

## **Fabrication of High-Performance Symmetrical Coin Cell Supercapacitors by Using One Step and Green Synthesis Sulfur Doped Graphene Powders**

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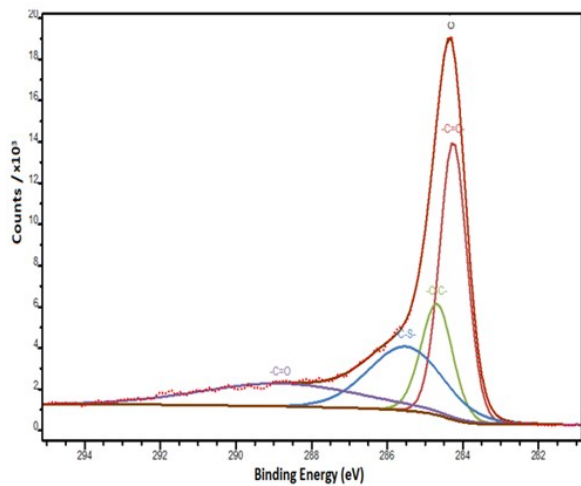
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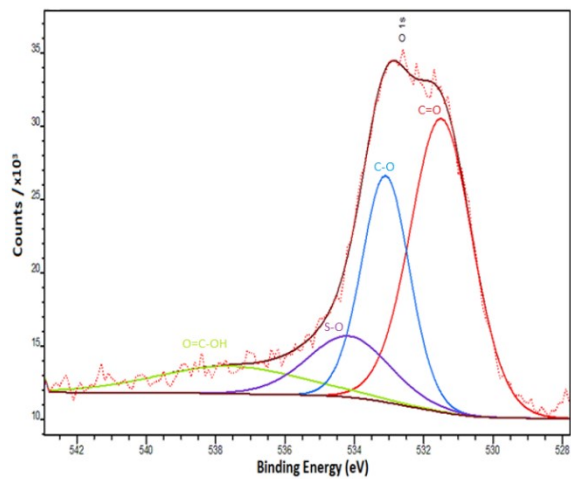
**Supplementary Document**

