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Supporting Information

Controllable synthesis of 3D hierarchical bismuth compounds with good electrochemical performance for advanced energy storage devices

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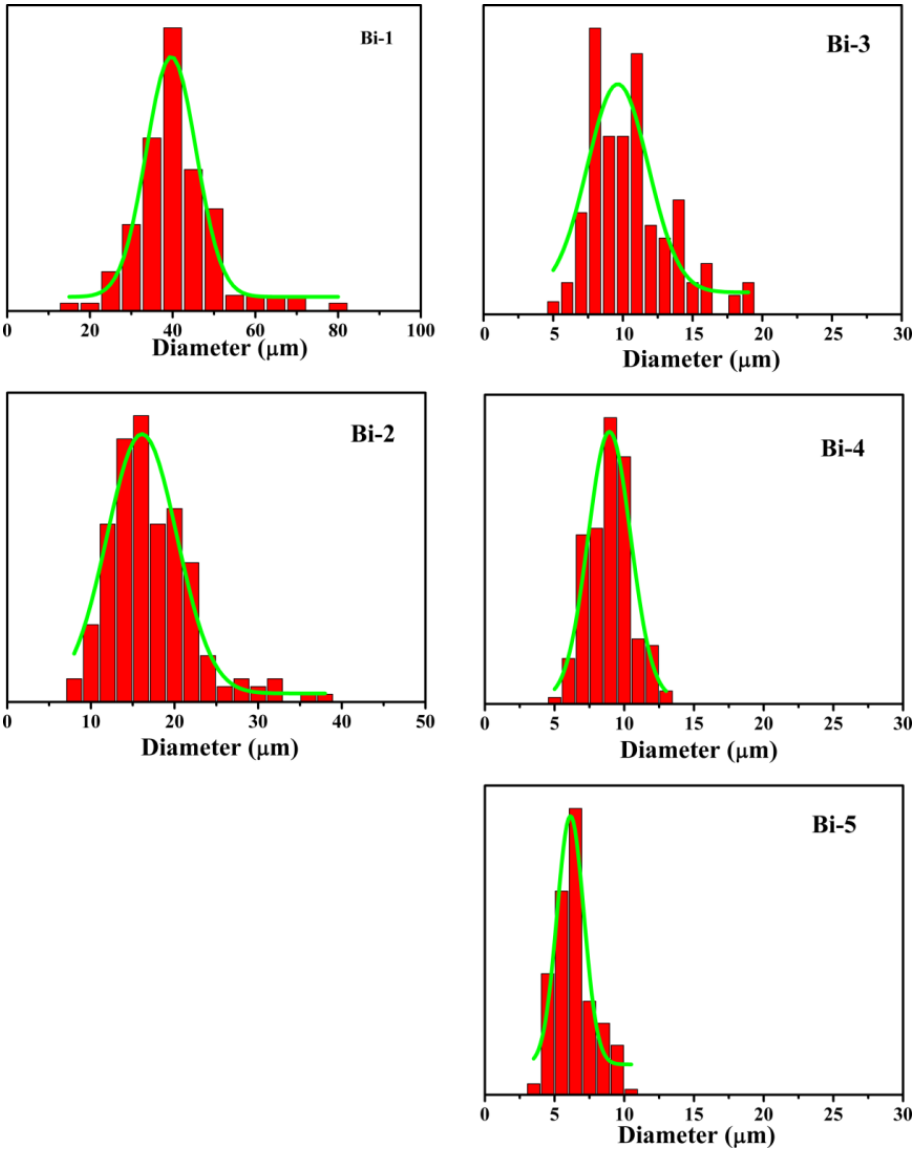

Fig. S1 Size distribution of diameter for Bi-samples.

