In-situ growth of α-Fe₂O₃ nanorod arrays on 3D carbon foam as an efficient binder-free electrode for highly sensitive and specific determination of nitrite

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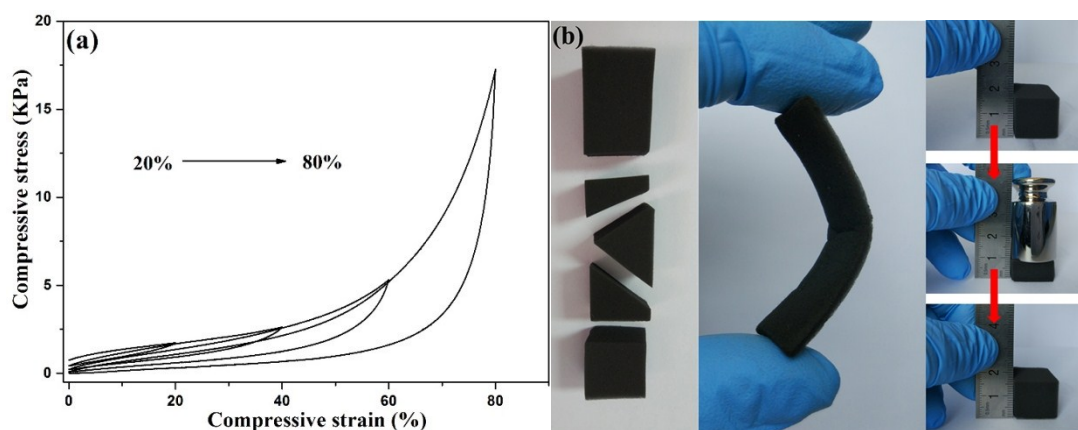
4222, Australia.

Fig. S1 (a) Compressive stress–strain curves of CF at strain values of 20, 40, 60, and 80%; (b) Digital photograph of different shapes and sizes of the obtained 3D CF, indicating the high flexibility of the obtained CF samples.

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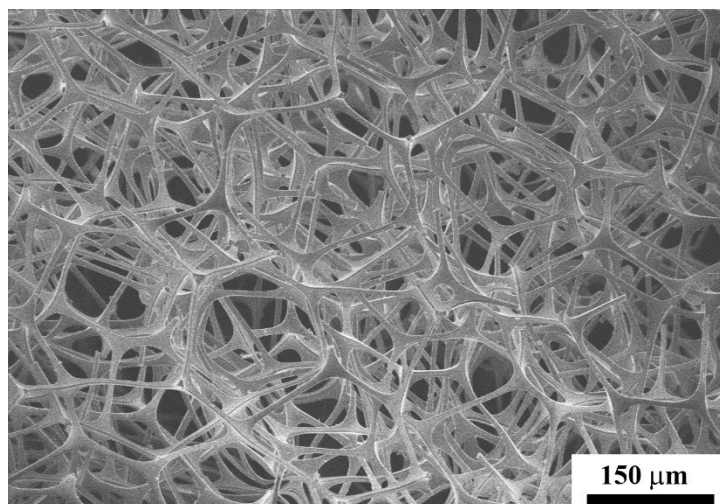Fax: +86-551-65591434; Tel: +86-551-65592145
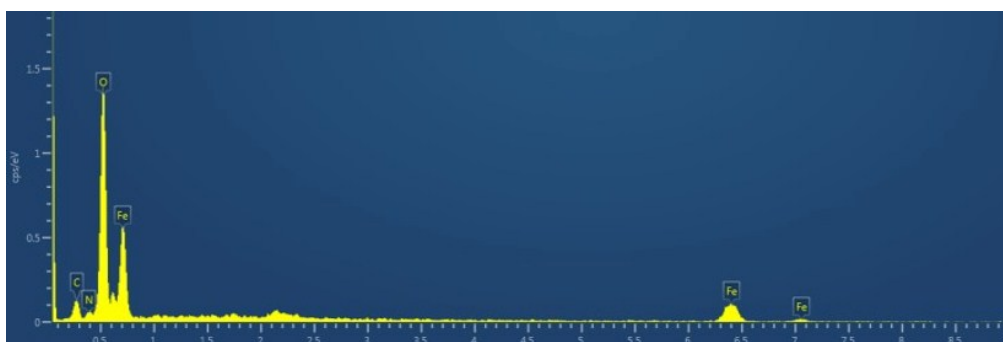
Fig. S2 SEM image of MF sponge.
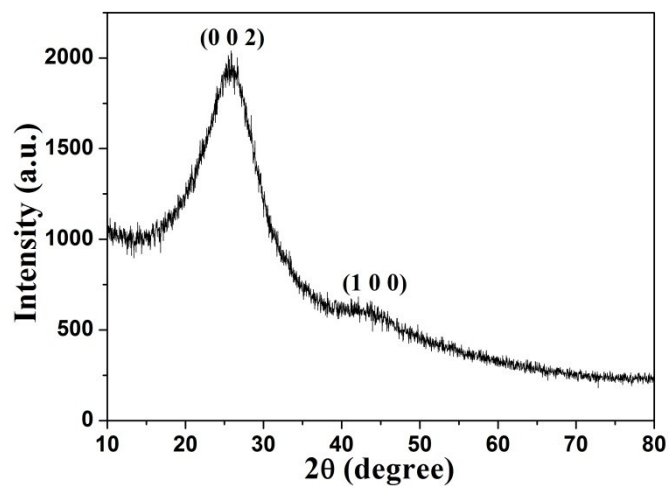