**Fig. S1**

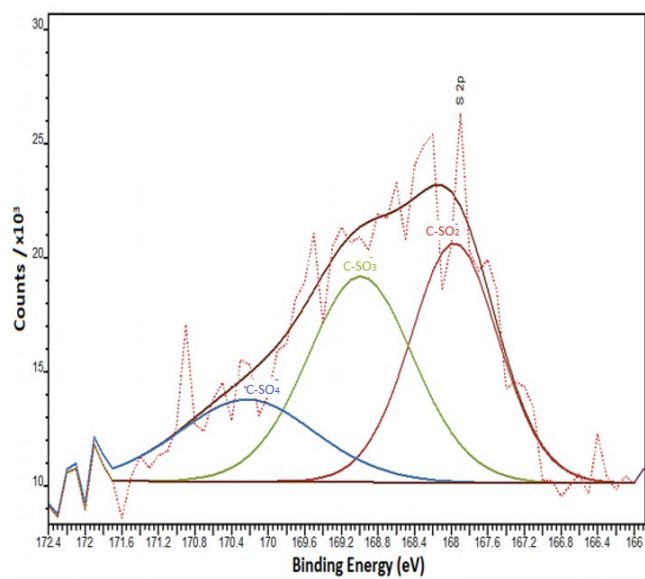
**a)**



**b)**

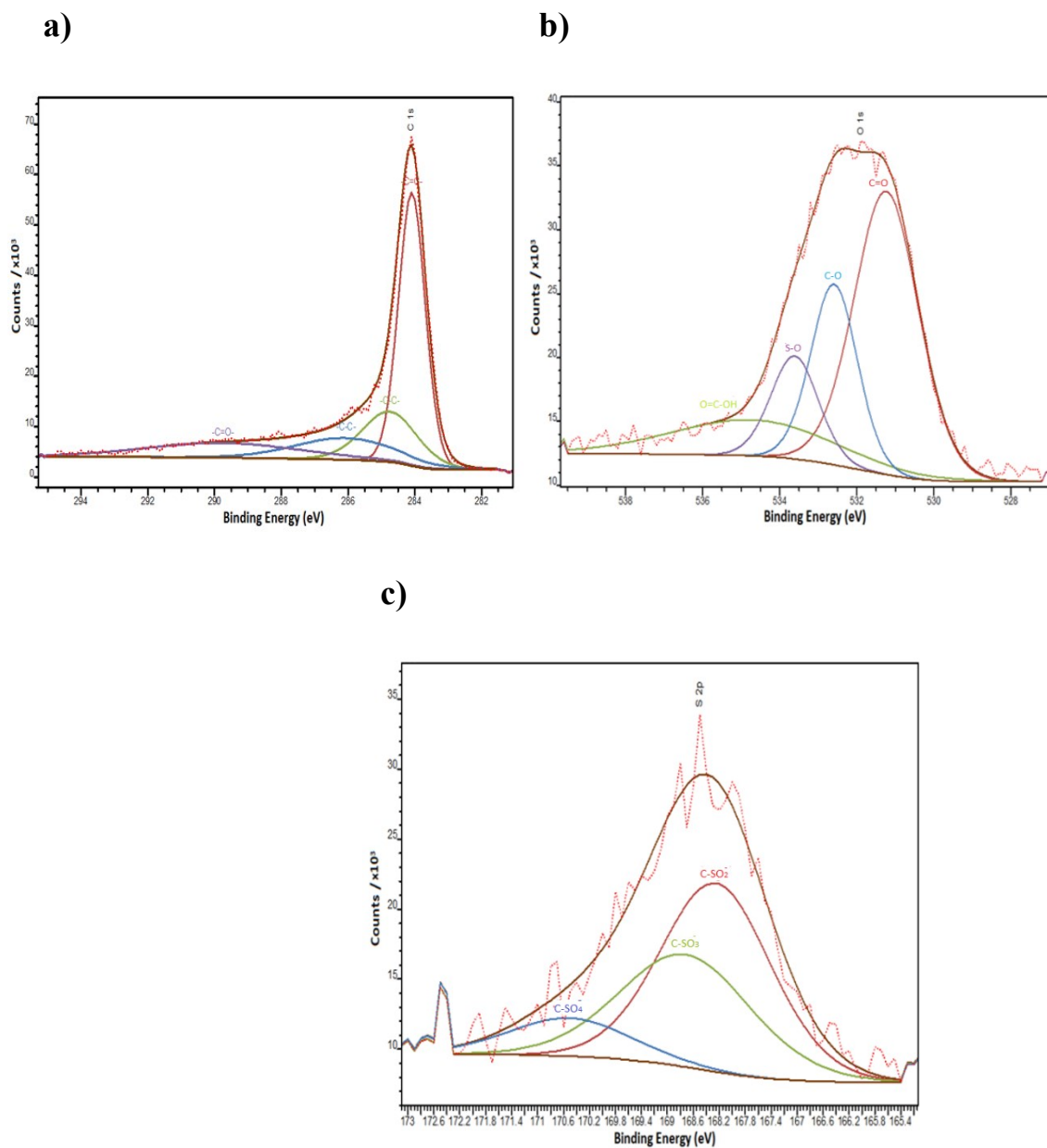


