

Supporting Information

Perovskite-Derivative Ni-Based Catalysts for Hydrogen Production via Steam Reforming of Long-Chain Hydrocarbon Fuel

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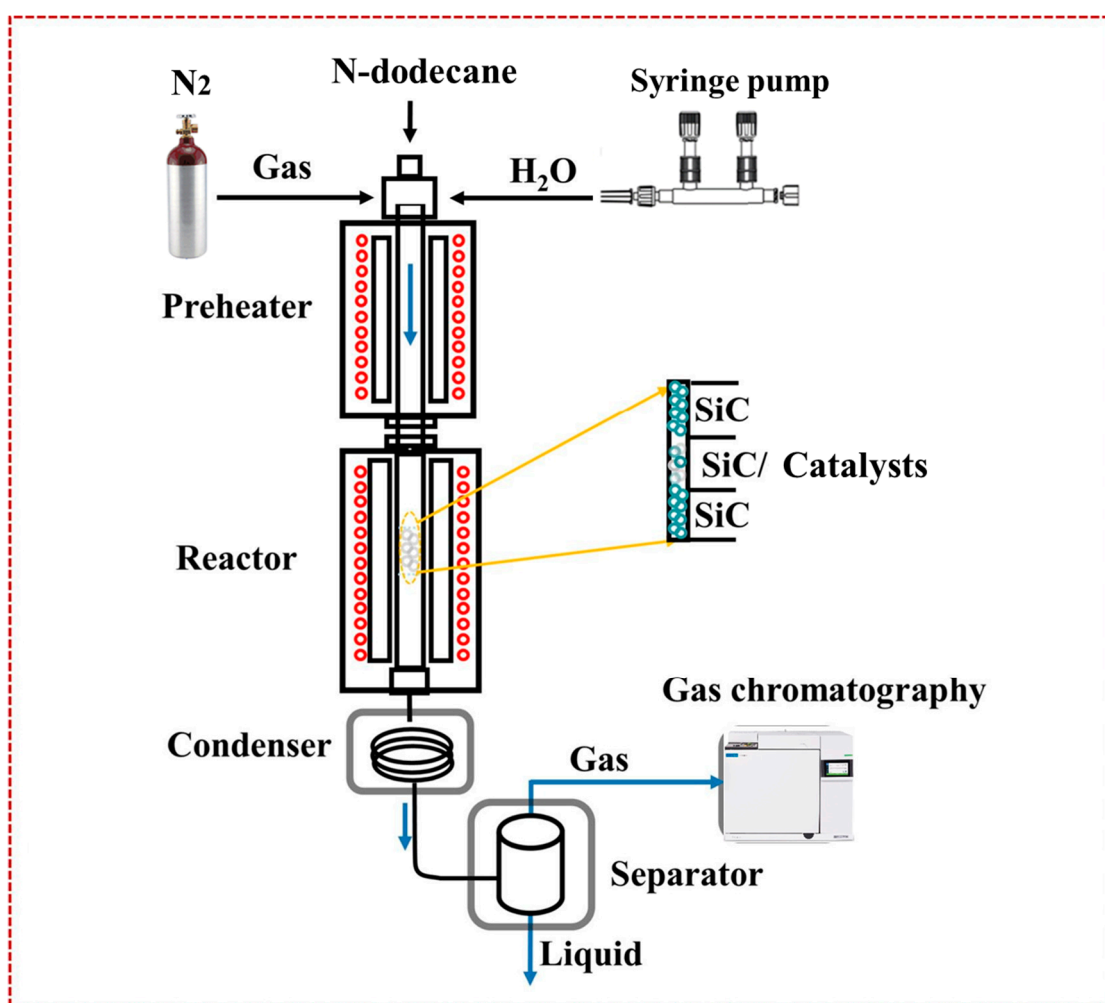


Figure S1. The schematic diagram of experimental apparatus.

