

Chromium oxide coated nickel/yttria-stabilized zirconia electrode with heterojunction interface toward electrochemical methane reforming

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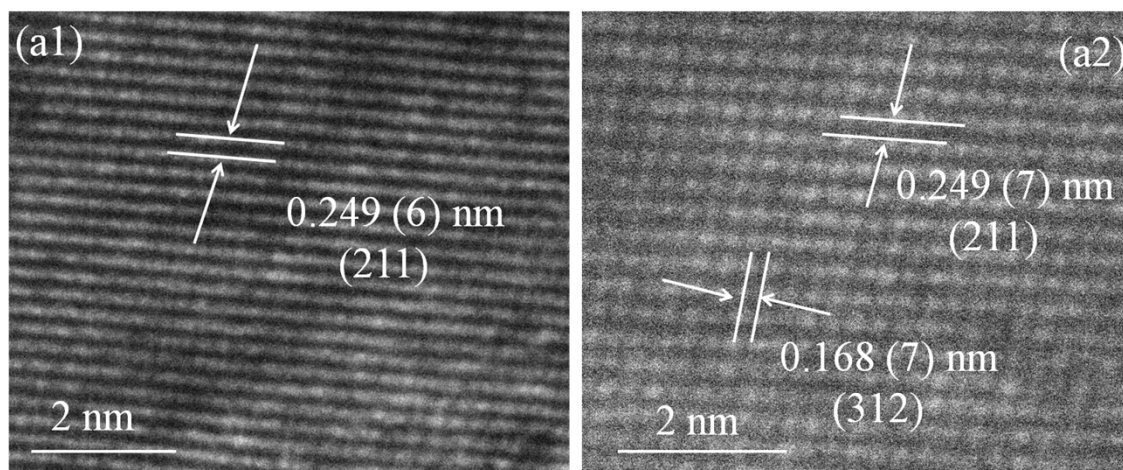


Fig. S1: The TEM graph of the oxidized NiCr_2O_4 (a1) and (a2).

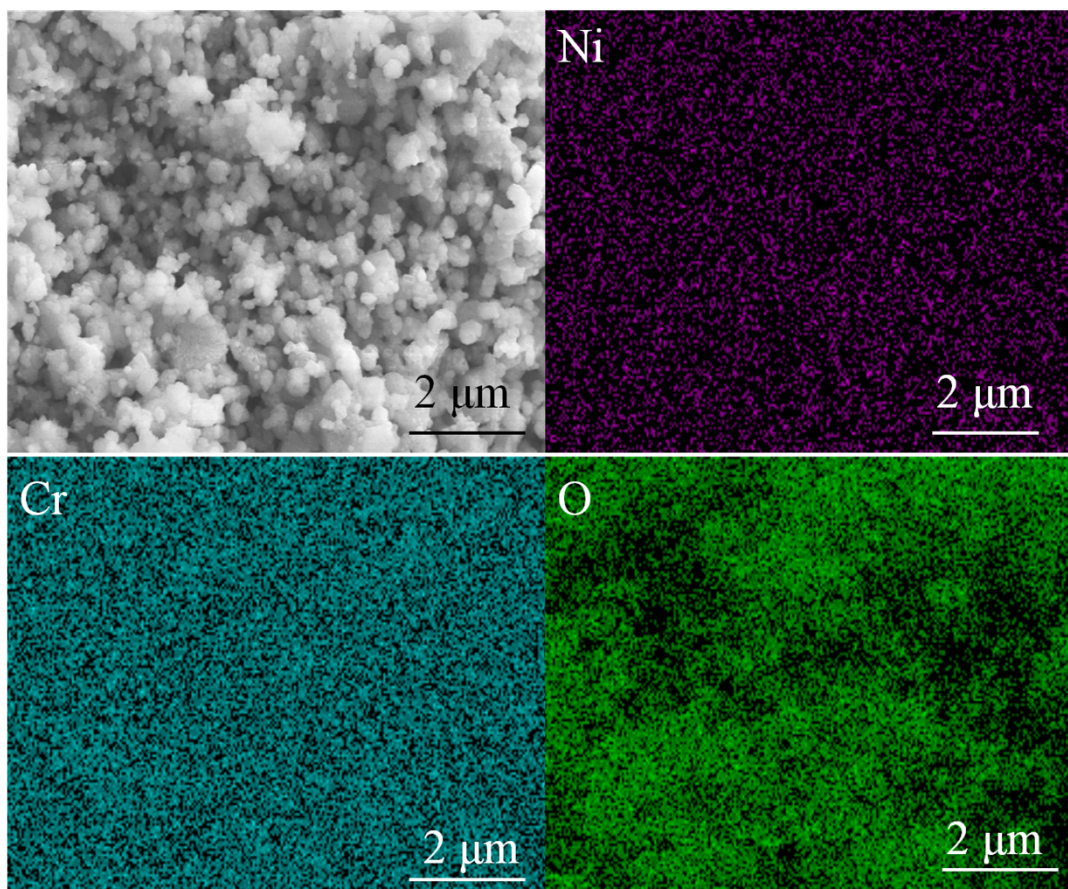


Fig. S2: SEM and EDS results of the reduced form of NiCr_2O_4 .

