Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information for

Facile synthesis of the Basolite F300-like Nanoscale Fe-BTC Framework and its Lithium Storage Properties

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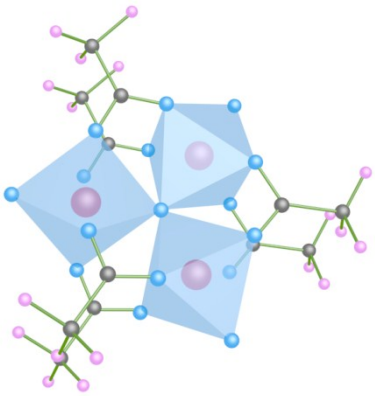


Figure S1. Acetate-Model picture of Fe-BTC building block in which iron atoms are inside the polyhedra, oxygen atoms are green, carbon atoms are yellow, and hydrogen atoms are pink.

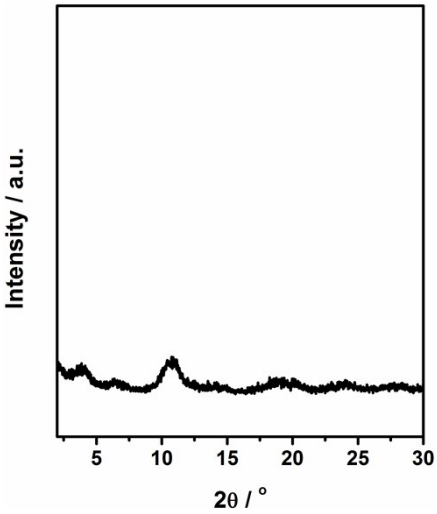
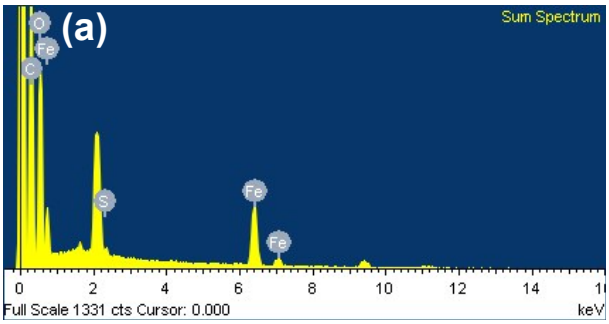


Figure S2. PXRD pattern of Fe-BTC product obtained using $FeCl_3 \cdot 6H_2O$ as the iron source.



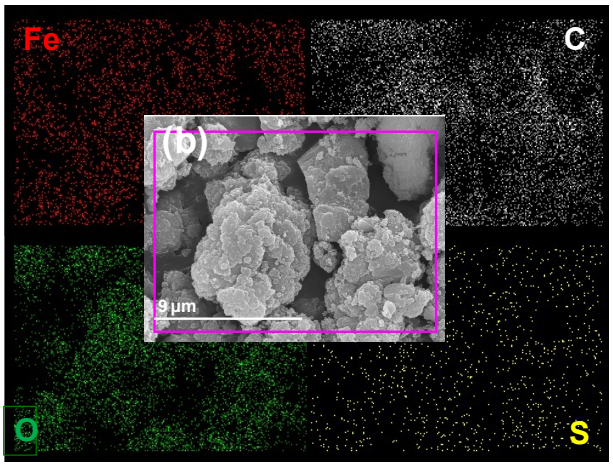


Figure S3. (a) EDS spectra and (b) EDS mapping images for a selected region of Basolite F300.

