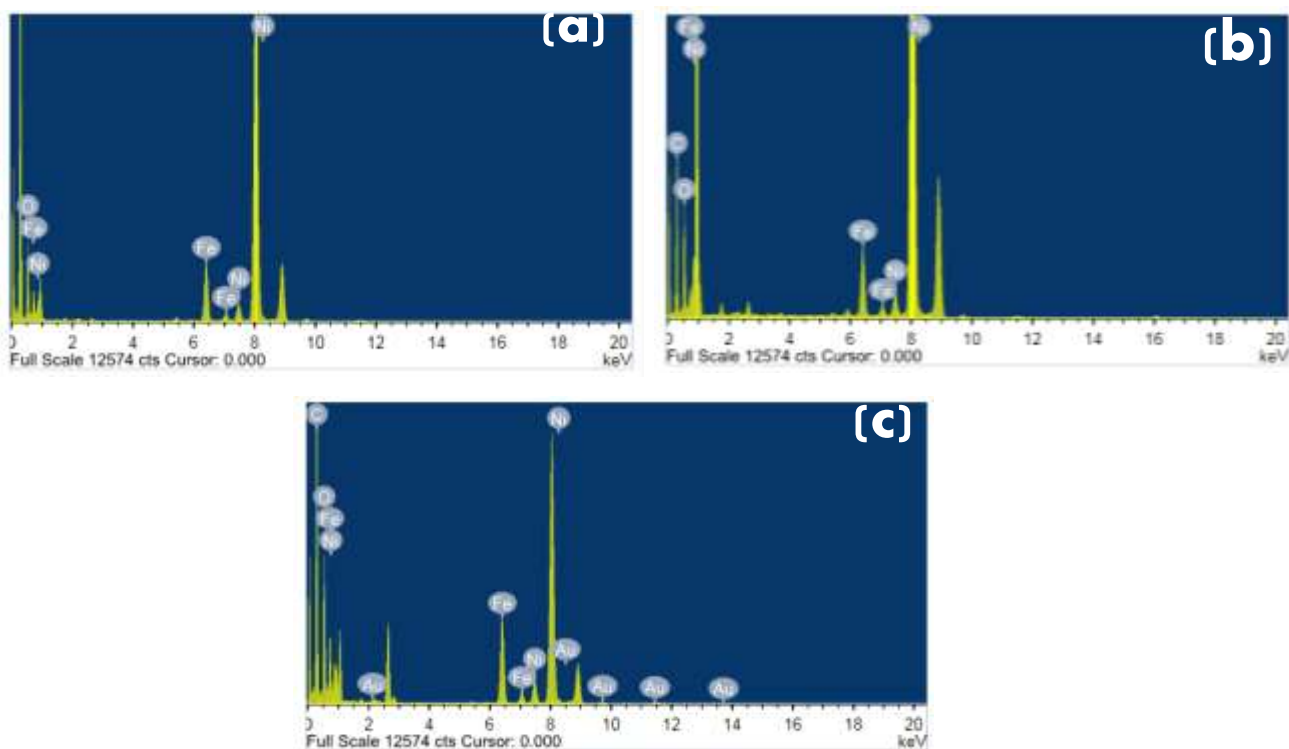
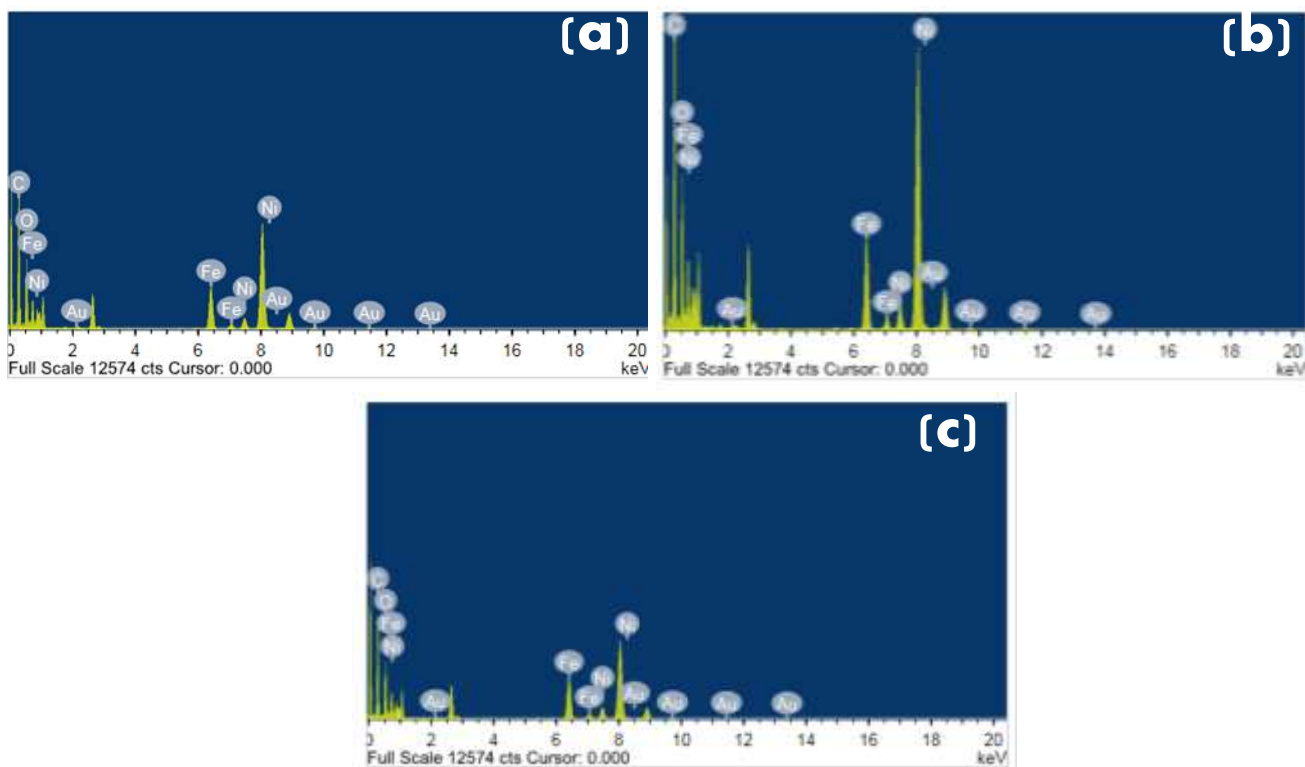