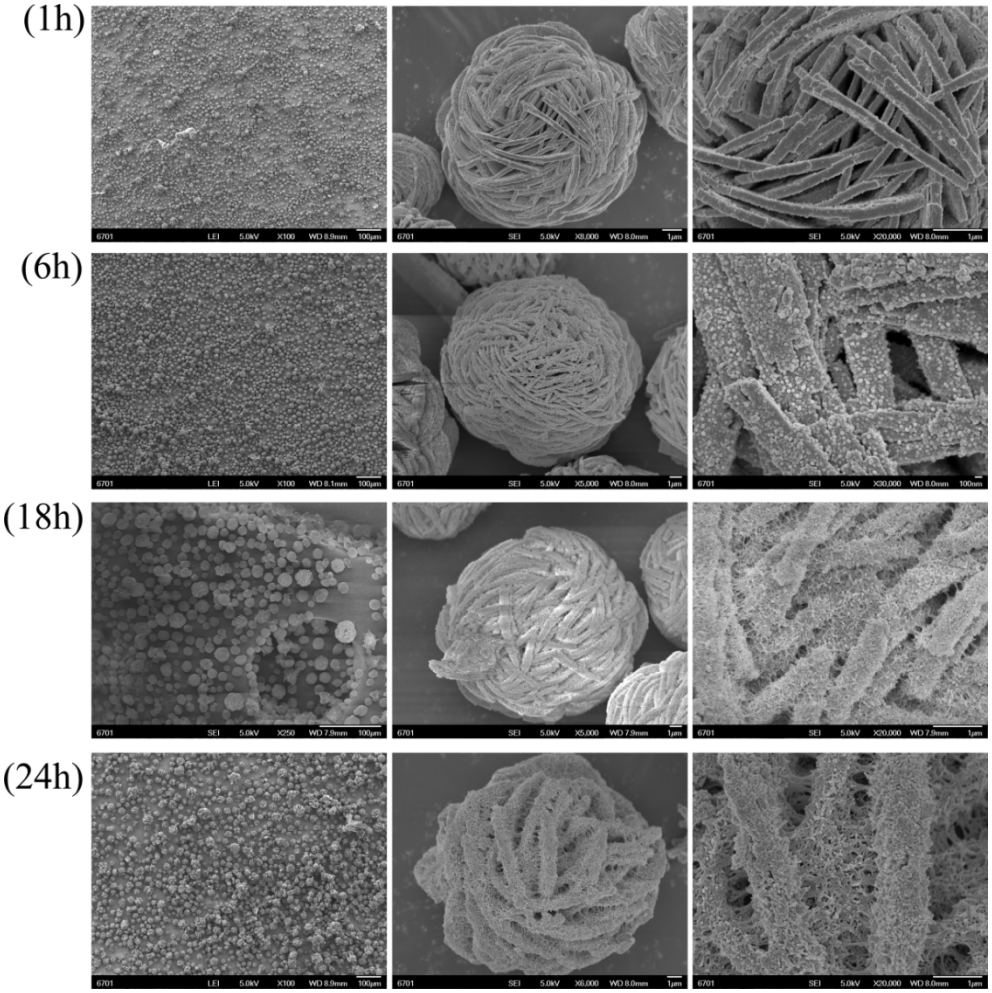

Fig. S2 SEM images of Bi-2 (Bi^{3+}/urea, 1/5) at different reaction times (1-24 h).

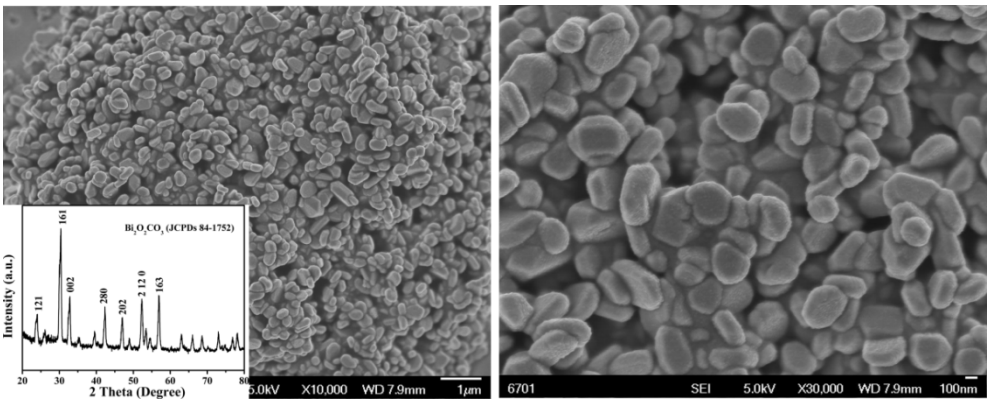

Fig. S3 SEM images of Bi-2 (Bi^{3+}/urea, 1/5) with 15 mL EG + 15 mL H_2O.