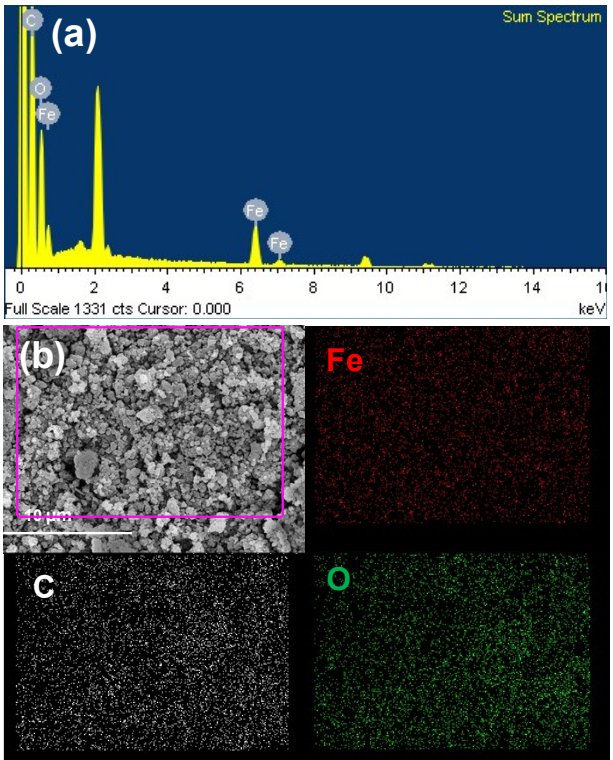


Figure S4. EDS spectra and EDS mapping images for a selected region of the synthetic Fe-BTC.

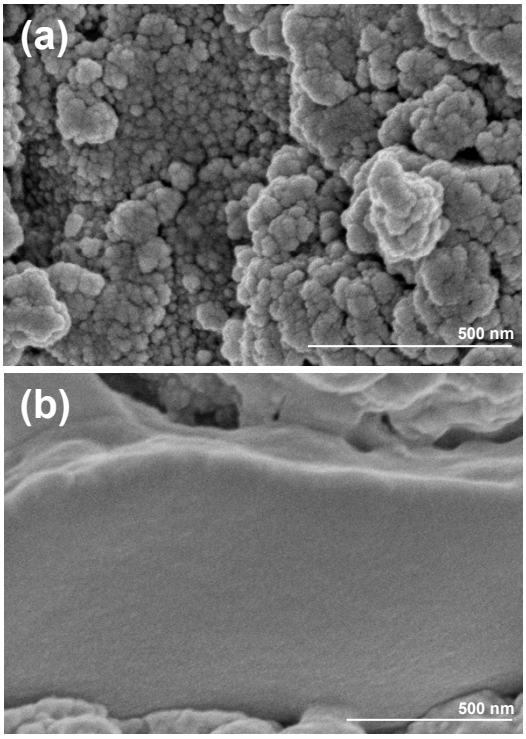


Figure S5. High-resolution SEM imagines of Basolite F300: enlargements of the (a) top and (b) left bottom particles of Figure 5a, respectively.

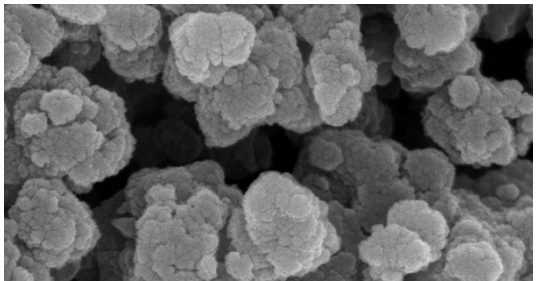


Figure S6. High-resolution SEM imagine of the synthetic Fe-BTC material.

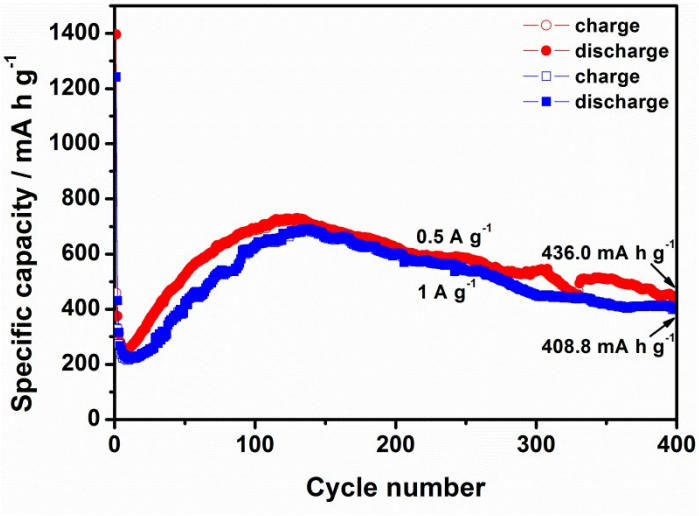


Figure S7. Cycling performance of Fe-BTC MOF at high current density (0.5 A g^{-1} and 1 A g^{-1}).

