Electronic Supplementary Material (ESI) for Catalysis Science & Technology.

CO_2 conversion over Cu-Mo_2C catalysts: Effect of Cu promoter and preparation method

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Electronic Supporting Information

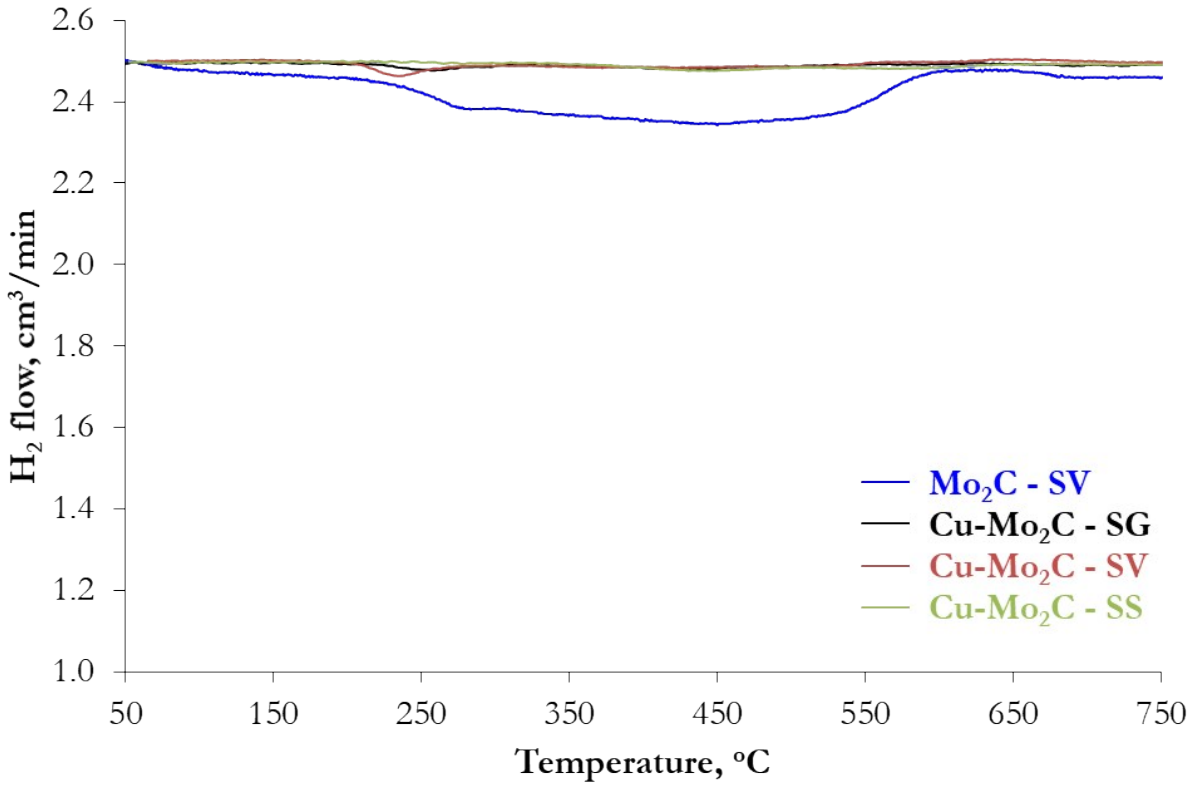

Figure S1. TPR-H_2 hydrogen consumption profiles of the Mo_2C and Cu-Mo_2C catalysts.

