

Superior Energy Storage Performance of MOF/PANI Nanocomposites: Toward Sustainable Supercapacitors

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Supplementary Fig 1:

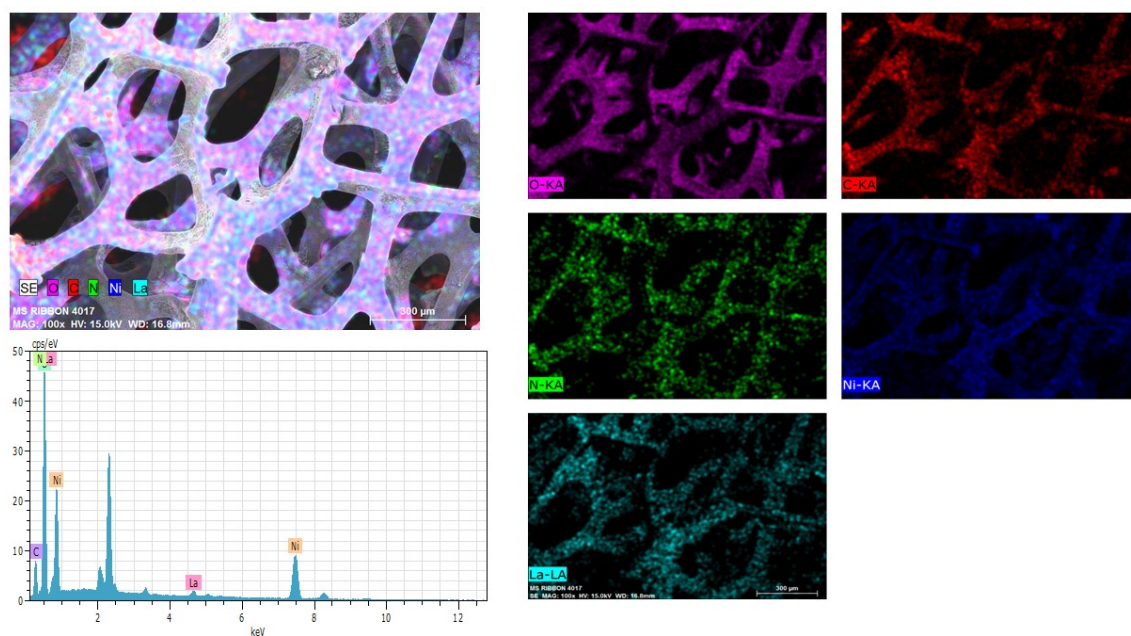
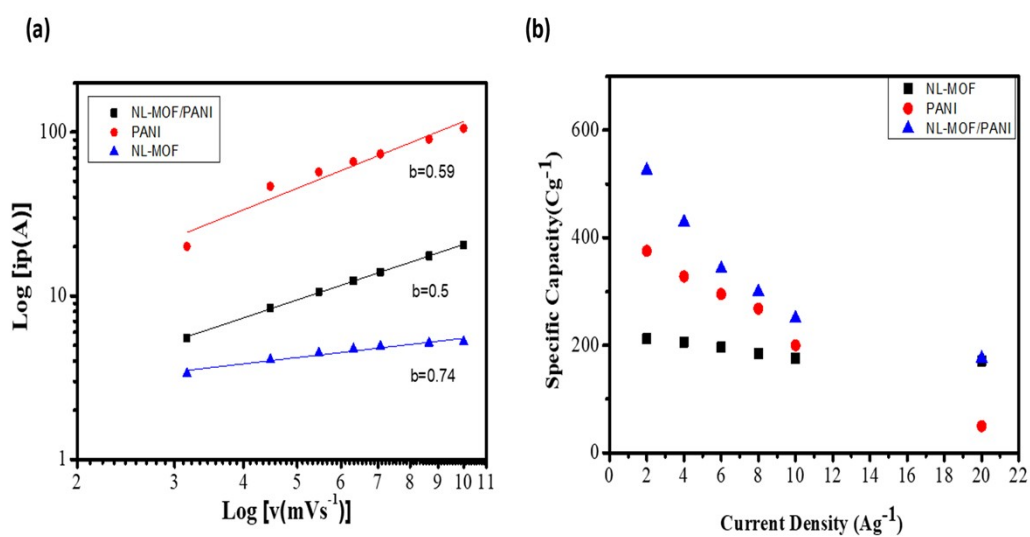