**Electronic Supplementary Information**



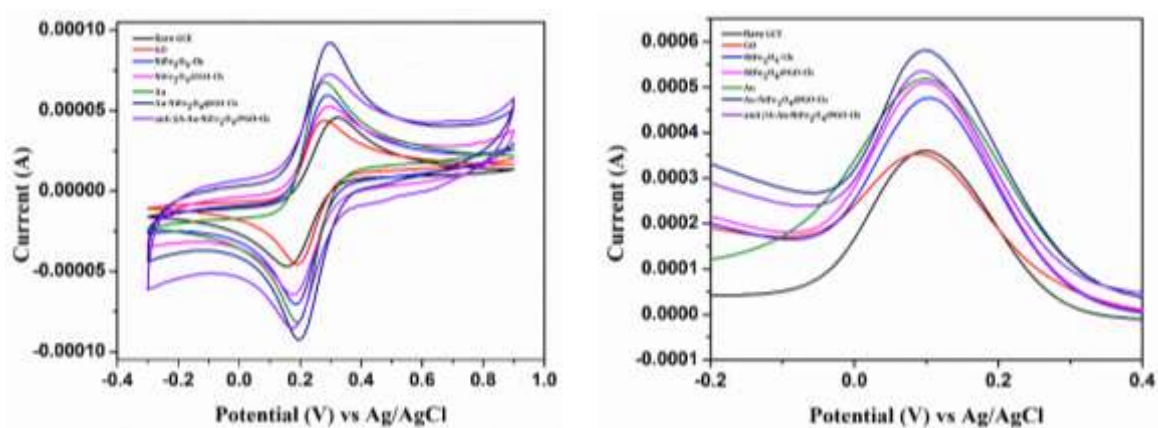
**Figure S1:** EDX spectra of (a) NiFe<sub>2</sub>O<sub>4</sub> (b) NiFe<sub>2</sub>O<sub>4</sub>@GO-Ch (c) Au/NiFe<sub>2</sub>O<sub>4</sub>@GO-Ch



**Figure S2:** (a), (b), (c) EDX spectra of Au/NiFe<sub>2</sub>O<sub>4</sub>@GO-Ch nanocomposite at three different areas

**Table S1:** Weight percentage of each constituent elements of Au/NiFe<sub>2</sub>O<sub>4</sub>@GO-Ch nanocomposite at three different areas

Elements	Weight%		
	(a)	(b)	(c)
C	50.64	52.96	49.13
O	21.27	19.50	20.54
Ni	5.45	5.03	5.92
Fe	19.64	19.50	21.03
Au	3.00	3.01	3.38



**Figure S3:** CV and DPV of individual/synergistic components of the Au/NiFe<sub>2</sub>O<sub>4</sub>@GO-Ch nanocomposite