

## Supporting Information for

### **Honeycomb in honeycomb carbon bubbles: excellent Li- and Na-storage performances**

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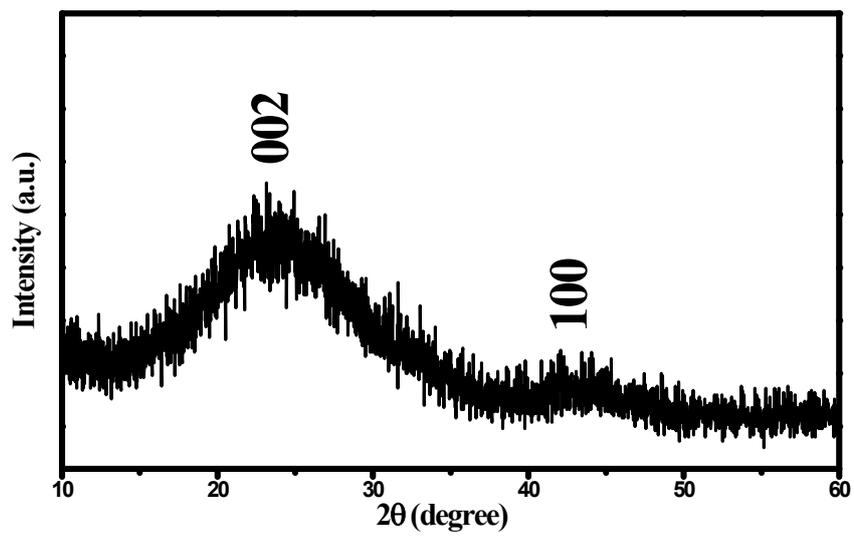
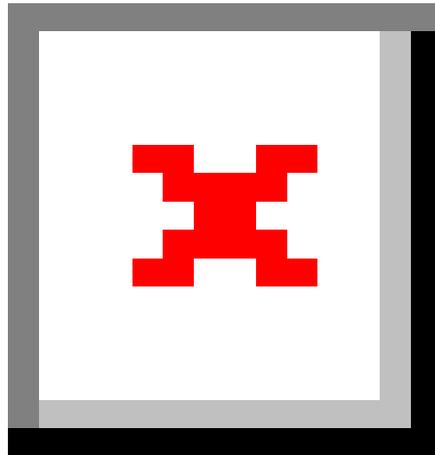
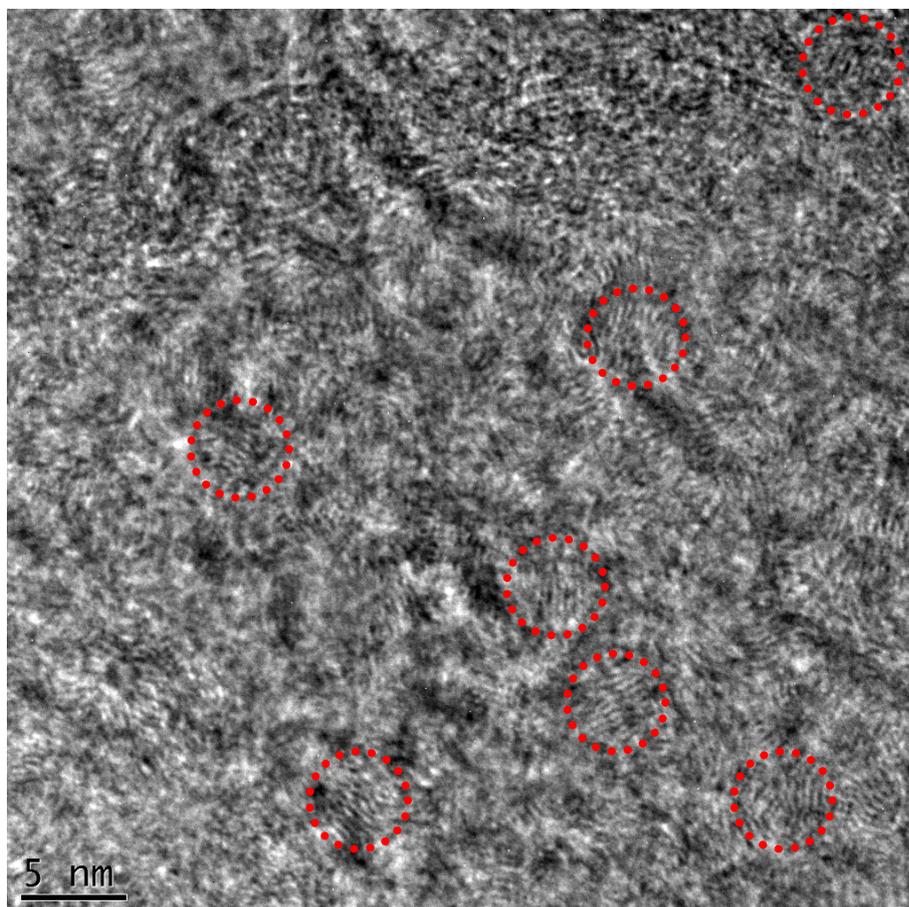


Figure S1. XRD patterns of the HHCBs.