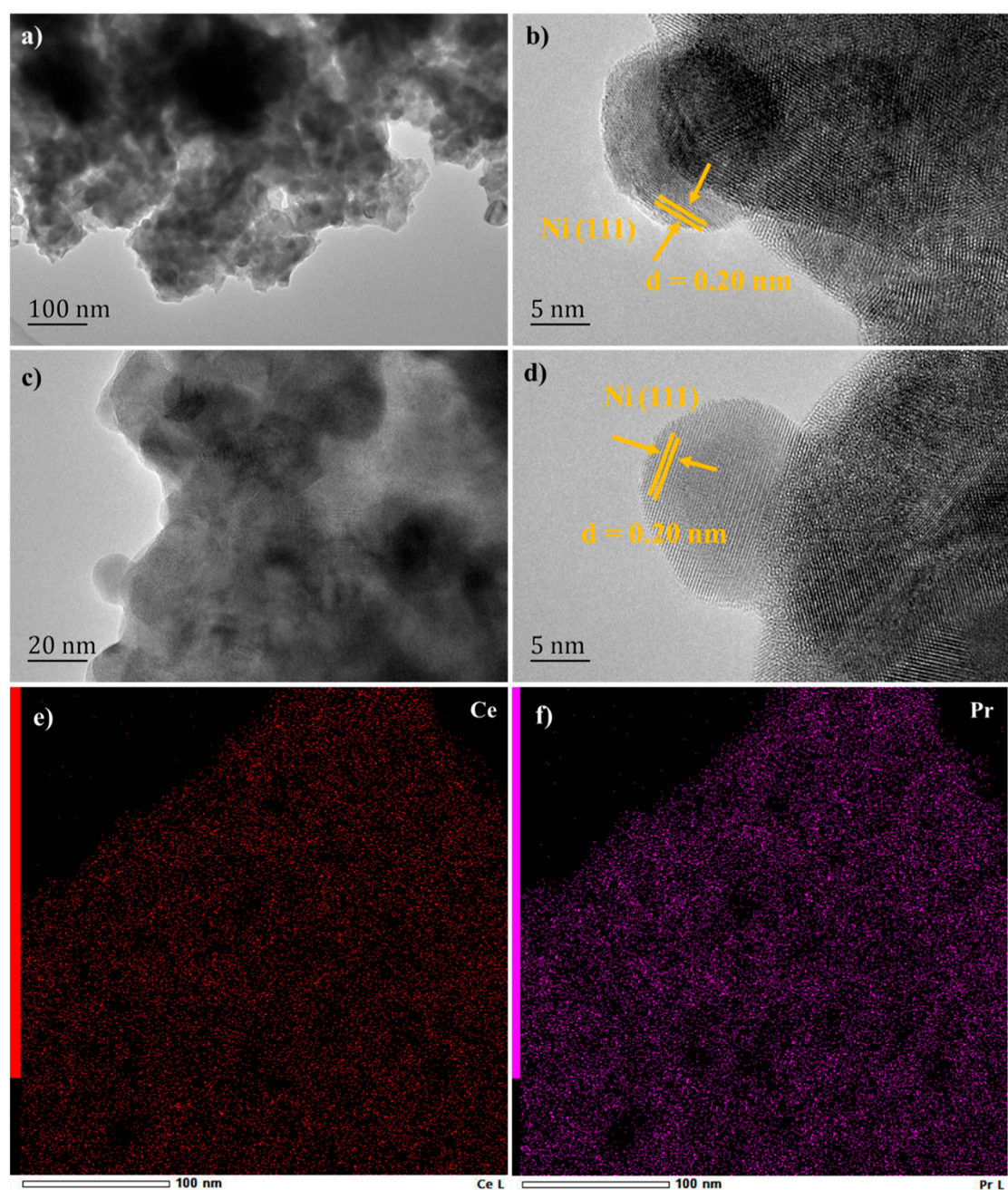


Figure S2. a) TEM images and b) HRTEM images of LaNiO₃. c) TEM images and d) HRTEM images of LaCePrNiO₃, e) The element mapping of Ce and f) Pr of LaCePrNiO₃ after hydrogen reduction.

