

Supporting Information

Shiitake-Derived Nitrogen/Oxygen/Phosphorus Co-Doped Carbon Framework with Hierarchical Tri-Modal Porosity for High-Performance Electrochemical Capacitors

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Table S1 Chemical composition of the dry shiitake derived from EDS analysis

Composition	C	O	N	Cl	Cu	K
Content (at.%)	59	39.9	0.5	0.27	0.05	0.28

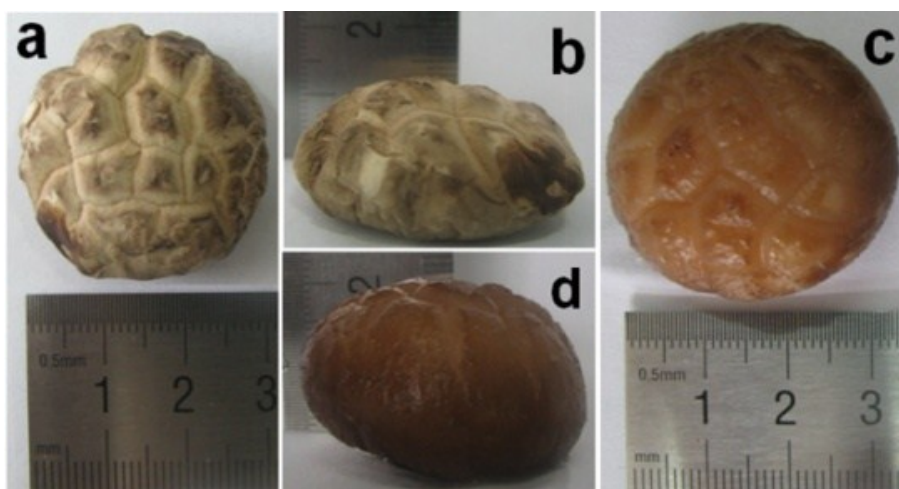


Fig. S1. Optical images for the aerial (a, c) and lateral (b, d) views of the shiitake before (a, b) and after (c, d) absorbing the $(\text{NH}_4)_3\text{PO}_4$ aqueous solution

As shown in **Fig. S1a-d**, the volume of the shiitake is increased greatly after fully soaked with the $(\text{NH}_4)_3\text{PO}_4$ solution.

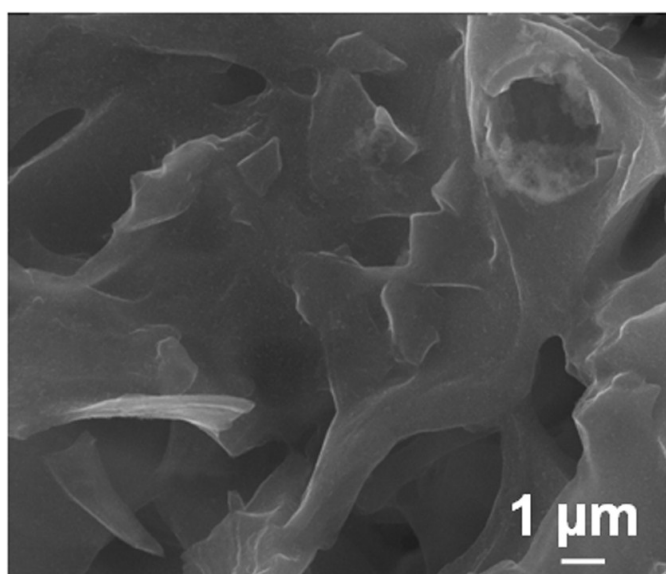


Fig. S2. FESEM image of the resultant SNOC product

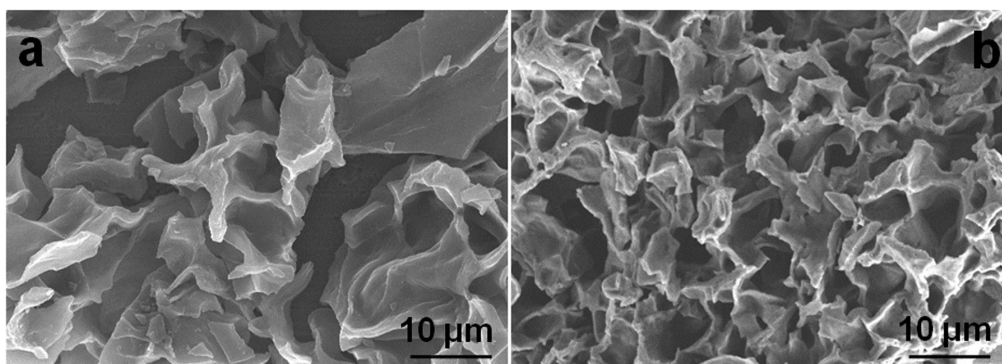


Fig. S3. FESEM image of the shiitake before (a) and after (b) absorbing the $(\text{NH}_4)_3\text{PO}_4$ aqueous solution

