

Supplementary Information

The influence of fibrous carbon envelope on the formation of Co-Fe nanoparticles for durable electrocatalytic oxygen evolution reaction

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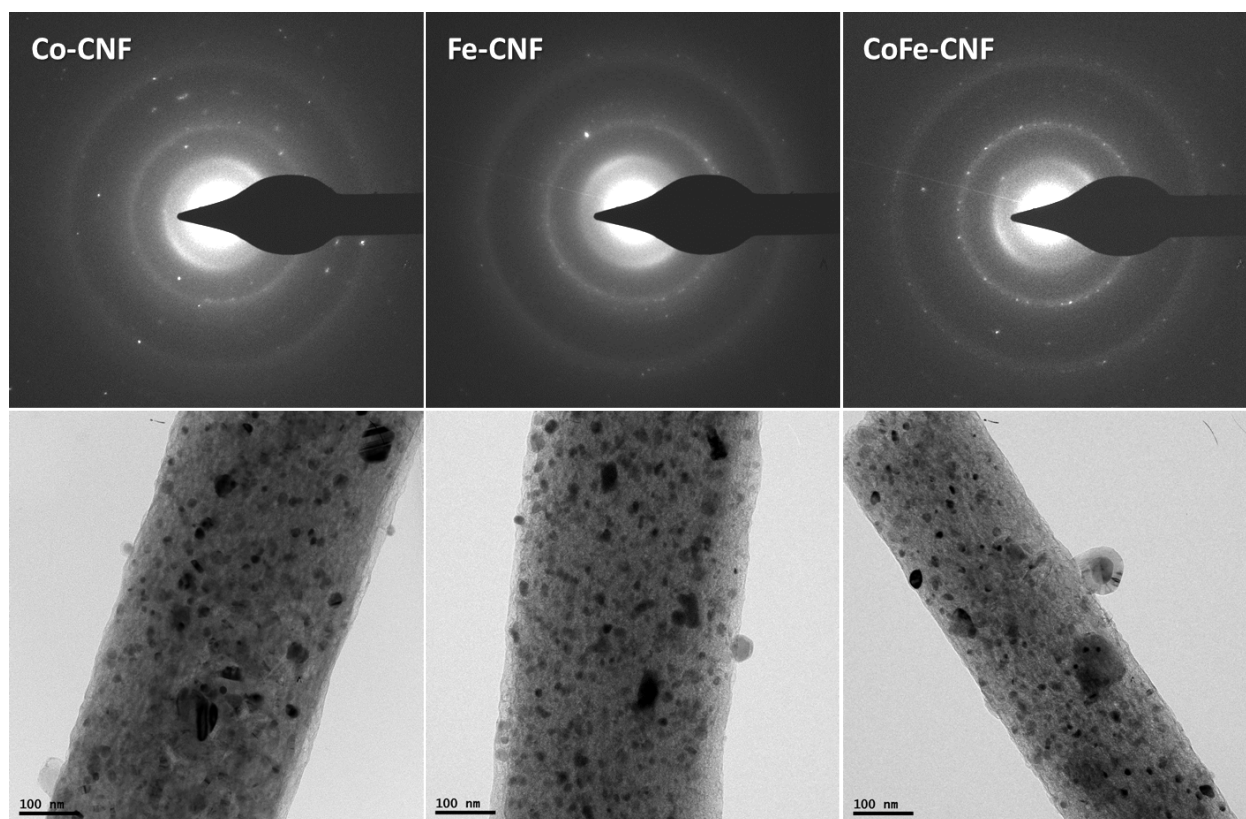


Fig. S1. ED patterns and TEM images of Me-CNFs.

