

N,P-Codoped Carbon Layer Coupled with MoP Nanoparticles as Efficient Electrocatalyst for Hydrogen Evolution Reaction

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HER in acid electrolyte.

Before electrochemical tests, 60.0 μL of Nafion solution (5.0 wt. %) containing 3.0 mg catalyst was adequately dispersed into the solution of ethanol (0.30 mL) and deionized water (0.15 mL), then the solution was ultrasonicated to form a homogeneous ink. Afterwards, 5.0 μL of obtained catalyst ink (0.23 mg cm^{-2}) was dropped onto electrode surface.

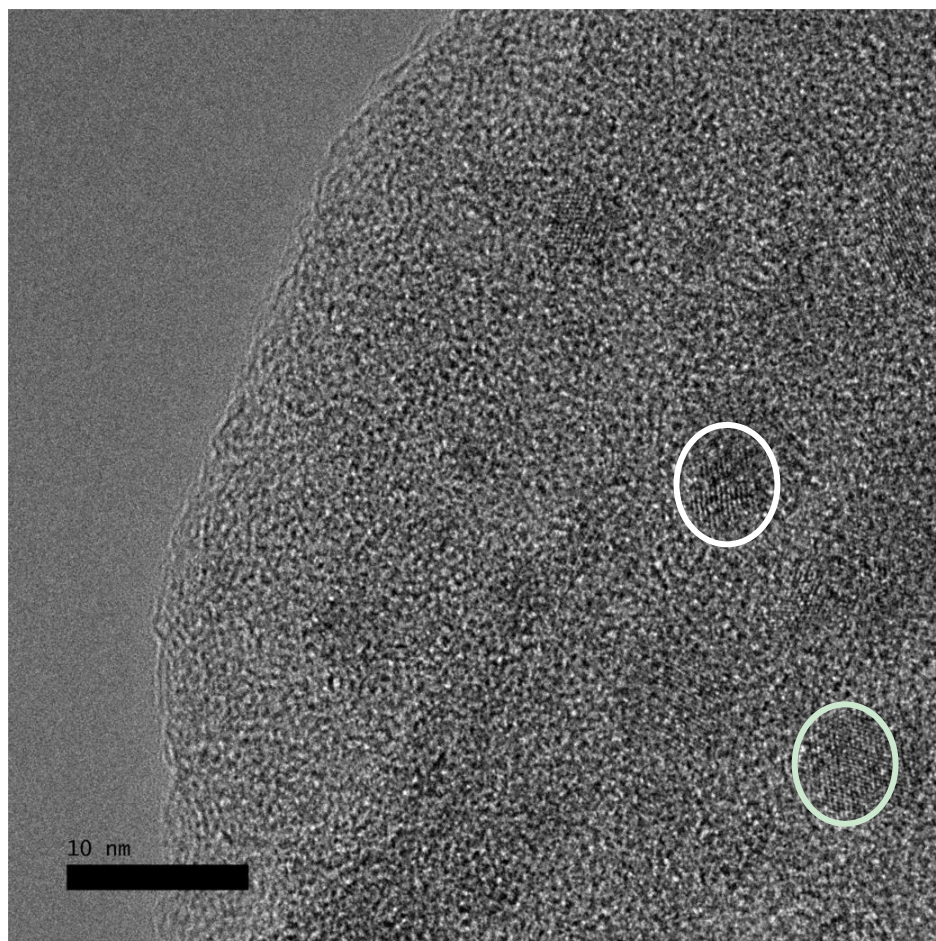


Figure S1. TEM of MoP/NPC.

