

Enhanced Conductivity and Structure Stability of BiPO₄@void@C/CNT particles for High-Performance Bismuth-Based Battery

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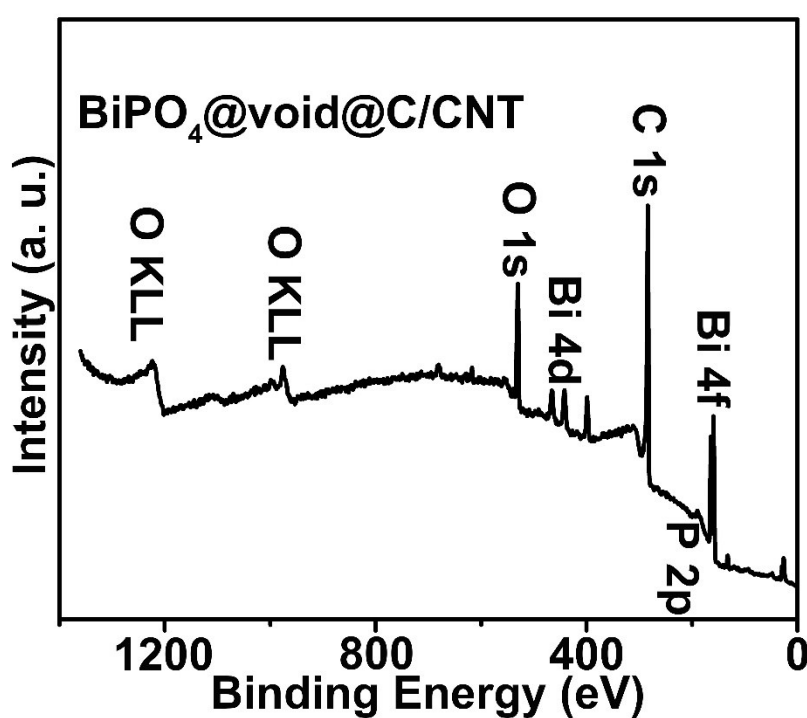


Fig. S1 The wide scan XPS spectra for BiPO₄@void@C/CNT particles.

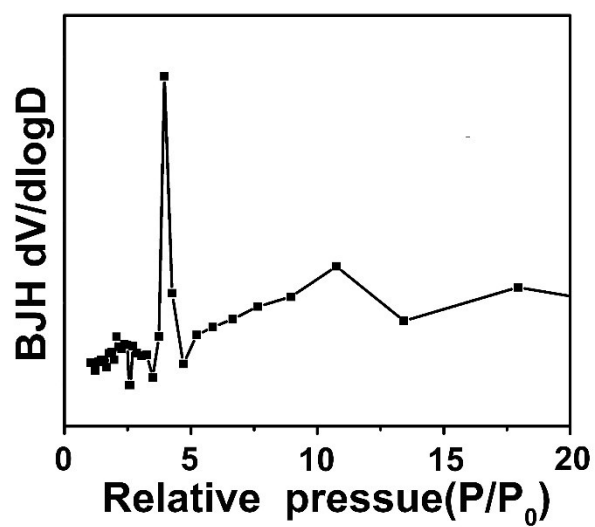


Fig. S2 The pore size distribution curve of BiPO₄@void@C particles obtained from the desorption data.

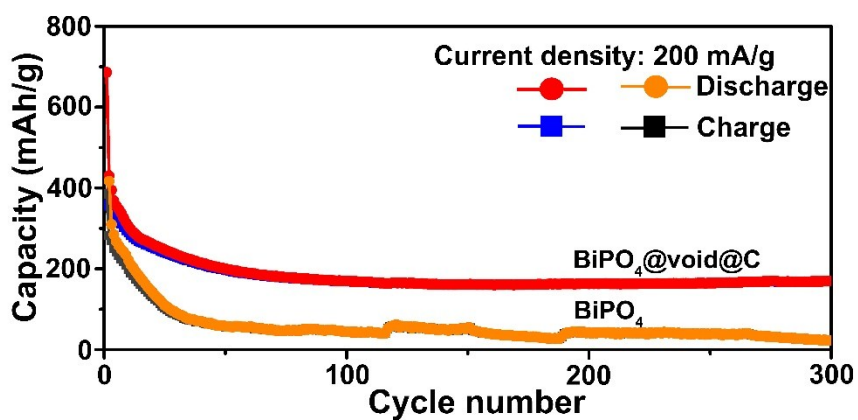


Fig. S3 Cycling performance of BiPO₄@void@C particles and BiPO₄ under a current density of 200 mA·g⁻¹.

