Electronic Supplementary Information

Rational synthesis of metal–organic framework composites, hollow structures and their derived porous mixed metal oxide hollow structures

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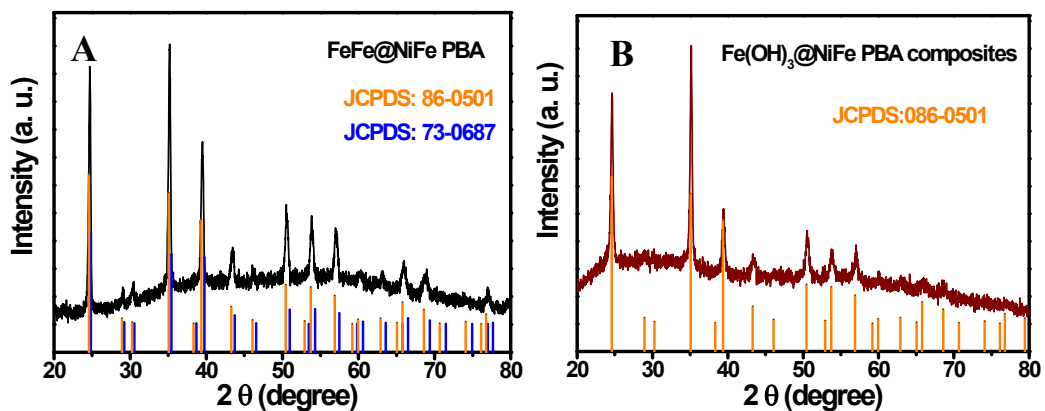
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Figure S1. The XRD patterns of the (A) core-shell FeFe@NiFe PBA nanocubes and (B) Fe(OH)$_3$@NiFe PBA composites.
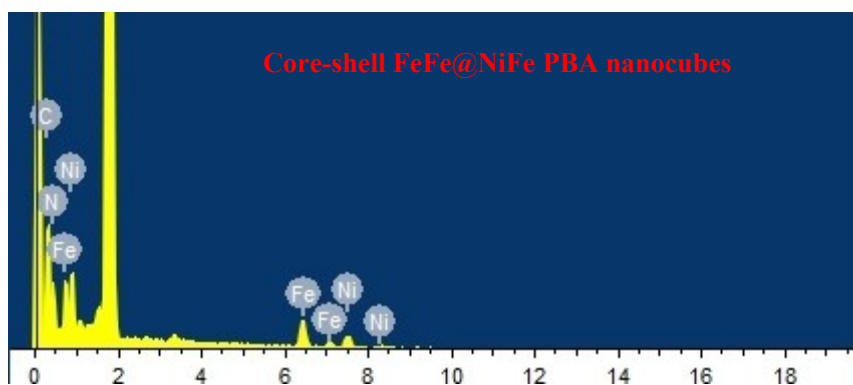