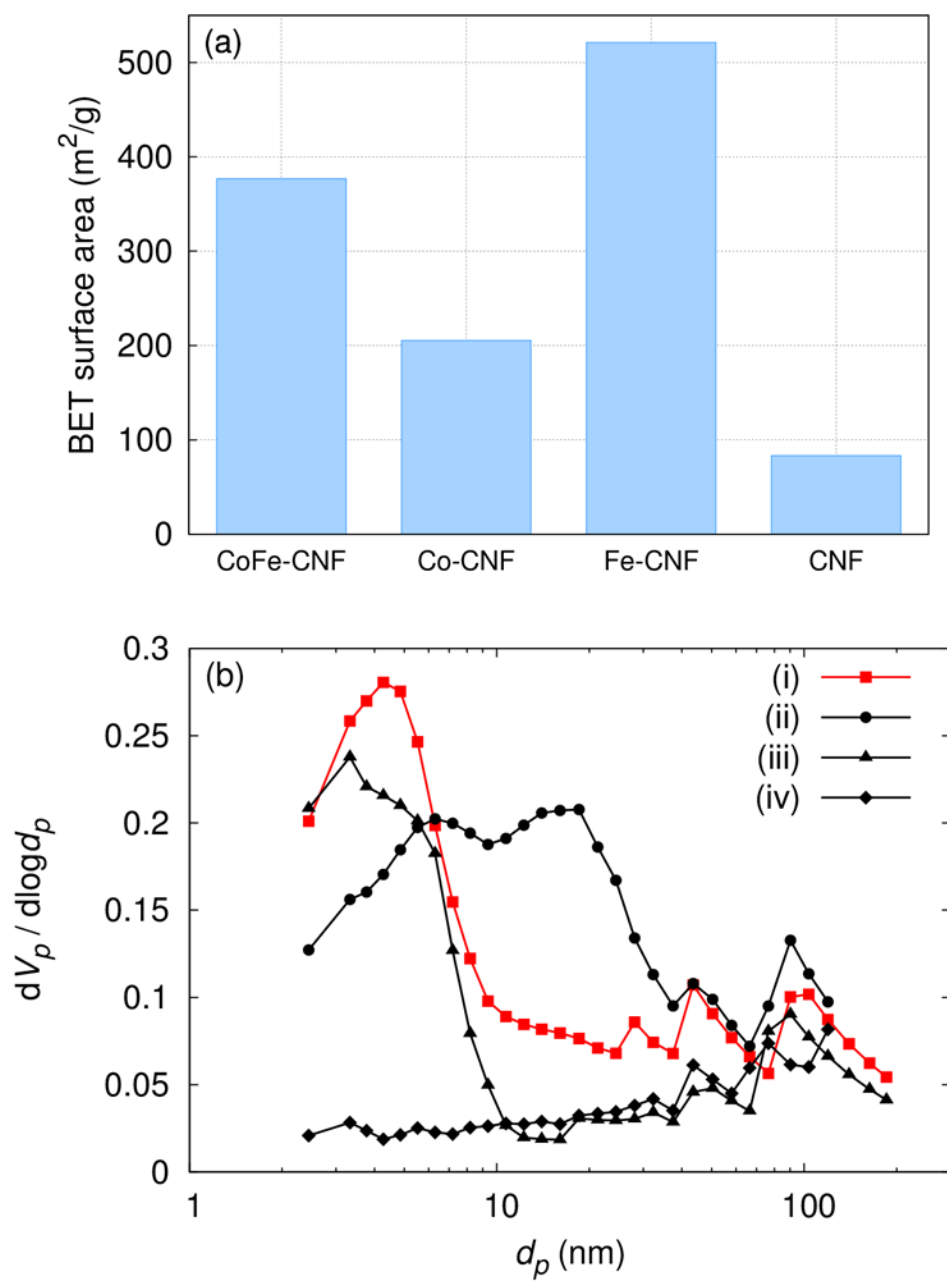


Fig. S2. (a) BET surface area of Me-CNFs, (b) BJH plot for (i) CoFe-CNF, (ii) Co-CNF, (iii) Fe-CNF, and (iv) CNF