**c)**



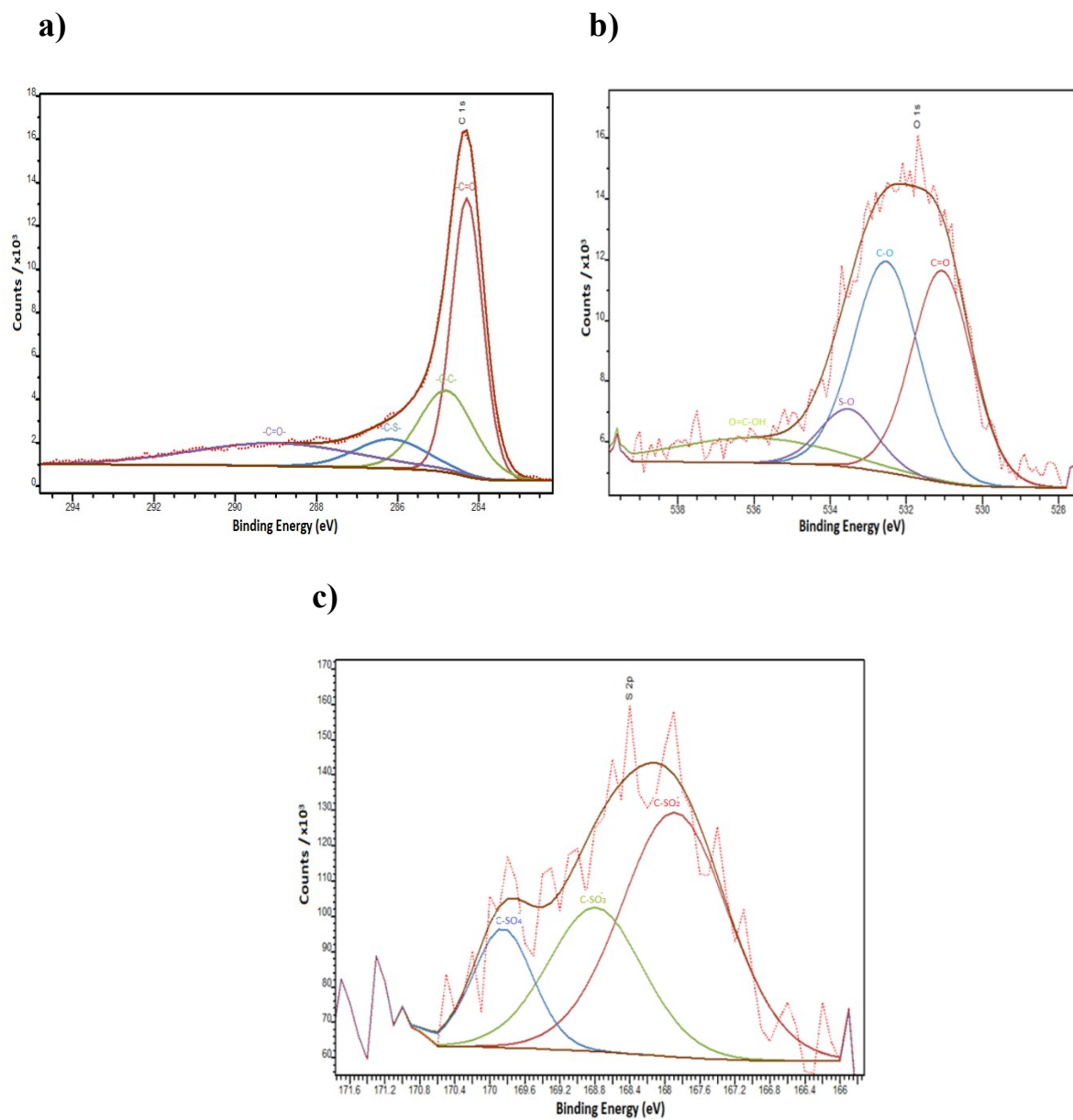
**Fig. S1. a C1s, b O1s and c S2p XPS spectra of A-SG1**

