Supporting Information

Design and Assembly of Porous Organic Cages

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Table S1. Some reported POCs since 2009. The data was gathered from POCs with crystal structures deposited in the Cambridge Crystallographic Data Centre (CCDC) since 2009.

Examples	Year	BET (m^2/g)	Applications	Reference
Imine Condensation				
Andrew I. Cooper	2009	40/533/624	N_2 adsorption	Ref S1
Michael Mastalerz	2010	1377	Selective CO_2/CH_4 adsorption	Ref S2
Andrew I. Cooper	2010	/	-	Ref S3
Andrew I. Cooper	2011	/	-	Ref S4
Andrew I. Cooper	2011	/	Adsorption	Ref S5
Michael Mastalerz	2011	2071	N_2 adsorption	Ref S6
Andrew I. Cooper	2011	854/460	N_2 adsorption	Ref S7
Andrew I. Cooper	2011	1333	Adsorption	Ref S8
Ralf Warmuth	2011	/	Molecule recognition	Ref S9
Michael Mastalerz	2012	1700	CO_2 adsorption	Ref S10
Michael Mastalerz	2012	30/744	N_2 adsorption	Ref S11
Stuart L. James	2012	289	Adsorption	Ref S12
Andrew I. Cooper	2013	/	-	Ref S13
Partha Sarathi Mukherjee	2013	/	-	Ref S14
Dave J. Adams & Andrew I. Cooper	2013	41/93/252	N_2 adsorption	Ref S15
Andrew I. Cooper	2013	/	-	Ref S16
Urszula Rychlewska	2013	/	-	Ref S17
Andrew I. Cooper	2014	67/377	N_2 adsorption	Ref S18
Andrew I. Cooper	2014	624	Separation of rare gases and chiral molecules	Ref S19
Partha Sarathi Mukherjee	2014	/	Picric acid detection	Ref S20
Daqiang Yuan & Cheng Wang	2014	1181	Selective CO_2/N_2 adsorption	Ref S21
Kimoon Kim	2015	935/1370	Selective CO_2/N_2 and CH_4 adsorption	Ref S22
Alexandre Martinez	2015	/	Chiral sensors or catalysts	Ref S23
Andrew I. Cooper	2015	/	Adsorption	Ref S24
Hao Li & Jonathan L. Sessler	2015	/	-	Ref S25
Partha Sarathi Mukherjee	2015	/	-	Ref S26
Michael Mastalerz	2016	918/550/211	N_2 adsorption	Ref S27
Michael E. Briggs & Andrew I. Cooper	2016	10/423/1023	N_2 adsorption	Ref S28
Bernard Tinant & Jean-Pierre Dutasta	2016	/	-	Ref S29
Xiaoyu Cao	2016	/	-	Ref S30
Andrew I. Cooper	2016	/	Protonic conductivity	Ref S31
Hao Li	2017	/	P_4 capture	Ref S32
Partha Sarathi Mukherjee	2017	/	Recognition of nitroaromatics	Ref S33
Michael Mastalerz	2017	443	N_2 adsorption	Ref S34
Andrew I. Cooper	2017	320/2.7	Adsorption	Ref S35
Xiaoyu Cao	2017	/	Chiral sensors and luminescent materials	Ref S36
Graeme M. Day & Andrew I. Cooper	2017	26-2037	-	Ref S37
Michael Mastalerz	2017	67/377	Adsorption	Ref S38
Andrew I. Cooper	2017	307/532	N_2 adsorption	Ref S39
Xiaoyu Cao	2017	/	-	Ref S40
Michael Mastalerz	2018	/	Molecule recognition	Ref S41

Andrew I. Cooper	2018	/	-	Ref S42
Hao Li	2018	/	-	Ref S43
Hao Li	2018	/	Silver cation sensors	Ref S44
Xiaoyu Cao	2018	/	-	Ref S45
Andrew I. Cooper & Kim E. Jelfs	2018	131	Adsorption	Ref S46
Xiaoyu Cao	2018	/	-	Ref S47
Wei Zhang & Jianzhuang Jiang	2019	/	Container	Ref S48
Andrew I. Cooper & Kim E. Jelfs	2019	/	-	Ref S49
Andrew I. Cooper	2019	/	-	Ref S50
Andrew I. Cooper	2019	1752	N_2 adsorption	Ref S51
Andrew I. Cooper	2019	/	Selective H_2/D_2 adsorption	Ref S52
Shaodong Zhang	2020	/	-	Ref S53
Michael Mastalerz	2020	698	Sensing of either acid or base vapors	Ref S54
Kimoon Kim	2020	/	-	Ref S55
Shaodong Zhang	2020	/	-	Ref S56
Daqiang Yuan	2020	38-2803	Adsorption	Ref S57
Hao Li	2020	/	Molecule recognition	Ref S58
Bernd M. Schmidt	2020	536	CO_2 and H_2 adsorption	Ref S59
Anna G. Slater	2020	/	-	Ref S60
Michael Mastalerz	2021	1134/1212/1487	Adsorption	Ref S61
Michael Mastalerz	2021	/	-	Ref S62
Guo-Hong Ning & Andrew I. Cooper	2021	/	Multiphoton harvesting	Ref S63
Michael Mastalerz	2022	5/705	Adsorption	Ref S64
Chunyi Sun	2023	/	Molecule recognition	Ref S65
Boronic Condensation				
Nobuharu Iwasawa	2009	/	Molecule recognition	Ref S66
Michael Mastalerz	2013	3758	N_2 adsorption	Ref S67
Nobuharu Iwasawa	2015	/	-	Ref S68
Michael Mastalerz	2018	12-511	Selective ethane/ethylene adsorption	Ref S69
Nobuharu Iwasawa	2020	/	Molecule recognition	Ref S70
Alkyne Metathesis				
Christian J. Doonana	2012	1153	N_2 adsorption	Ref S71
Jeffrey S. Moore	2016	/	-	Ref S72
Christian J. Doonana	2016	845	N_2 adsorption	Ref S73
Irreversible Reaction				
Alexandre Martinez	2010	/	Molecular container	Ref S74
Mei-Xiang Wang	2011	/	-	Ref S75
De-Xian Wang & Mei-Xiang Wang	2011	/	Anion recognition	Ref S76
Alexandre Martinez	2011	/	Anion recognition	Ref S77
Alexandre Martinez	2013	/	Proton transfer	Ref S78
Yasutomo Segawa & Kenichiro Itami	2014	/	-	Ref S79
J. Fraser Stoddart	2014	/	Anion recognition	Ref S80
Hui-Bi Xu	2015	432	Selective CO_2/N_2 adsorption	Ref S81
Chun Zhang	2016	/	Selective CO_2/N_2 adsorption	Ref S82
Mei-Xiang Wang, Qi-Qiang Wang,	2017	/	Adsorption	Ref S83

Dongho Kim & Jonathan L. Sessler	2018	/	-	Ref S84
Chun Zhang	2018	929	CO_2 capture and sensing	Ref S85
J. Fraser Stoddart	2018	/	Molecule recognition	Ref S86
Qi-Qiang Wang & De-Xian Wang	2019	/	Anion recognition	Ref S87
Qi-Qiang Wang	2019	/	Adsorption	Ref S88
Amar H. Flood	2019	/	Chloride capture	Ref S89
Hao Li	2019	/	Molecule recognition	Ref S90
Alexandre Martinez	2019	/	Circularly polarized luminescence	Ref S91
Ben Zhong Tang	2020	/	Temperature sensing in living cells	Ref S92
J. Fraser Stoddart	2020	/	Molecule recognition	Ref S93

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