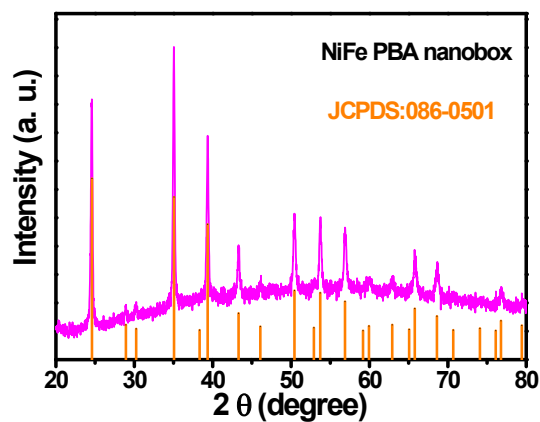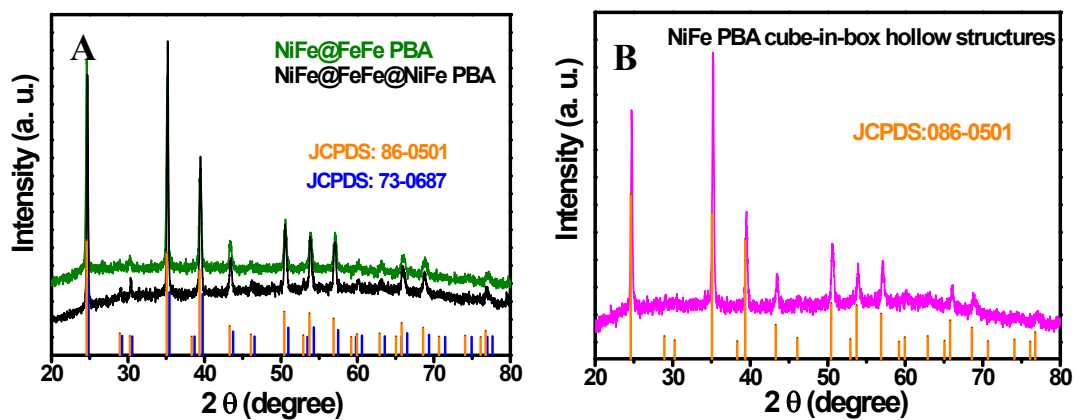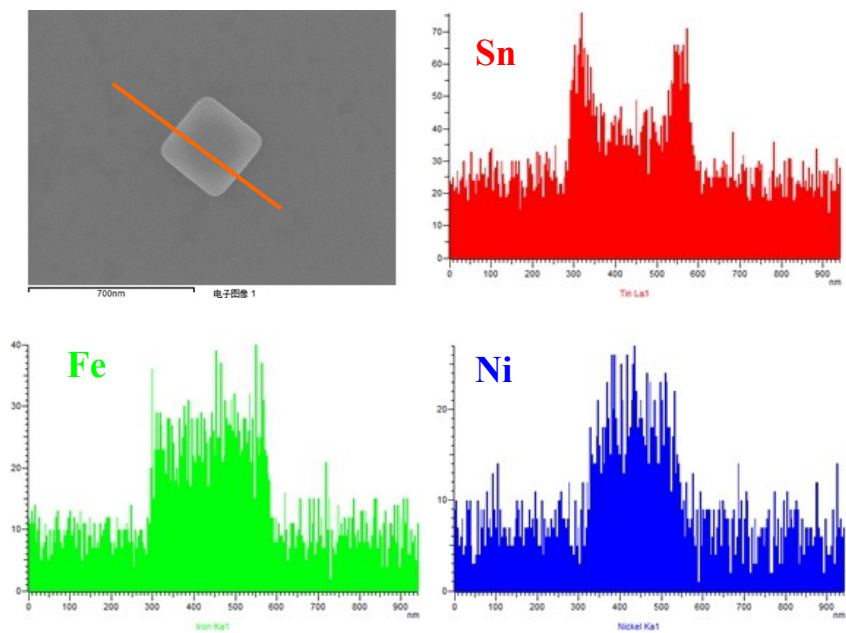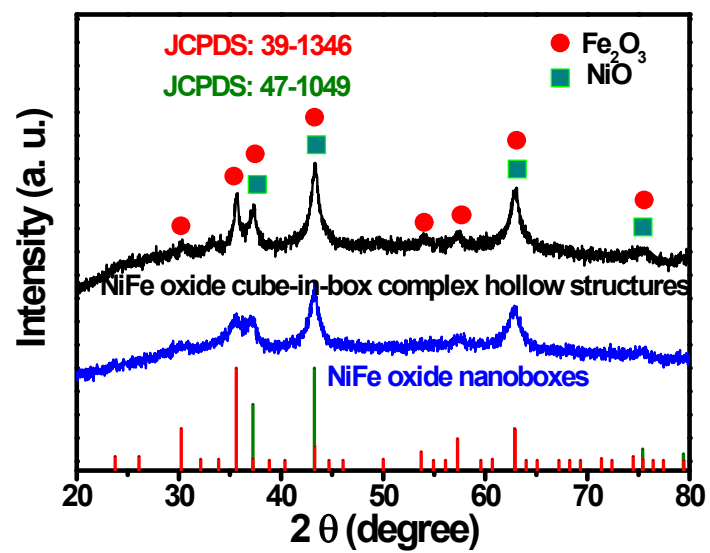**Figure S2**. EDX analysis of the core-shell FeFe@NiFe PBA nanocubes.

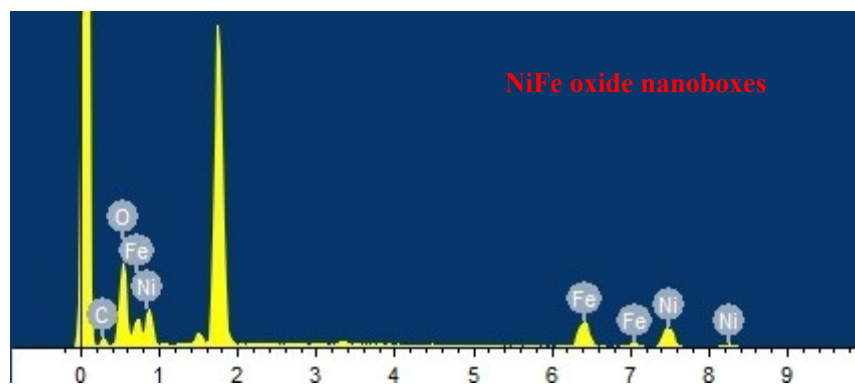**Figure S3**. The XRD pattern of the hollow NiFe PBA nanoboxes.

