

# Electronic Supporting Information

## Ethyl viologen dibromide as a novel dual redox shuttle for supercapacitor

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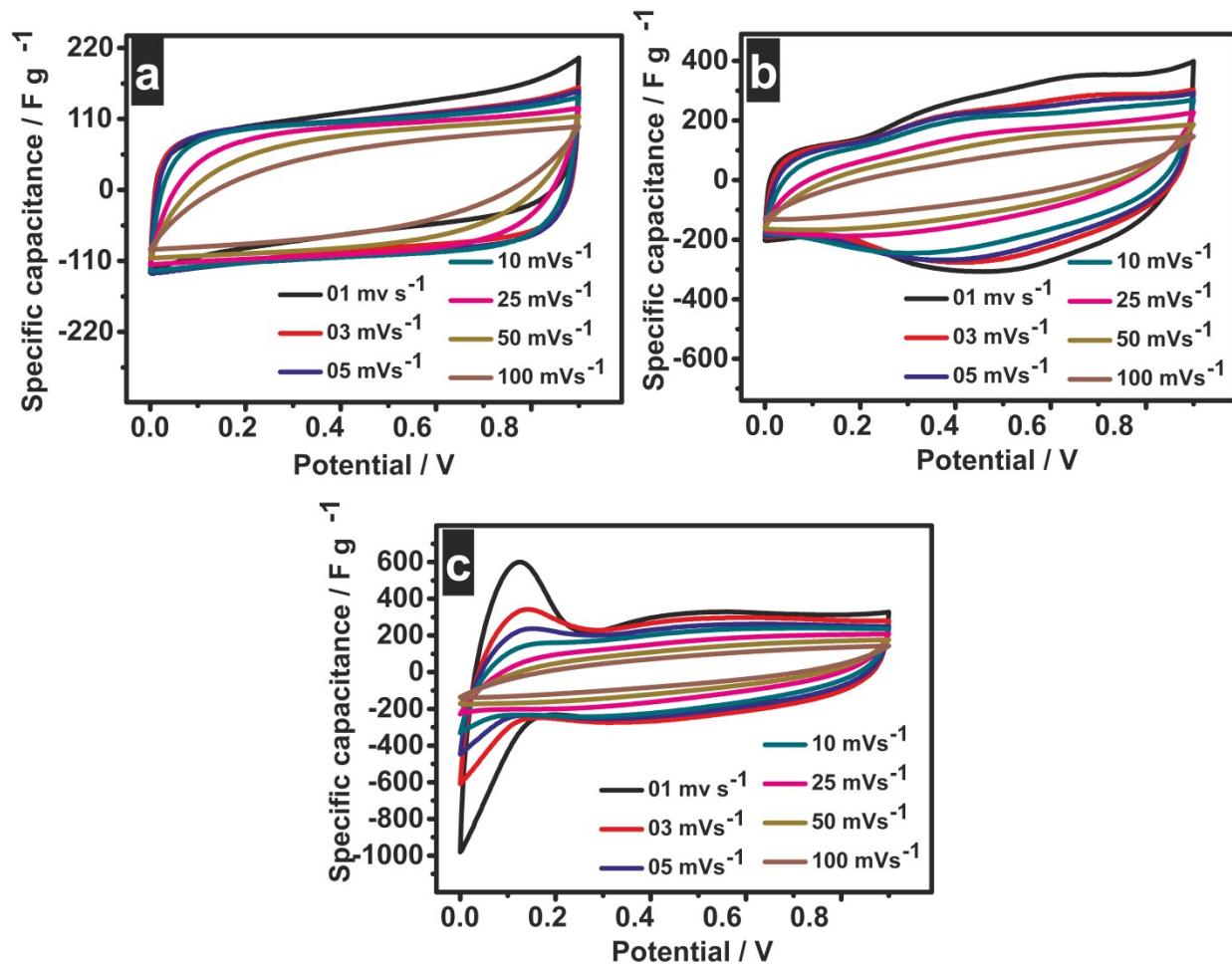
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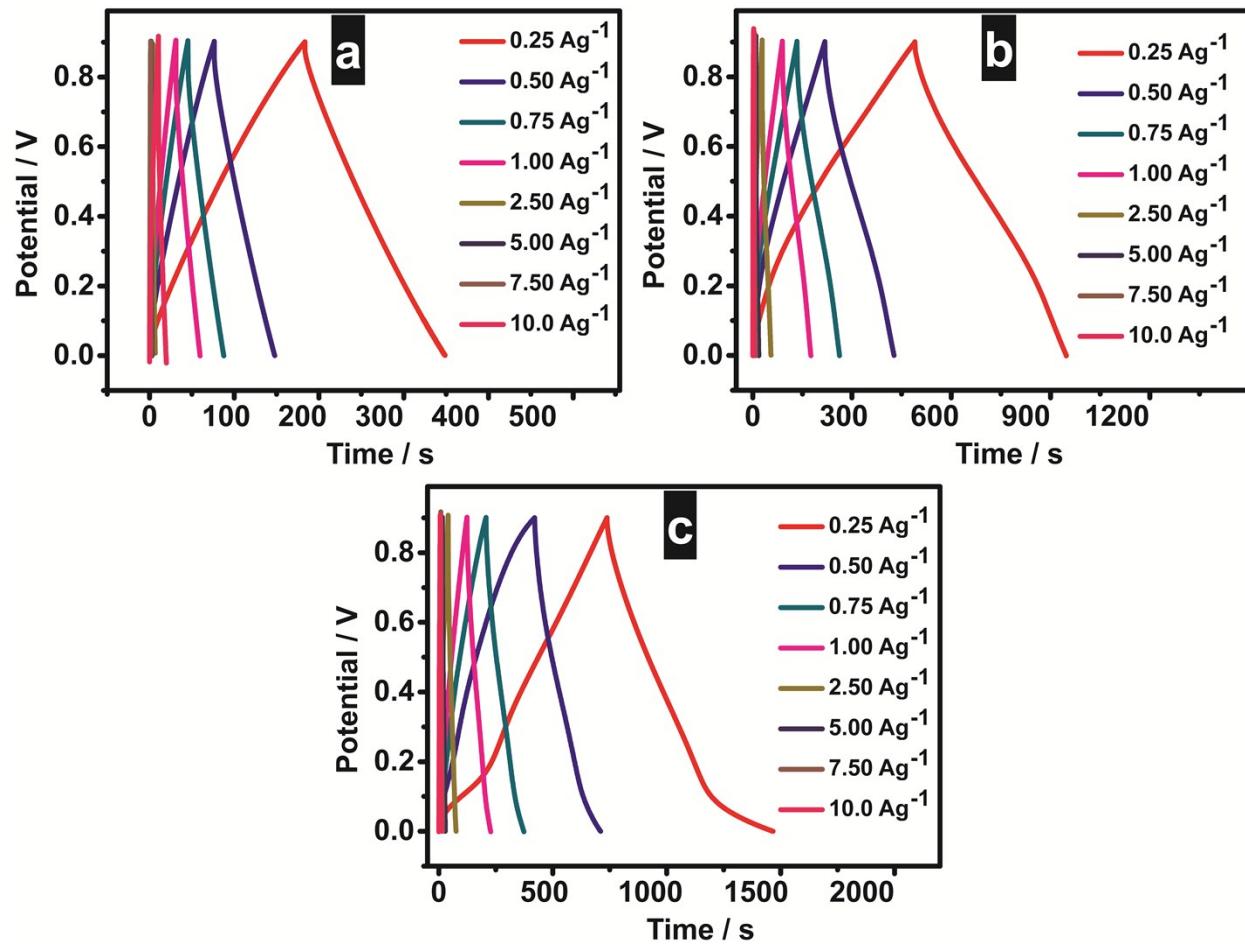
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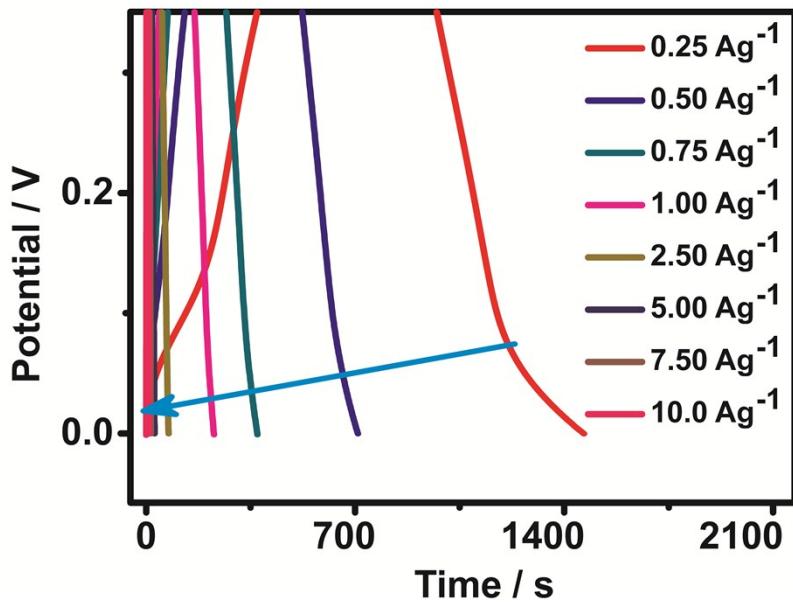
E-mail address: [dvelayutham@rediffmail.com](mailto:dvelayutham@rediffmail.com), [dvelayutham@cecri.res.in](mailto:dvelayutham@cecri.res.in)  
