

## Surfactant Assisted Synthesis of Strontium hexaferrite Microspheres for the Fabrication of High-Performance Asymmetric supercapacitors

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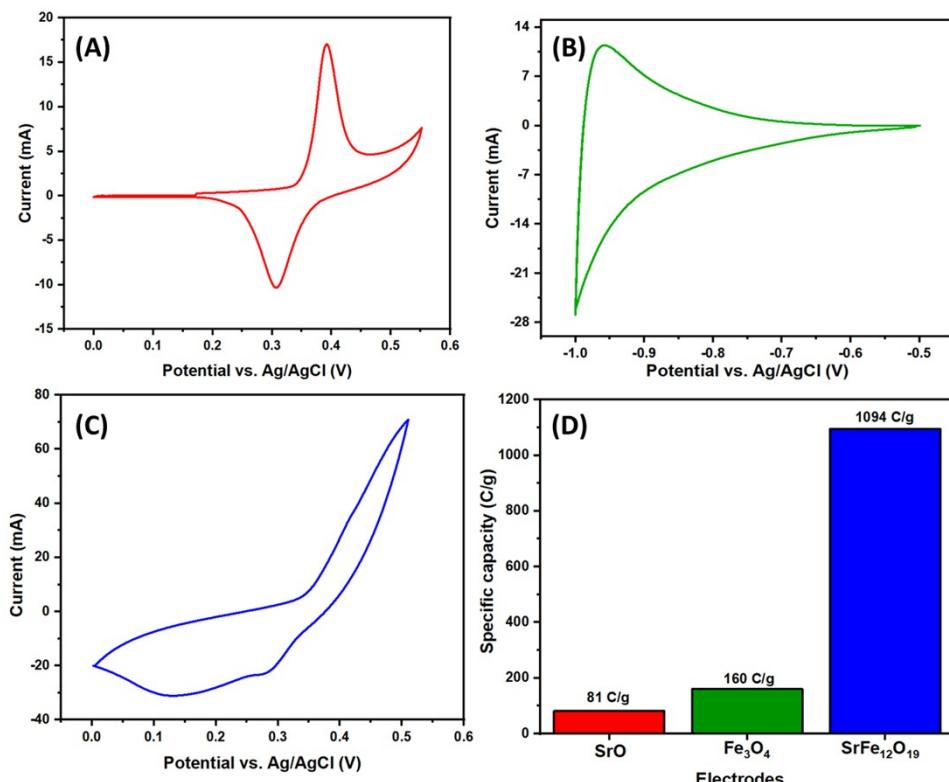
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*Prof. Sea-Fue Wang*

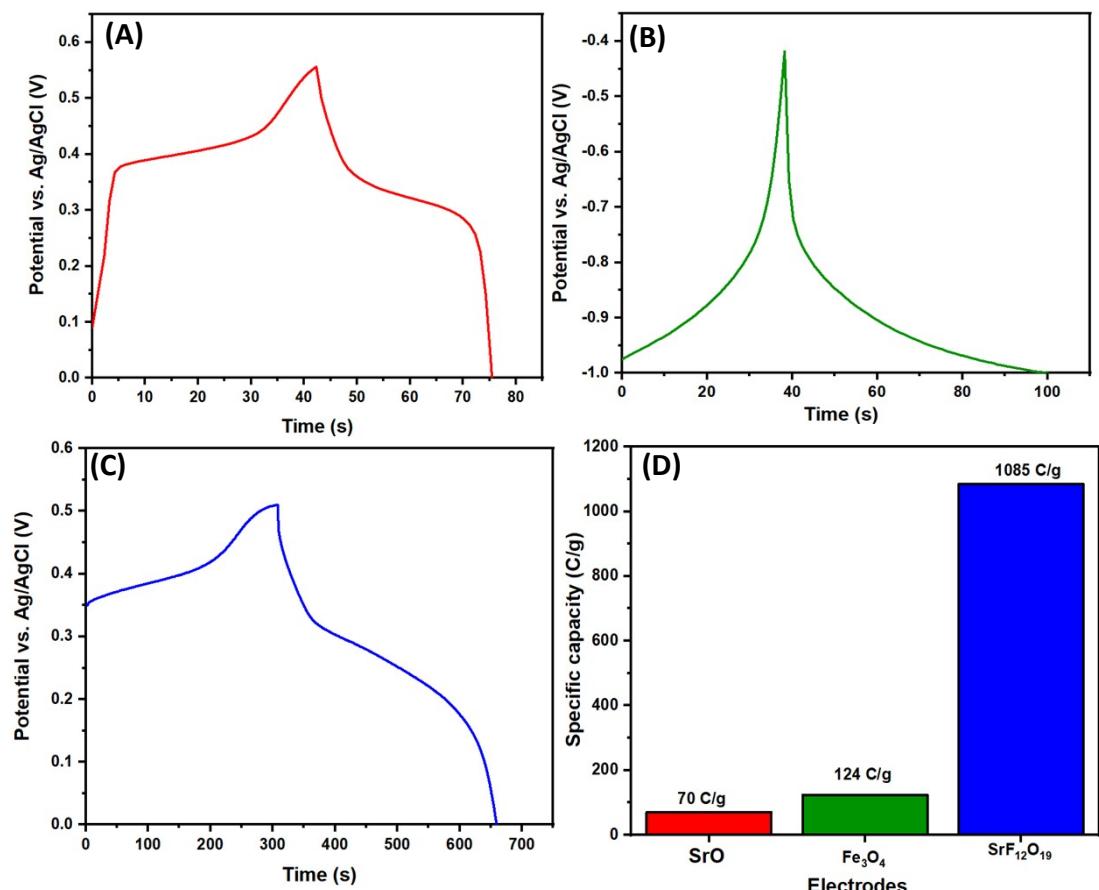
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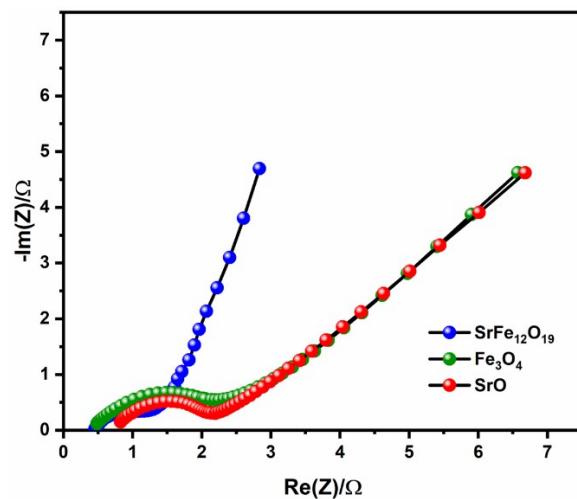
**Fig.S1: CV curve of (A)SrO (B)Fe<sub>3</sub>O<sub>4</sub> (C)SrFe<sub>12</sub>O<sub>19</sub> electrodes at 5 mV/s in 3 M KOH**