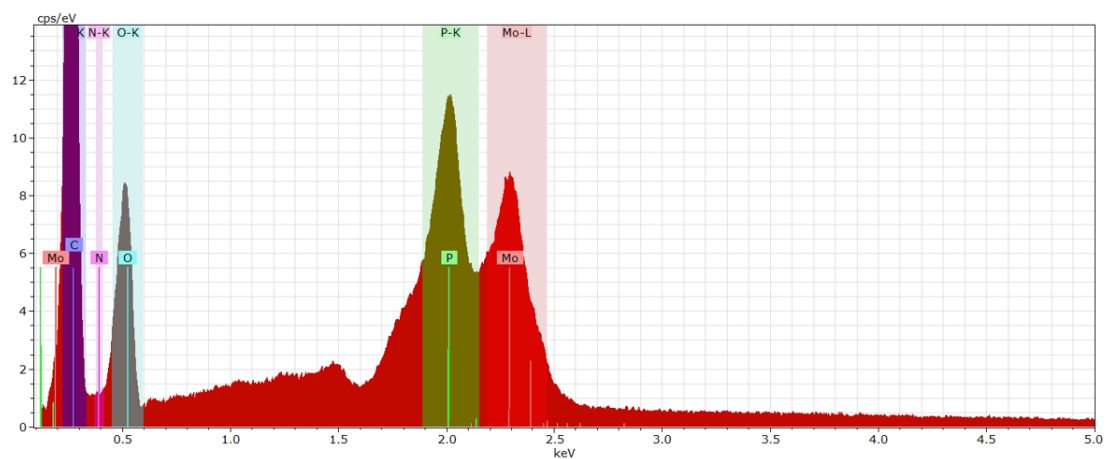


Figure S2. EDS spectra of MoP/NPC.

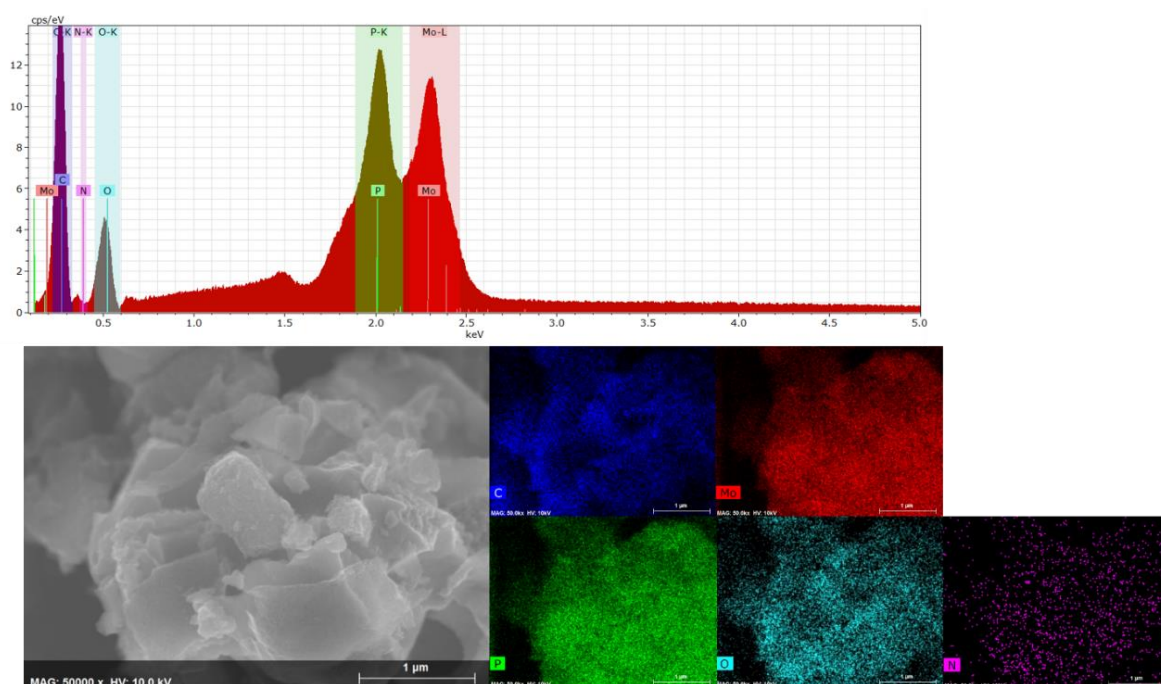


Figure S3. MoPON/C: EDS spectra, SEM and elemental mappings of C, Mo, P, O, N.