**Figure S2. SEM images of the Zn microspheres.**



**Figure S3. A representative TEM image shows the localized graphitization that probed distributing almost anywhere on the shells of hollow carbon bubbles.**

**Table S1. BET surface area ( $S_{\text{BET}}$ ), total ( $V_{\text{total}}$ ), micropore ( $V_{\text{micro}}$ ) and mesopore ( $V_{\text{meso}}$ ) pore volumes of the HHCBs.**

<b>Sample</b>	<b><math>S_{\text{BET}}^{\text{a}}</math> (<math>\text{m}^2/\text{g}</math>)</b>	<b><math>V_{\text{total}}^{\text{b}}</math> (<math>\text{cm}^3/\text{g}</math>)</b>	<b><math>V_{\text{micro}}^{\text{c}}</math> (<math>\text{cm}^3/\text{g}</math>)</b>	<b><math>V_{\text{meso}}^{\text{d}}</math> (<math>\text{cm}^3/\text{g}</math>)</b>	<b><math>D_{\text{BJH}}^{\text{e}}</math> (nm)</b>
HHCBs	780	1.53	0.32	1.08	8.7

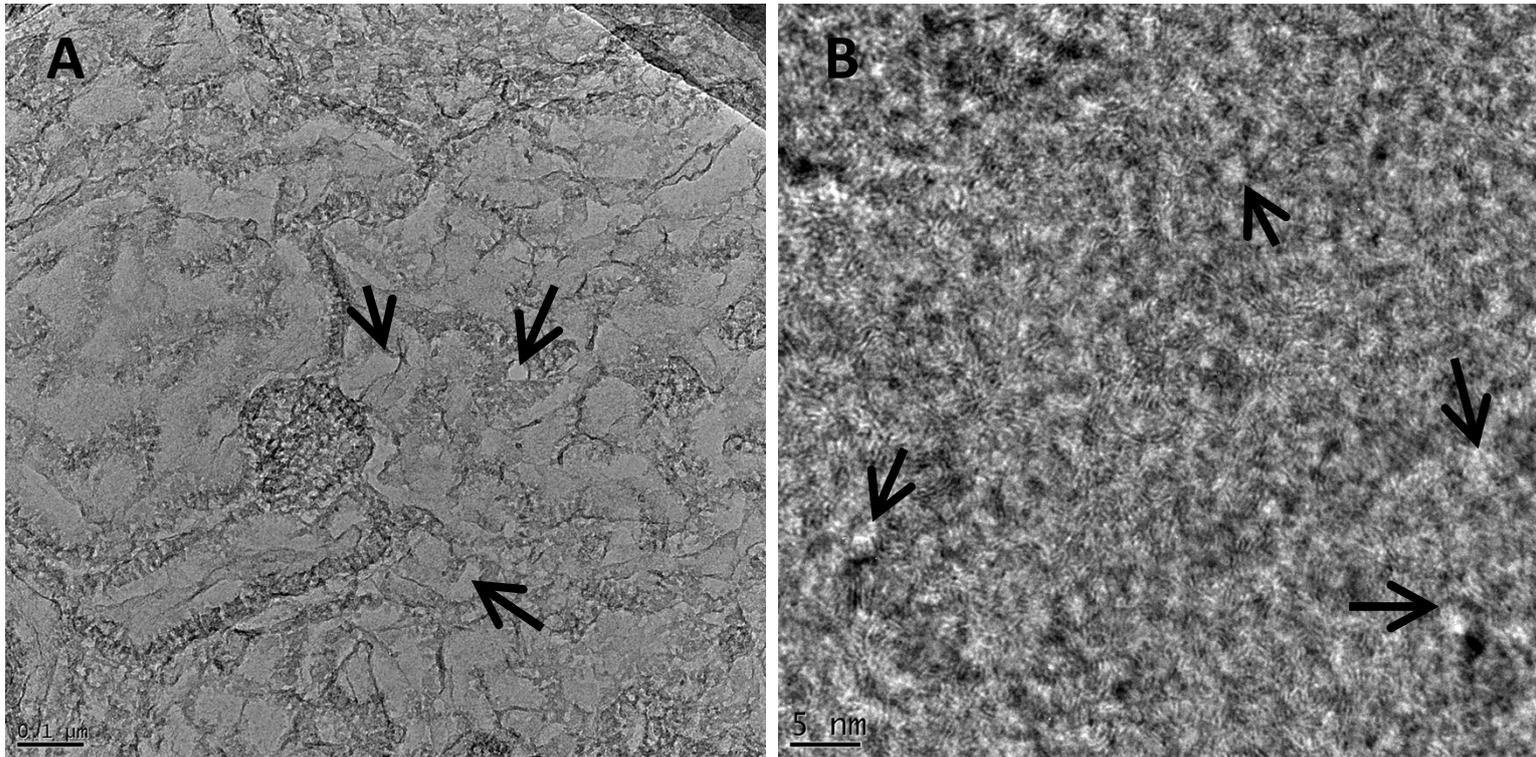
**$^{\text{a}}S_{\text{BET}}$ : surface area calculated by the BET method.**

**$^{\text{b}}V_{\text{total}}$ : total pore volume of pores.**

**$^{\text{c}}V_{\text{micro}}$ : pore volume of micropores calculated by the HK method.**

**$^{\text{d}}V_{\text{meso}}$ : pore volume of mesopores calculated by the BJH method.**

**$^{\text{e}}D_{\text{BJH}}$ : mesopore diameter calculated from adsorption branch of nitrogen isotherms using BJH method.**



**Figure S4. Low-magnification (A) and high resolution (B) TEM images of a broken hollow carbon bubble, in which one can clearly see the gaps, meso-, and micropores.**