

# Ni-Based Molecular Sieves Nanomaterials for Dry Methane Reforming: Role of Porous Structure and Active Sites Distribution on Hydrogen Production

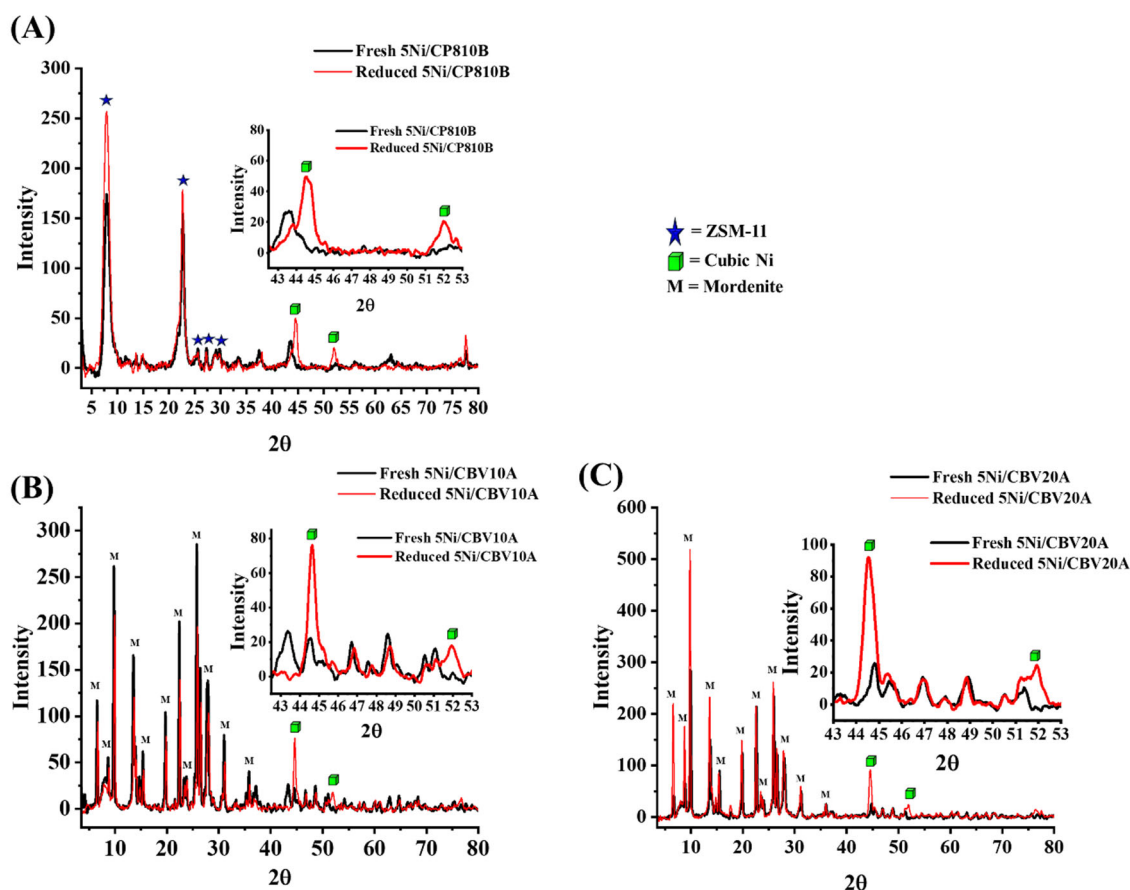
