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Supplementary Information

$NiCo_2O_4$/NiCoP nanoflake-nanowire arrays: a homogeneous hetero-structure for high performance asymmetric hybrid supercapacitors

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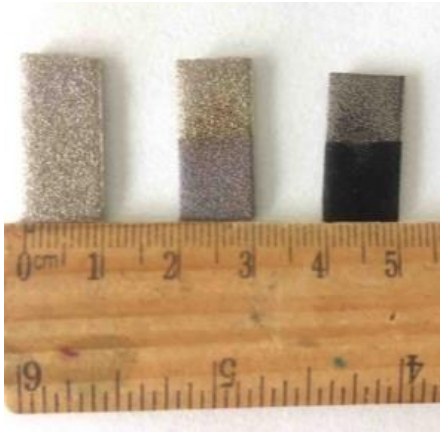

Figure S1 Photographs of nickel foam substrate, Ni-Co precursor on nickel foam and $NiCo_2O_4$/NiCoP-500 on Ni foam

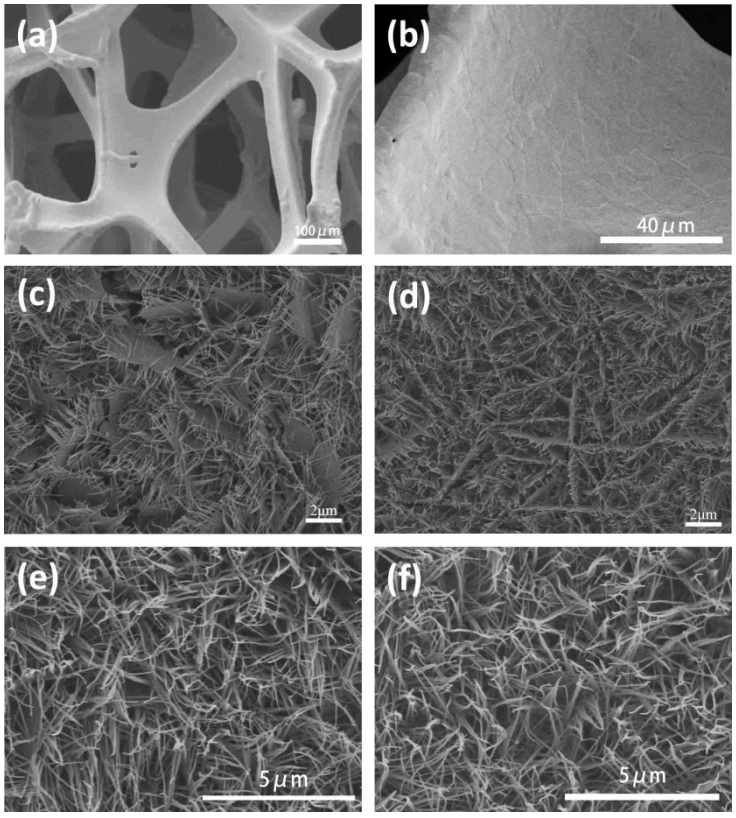

Figure S2 SEM micrographs of (a, b) pure Ni foam, (c) $NiCo_2O_4$/NiCoP-200, (d) $NiCo_2O_4$/NiCoP-1000 ,(e) NCO-6h and (f) NCO-9h

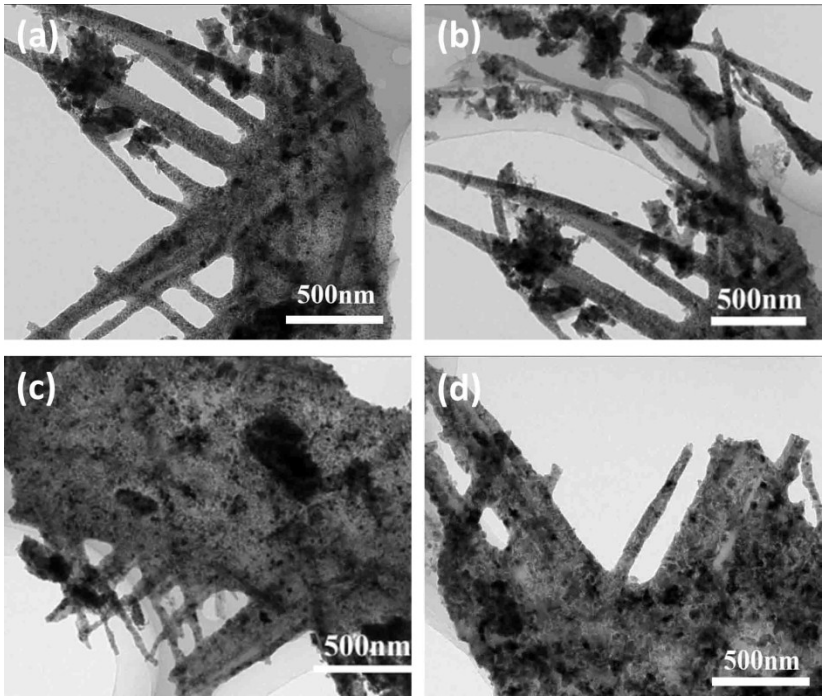

Figure S3 TEM of (a) $NiCo_2O_4$ (b) $NiCo_2O_4$/NiCoP-200 (c) $NiCo_2O_4$/NiCoP-1000(d) $NiCo_2O_4$/NiCoP-1500.

