

# Supplementary Information

## Fe,Ni-Based Metal–Organic Frameworks Embedded in Nanoporous Nitrogen-Doped Graphene as a Highly Efficient Electrocatalyst for the Oxygen Evolution Reaction

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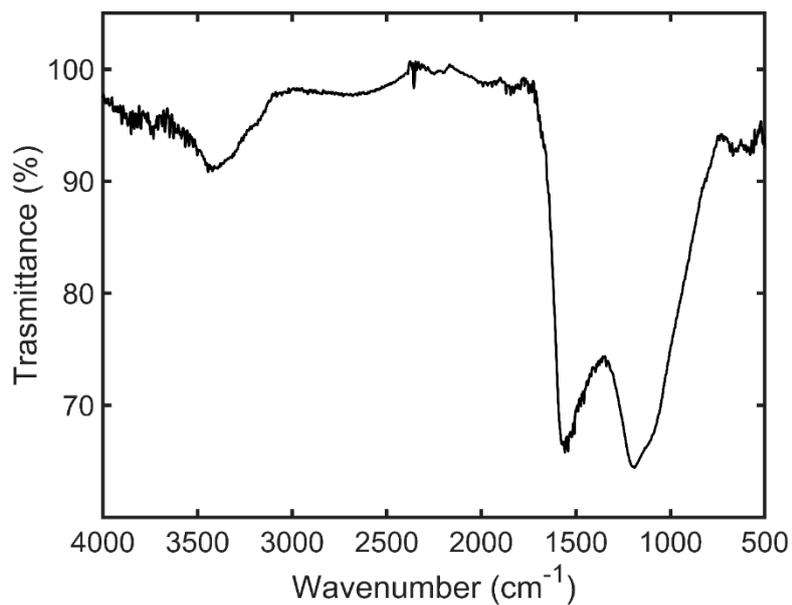


Figure S1: NG Fourier Transformed Infrared (FT-IR), prepared on KBr disk. Spectrum recorded with a Nicolet Nexus FT-IR spectrometer. The characteristic NG bands of C-N ( $\sim 1160\text{ cm}^{-1}$ ) and C=C ( $\sim 1550\text{ cm}^{-1}$ ) vibrations are visible.

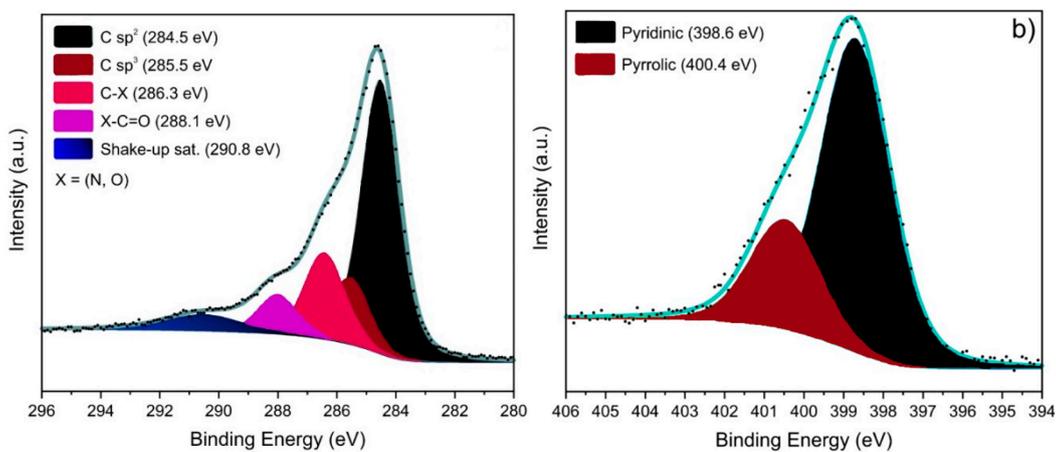


Figure S2: NG not-monochromatic X-ray photoemission spectroscopy (XPS) lines of C1s and N1s, deconvoluted into single chemically shifted components.

