Supporting Information

Hollow $Ni_{0.85}Se/Co_{0.85}Se/Co(OH)_2$ hexagonal plates for high-performance hybrid supercapacitors

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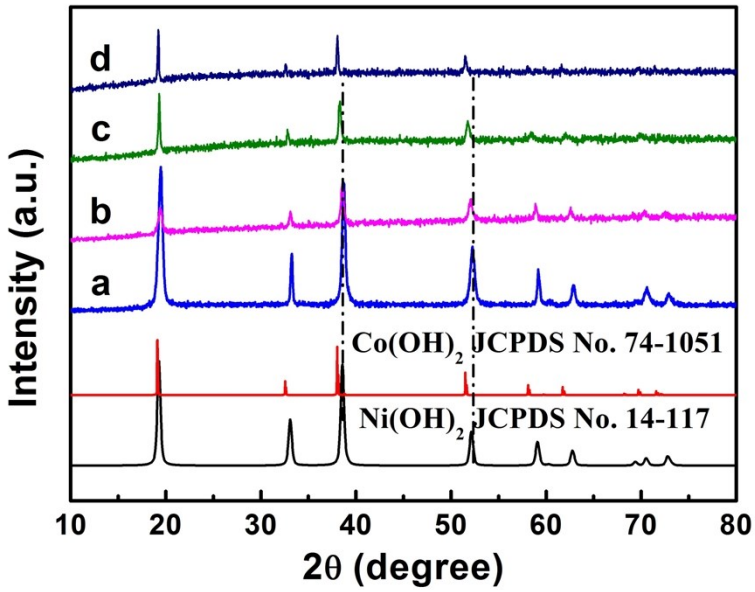

Fig. S1 XRD pattern of (a) P-1, (b) P-2, (c) P-3 and (d) P-4.

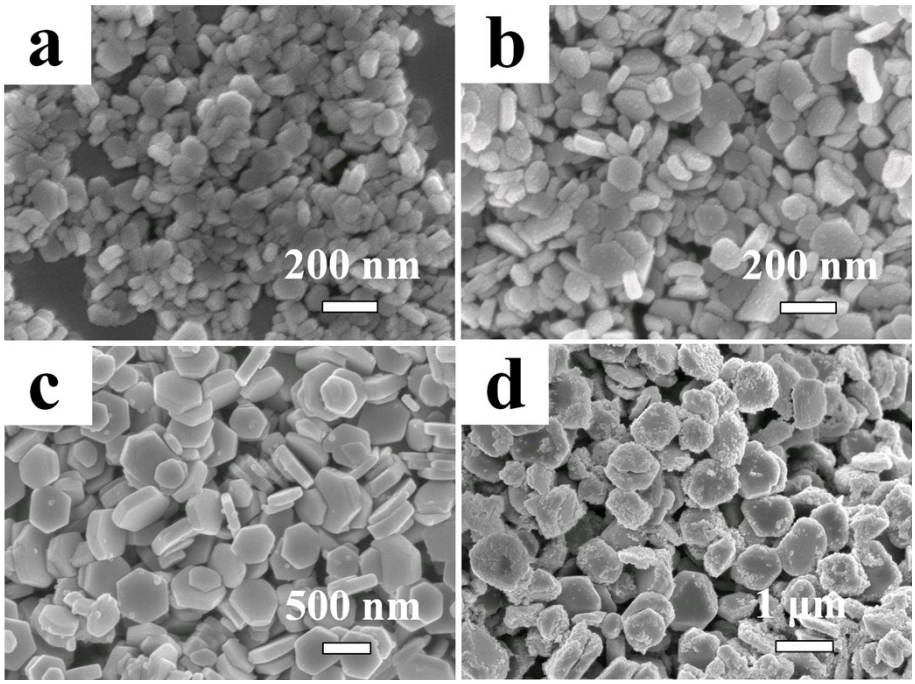

Fig. S2 SEM images of (a) P-1, (b) P-2, (c) P-3 and (d) P-4.