Fig. S3 EDS spectrum of the as-prepared α-Fe$_2$O$_3$ NAs/CF.

Fig. S4 XRD pattern of the as-prepared CF sample.
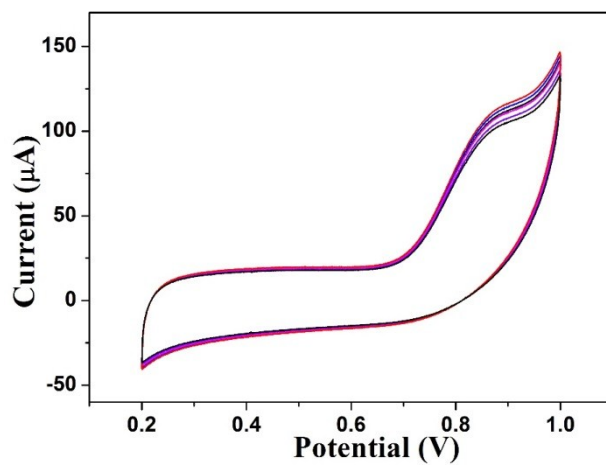
Fig. S5 Cyclic voltammograms of six different α-Fe$_2$O$_3$ NAs/CF electrodes in the presence of 1000 μM NaNO$_2$ in N$_2$-saturated 0.1 M PBS at a scan rate of 50 mV/s.
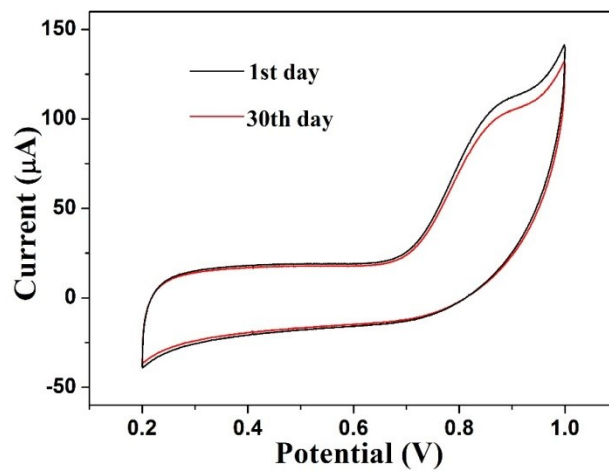
Fig. S6 Cyclic voltammograms of a α-Fe$_2$O$_3$ NAs/CF electrode before and after 30 days of storage in presence of 1000 μM NaNO$_2$ in N$_2$-saturated 0.1 M PBS at a scan rate of 50 mV/s.