Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supplementary Information

Hierarchical $CuCo_2O_4$@$NiMoO_4$ core-shell hybrid arrays as the battery-like electrode for supercapacitors

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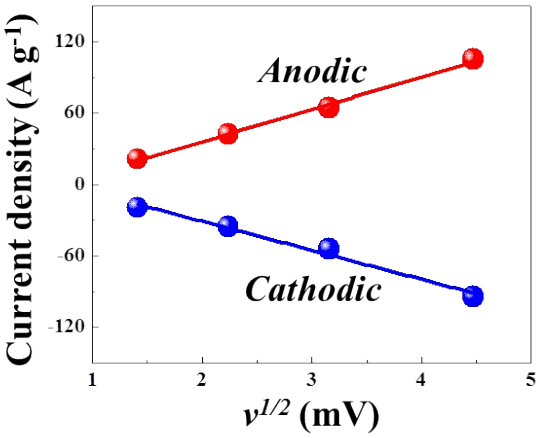

Fig. S1 The corresponding current density (i)-$v^{1/2}$ (scant rate$^{1/2}$) plots in $CuCo_2O_4$@$NiMoO_4$

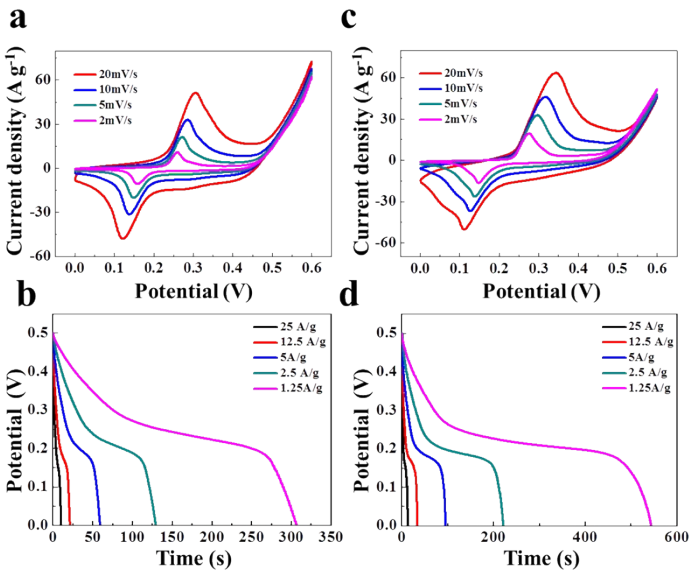

Fig. S2 CV and galvanostatic discharge curves curves of (a, b) $CuCo_2O_4$ and (c, d) $NiMoO_4$ at various scan rates and current densities

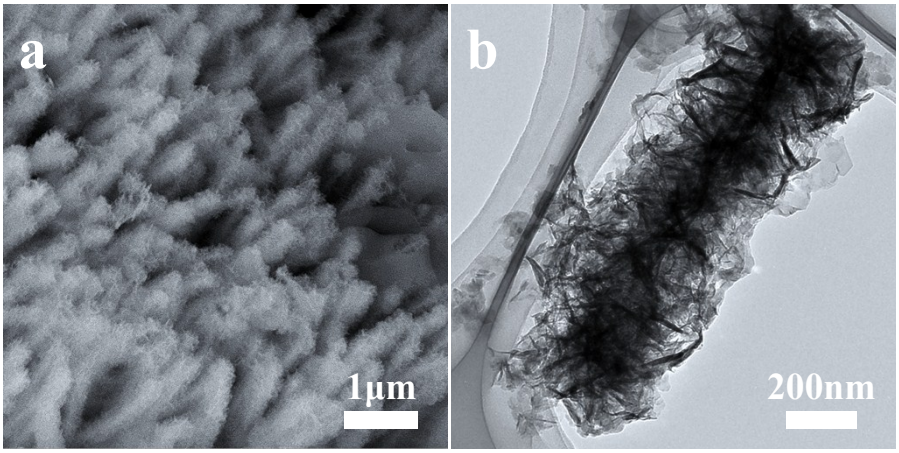

Fig. S3 (a) Typical SEM and (b) TEM images of $CuCo_2O_4$@$NiMoO_4$ after 5000 cycles.