Table S1 Surface area, pore volume, and average pore size of the samples

Samples	**S_{BET}[a] (m^2 g^{-1})**	**V_{tot}[b] (cm^3 g^{-1})**	**Aps[c] (nm)**
Bi-1	6.23	0.0227	14.5
Bi-2	29.25	0.1671	22.9
Bi-3	32.67	0.2131	26.1
Bi-4	45.31	0.2485	21.9
Bi-5	67.89	0.3187	18.7
***a-BET surface area; b-Total pore volume of pore; c-Average pore size**			

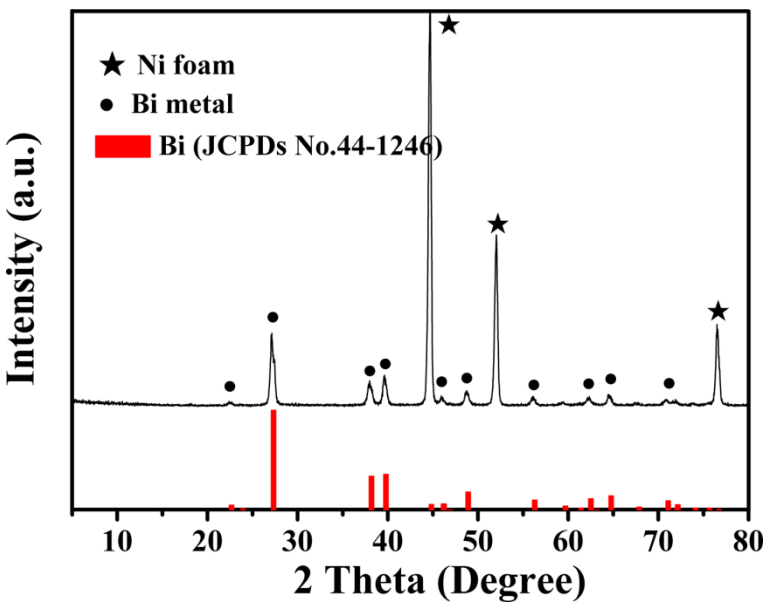

Fig. S4 XRD pattern of the fully discharged electrode.

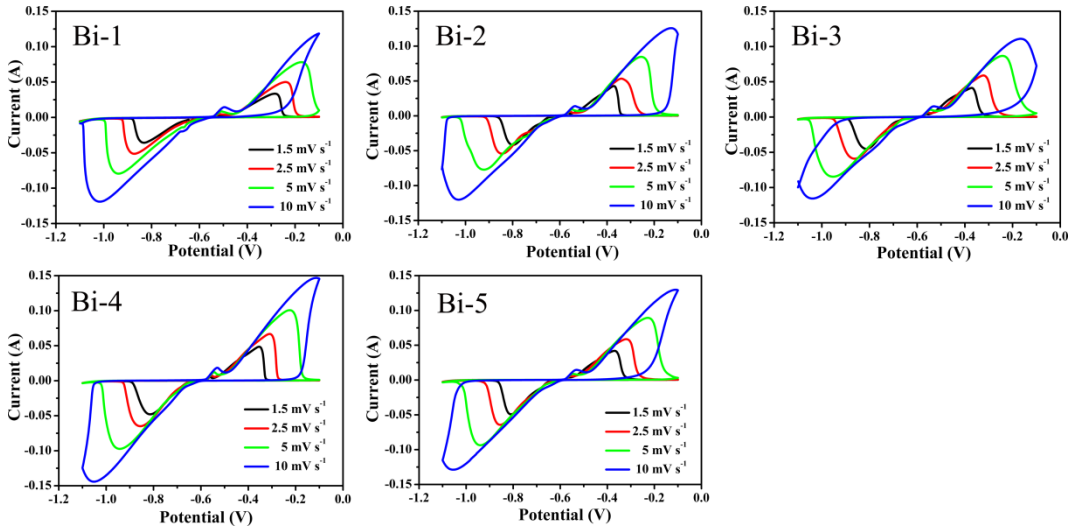

Fig. S5 CV curves at various scan rates from 1.5 to 10 mV s^{-1} of the samples.