**Fig. S2**



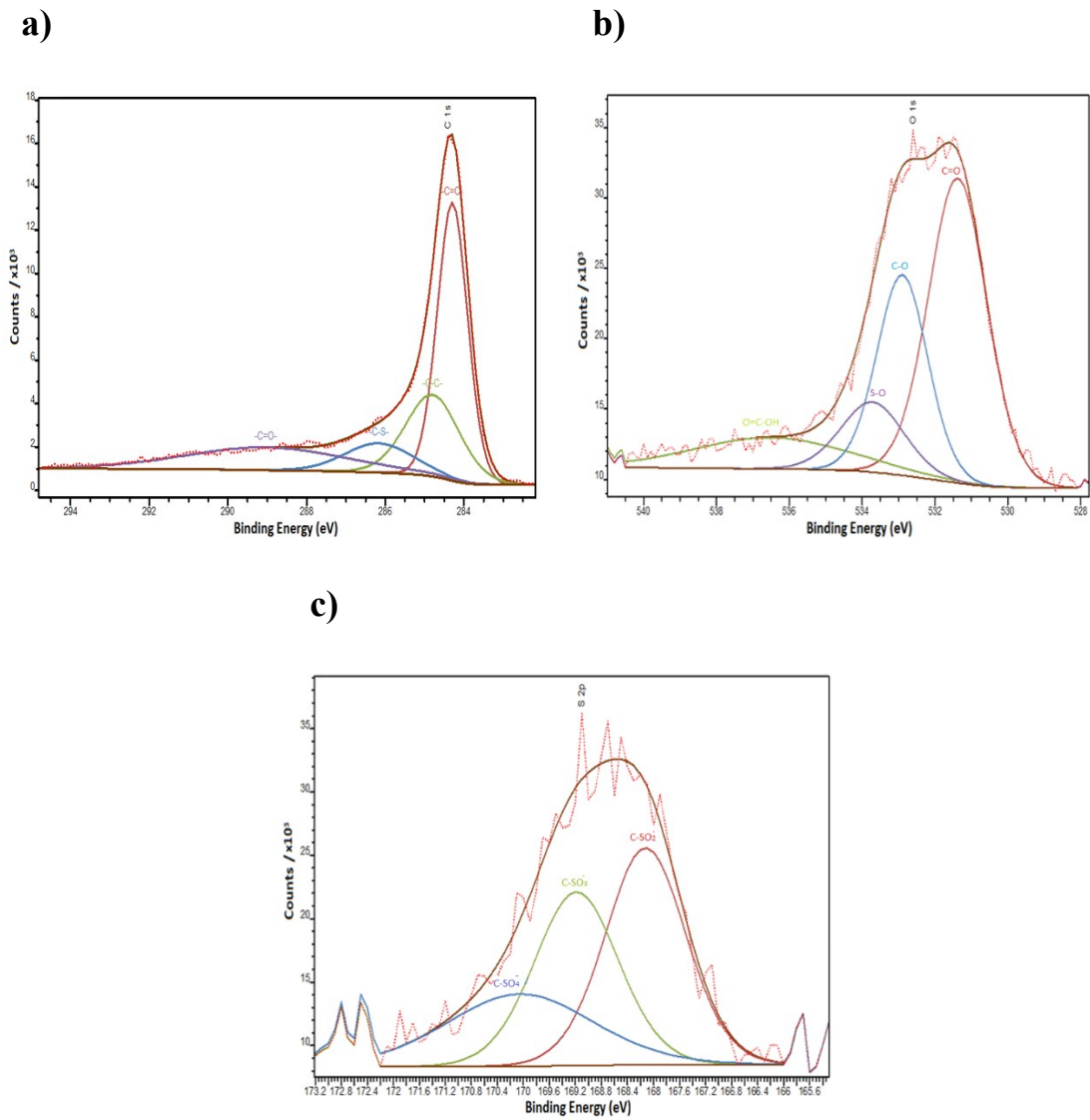
**Fig. S2.** C1s, b O1s and c S2p XPS spectra of A-SG2

