Supplementary Information

Fig. S1

Fig. S1 The photos of the experimental setup and CCNF electrode sample: (a) Experimental setup, (b) Electrolytic cell, (c) Washing by dipping in absolute ethanol and (d) The CCNF electrode.

Fig. S2

Fig. S2 The configuration of electrochemical tests.
Fig. S3 EDS spectra of the CCNF

**Table S1** EDS analysis results of CCNF.

| Element | Weight% | Atomic% |
|---------|---------|---------|
| C       | 32.32   | 55.20   |
| O       | 22.73   | 29.15   |
| Co      | 44.95   | 15.65   |
| Totals  | 100.00  |         |