	[C]448	0.09	[23] (2011)

32	MSO-MOF	Northwestern University	478	NR	NR	[24] (2011)
33	MOF-648	University of California – Los Angeles and University of Zurich	690	[SE] NR	NR	[25] (2011)
34 35 36	DUT-27 MOF-39 DUT-28	Dresden University of Technology	NR	NR	NR	[26] (2011)
37	Zn-bdc MOF nanospheres	Chinese Academy of Sciences	756	NR	0.53	[27] (2011)
38	$Co_3(BTB)_{1.5}(Im)_{1.35}O_{0.5}(OH)_{0.5}(H_2O)_{1.65}$	University of Liverpool	500	[c]360	0.34	[28] (2012)
39	FIR-3	Chinese Academy of Sciences	544.3	[HT]29.4, [FD]288.6	0.20	[29] (2012)
40 41	SNU-70 SNU-71	Seoul National University	5290 1770	NR NR	2.17 0.71	[30] (2012)
42	UMCM-9	University of Michigan	[FSC]4970	[SE]1330	1.80	[31] (2012)
43 44	Li_$Cu_3(btc)_2$ Li_MIL-101	Beijing University of Chemical Technology	795 1840	NR	0.51 1.38	[32] (2012)
45 46 47 48	SNU-90 Mg@SNU-90a Mg@SNU-90b Mg@SNU-90c	Seoul National University	4244 4154 2056 1371	NR NR NR NR	1.64 1.47 0.84 0.36	[33] (2012)
49	Bio-MOF-100	University of Pittsburgh	4300	[c] NR	4.3	[34] (2012)
50	NU-111	Northwestern University	5000	NR	2.38	[35] (2012)
51 52	NU-109 NU-110	Northwestern University	7010 7140	NR NR	3.75 4.40	[36] (2012)
53	IRMOF-8	University of Michigan	[FSC] 4461	[SE] 773	NR	[37] (2012)
54	Zn_4O(dimethyl 2-	Massey	131	NR	NR	[38]

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	nitrobenzyloxybiphenyl-4,4'-dicarboxylate)$_3$	University				(2012)
55	MOF 2a	Massey University	1381	[c] <50	NR	[39] (2012)
56	$Zn_6(BTB)_4(BP)_3$	Ulsan National Institute of Science & Technology	3710	[c] 0	1.62	[40] (2012)
57	$Co_6(BTB)_4(BP)_3$		5200	[c] 480	2.10	
58	$Cu_6(BTB)_4(BP)_3$		5480	[c] 4260	2.24	
59	$Ni_6(BTB)_4(BP)_3$		5470	[c] 5590	2.25	
60	MMPF-4	University of South Florida	958	NR	NR	[41] (2012)
61	MMPF-5		740	NR	NR	
62	IRMOF-74-V	University of California, Los Angeles	2230	NR	1.89	[42] (2012)
63	IRMOF-74-VI		1600	NR	1.65	
64	IRMOF-74-VII		1800	NR	2.12	
65	IRMOF-74-IX		1920	NR	2.51	
66	IRMOF-74-XI		1760	NR	3.41	
67	$[Cu(imid)(H_2O)]^+$	Dresden University of Technology	170	NR	NR	[43] (2012)
68	$[Zn_4(imid)_5]^{3+}$		0	NR	NR	
69	DUT-25	Dresden University of Technology	4672	NR	2.22	[44] (2012)
70	DUT-9	Dresden University of Technology	NR	NR	1.77	[45] (2012)
71	$Zn_4O(btb)_2(H_2O)_{3.5}(DMF)_{0.5}$				0.9	
72	DUT-40	Dresden University of Technology	34	[C] NR	NR	[46] (2012)
73	DUT-43		397	[C] NR	NR	
74	DUT-44		479	[C] NR	NR	
75	DUT-49	Dresden University of Technology	5476	NR	2.91	[47] (2012)
76	MMPF-2	University of South Florida	1401	NR	0.61	[48] (2012)
77	OH-IRMOF-8	University of Crete	1927	NR	0.78	[49] (2013)
78	OH-DUT-6		4354	NR	2.01	
79	OH-IRMOF-9		901	NR	0.39	
80	NU-125	Northwestern	3120	NR	1.29	[50]

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		University				(2013)
81	UMCM-9	University of Michigan	^{FSC}5357	^{SC}4970; ^{SE}1330	NR	^{51}(2013)
82	FJI-1		^{FSC}4813	^{SC}4043	NR	
83	IRMOF-3		^{FSC}3090	^{SC}2850	NR	
84	MOF-177		^{FSC}4719	^{SE}4353	NR	
85	MOF-5		^{FSC}3394	NR	NR	
86	UiO-66		^{FSC}1065	^{c}1067	NR	
87	MOF-74		^{FSC}1118	^{c}750	NR	
88	HKUST-1		^{FSC}1700	^{c}682	NR	
89	UMCM-150		^{FSC}2873	^{c}2910	NR	
90	Bio-MOF-101	University of Pittsburgh	4410	NR	2.83	^{52}(2013)
91	Bio-MOF-102		3222	NR	4.36	
92	Bio-MOF-103		2704	NR	4.13	
93	HCC-2	Hanwha Chemical Research & Development Center	$^{SE+SC+C}$3820	$^{SC+C}$602	NR	^{53}(2013)
94	P11-16/1	University of South Florida	1009	NR	NR	^{54}(2013)
95	MMPF-5(Co)	University of South Florida	NR	NR	NR	^{35}

C = Conventional activation
FD = Activation by freeze-drying
FSC = Activation by flowing $scCO_2$
HT = High temperature evacuation
RT = Room temperature evacuation
SC = Activation by $scCO_2$
SE = Solvent Exchange
NR = Represents that the value was not reported (in some instances isotherms could be measured/obtained, in other instances there was simply no porosity or loss of crystallinity). In most instances where one values is reported over another (e.g., $scCO_2$ *vs*. conventional activation) the reported value was higher or identical to the value not reported.

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