Supplementary Materials:

Metal-Organic Framework Nanosheet derived Petal-like Co₃O₄@CoNi₂S₄ Hybrid on Carbon Cloth with Enhanced

Performance for Supercapacitors

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Figure S1. (a,b) SEM images of the clean carbon cloth and (c,d) the Co-MOF on carbon cloth.



Figure S2. TEM images of the Co₃O₄ nanosheets



Figure S3. The electrochemical performance of the Co_3O_4 electrode in 2 M KOH electrolyte: (a) CV curves, (b) GCD curves, (c) Specific capacitances at different current densities calculated from GCD curves, (d) EIS curve.



Figure S4. The electrochemical performance of the $CoNi_2S_4$ electrode in 2 M KOH electrolyte: (a) CV curves, (b) GCD curves, (c) Specific capacitances at different current densities calculated from GCD curves, (d) EIS curve.



Figure S5. The electrochemical performance of the electrode in 2 M KOH electrolyte: (a) CV curves of $CC/Co_3O_4@CoNi_2S_4$ and AC electrodes at a scan rate of 5 mV·s⁻¹, (b) CV curves of AC (c) GCD curves of AC, (d) EIS curve of AC.



Figure S6. The photograph of an LED is powered by the two ASCs in series.



Figure S7. The SEM images of CC/Co₃O₄@CoNi₂S₄ on carbon cloth after 10000 cycles.