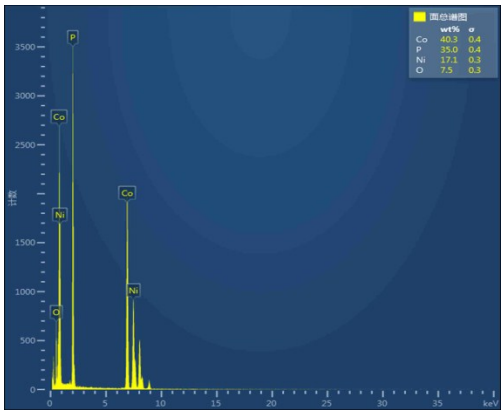

Figure S4 TEM EDS result of $NiCo_2O_4$/NiCoP-200

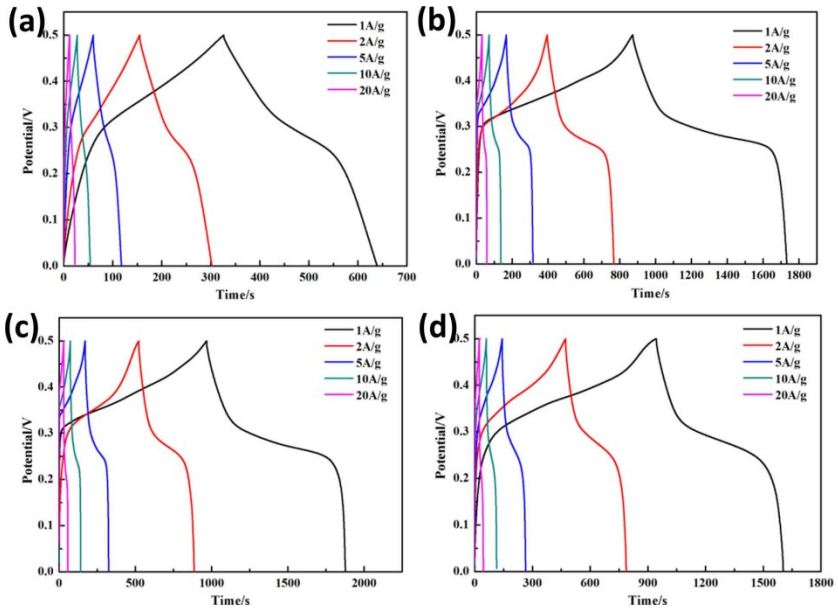

Figure S5 GCD curves of (a) $NiCo_2O_4$ (b) $NiCo_2O_4$/NiCoP-200 (c) $NiCo_2O_4$/NiCoP-1000(d) $NiCo_2O_4$/NiCoP-1500 electrode at different current densities

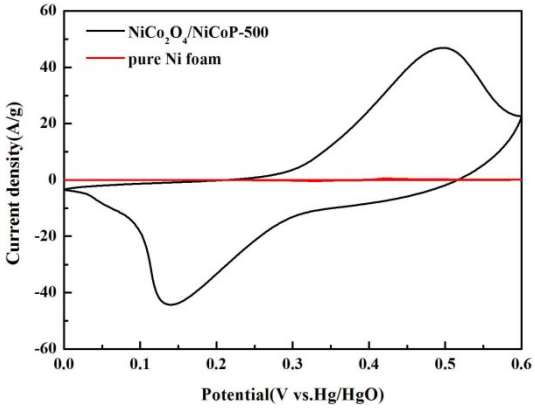

Figure S6 CV curves of $NiCo_2O_4$/NiCoP-500 and pure Ni foam at the scan rates of 10 mV s^{-1}.

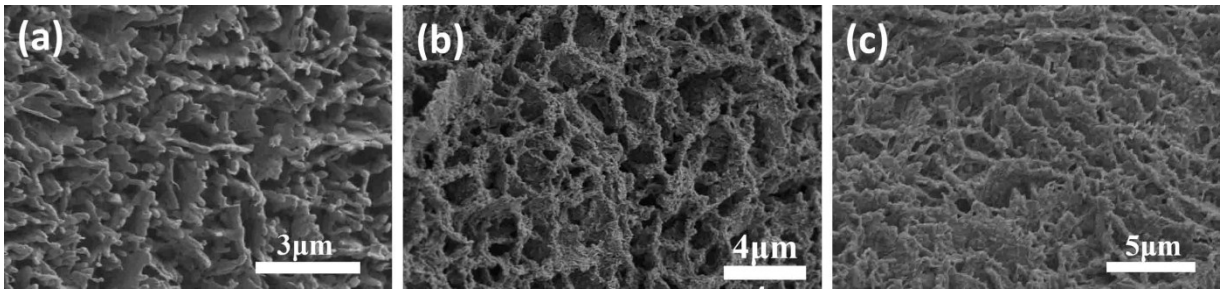

Figure S7 SEM images of the (a) $NiCo_2O_4$;(b)$NiCo_2O_4$/NiCoP-500;(c) $NiCo_2O_4$/NiCoP-1500 after 2000 cycles