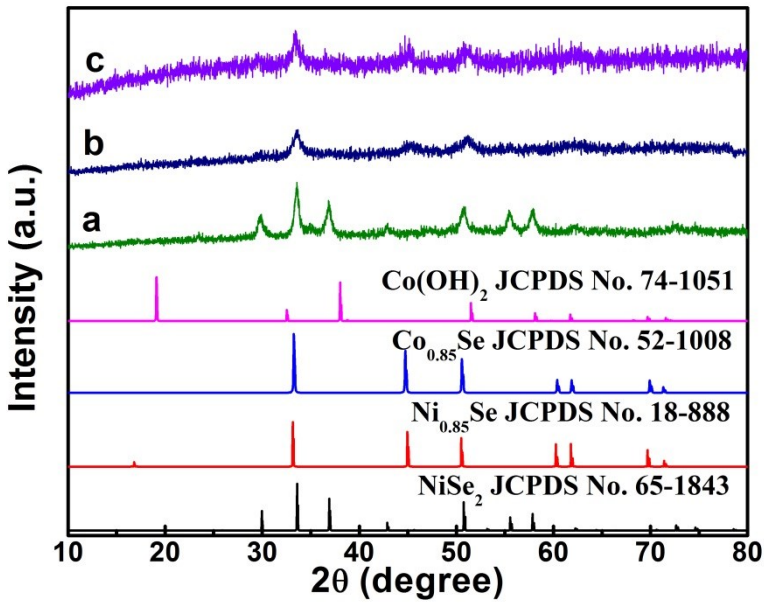

Fig. S3 XRD pattern of (a) S-1, (b) S-2 and (c) S-3.

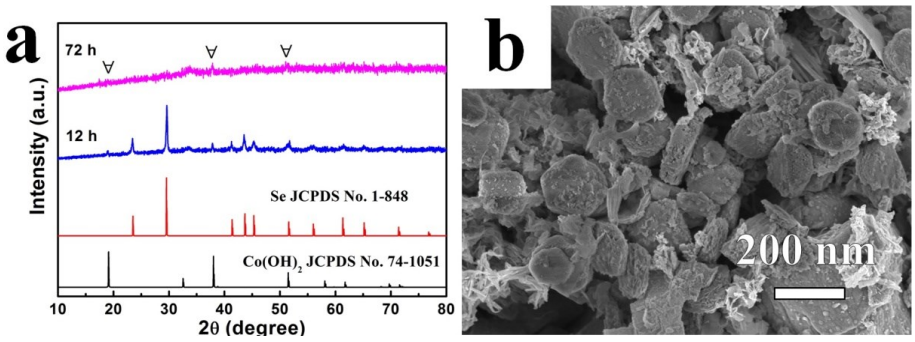

Fig. S4 (a) XRD pattern of P-4 after 12 h and 72 h reaction with Se powder, respectively; (b) SEM image of P-4 after 12 h reaction with Se powder.

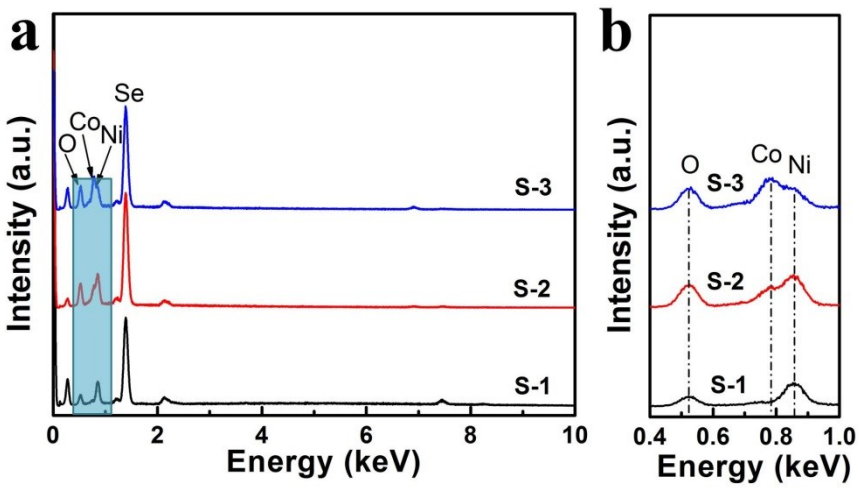

Fig. S5 (a) EDS pattern of S-1, S-2 and S-3, (b) the larger view of the blue area in Fig. S5a.

