## **Supporting information**



**Figure S1.** Mapping image of NiCo<sub>2</sub>O<sub>4</sub>-MFs (A). (B-D) conforms the presence of Ni (B), Co (C), O (D). (E) EDX profile for NiCo<sub>2</sub>O<sub>4</sub>-MFs. Inset: weight perctange.



Figure S2. Effect of accumulation time on the reduction peak current of 100 µM 4-NQO at NiCo<sub>2</sub>S<sub>4</sub>-MS/GCE.



Figure S3. DPV curve of obtained at NiCo<sub>2</sub>S<sub>4</sub>-Ms/GCE in the 0.1M pH-7 containing 0.5  $\mu$ M of 4-NQO with other bioactive and electro active nitro species.