

Description of Additional Supplementary Files

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Supplementary Movie 1:

4 The HER process of Mo/C-590 in 0.5 M H₂SO₄ at the current density of 40 mA cm⁻² .

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Supplementary Movie 2:

7 The HER process of MoC-Mo₂C-690 in 0.5 M H₂SO₄ at the current density of 40 mA cm⁻² .

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Supplementary Movie 3:

10 The HER process of MoC-Mo₂C-790 in 0.5 M H₂SO₄ at the current density of 40 mA cm⁻² .

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Supplementary Movie 4:

13 The HER process of Mo₂C-790 in 0.5 M H₂SO₄ at the current density of 40 mA cm⁻² .

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Supplementary Movie 5:

16 The HER process of Pt foil in 0.5 M H₂SO₄ at the current density of 40 mA cm⁻² .

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Supplementary Movie 6:

19 The HER process of the enlarged MoC-Mo₂C790 electrode in 0.5 M H₂SO₄ at the current density of
20 40 mA cm