N-doped Carbon Foam Based Three-dimensional Electrode Architectures and Asymmetric Supercapacitors

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Figure S1. SEM images of MF before calcination.



Figure S2. (a) N_2 adsorption-desorption isotherms and (b) PSD curves of pure CF and CF-



Figure S3. TEM image (a), and corresponding (b, c, d) elemental mappings of OMC film.



Figure S4. Electrochemical properties of pure CF: (a) CV curves at various scan rates ranged from 5 to 200 mV s⁻¹. (b) Constant-current charge-discharge voltage profiles at various current densities.



Figure S5. SEM images of NiCo₂O₄ NS assembled spherical structure.



Figure S6. (a) N_2 adsorption-desorption isotherms and (b) PSD curve of CF-NiCo₂O₄.



Figure S7. Electrochemical evaluations of CF (voltage window: 0-0.4 V): (a) CV curve at 5 mV s⁻¹; (b) Galvanostatic charge-discharge curve at 1 A g⁻¹.



Figure S8. Electrochemical properties of the NiCo₂O₄ NS assembled spherical structure: (a) CV curves at various scan rates ranged from 5 to 40 mV s⁻¹. (b) Constant-current chargedischarge voltage profiles at various current densities. (c) Specific capacitance as a function of current density.



Figure S9. XRD pattern of CF-NiCo₂O₄ after cycling performance.



Figure S10. TEM images of $NiCo_2O_4 NS$ (a) before and (b) after cycling performance.