Facile preparation of transition metal oxide-metal composites with unique nanostructures and their electrochemical performance as energy storage material

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Figure S1 SEM (a) and TEM (b) images of a single C@TiC nanowire.

Figure S2. SEM images of the NiO-Ni@C@TiC nanoarray electrodes prepared with different electrodeposition time, (a) 10 min, (b) 15 min and (c) 20 min.
Figure S3 XPS survey spectra of NiO-Ni@C@TiC nanoarray (a); Ni 2p XPS spectra of NiO-Ni@C@TiC nanoarray (b).

Figure S4. SEM images of Co₃O₄-Co@C@TiC (a) and MnO₂-Mn@C@TiC (b) nanoarray electrodes.
Figure S5 CV curves of NiO-Ni@C@TiC nanoarray electrode and C@TiC substrate at a scan rate 10 mV s$^{-1}$. 

Figure S6 Galvanostatic discharge curves of the NiO-Ni@C@TiC nanoarray electrodes prepared with different electrodeposition time.
Figure S7 Electrochemical impedance spectra of the NiO-Ni@C@TiC nanoarray electrode before and after charge–discharge cycling