Controllable synthesis of spinel nano-ZnMn$_2$O$_4$ via a single source precursor route and its high capacity retention as anode material for lithium ion batteries

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Figure S1. EDS of the Zn-Mn citrate precursor (SSPs-1).

Figure S2. X-ray powder diffraction pattern of the product obtained from calcinations of Zn-Mn citrate precursor (the metal ions:citric acid = 3:1) at 700 °C for 2 h.

Figure S3. X-ray powder diffraction pattern of the product obtained from calcinations of Zn-Mn citrate precursor (the metal ions:citric acid = 1:1) at 700 °C for 2 h.

Figure S4. SEM of the Zn-Mn citrate complex precursor .

Figure S5. N₂ adsorption/desorption isotherm of ZnMn₂O₄-700°C and the corresponding pore size distribution.

Figure S6. The discharge and charge curves of the ZnMn₂O₄-600°C/Li cell at a current density of 100 mA g⁻¹. The cycle numbers are indicated in the graph.

Figure S7. The discharge and charge curves of the ZnMn₂O₄-800°C/Li cell at a current density of 100 mA g⁻¹. The cycle numbers are indicated in the graph.
Figure S3
Figure S5
Figure S6

[Graph showing the voltage capacity profile for ZnMn2O4_600C with cycles 1, 2, 5, and 10 indicated]
Figure S7

![Graph showing ZnMn$_2$O$_4$ Voltage vs. Capacity for different cycles](image)