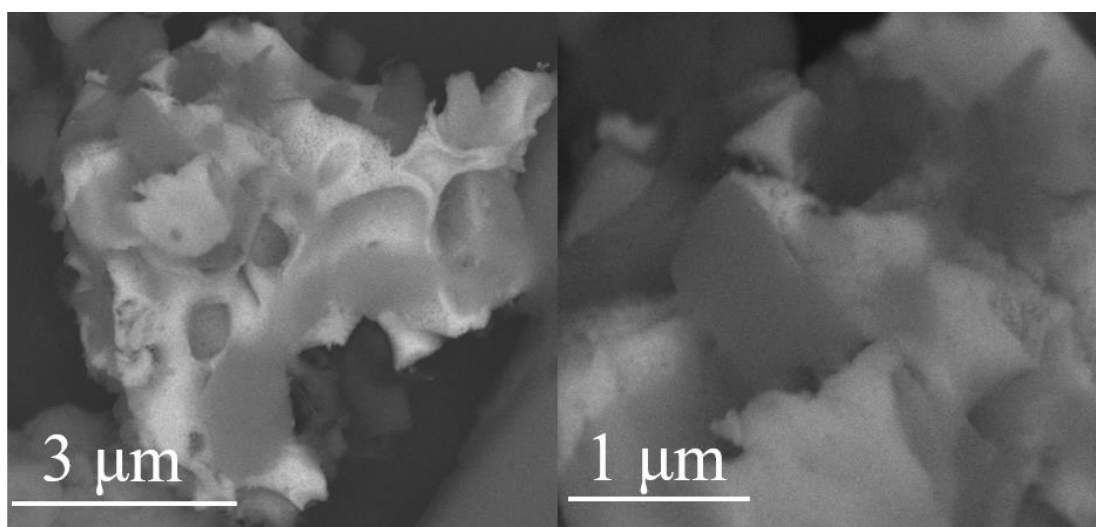


Figure S4. SEM of MoPON/C.