**(D) Comparison of specific capacity values**

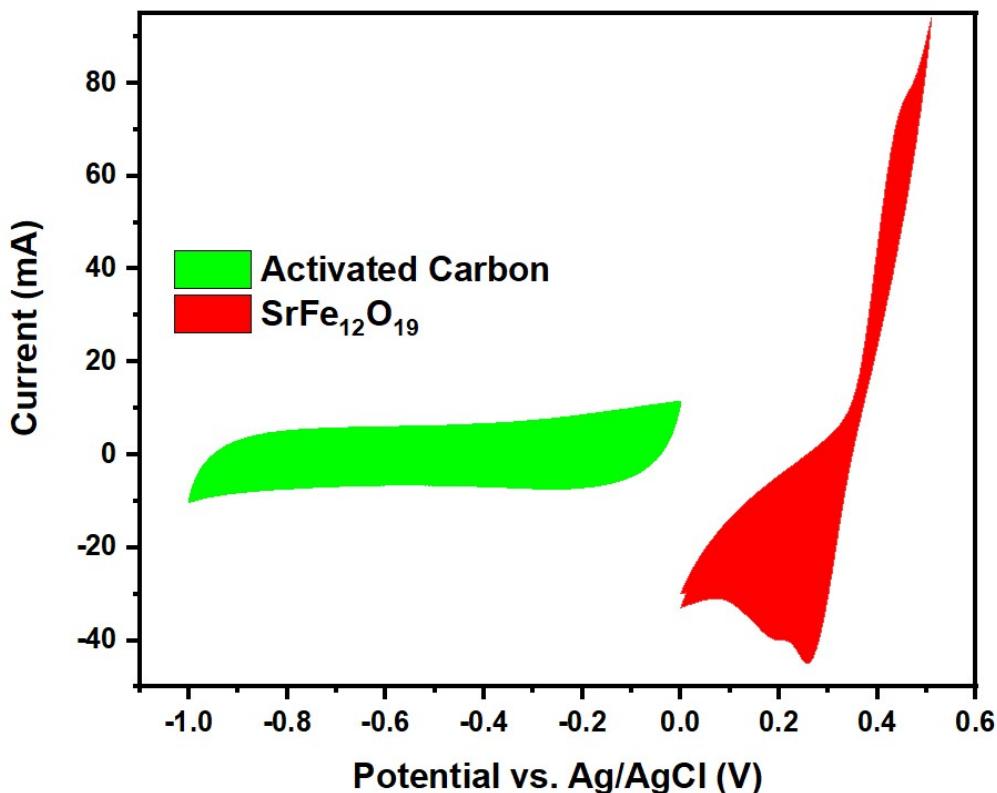


**Fig.S2:** GCD curve of (A)SrO (B)Fe<sub>3</sub>O<sub>4</sub> (C)SrFe<sub>12</sub>O<sub>19</sub> electrodes at 1 A/g in 3M KOH

#### (D) Comparison of specific capacity values



**Fig.S3:** Nyquist plots of SrO, Fe<sub>3</sub>O<sub>4</sub> and SrFe<sub>12</sub>O<sub>19</sub> electrodes



**Fig. S4: CV curves of activated carbon and  $\text{SrFe}_{12}\text{O}_{19}$  in 6 M KOH electrolyte at a scan rate of 50 mV/s ( $\text{SrFe}_{12}\text{O}_{19}/\text{AC}$  device analysis)**

**Table S1:  $R_s$ ,  $R_{ct}$  and ESR values of  $\text{SrO}$ ,  $\text{Fe}_3\text{O}_4$  and  $\text{SrFe}_{12}\text{O}_{19}$  electrodes**

| Electrodes                      | $R_s$ ( $\Omega$ ) | $R_{ct}$ ( $\Omega$ ) | ESR ( $\Omega$ ) |
|---------------------------------|--------------------|-----------------------|------------------|
| $\text{SrFe}_{12}\text{O}_{19}$ | 0.48               | 0.84                  | 1.32             |
| $\text{SrO}$                    | 0.83               | 1.35                  | 2.18             |
| $\text{Fe}_3\text{O}_4$         | 0.50               | 2.21                  | 2.71             |