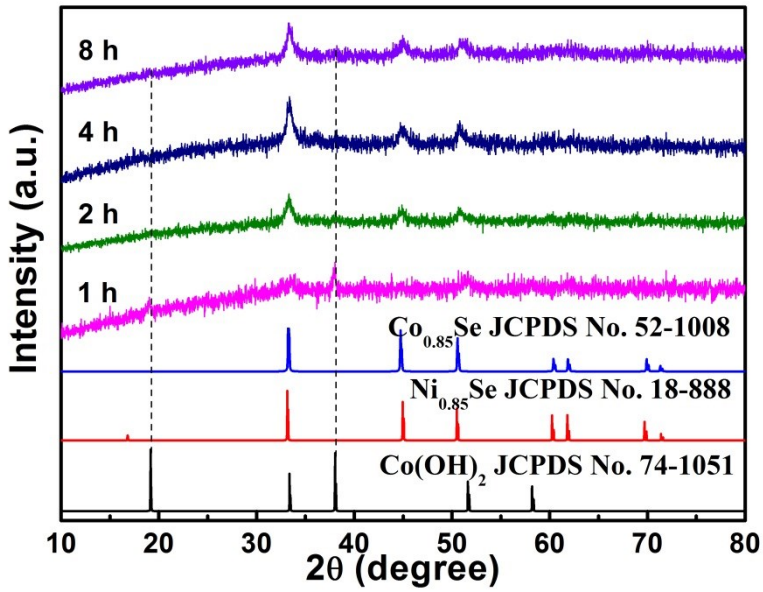

Fig. S6 XRD pattern of the samples collected at 1 h, 2 h, 4 h and 8 h under the reaction condition for preparing S-3.

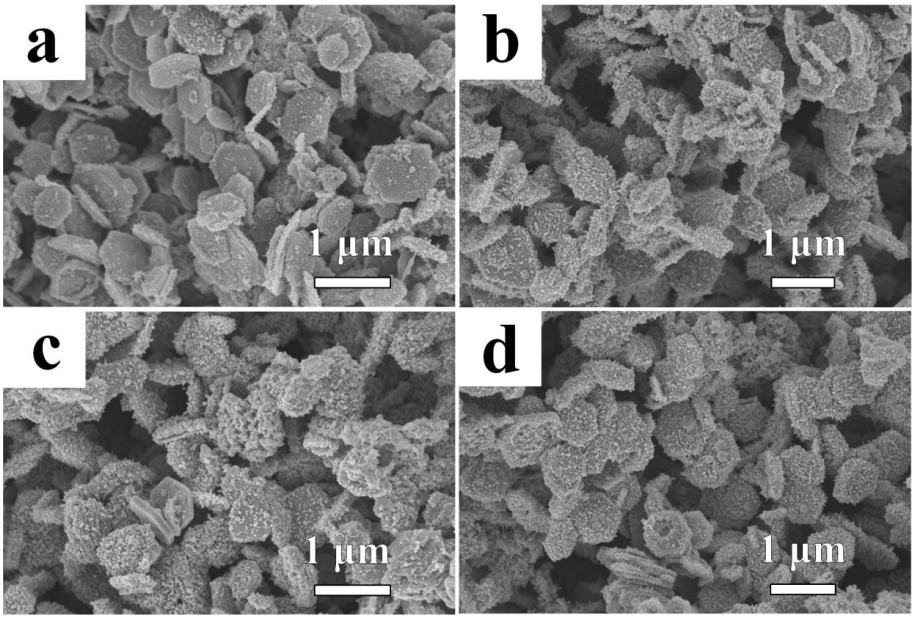

Fig. S7 SEM images of the samples collected at 1 h, 2 h, 4 h and 8 h under the reaction condition for preparing S-3.

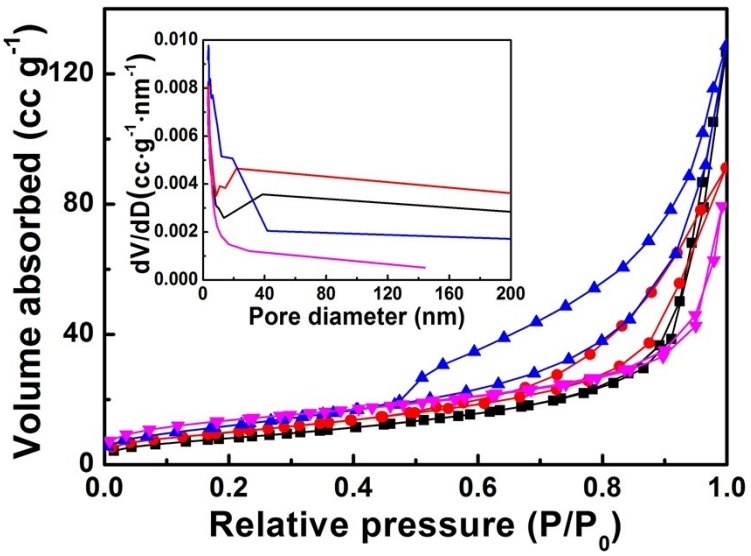

Fig. S8 N_2 adsorption desorption curves of S-1, S-2, S-3 and P-4.

