Supporting Information

Ultrafast spray pyrolysis fabrication of nanophase ZnMn$_2$O$_4$ anode towards high-performance Li-ion batteries

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Table S1 Atomic coordinates, isotropic thermal parameters and occupation numbers for the ZMO phase refined from X-ray powder diffraction data. Spinel-type structure in space group $I4_1$/amd (No. 141); cell parameters: $a = 5.7399$ (6) Å, $c = 9.2903$ (1) Å, $V = 306.08$ (8) Å$^3$ and $Z = 4$; $R_{wp} = 9.16 \%$, $R_p = 7.31 \%$, $S = 1.91$.

<table>
<thead>
<tr>
<th>Atom</th>
<th>Site</th>
<th>$g$</th>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mn</td>
<td>4a</td>
<td>0.839(9)</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Zn</td>
<td>16h</td>
<td>0.849(1)</td>
<td>0.0</td>
<td>0.244(2)</td>
</tr>
<tr>
<td>O</td>
<td>16h</td>
<td>1.253(1)</td>
<td>0.0</td>
<td>0.225(3)</td>
</tr>
</tbody>
</table>
Fig. S1 XRD patterns of the (a) ZMO-AE and (b) ZMO-EG samples
Fig. S2 Low-magnification FESEM images of the as-obtained ZMO-W sample with different magnifications
Fig. S3 FESEM images of the (a, b) ZMO-AE and (c, d) ZMO-EG products
Fig. S4 (a) N$_2$ adsorption-desorption isotherms and (b) corresponding PSD data of the ZMO-AE sample
Fig. S5 (a) N$_2$ adsorption-desorption isotherms and (b) corresponding PSD data of the ZMO-EG sample
Fig. S6 Cycling performance (1.0 C) of the (a) ZMO-AE and (b) ZMO-EG products