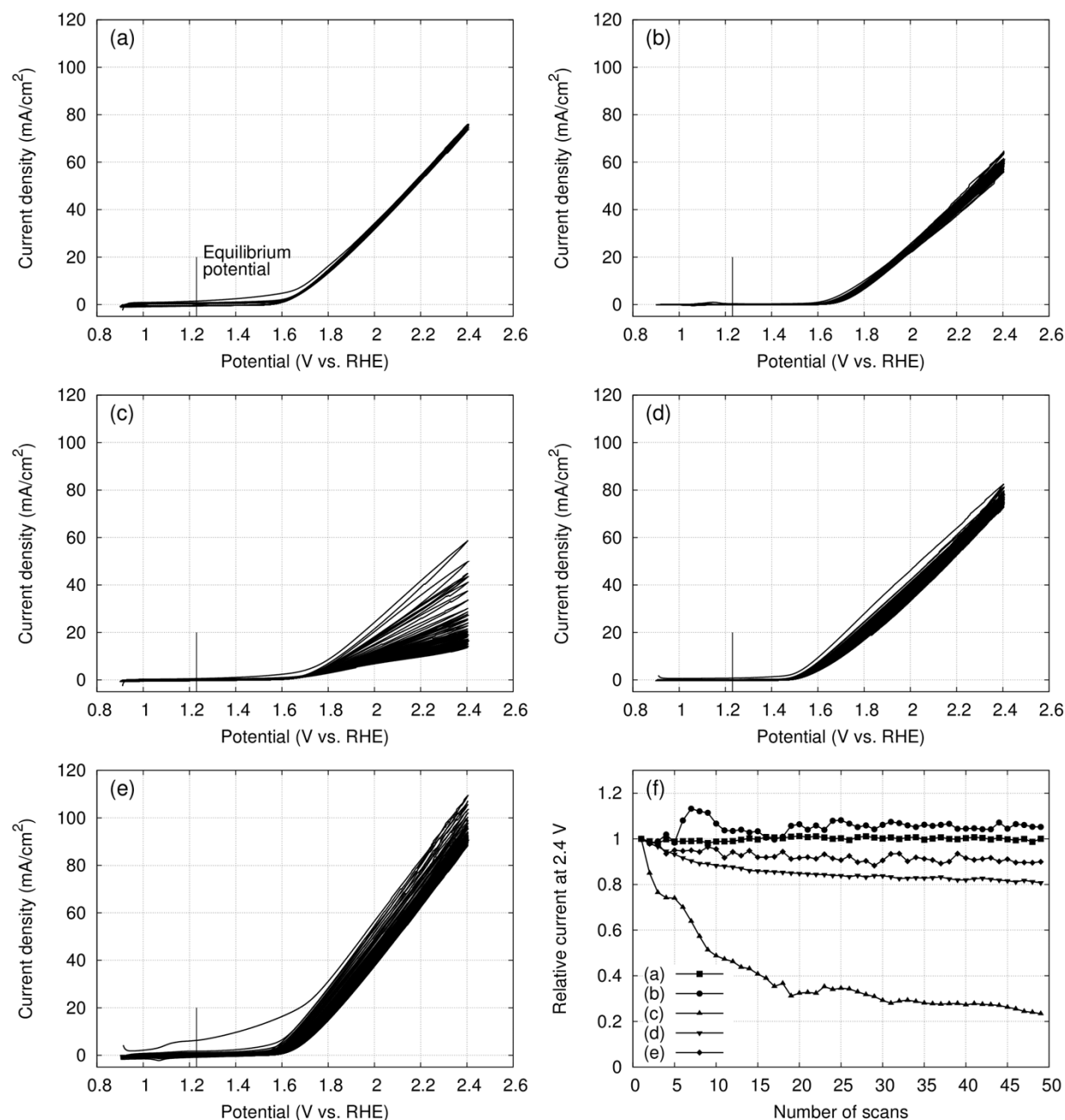


Fig. S3. OER activity test through cyclic voltammetry for (a) CoFe-CNFs, (b) Co-CNF, (c) Fe-CNF, (d) ball-milled CoFe-CNF, (e) Ir black, and (f) Relative current change with number of CV scans with the same sample assignment.