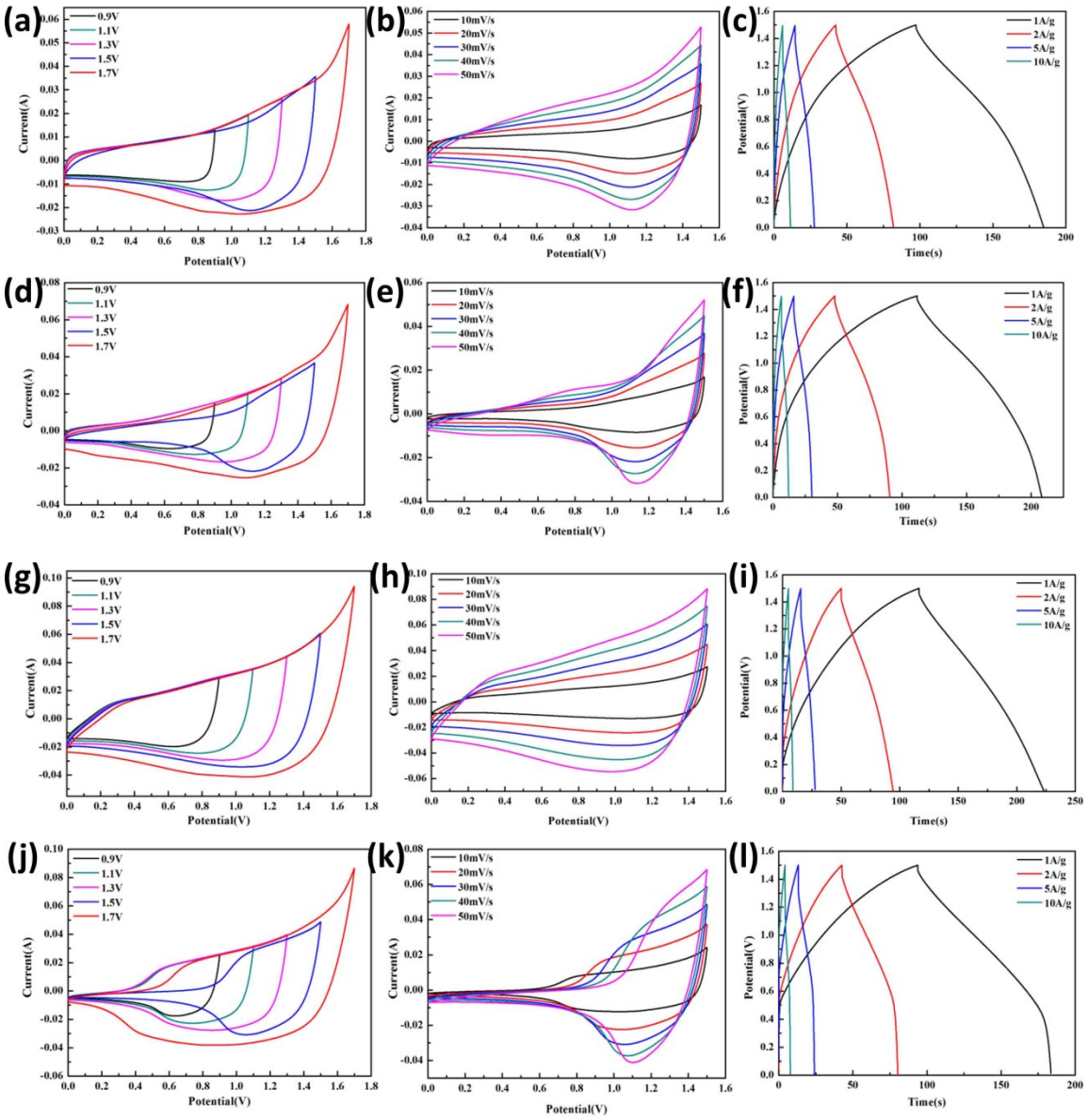

Figure S8 The electrochemical performance of $NiCo_2O_4$//AC, $NiCo_2O_4$/NiCoP-200//AC, $NiCo_2O_4$/NiCoP-1000//AC, and $NiCo_2O_4$/NiCoP-1500//AC: (a, d, g and j) CV curves in different potential ranges at a scan rate of 30 mV s^{-1}; (b, e, h and k) CV curves at different scan rates; (c, f, i and l) GCD curves at different current densities.