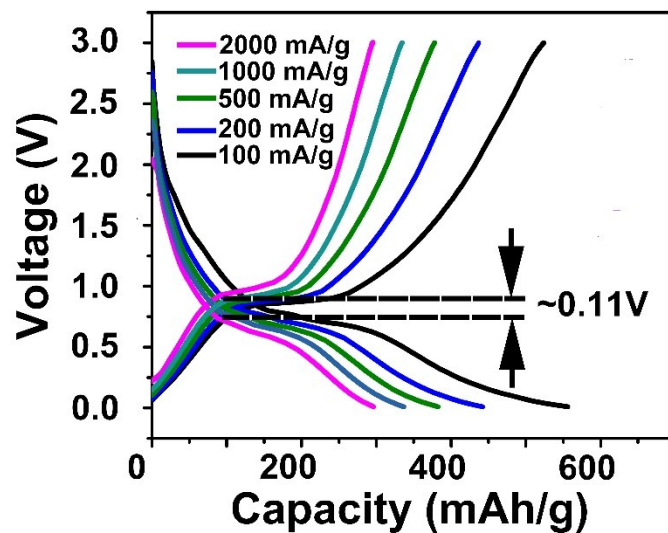


Fig. S4 Voltage profiles show a tiny potential hysteresis of ~ 0.11 V which is nearly stable when raising the rate from 100 to 2000 $\text{mA}\cdot\text{g}^{-1}$.

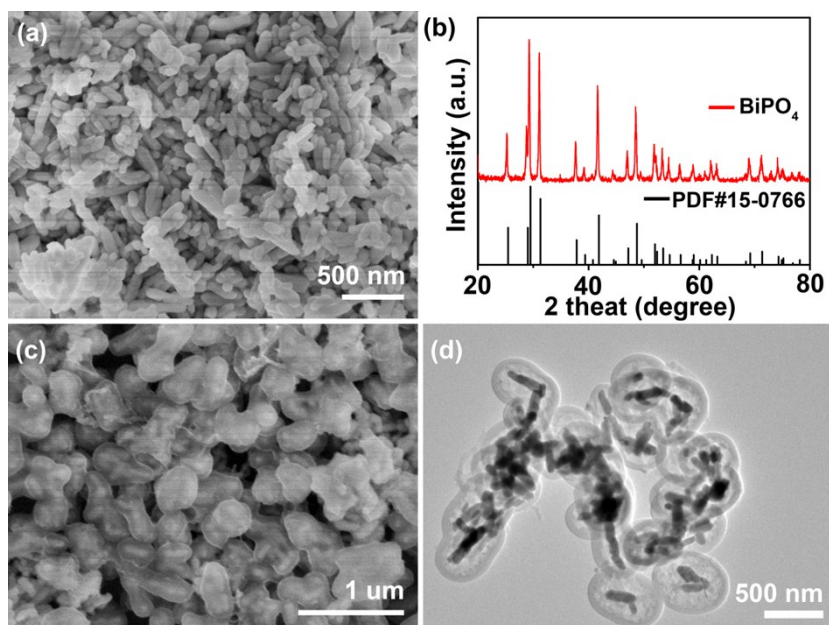


Fig. S5 (a and b) SEM image and XRD patterns of BiPO_4 nanorods. (c and d) SEM and TEM images of $\text{BiPO}_4@void@C$ particles.

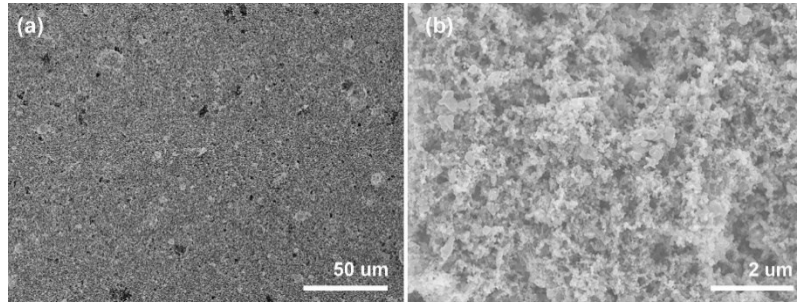


Fig. S6 (a, b) the SEM images of the BiPO₄@void@C/CNT particles electrode before cycle.