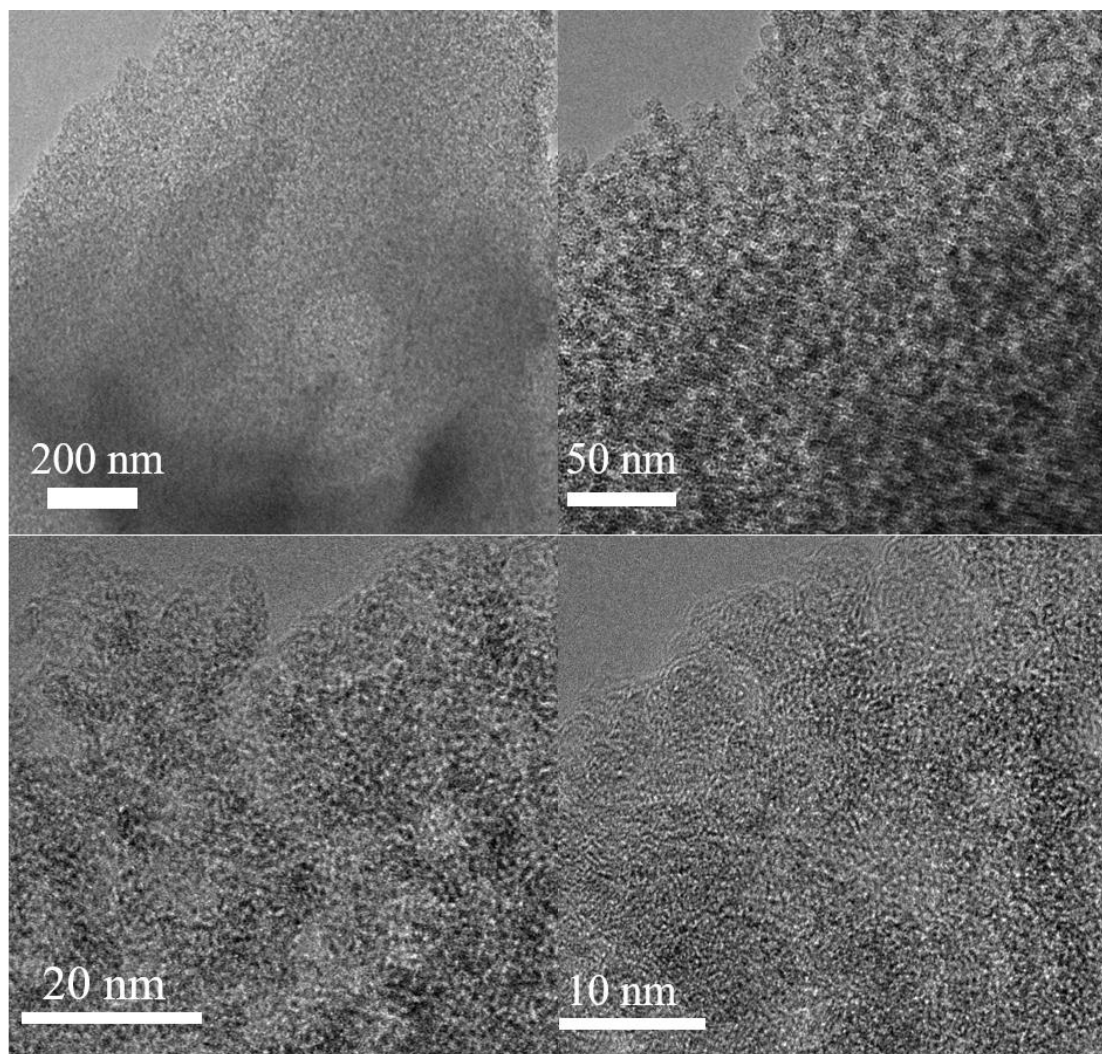


Figure S5. TEM of MoPON/C.