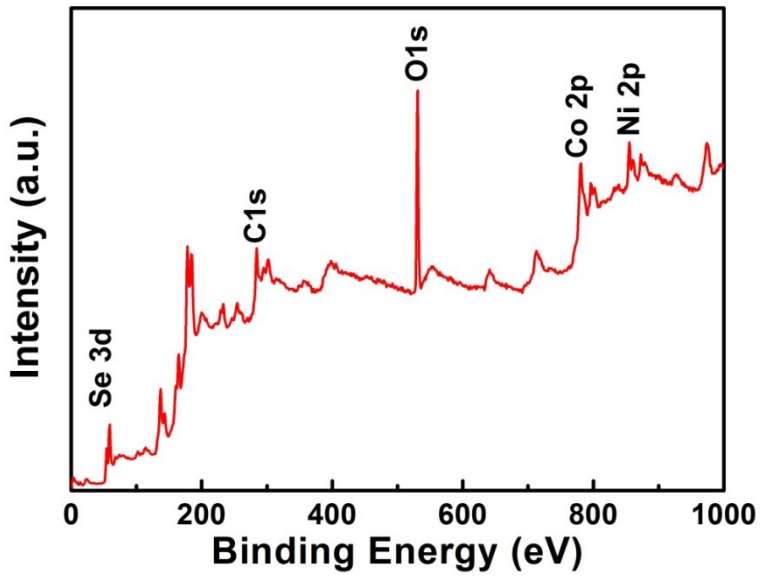

Fig. S9 The full XPS spectrum of hollow $Ni_{0.85}Se/Co_{0.85}Se/Co(OH)_2$ hexagonal plates.

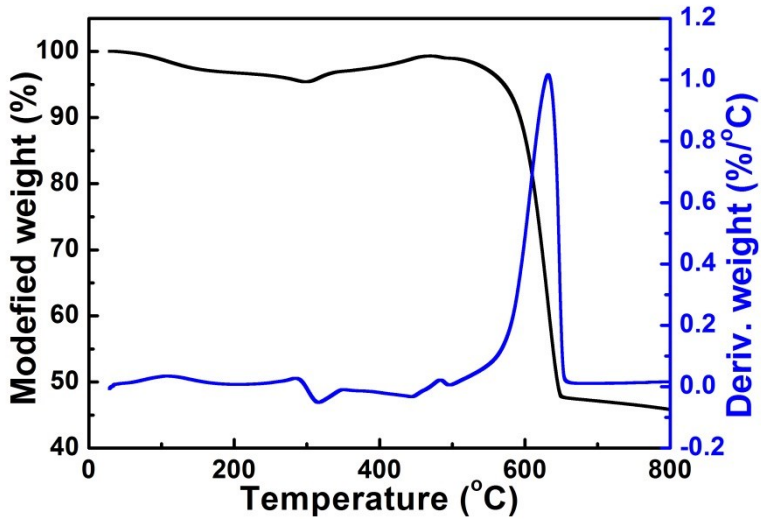

Fig. S10 TGA curves of hollow $Ni_{0.85}Se/Co_{0.85}Se/Co(OH)_2$ hexagonal plates.