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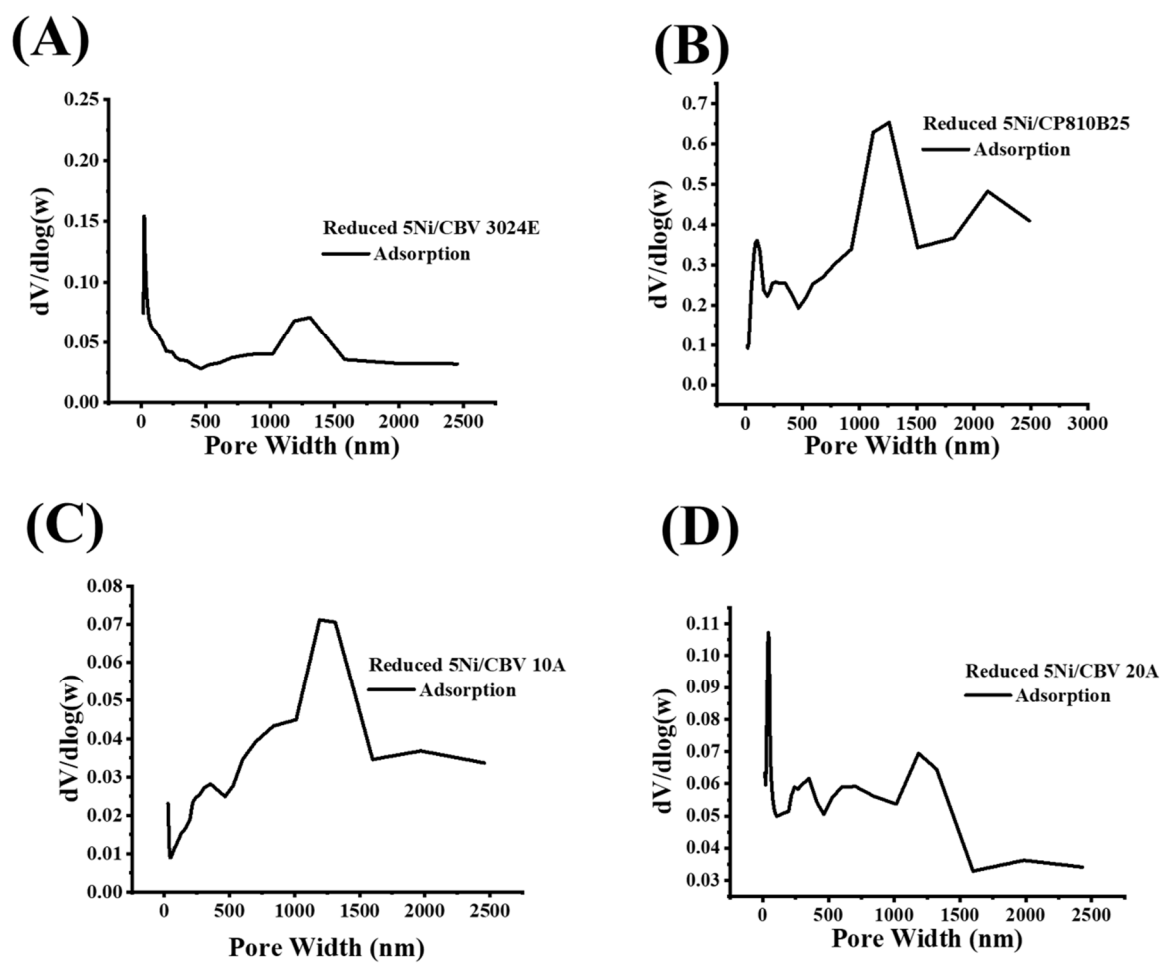
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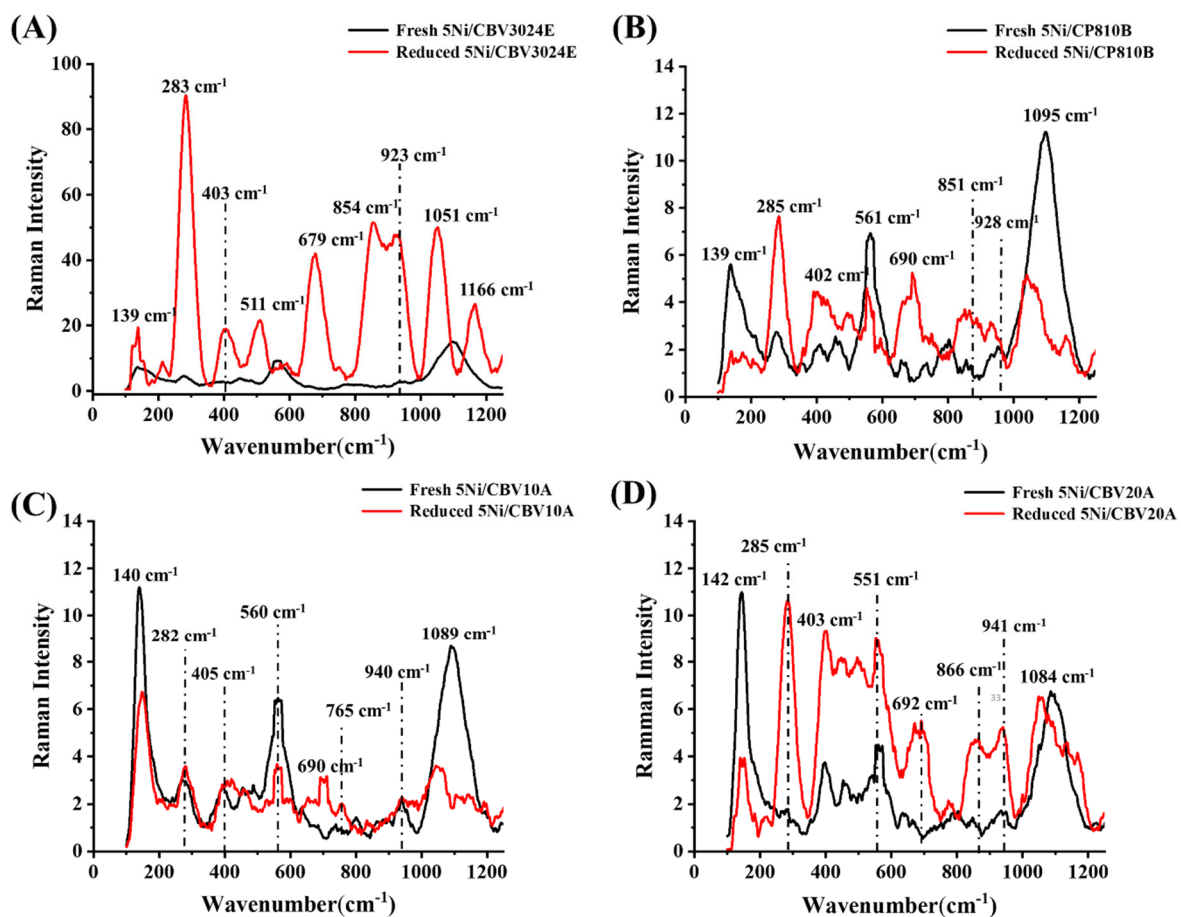
## Supporting information