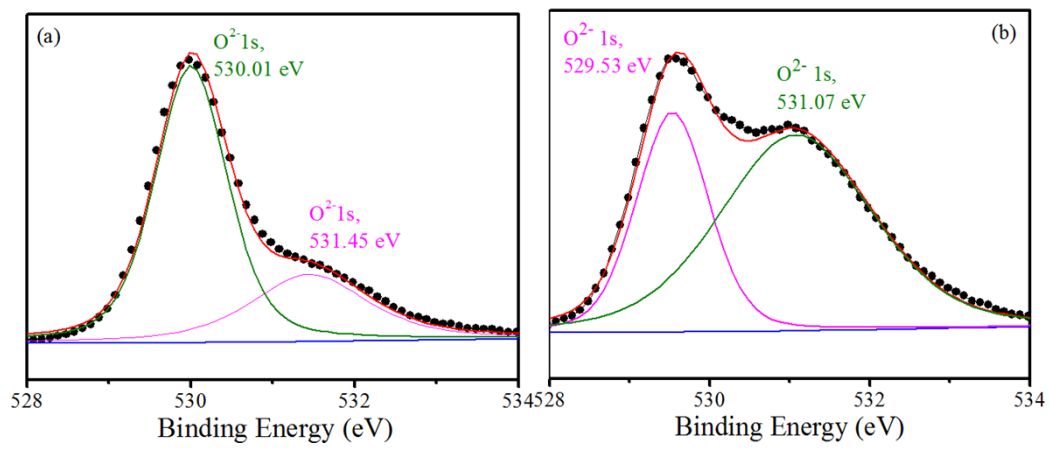


Fig. S3: XPS results of O (a) in the oxidized NiCr₂O₄; (b) in the reduced NiCr₂O₄.

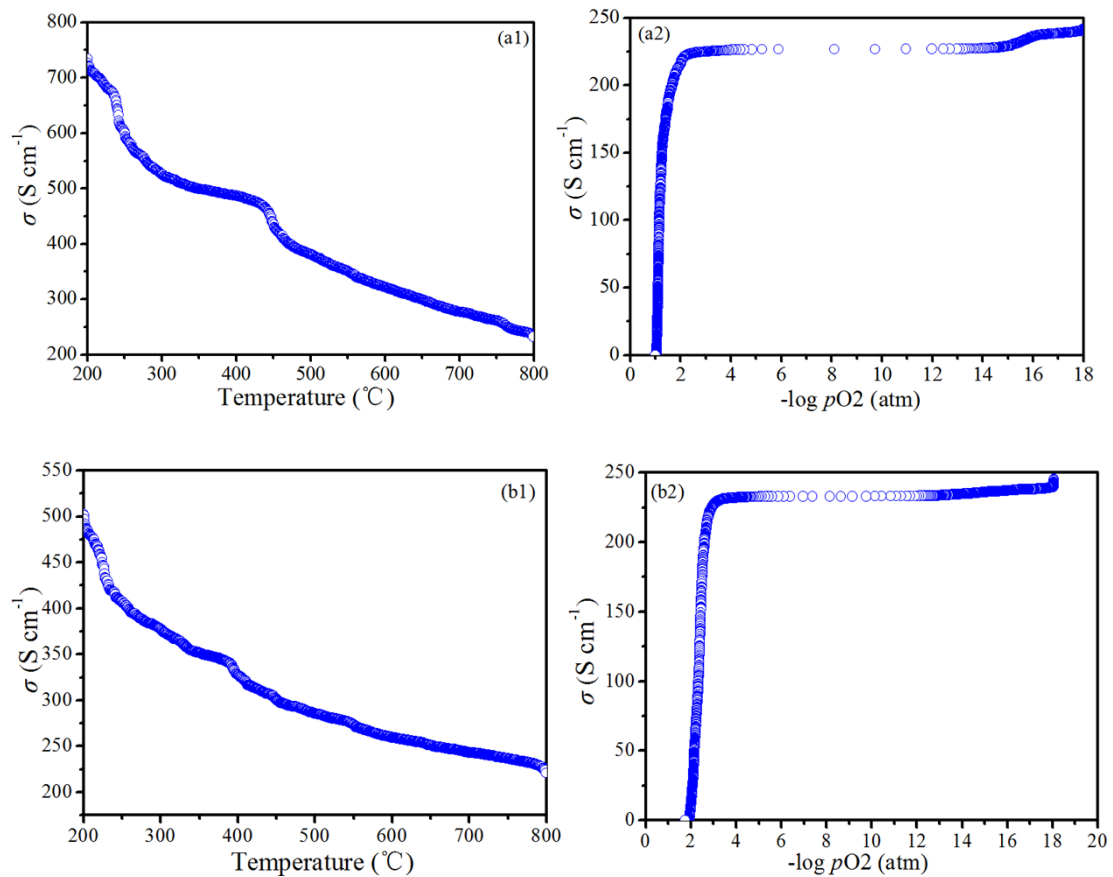


Fig. S4: (a1) and (b1) The dependence of conductivities on temperature of the reduced form of Ni/YSZ and 5% Cr₂O₃-Ni/YSZ samples; (a2) and (b2) the dependence of the conductivities on oxygen partial pressure of the reduced form of Ni/YSZ and 5% Cr₂O₃-Ni/YSZ samples at 800 °C.