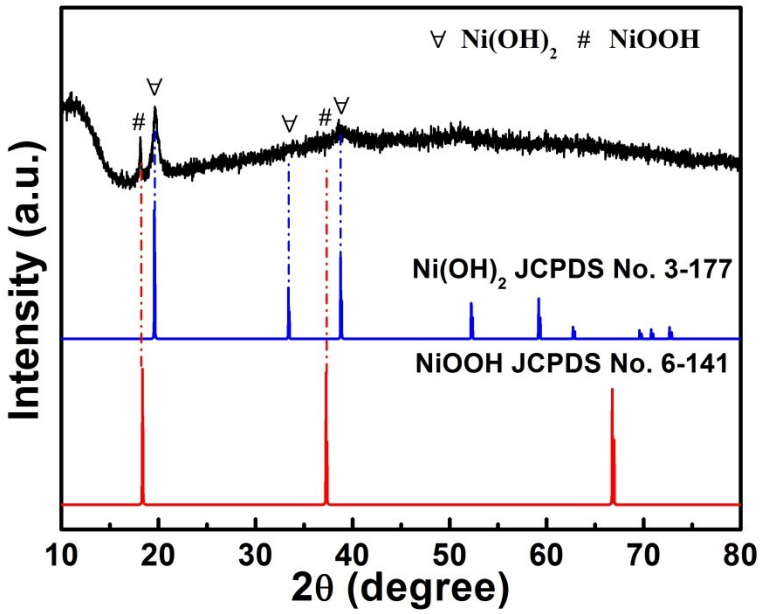

Fig. S11 XRD pattern of S-3 after the charge/discharge cycles.

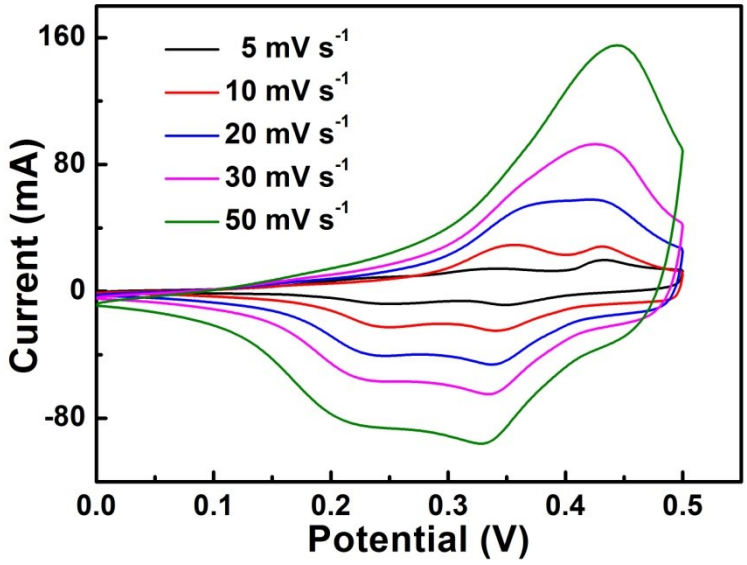

Fig. S12 CV curves of S-3 measured at different scan rates of 5, 10, 20, 30 and 50 mV s^{-1}, respectively.

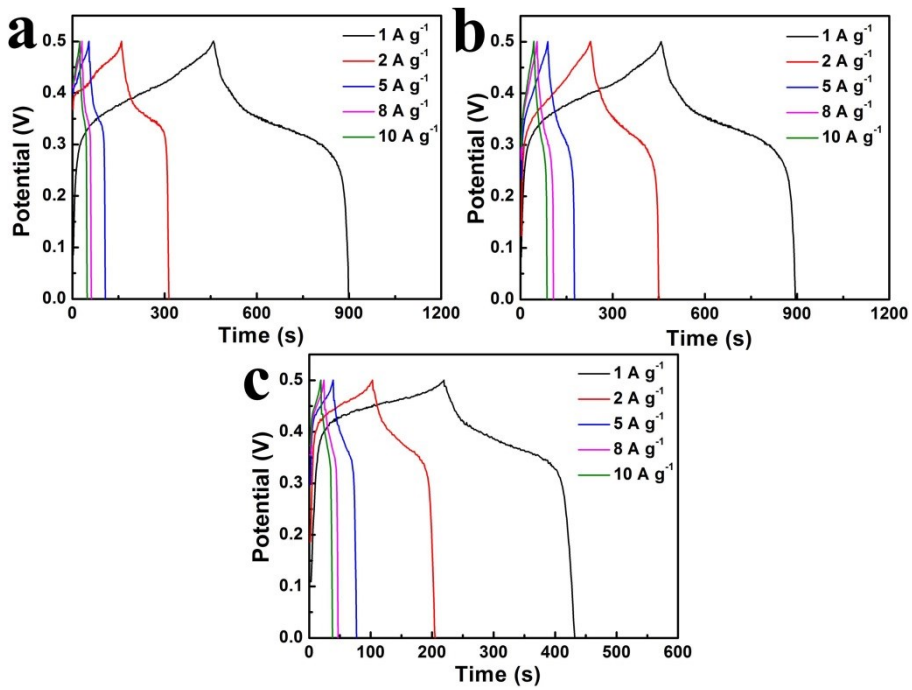

Fig. S13 Charging/discharging curves at different current densities of (a) S-1, (b) S-2 and (c) P-4.

