Supporting Information

A metal-organic framework approach to engineer mesoporous ZnMnO$_3$/C towards enhanced lithium storage

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Fig. S1 Raman spectrum of ZnMnO$_3$/C.

Fig. S2. XRD patterns of ZnMnO$_3$/C calcinated at 600, 700 and 800 °C.
Fig. S3. Cycling performance of ZnMnO$_3$/C at 1 A g$^{-1}$

Fig. S4. XRD patterns of the ZnMnO$_3$/C electrode after 20 cycles of the charge process.
Fig. S5. XRD patterns of the ZnMnO$_3$/C electrode after 20 cycles of the discharge process.

Fig. S6. XRD pattern of ZnMnO$_3$. 
Fig. S7. Raman spectrum of ZnMnO$_3$. 

![Raman spectrum](image)
Fig. S8. (a) CV curves of ZnMnO$_3$ electrode at different sweep rates; (b) A linear relationship between log (scan rate) and log (peak current); (c) Typical capacitive contribution of ZnMnO$_3$ electrode at 2.0 mV s$^{-1}$; (d) Contribution ratios of capacitance at different scan rates.

<table>
<thead>
<tr>
<th>Electrode materials</th>
<th>Cycle capacity (mAh g$^{-1}$)</th>
<th>Cycle number</th>
<th>Ref</th>
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</thead>
<tbody>
<tr>
<td>ZnMnO$_3$ porous spherulites</td>
<td>729/0.5 A g$^{-1}$</td>
<td>50</td>
<td>S1</td>
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<tr>
<td>Hierarchical porous ZnMnO$_3$ yolk-shell microspheres</td>
<td>540/0.4 A g$^{-1}$</td>
<td>300</td>
<td>S2</td>
</tr>
<tr>
<td>Porous ZnMnO$_3$</td>
<td>560/0.4 A g$^{-1}$</td>
<td>300</td>
<td>S3</td>
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<tr>
<td>Multi-shelled ZnMnO$_3$ hollow micro-spheres</td>
<td>290/0.4 A g$^{-1}$</td>
<td>150</td>
<td>S4</td>
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<td>1D ZnMnO$_3$</td>
<td>382.9/0.8 A g$^{-1}$</td>
<td>100</td>
<td>S5</td>
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<tr>
<td>MOF-derived ZnMnO$_3$/C</td>
<td>460/1 A g$^{-1}$</td>
<td>500</td>
<td>This work</td>
</tr>
</tbody>
</table>

References
(S3) C. H. Zhao, Z. G. Teng, D. N. Zhao, Z. B. Hu and K. Y. Liu, Porous ZnMnO$_3$ plates prepared from Zn/Mn–sucrose composite as high-