**Fig. S3**



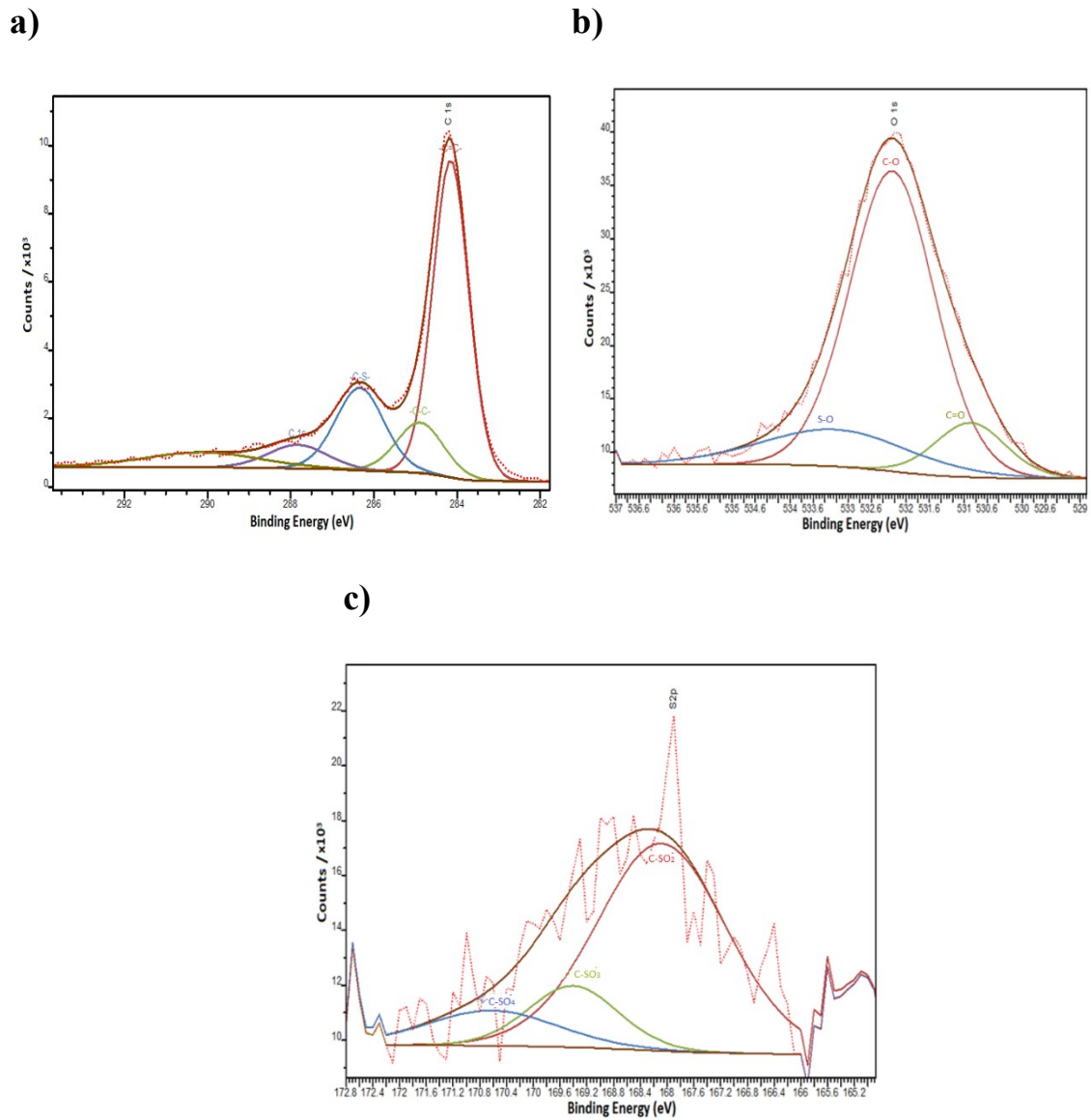
**Fig. S3 C1s, b O1s and c S2p XPS spectra of A-SG3**