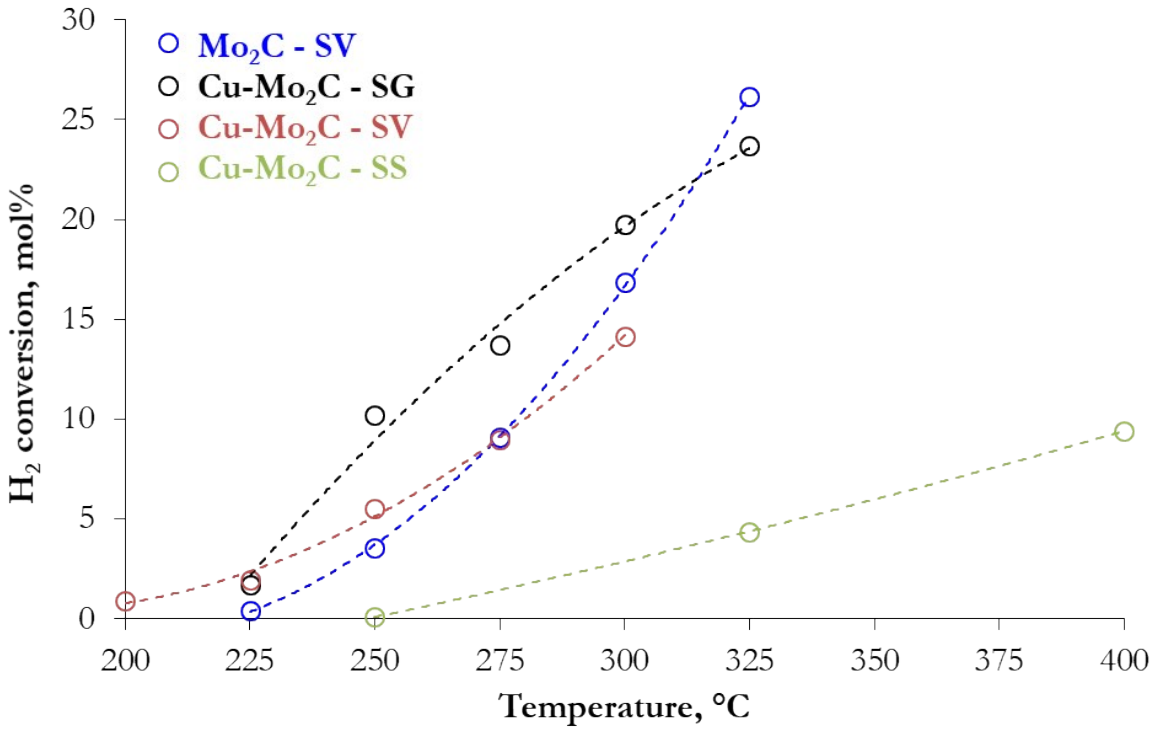

Figure S2. Conversion of H_2 versus temperature over the Mo_2C and Cu-Mo_2C catalysts (reaction conditions: P = 45 bar, H_2/CO_2 ratio = 3, W/F = 0.3 g.s/cm^3).