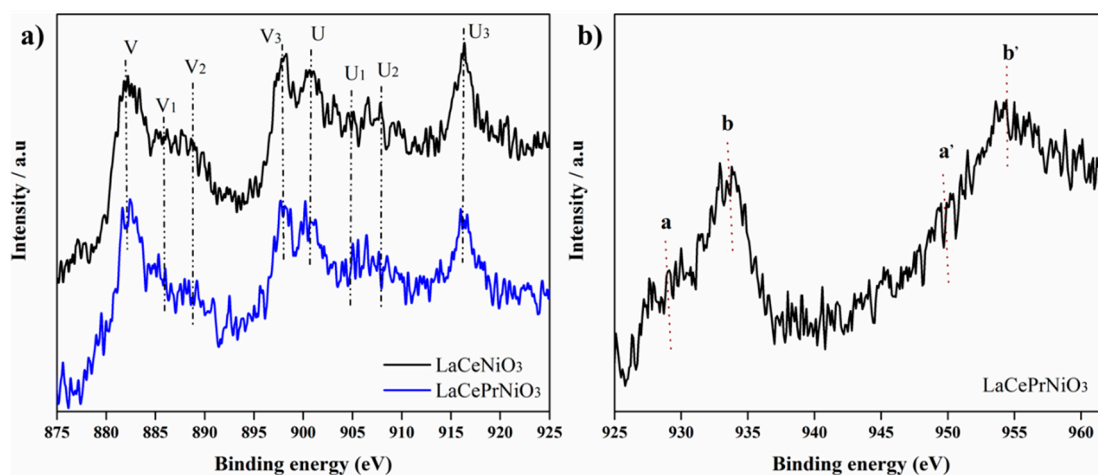


Figure S3. XPS spectra of the catalysts after reduction for a) Ce-3d, and b) Pr-3d.

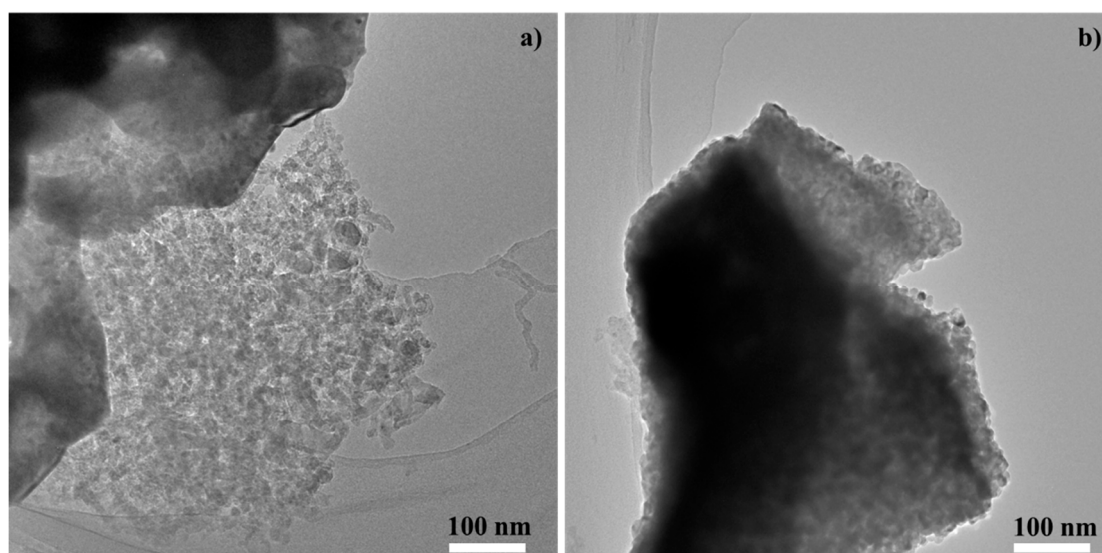


Figure S4. SEM images of spent catalysts for a) LaNiO₃, and b) LaCePrNiO₃. Reaction condition: 600 °C, 0.1 MPa, LHSV of C₁₂H₂₆ 15 ml/g_{cat}·h, with mole ratio of H₂O:C₁₂H₂₆ at 24.