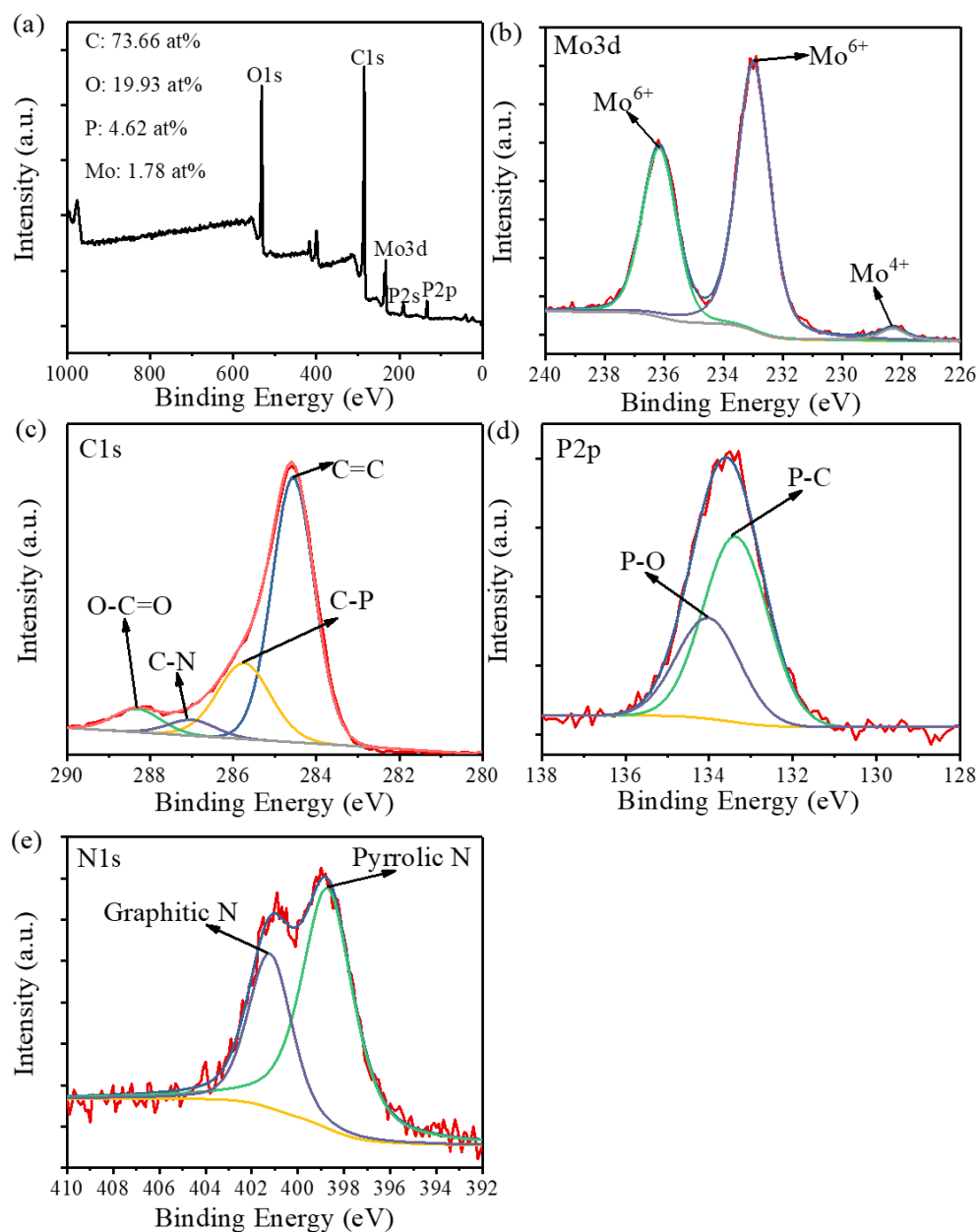


Figure S6. MoPON/C: (a) XPS survey spectrum; (b–e) High-resolution XPS spectra of Mo 3d, C 1s, P 2p and N 1s.

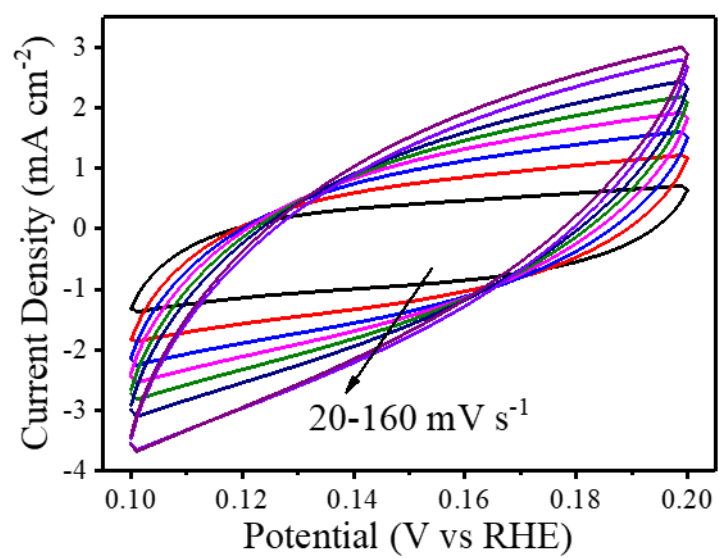


Figure S7. CVs of MoPON/C in the region of 0.10–0.20 V (vs RHE) .