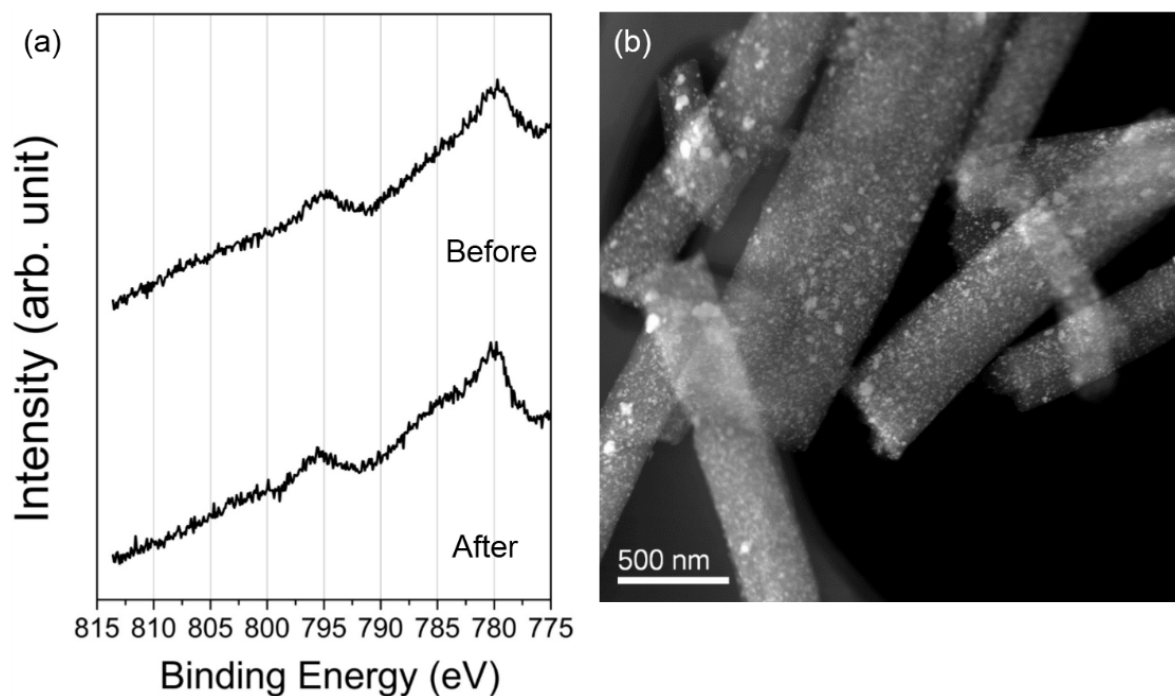


Fig. S4. (a) XPS in Co 2p region for CoFe-CNF before and after the OER experiment, (b) STEM image of CoFe-CNF after 50 cycles

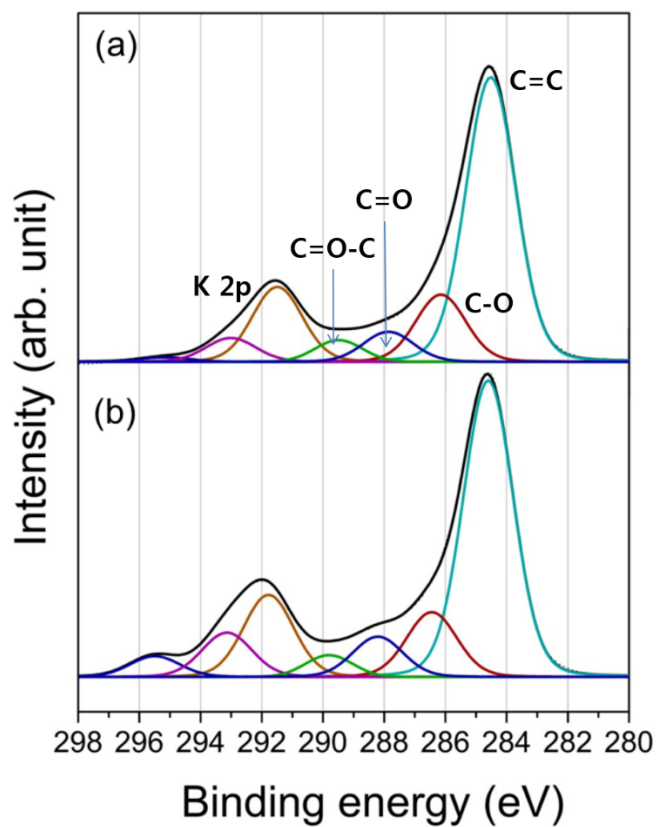


Fig. S5. XPS in C 1s region for CoFe-CNF (a) before and (b) after OER experiment.