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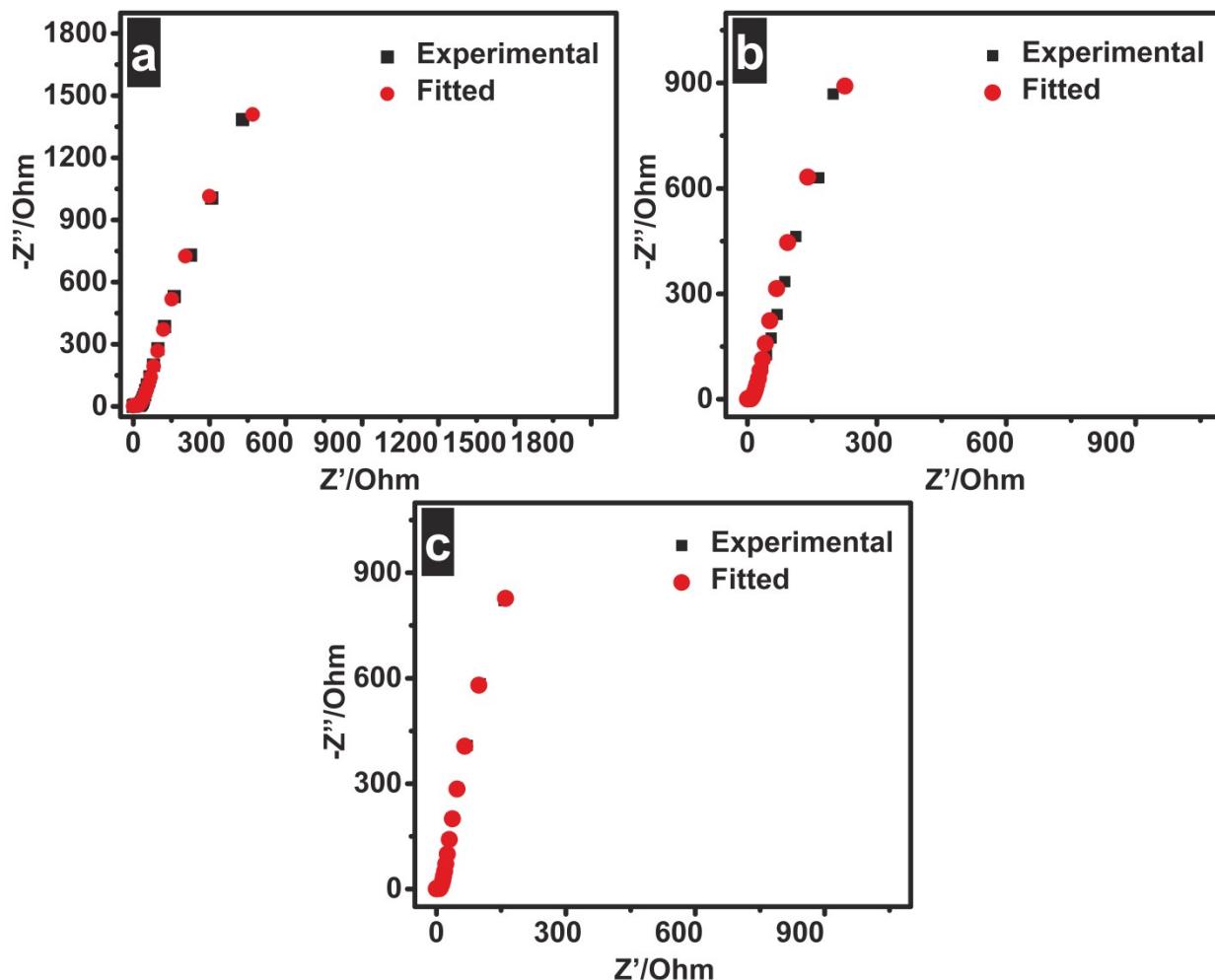
**ESI Fig. 1** CVs of SC in (a) 1.0 M H<sub>2</sub>SO<sub>4</sub>, (b) 0.03 M N<sub>2224</sub>Br/1.0 M H<sub>2</sub>SO<sub>4</sub> and (c) 0.03 M viologen/1.0 M H<sub>2</sub>SO<sub>4</sub> at different scan rates.



**ESI Fig. 2** GCDs of SC in (a) 1.0 M  $\text{H}_2\text{SO}_4$ , (b) 0.03 M  $\text{N}_{2224}\text{Br}/1.0$  M  $\text{H}_2\text{SO}_4$  and (c) 0.03 M viologen/1.0 M  $\text{H}_2\text{SO}_4$  at different current densities.



**ESI Fig. 3** Zoomed portion of GCD profiles of SC in 0.03 M viologen/1.0 M  $\text{H}_2\text{SO}_4$  at different current densities.



**ESI Fig. 4** Experimental and fitted Nyquist plot of SC in (a) 1.0 M H<sub>2</sub>SO<sub>4</sub>, (b) 0.03 M N<sub>224</sub>Br/1.0 M H<sub>2</sub>SO<sub>4</sub> and (c) 0.03 M viologen/1.0 M H<sub>2</sub>SO<sub>4</sub>.