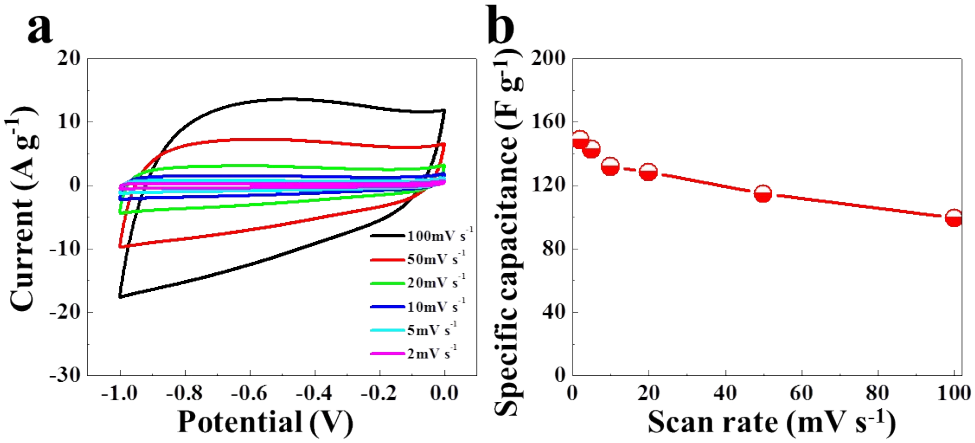

Fig. S4 (a) CV curves of AC at various scan rate and (b) corresponding specific capacitance.

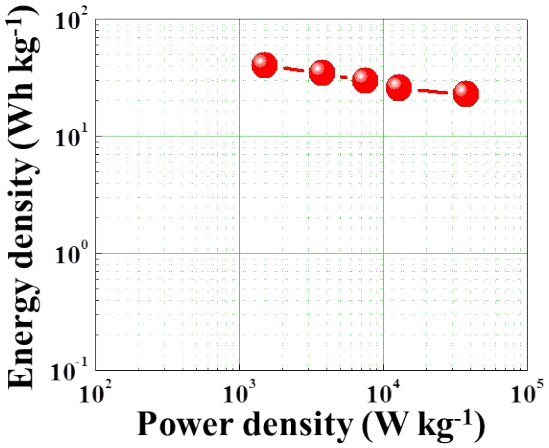

Fig. S5 Ragone plots of the $CuCo_2O_4$@$NiMoO_4$//AC devices

Table S1. The specific capacitance of various electrodes in the three-electrode system in references

electrode materials	electrolyte	specific capacitance	reference
$NiMoO_4$@MnO_2 core-shell nanorod/nanosheet	2 M KOH	1136 F g^{-1}	1
graphitized carbon nanofibers /$NiMoO_4$ nanoparticles	6 M KOH	1438 F g^{-1}	2
$CoMoO_4$@$NiMoO_4$	2 M KOH	1582 F g^{-1}	3
$CoMoO_4$@$NiMoO_4$ nanosheet arrays	2 M KOH	1639.8 F g^{-1}	4
one-dimensional $NiMoO_4$	1 M KOH	1335 F g^{-1}	5
$NiMoO_4$@MnO_2 nanosheet arrays	3 M KOH	976 F g^{-1}	6
$CuCo_2O_4$ nanoflowers	2 M KOH	1075.2 F g^{-1}	7
$CoMoO_4$–$NiMoO_4$ nanosheet-nanotubes	3 M KOH	751 F g^{-1}	8
$NiMoO_4$ nanosheet	1 M KOH	1483 F g^{-1}	9
MnO_2@$NiMoO_4$	2 M KOH	582.2 F g^{-1}	10
$CuCo_2O_4$@$CuCo_2O_4$	2 M KOH	888.9 F g^{-1}	11
flower-like $CuCo_2O_4$ nanosheets	6 M KOH	1131 F g^{-1}	12
$CuCo_2O_4$/CuO	1 M KOH	781 F g^{-1}	13
$CuCo_2O_4$/$MnCo_2O_4$	2 M KOH	1434 F g^{-1}	14
Ni-Co@Ni-Co layered double hydroxide	1 M NaOH	2200 F g^{-1}	15
Co_3O_4@$Ni(OH)_2$	3 M KOH	1306F g^{-1}	16
$NiCo_2O_4$@$NiWO_4$	6 M KOH	1384 F g^{-1}	17
CoO@MnO_2	6 M KOH	1835 F g^{-1}	18
Co_3O_4@$CoMoO_4$	2 M KOH	1902 F g^{-1}	19
$MnCo_2O_4$@$Ni(OH)_2$	2 M KOH	2154 F g^{-1}	20
$CuCo_2O_4$@$NiMoO_4$	6M KOH	2207 F g^{-1}	This work

Notes and references

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