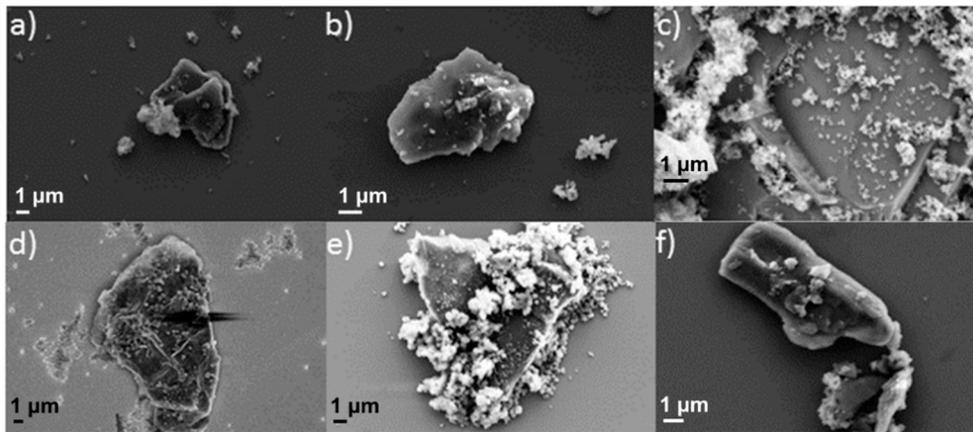


Figure S3. SEM images of as-prepared a) MIL-NG-1, b) MIL-NG-2, c) MIL-NG-3, d) MIL-NG-4, e) MIL-NG-5, f) MIL-NG-6.

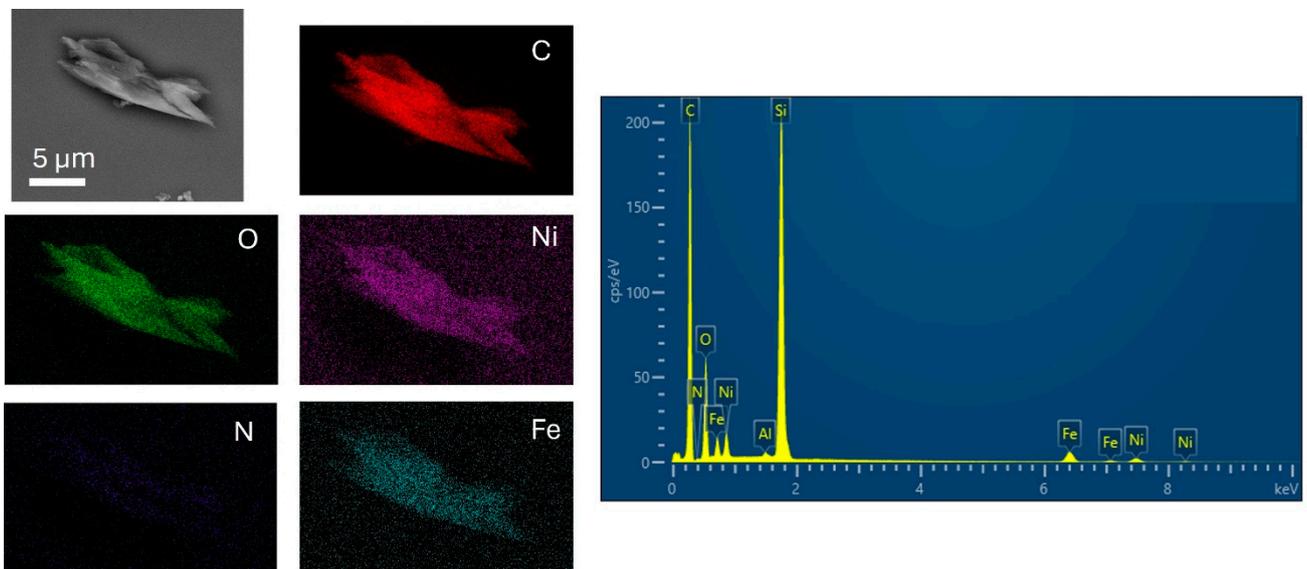


Figure S4. SEM EDX mapping of MIL-NG-3 and EDX spectrum.

