

Supplementary Information

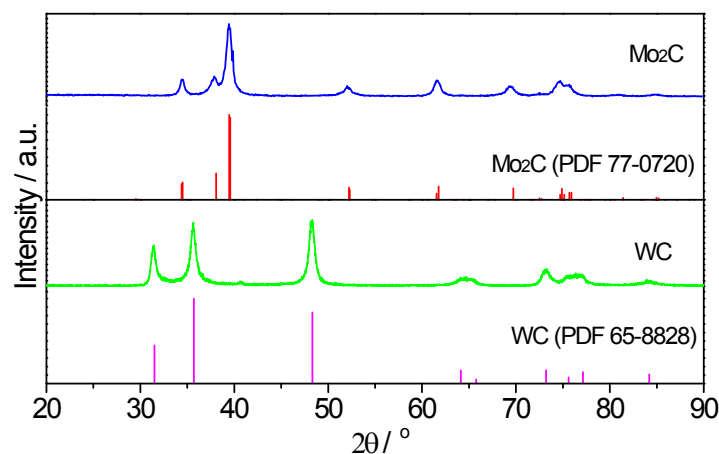


Fig. S1 XRD patterns of Mo_2C and WC prepared by TPR method (PDF file references are also included).

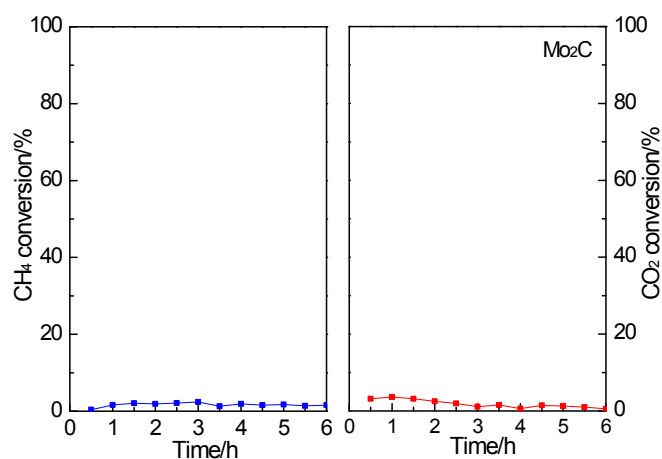


Fig. S2 Lifetime study of Mo_2C in DRM ($T=800\text{ }^\circ\text{C}$, $P=1\text{ atm}$, $\text{CH}_4/\text{CO}_2=1$, $\text{WHSV}=6000\text{ cm}^3\text{ g}^{-1}\text{ h}^{-1}$).

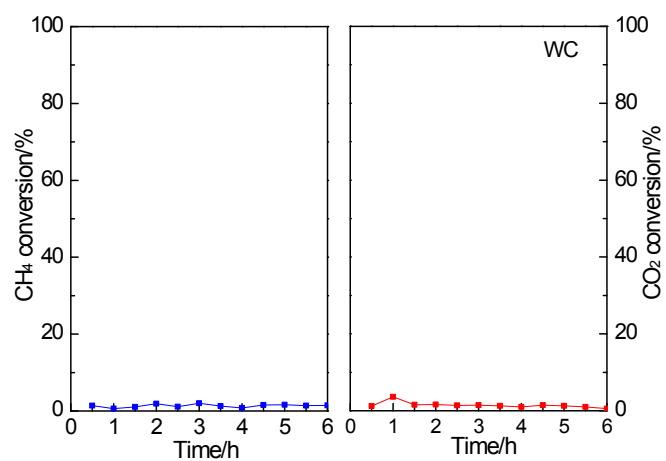


Fig. S3 Lifetime study of WC in DRM (T=800 °C, P=1 atm, CH₄/CO₂=1, WHSV=6000 cm³ g⁻¹ h⁻¹).