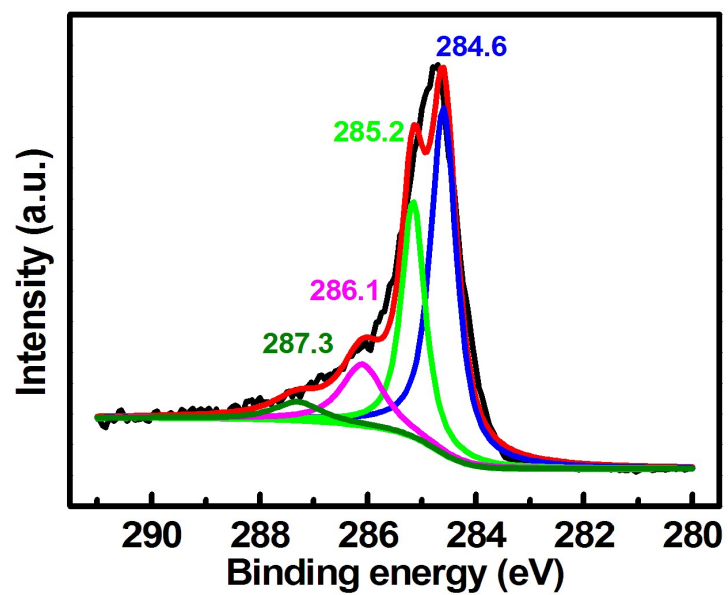


Fig. S4. High-resolution elemental C XPS spectrum and fitted data of the resultant SNOPC product

Table S2 Relative contents of C, O and N species in the resultant SNOC product obtained from

EDS analysis

Element	C	O	N
Relative content (at.%)	85.9	13.5	0.6

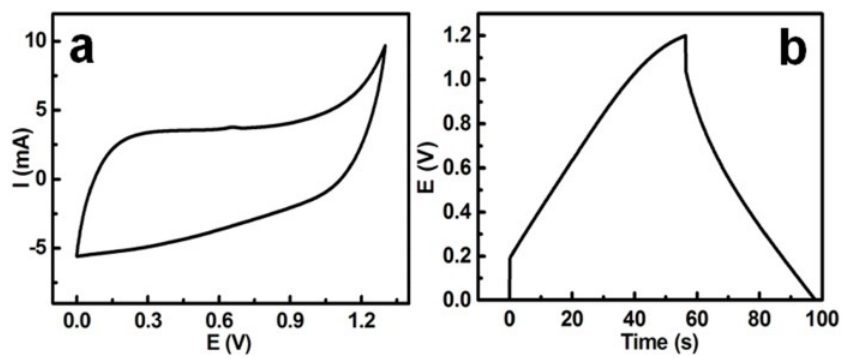


Fig. S5. CV curves (10 mV s^{-1}) and CP plot (1.0 A g^{-1}) of the SNOC-based symmetric device

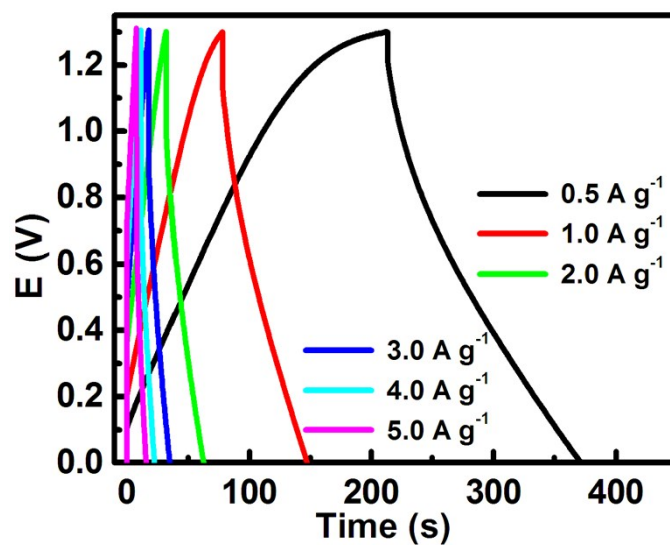


Fig. S6. CP profiles of the SNOPC-based symmetric device at a current range from 0.5 to 5 $A g^{-1}$

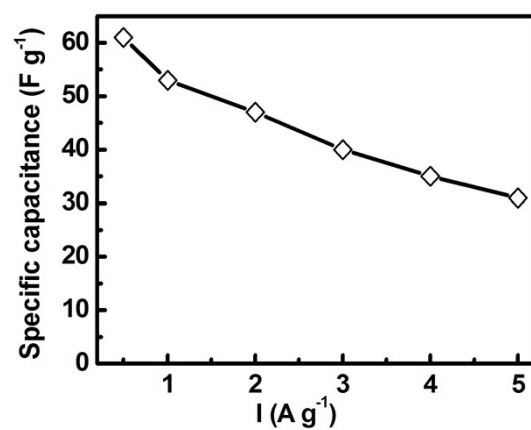


Fig. S7. Corresponding SCs the SNOPC-based symmetric device as a function of current density