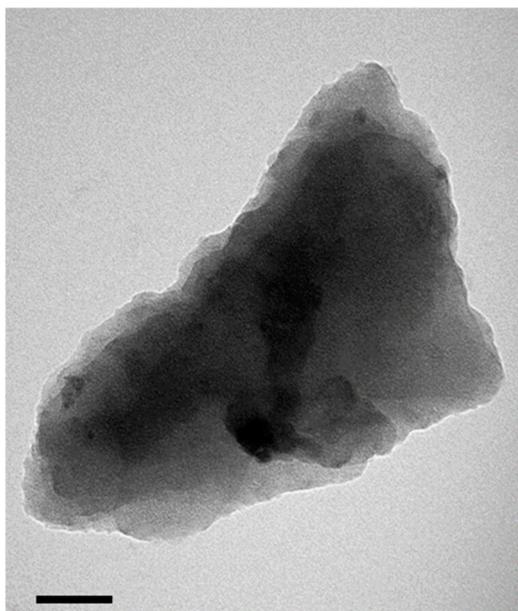


Figure S5: TEM image of NG, scale bar 100 nm.

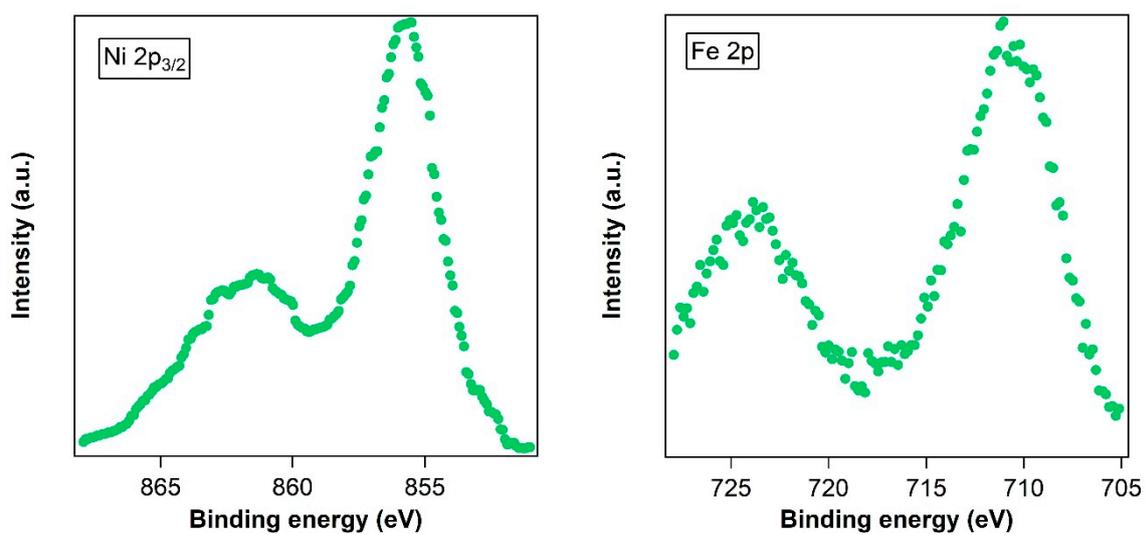


Figure S6: Ni 2p<sub>3/2</sub> and Fe 2p XPS lines of MIL-NG-3 after chronoamperometry in OER indicating the presence of Ni(OH)<sub>2</sub>/NiOOH and FeOOH.