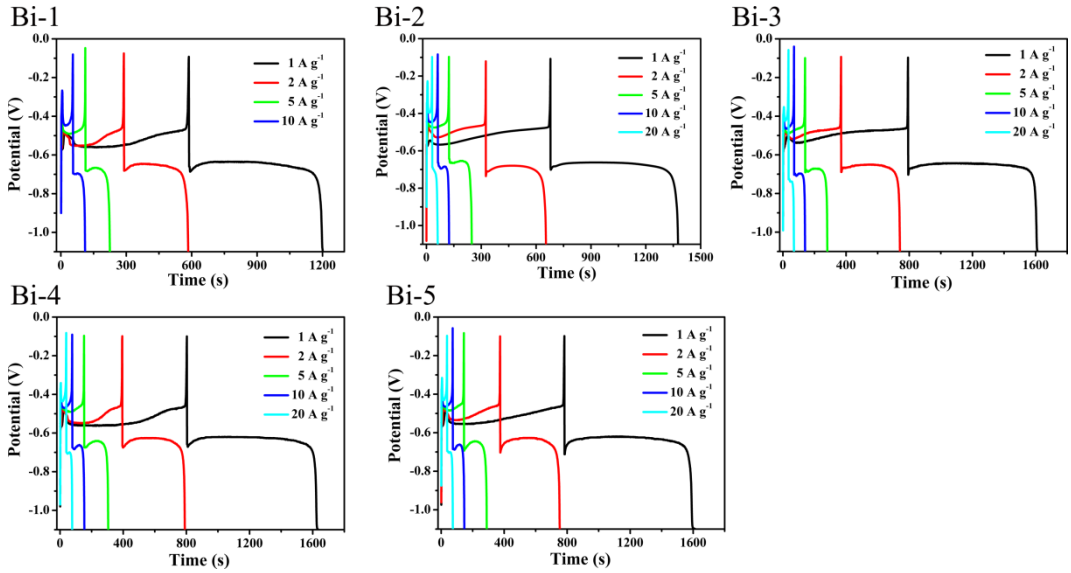

Fig. S6 charge-discharge curves at various current densities from 1 to 20 A g^{-1} of the samples.

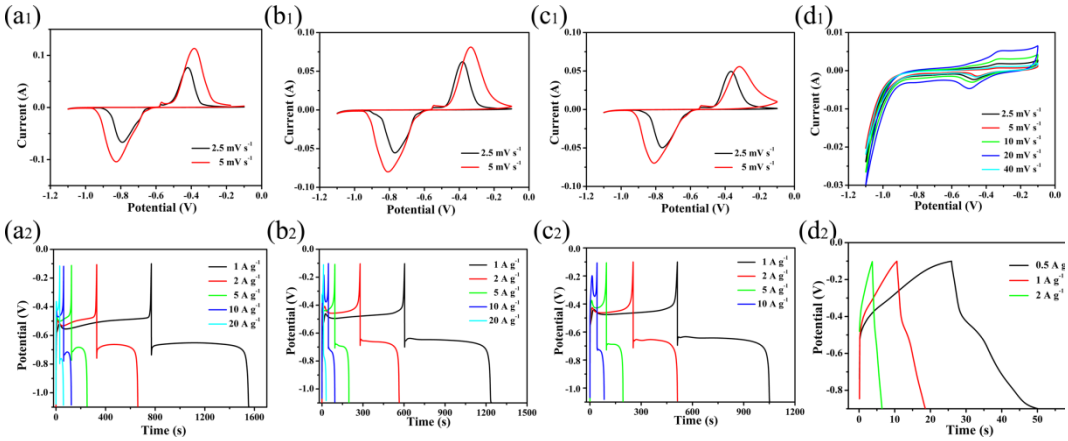

Fig. S7 Electrochemical properties of the Bi-4 electrode in different electrolyte: (a) 4 M KOH, (b) 2 M KOH, (c) 2 M NaOH, (d) 1 M Na_2SO_4.

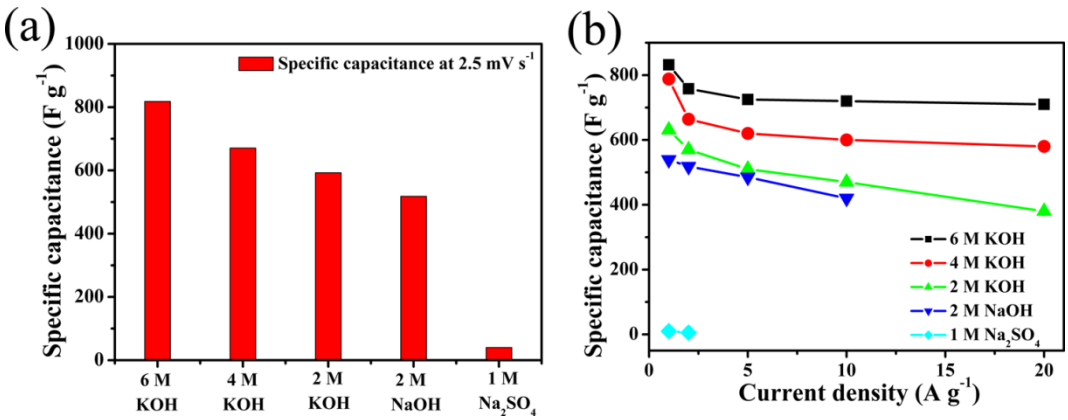

Fig. S8 (a) Specific capacitances of Bi-4 electrode at a scan rate of 2.5 mV s^{-1} in different electrolyte. (b) Corresponding specific capacitances as a function of current densities of Bi-4 electrode in different electrolyte.