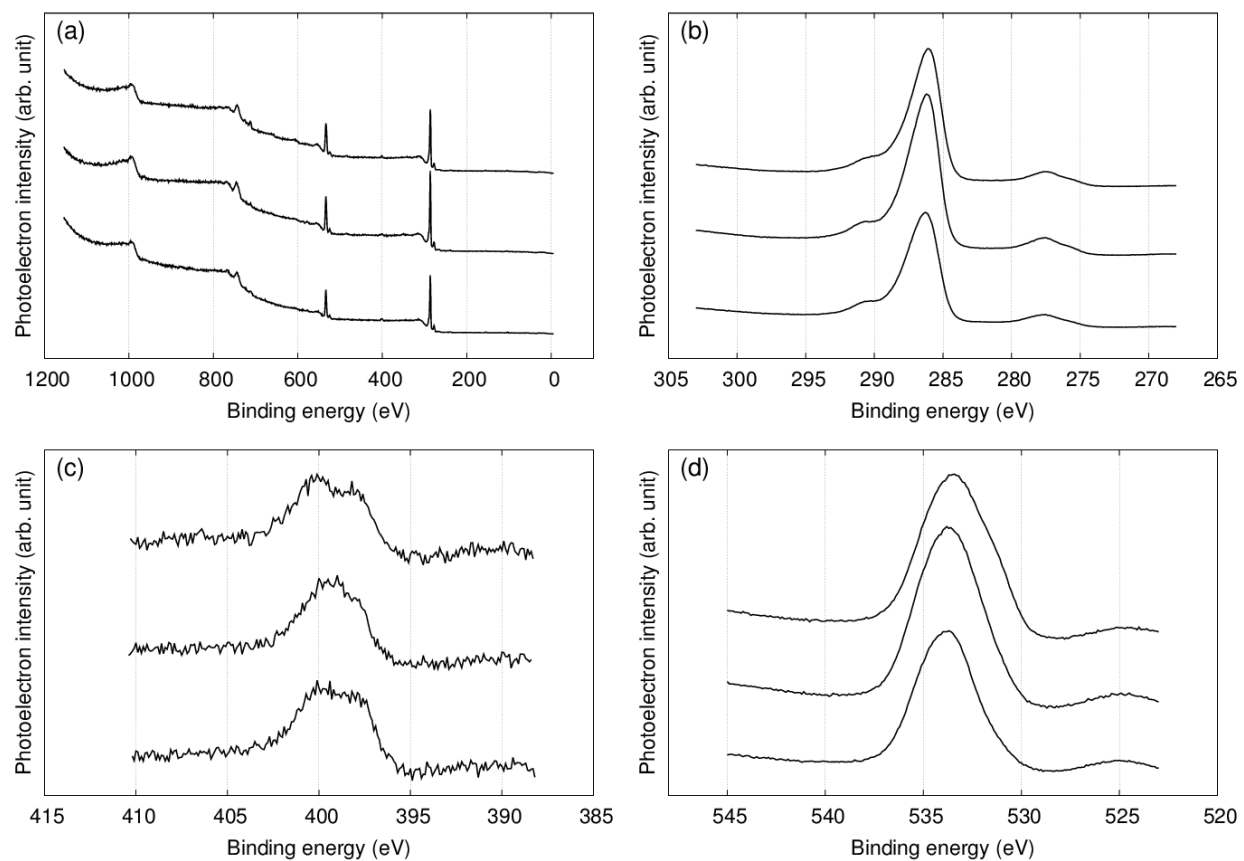


Fig. S6. (a) Survey, (b) C 1s, (c) N 1s, (d) O 1s XPS for CoFe-CNF (top), Co-CNF (middle), and ball-milled CoFe-CNF (bottom).