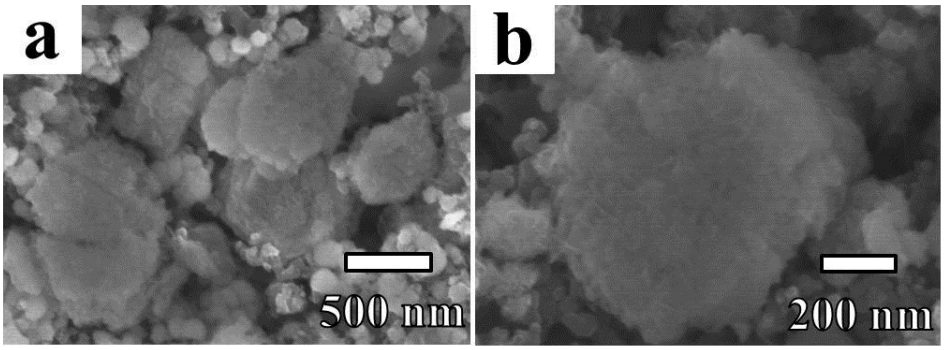

Fig. S14 (a) the low magnification and (b) high magnification SEM images of S-3 after the charge/discharge cycles.

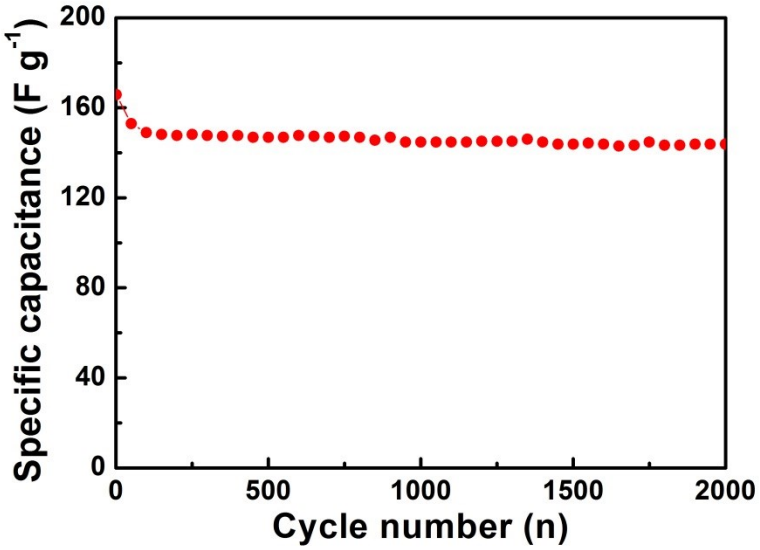

Fig. S15 The cycling performance of AC electrode materials at the current density of 1 A g^{-1}.

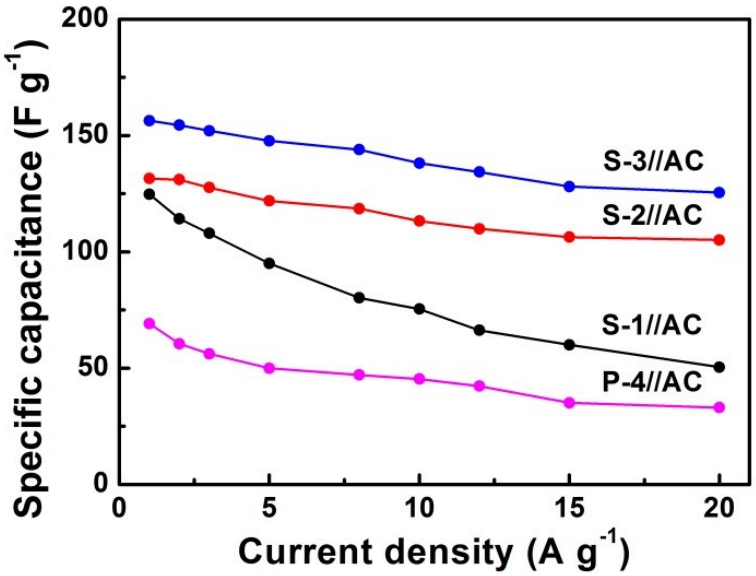

Fig. S16 Rate performances of S-1//AC, S-2//AC, S-3//AC and P-4//AC hybrid supercapacitor devices.