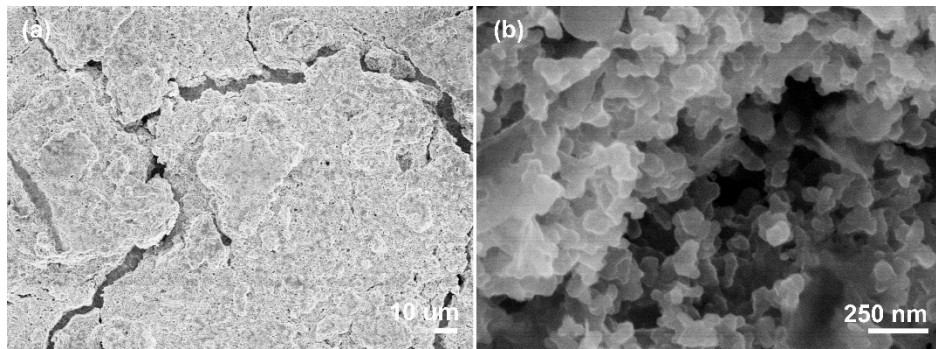


Fig. S7 (a and b) Low-magnification and high-magnification SEM images of BiPO₄@void@C particles electrode after 600th cycle.

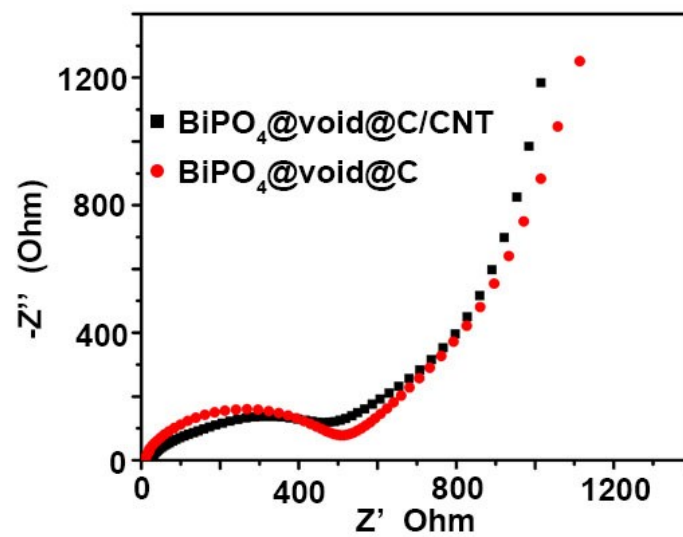


Fig. S8 Nyquist plots for the BiPO₄@void@C/CNT particle and BiPO₄@void@C particle electrode before cycle.

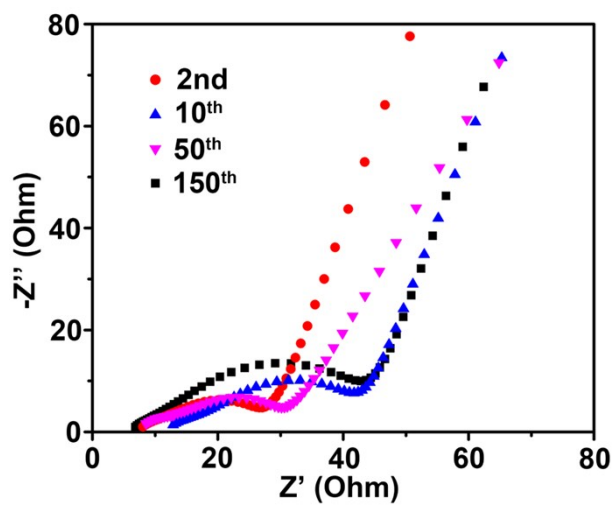


Fig. S9 Nyquist plots for the BiPO₄@void@C particles electrode.