## **Supporting Information**

## Redox-crosslinked graphene networks with enhanced electrochemical capacitance

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Fig. S1 The C 1s XPS spectra of GO (A), rGO (B) and BBO-GNs (C).



Fig. S2 TGA curves of rGO and BBO-GNs.



Fig. S3 N<sub>2</sub> adsorption-desorption isotherms (A) and pore size distributions (B) of rGO.



**Fig. S4** CV curve of the graphite electrode, rGO and BBO-GNs samples at a constant scanning rate of 20 mV s<sup>-1</sup>.



Scheme S1. The proposed electrochemical reactions on BBO-GNs.



Fig. S5 EIS of rGO and BBO-GNs electrodes.