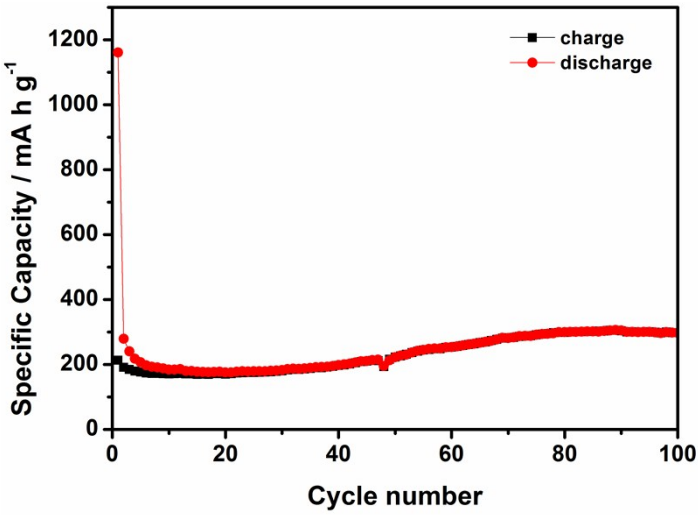


Figure S8. Cycling performance of the bulk material Basolite F300 at the current density of 500 mA g^{-1}.

Table S1. Metal organic frameworks (MOFs) as anode materials in LIBs.

MOFs	Voiltage / V vs Li^+/Li	Rate / C or mA g^{-1}	Capacity retention / mA g^{-1}	Cycle number	Refs.
Zn-MOF-crown	0.01-3.0	500	239	500	1
Zn_4O(1,3,5-benzenetribenzoates)	0.05-1.6	50	105	50	2
Li terephthalate	0.7-3.0	1C	234	50	3
Li trans-trans-muconate	0.7-3.0	1C	125	50	3
$Zn_3(HCOO)_6$	0.005-3.0	60	560	60	4
$Co_3(HCOO)_6$	0.005-3.0	60	390	60	4
$Zn_{1.5}Co_{0.5}(HCOO)_6$	0.005-3.0	60	450	60	4
Ni-1,4,5,8-naphthalenetetracarboxylates	0.01-3.0	100	246	80	5
Li-1,4,5,8-naphthalenetetracarboxylates	0.01-3.0	100	458	80	5
Li/Ni-1,4,5,8-naphthalenetetracarboxylates	0.01-3.0	100	475	80	5
Mn(tfbdc)(4,4'-bpy)$(H_2O)_2$)	0.01-2.5	50	390	50	6
CADS nanowire	0.8-2.8	57.6	177	110	7
$Co_2(OH)_2BDC$	0.005-3.0	50	650	100	8
$[Li_6(pda)_3]\cdot 2EtOH$	0.2-2.0	30	160	50	9
$[Cu_2(C_8H_4O_4)_4]_n$	0.01-2.5	24	227	50	10
2,6-Naph-$(COOLi)_2$	0.5-2.0	1C	~210	10	11
Ni-Me_4bpz	0.01-3.0	50	120	100	12
$Zn(IM)_{1.5}(abIM)_{0.5}$	0.01-3.0	100, 400	190, ~75	200, 200	13
Asp-Cu	0.01-3.0	50	233	100	14
Mn-BTC	0.01-3.0	103, 1030	694, 400	100, 100	15
Mn(3,5-PDC) $\cdot 2H_2O$	0.05-3.0	300	310	115	16
$[Mn2(2,3\text{-}pdc)_2(H_2O)3]_n \cdot 2nH_2O$	0.05-3.0	100	457.2	100	17
Ni-PTA	0.01-3.0	100	620	100	18
$Li4(H_2O)_4$(BTCA)	0.01-3.0	~100	93	30	19
$[Li_6(pda)_3] \cdot 2EtOH$	0.02-2.0	30	160	50	20

This work	0.01-3.0	100, 500, 1000	1021, 436, 408	100, 400 ,400	-

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