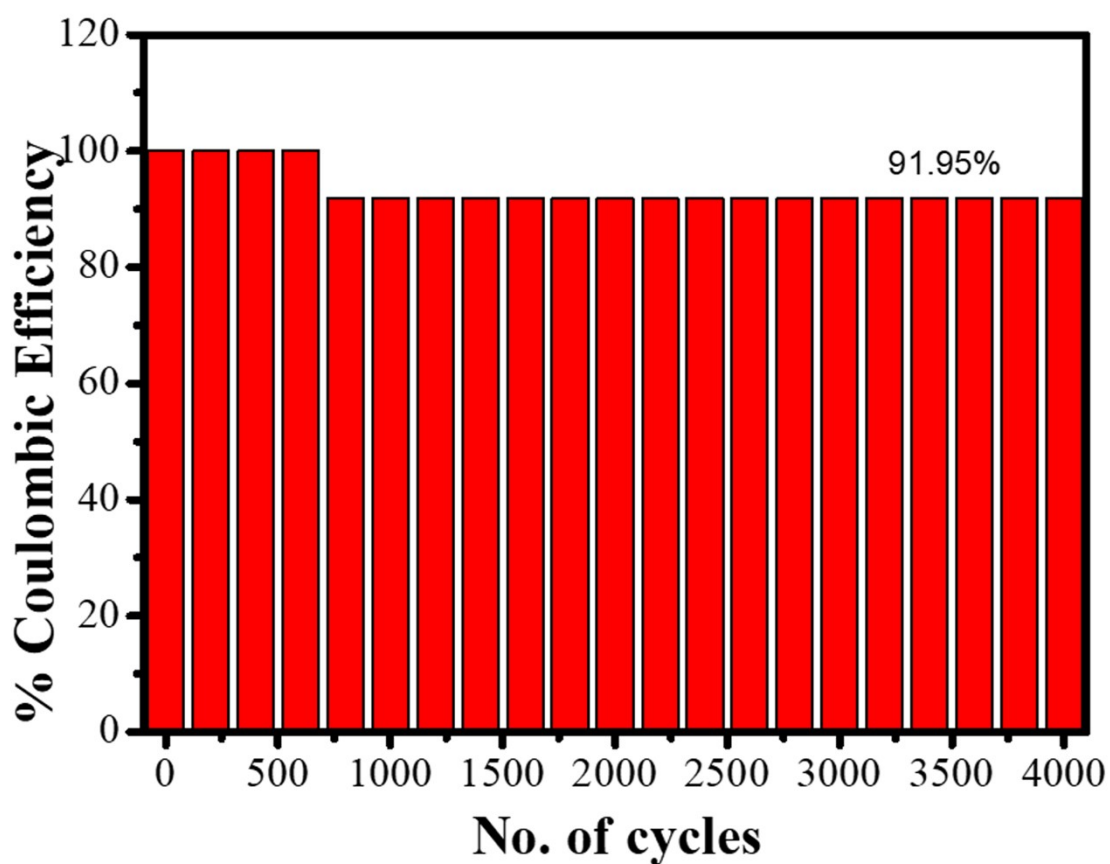
Fig S1: EDX analysis of the prepared NL-MOF/PANI material.

Supplementary Fig S2



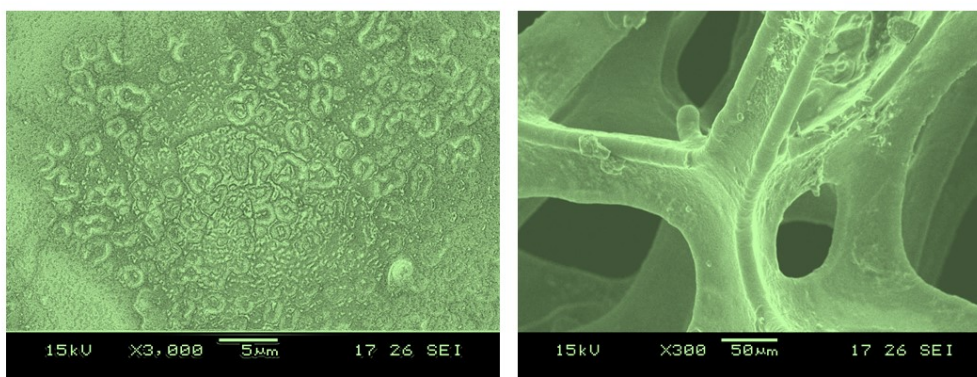
Supplementary Fig S2: (a) Comparative power law analysis of PANI, NL-MOF and NL-MOF/PANI electrodes, (b) Comparative specific capacity vs current density plot of NL-MOF PANI, PANI and NL-MOF

Supplementary Fig S3



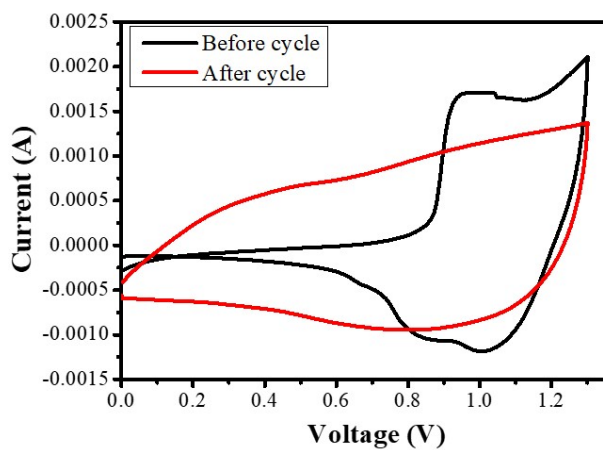
Supplementary Fig S3: %Coulombic efficiency plot of NL-MOF/PANI electrode in 1M KOH electrolyte.

Supplementary Fig S4



Supplementary Fig S4: After cycle SEM image of NL-MOF/PANI.

Supplementary Fig S5:



Supplementary Fig S5: Before and after cycle NL-MOF/PANI/ACC device.

Supplementary Table T1

Current densities	Specific Capacity of NL-MOF (Cg-1)	Specific Capacity of PANI (Cg-1)	Specific Capacity of NL-MOF/PANI (Cg-1)
2	211.96	375.43	525.68
4	206.15	327.75	428.95
6	196.47	295.22	342.47
8	184.5	268.15	299.48
10	175.92	200.20	250.39
20	171.10	49.60	175.800

Supplementary Table T1: Comparative electrochemical performance of NL-MOF/ PANI, NL-MOF/PANI

Supplementary Table T2:

Current Density Ag-1	Specific Capacity (Cg-1)	Specific Capacitance (Fg-1)	Energy Density (Whkg ⁻¹)	Power Density (Wkg ⁻¹)
0.5	401.44	308.8	72.48	1299.999
0.75	337.79	259.84	60.99	1949.94
1	250.406	192.62	45.21	2599.89
2	139.51	107.32	25.19	5199.85
3	111.83	86.03	20.19	7799.93
5	76.557	58.89	13.82	13095.27

Supplementary Table T2: Electrochemical performances of NL-MOF/PANI/ACC in 1M KOH electrolyte