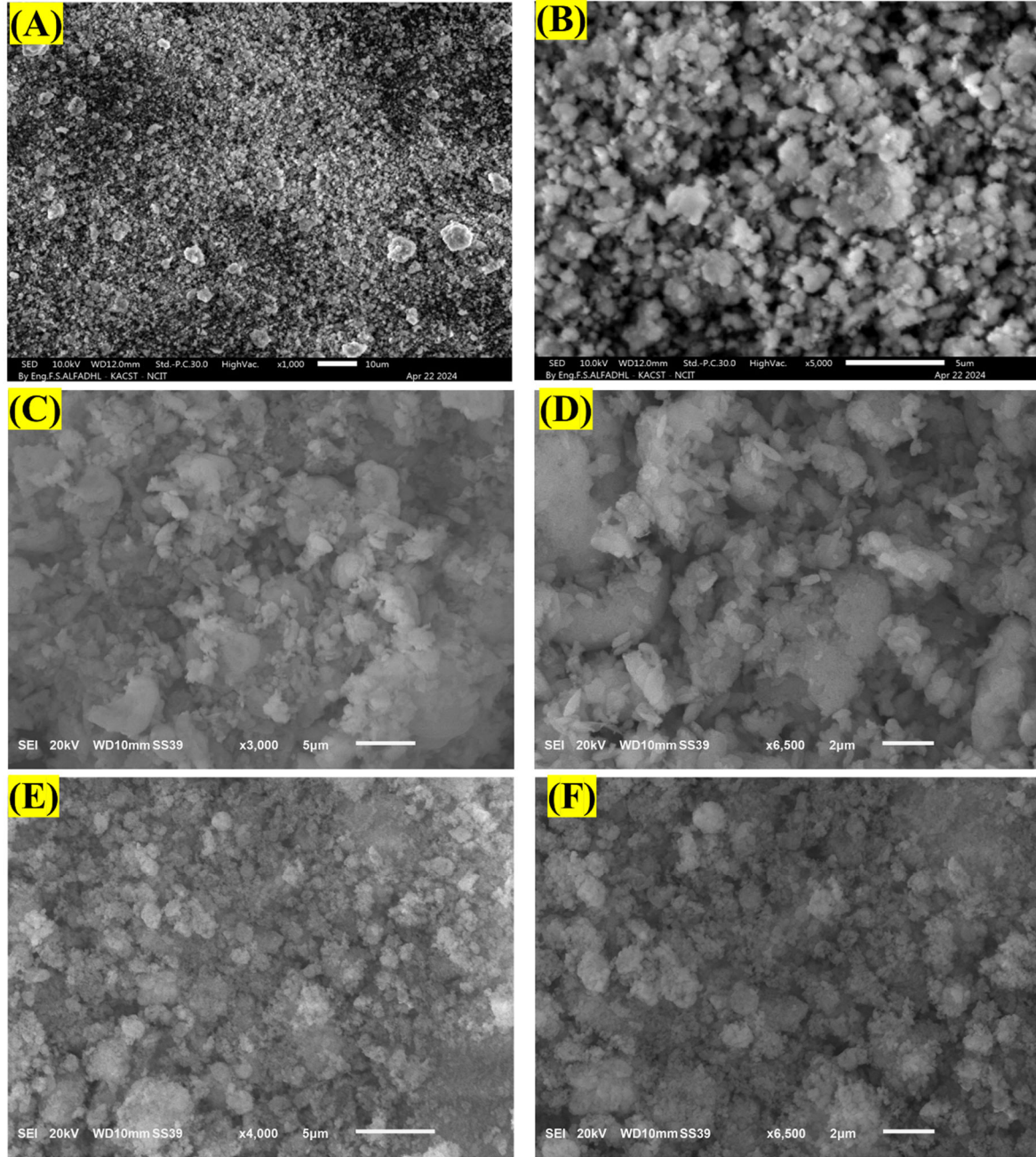
**Figure S1.** XRD of (A) fresh and reduced-5Ni/CP810B (B) fresh and reduced-5Ni/CBV10A (C) fresh and reduced-5Ni/CBV20A.



