Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2018



Fig. S 1: Low magnification of MoS₂-N1 nanomaterial.



Fig. S 2: Elemental mapping of MoS_2 -N1 nanomaterial; (a) TEM of MoS_2 -N1, mapping for (b) Oxygen, (c) Sulphur and (d) Molybdenum



Fig. S 3: The XPS spectra for (a) S 2p, (b) Mo $3d_{5/2}$ and (c) Survey scans of MoS₂ (a), MoS₂-400 (b), MOS₂-N1 (c) and MoS₂ -N5 (d).

Sr.	Current	MoS ₂		MoS ₂ -400		MoS ₂ -N1		MoS ₂ -N5	
No.	Density	C _s (F/g)	Energy Density (Wh/Kg)						
1	2	34.90	2.37	35.63	2.42	129.02	8.78	74.39	5.06
2	3	16.85	1.14	18.01	1.22	98.74	6.72	62.43	4.24
3	4	12.41	0.84	22.01	1.49	88.20	6.0	52.26	3.55
4	5	10.50	0.71	17.33	1.17	76.92	5.23	46.02	3.13

Table S 1: Energy density and specific capacitance of MoS_2 , MoS_2 -400, MoS_2 -N1 and MoS_2 -N5.