**Fig. S4**



**Fig. S4 C1s, b O1s and c S2p XPS spectra of C-SG3**

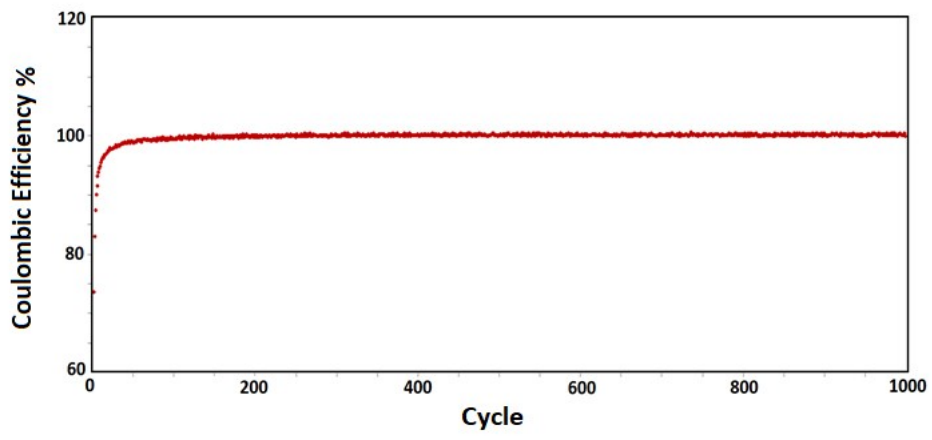
**Fig. S5**



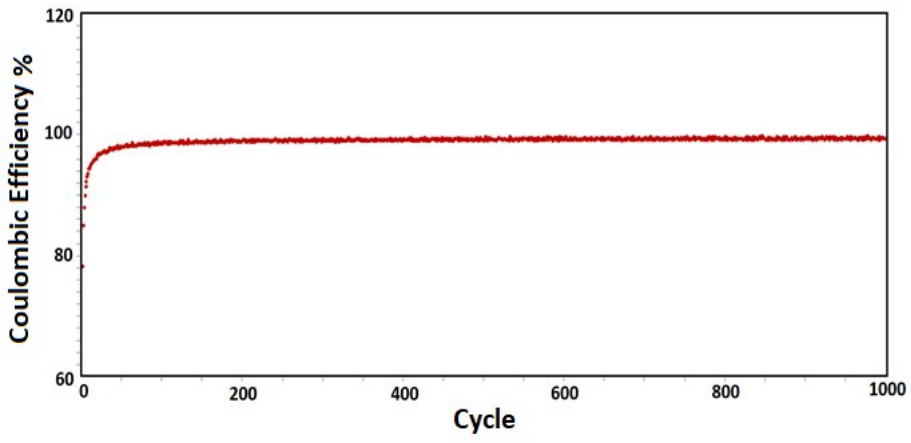
**Fig. S5 C1s, b O1s and c S2p XPS spectra of A-SG3M**

**Fig. S6**

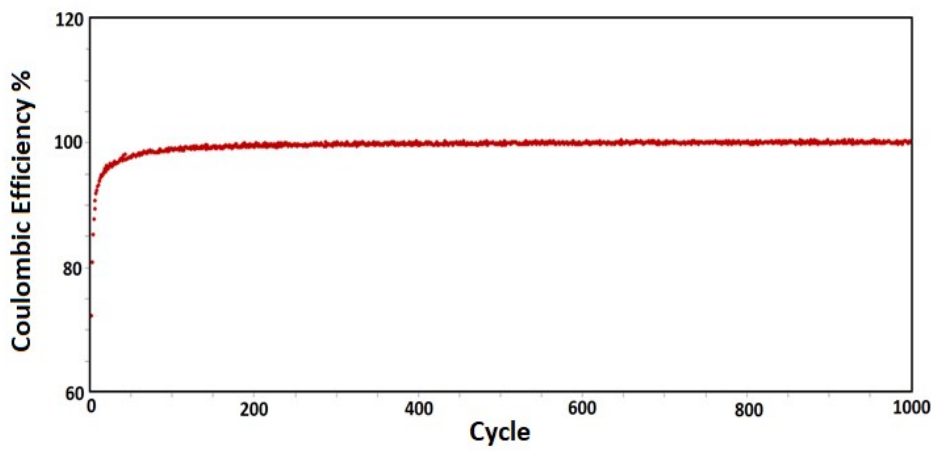
**a)**



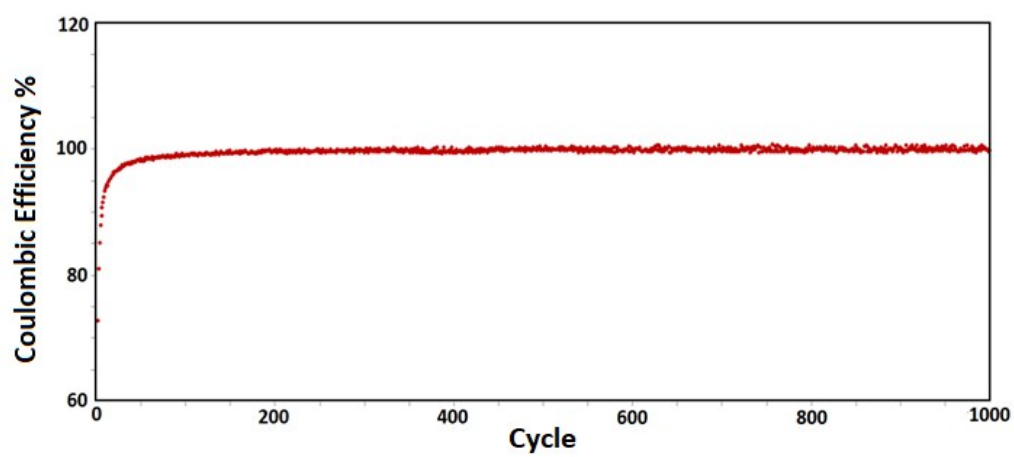
**b)**



**c)**



d)



**Fig. S6** Coulombic efficiency of **a** A-SG1, **b** A-SG2, **c** A-SG3 and **d** A-SG3M including coin cells for 1000 cycles in 1.0 M sulfuric acid