Figure S4. The XRD patterns of the (A) core-shell NiFe@FeFe and NiFe@FeFe@NiFe PBA nanocubes; (B) NiFe PBA cube-in-box hollow structures.

Figure S5. EDX analysis of the NiFe@Fe(OH)$_3$/SnO$_2 \cdot x$H$_2$O composites.

Figure S6. The XRD patterns of the NiFe oxide nanoboxes and cube-in-box complex hollow structures.

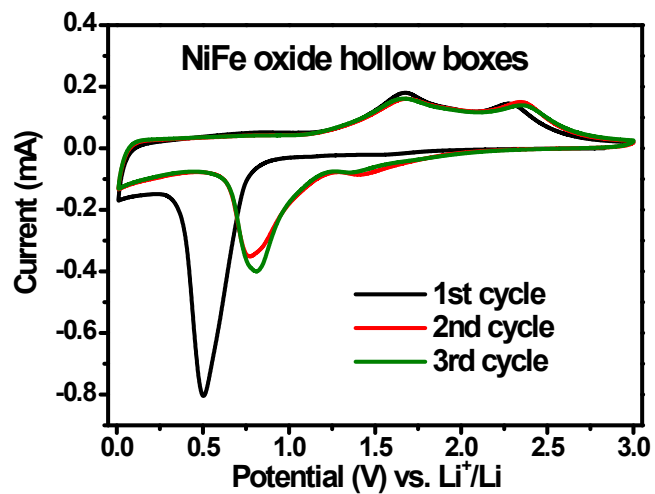**Figure S7**. EDX analysis of the NiFe oxide nanoboxes.

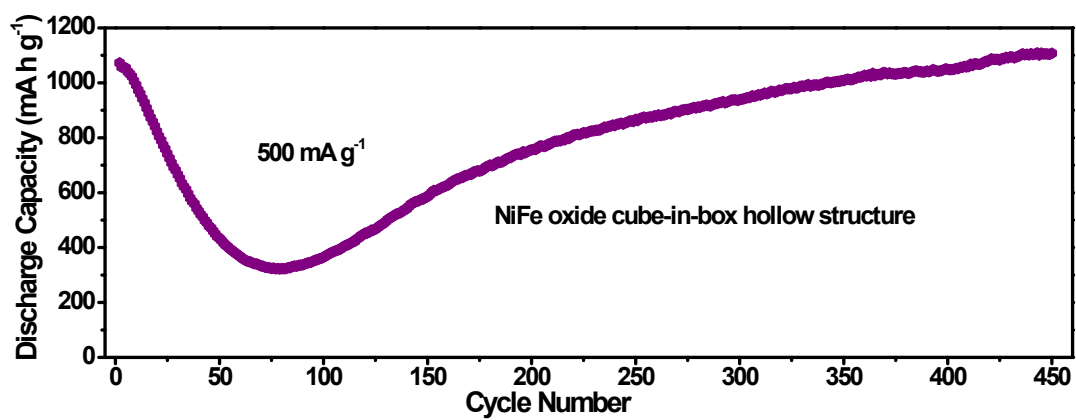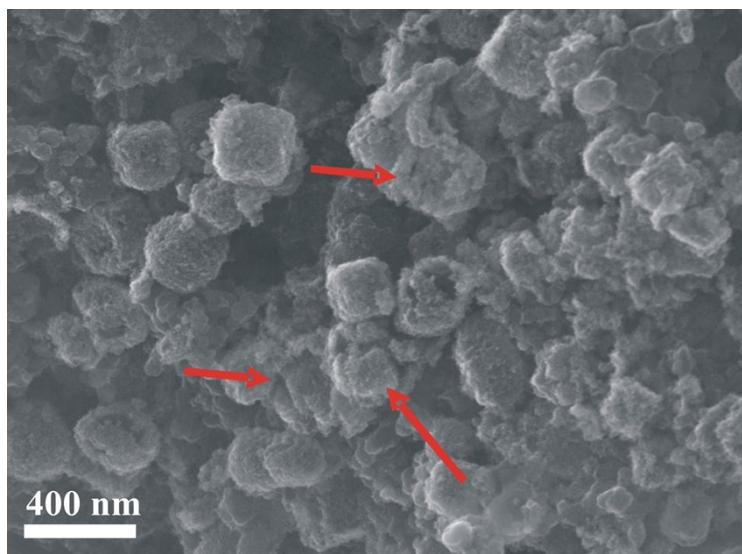**Figure S8**. CV curves of the NiFe oxide hollow boxes at a scan rate of 0.2 mV s^{-1}.

Figure S9. Cycling performance of the NiFe oxide cube-in-box complex hollow structures at a higher current density of 500 mA g^{-1} for 450 cycles.

Figure S10. SEM image of the NiFe oxide cube-in-box complex hollow structures after 300 cycles.