Supporting information

Effect of Dopant Concentration and Ambient Temperature on the Pseudo-capacitance Behavior of Novel Copper Doped Bismuth Layered Double Hydroxide

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Table S1: Measurement of resistance from EIS data for three electrodes

Electrode	**Solution resistance (Ohm)**	**Charge transfer resistance (Ohm)**	**Series resistance (Ohm)**
UBL	0.29	10.5	10.84
1 % CBL	0.31	4.0	4.31
2.5 % CBL	0.29	3.92	4.21
5 % CBL	0.21	22.12	22.33

Table S2: Comparison of current research with similar materials

Structure	**Type**	**Electro lyte**	**Energy ($Wh\ kg^{-1}$)**	**Power ($W\ kg^{-1}$)**	**References**
N, O codoped carbon nanosphere	Symmetric	KOH	6.5	425	[1]
Bi-Oxychloride/Mxene	Symmetric	KOH	15.2	567.4	[2]
Bi_2O_3/Graphite	Asymmetric	KOH	11	720	[3]

Ni-Bismuth LDH	Symmetric	KOH	43	725	[4]
NiCo-LDHs//AC	Asymmetric	KOH	74.37	492	[5]
NiCo-LDHs//CNT	Asymmetric	KOH	36.1	649	[6]
MnO_2@CoNi-LDHs//AC	Asymmetric	KOH	40.9	400	[7]
Cu-Bismuth LDH	Symmetric	KOH	65.5	905	This work

Table S3: Measurement of resistance from EIS data for two electrodes at different temperatures

Temperature	**Solution resistance (Ohm)**	**Charge transfer resistance (Ohm)**	**Series resistance (Ohm)**
35	2.25	19.01	21.06
45	2.22	11.12	13.34
55	2.29	70	70.29

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