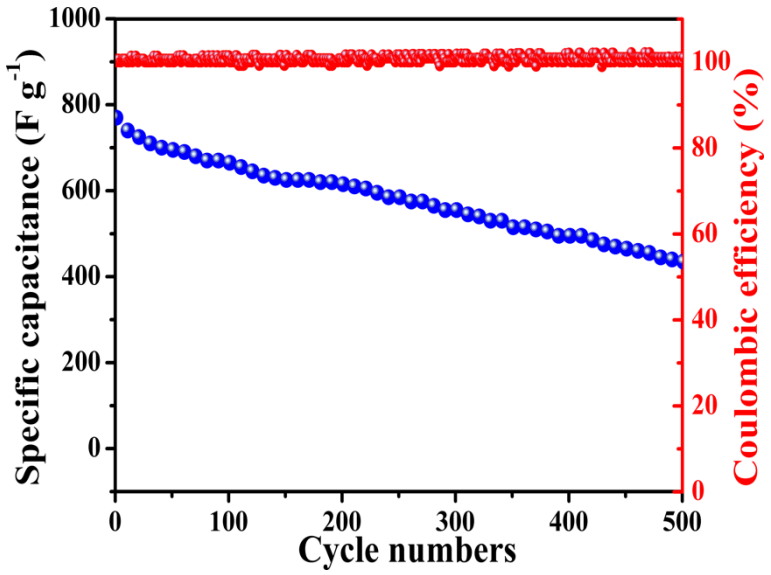

Fig. S9 Cycle stability and Coulombic efficiency of Bi-4 at a current density of 5A g^{-1}.

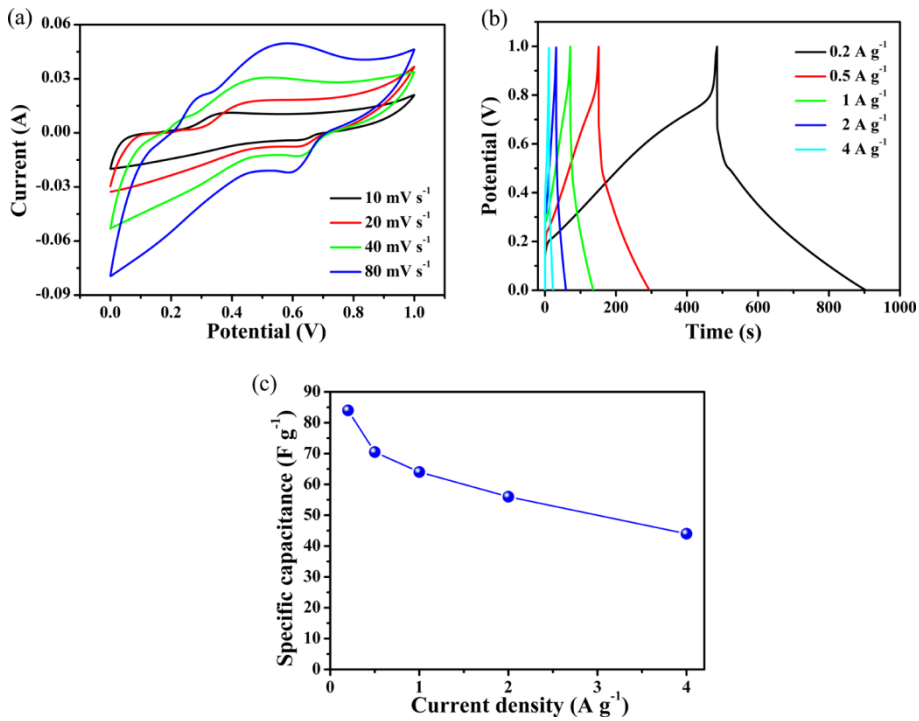

Fig. S10 Electrochemical properties of the fabricated Bi_2O_3//AC asymmetric supercapacitor: (a) CV curves of Bi_2O_3//AC at different scan rates from 10 to 80 mV s^{-1}. (b) Typical charge and discharge curves of Bi_2O_3//AC at different discharge rates from 0.2 to 4 A g^{-1}. (c) Corresponding specific capacitances as a function of current densities.