Electronic Supplementary Information for

Engineering robust interface with dual transfer routes to boost the capability of metal-organic framework derived metal sulfide for energy storage

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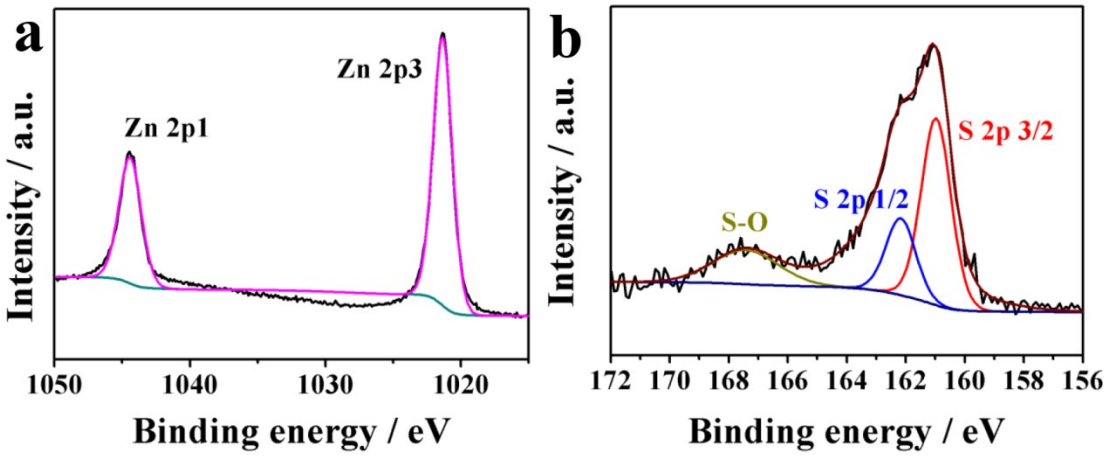

Figure S1. (a) Zn 2p and (b) S 2p XPS spectral of ZnS/NMC.

Table S1. XPS survey results of ZnS/NMC.

Element	C 1s	N 1s	O 1s	Zn 2p	S 2p
Atomic %	55.5	17.6	11.4	7.9	7.6

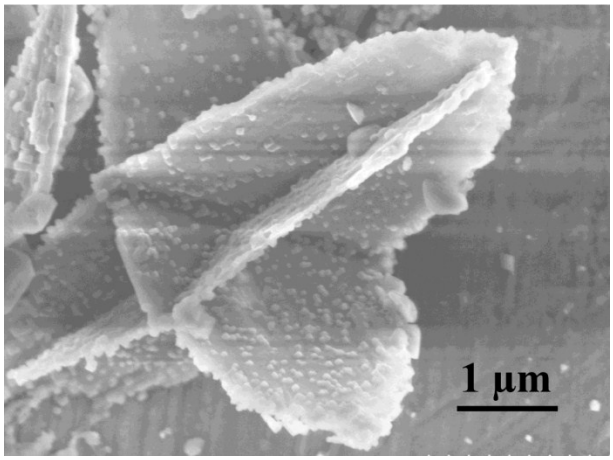

Figure S2. SEM image of Zn-MOF.

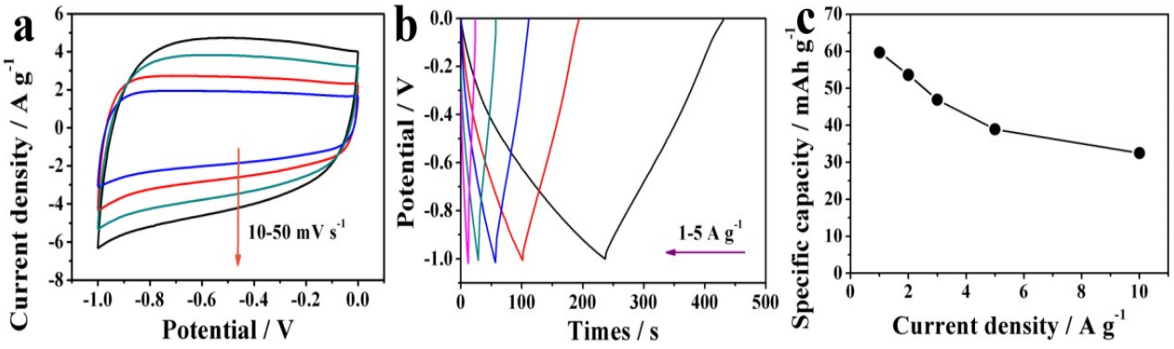

Figure S3. Electrochemical performance of active carbon (AC) anode. (a) CVs at different scan rates; (b) GCDs at different current densities; (c) capacities at different current densities. Capacities at 1, 2, 3, 5 and 10 A g^{-1} are 60, 54, 47, 39 and 33 mAh g^{-1}, respectively.

Table S2. Capacities of asymmetric devices with different mass ratio of AC and ZnS/NMC at the current density of 1 A g^{-1}.

$m_{ZnS/NMC}$ (mg)	1	1	1	1	1
m_{AC} (mg)	1	1.5	2	2.5	2.7
Capacity (mAh g^{-1})	42.1	56.9	40.7	29.3	16.9

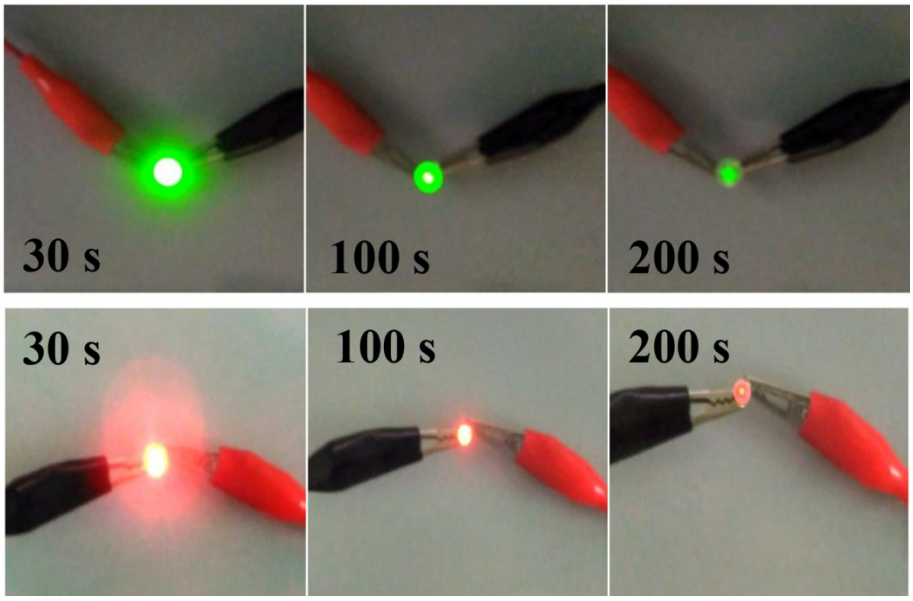

Figure S4. The LEDs powered by assembled asymmetric device at different times.