**Figure S2.** The pore size distribution of (A) reduced-5Ni/CBV3024E (B) reduced-5Ni/CP810B25 (C) reduced-5Ni/CBV10A (D) reduced-5Ni/CBV20A.



**Figure S3.** Raman spectra of (A) fresh and reduced-5Ni/CBV3024 E (B) fresh and reduced-5Ni/CBV810B (C) fresh and reduced-5Ni/CBV10A (D) fresh and reduced-5Ni/CBV20A.



**Figure S4.** SEM images of (A) fresh 5Ni/CBV3024E at a magnification of 1000 $\times$ . (B) Fresh 5Ni/CBV3024E at a magnification of 5000 $\times$  under high vacuum. (C) Fresh 5Ni/CBV20A at a magnification of 3000 $\times$ . (D) Fresh 5Ni/CBV20A at a magnification of 6500 $\times$ . (E) Fresh 5Ni/CP810B at a magnification of 4000 $\times$ . (F) Fresh 5Ni/CP810B at a magnification of 6500 $\times$ .

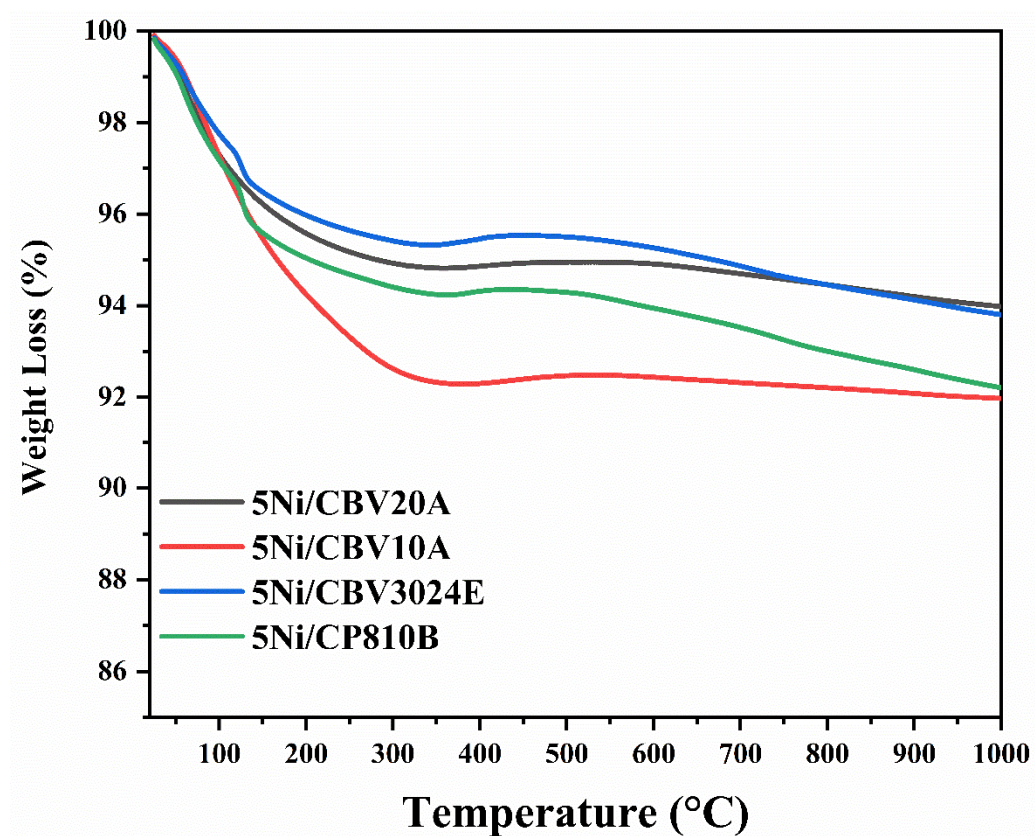


Figure S5. TGA profiles of used samples after 5h of reaction.