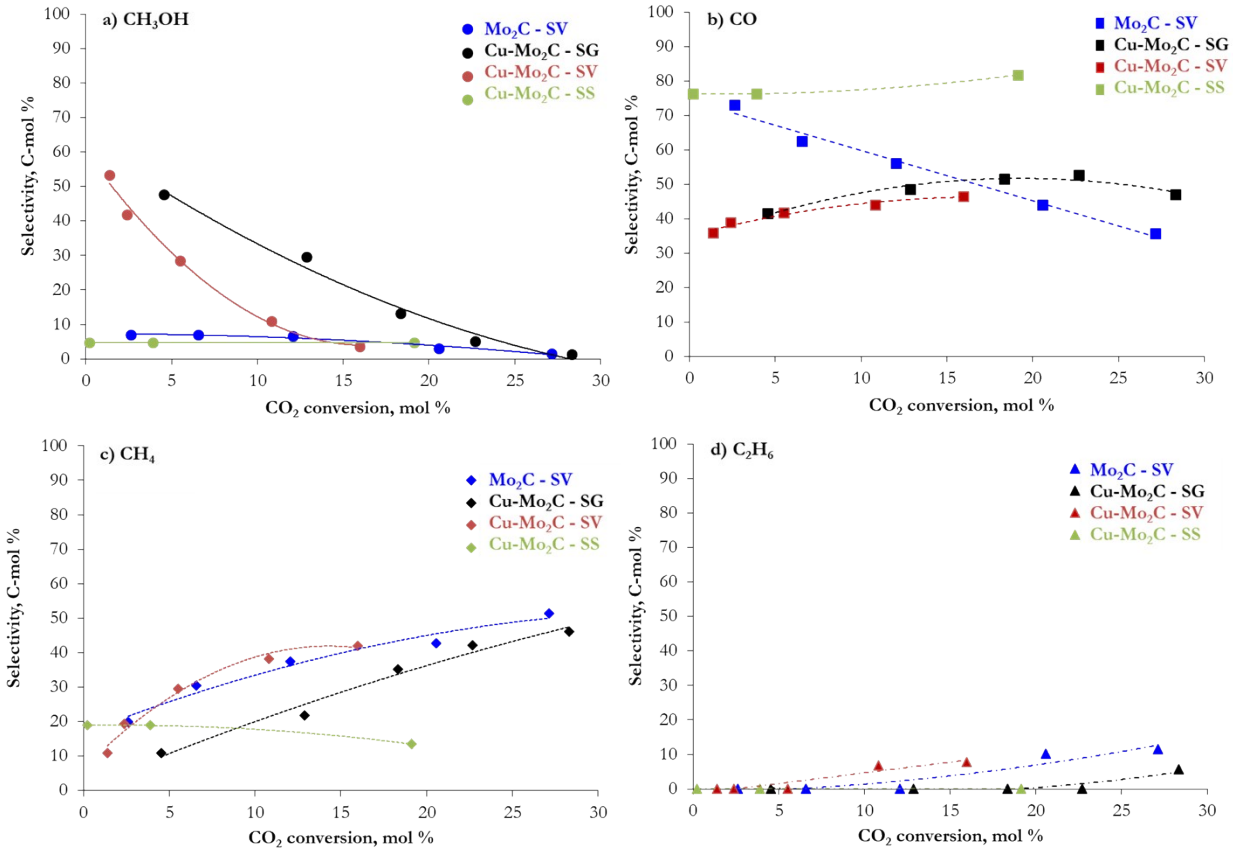

Figure S3. Selectivity to (a) CH_3OH, (b) CO, (c) CH_4 and (d) C_2H_6 versus CO_2 conversion over the Mo_2C and Cu-Mo_2C catalysts (reaction conditions: P = 45 bar, H_2/CO_2 ratio = 3, W/F = 0.3 g.s/cm^3).

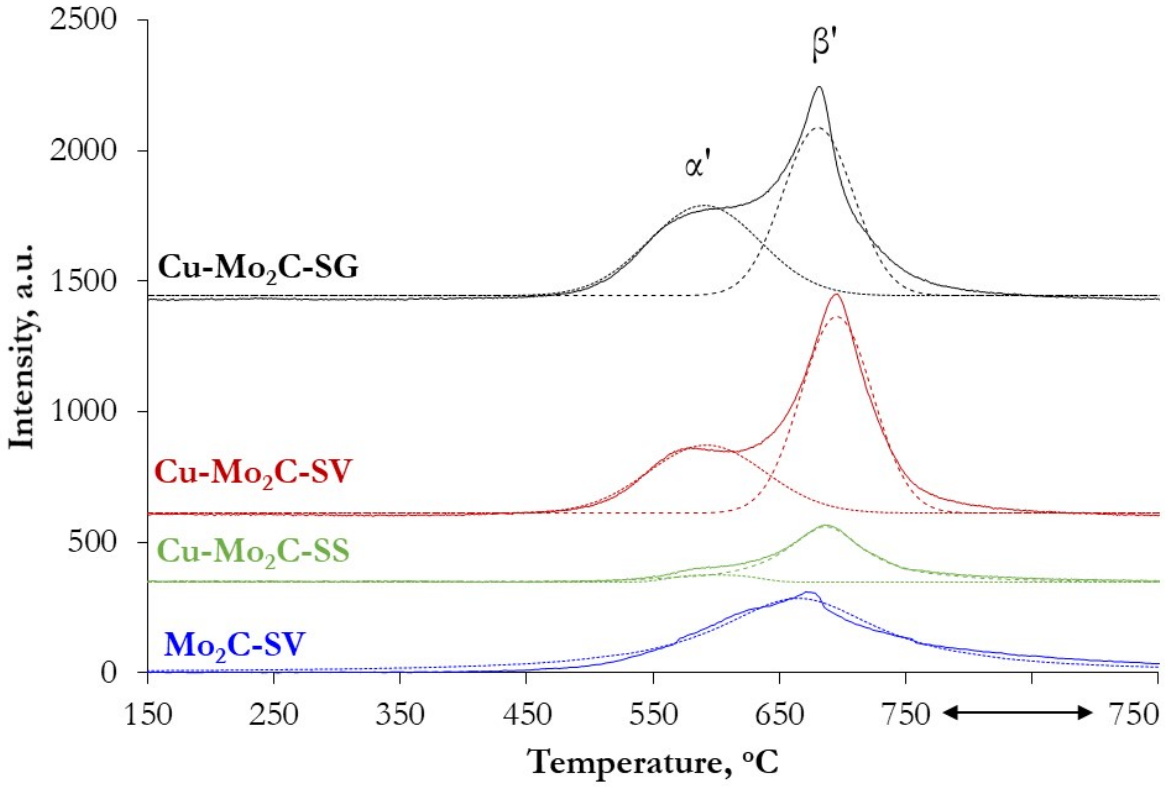

Figure S4. Deconvoluted desorption profiles of CO as a function of temperature following CO_2 adsorption on the Mo_2C and Cu-Mo_2C catalysts.

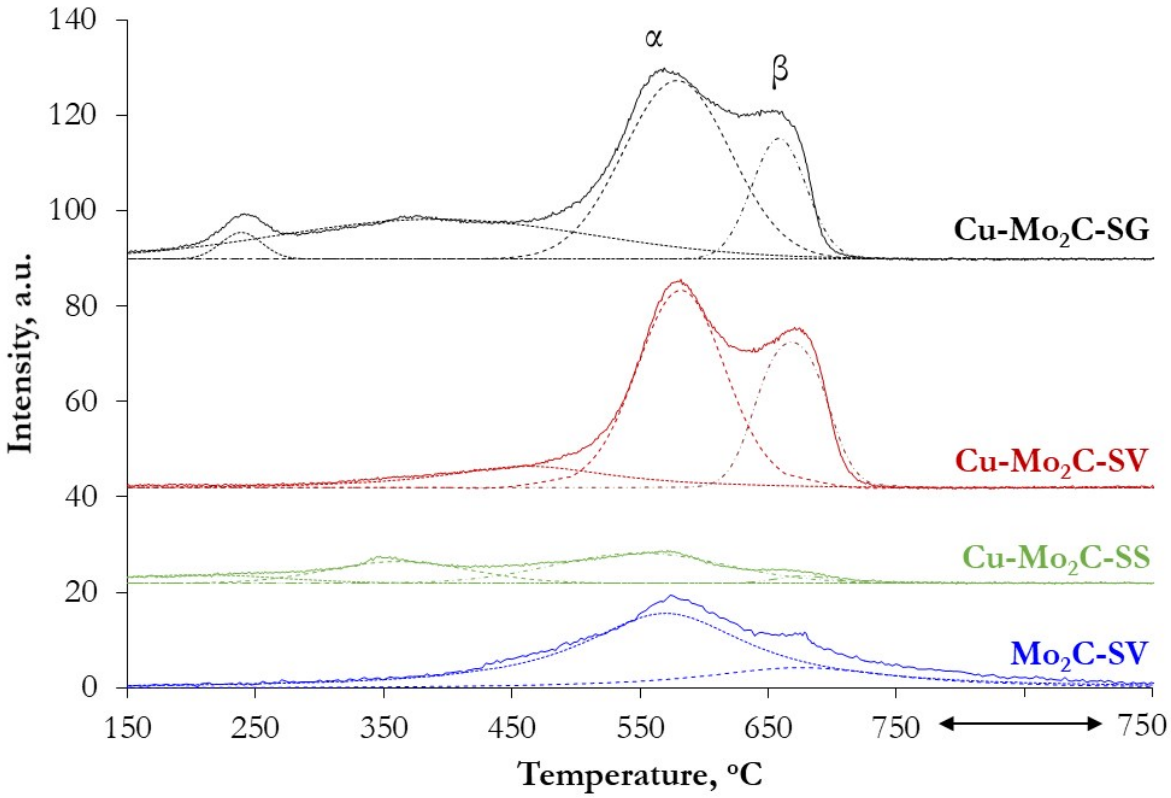

Figure S5. Deconvoluted desorption profiles of CO_2 as a function of temperature following CO_2 adsorption on the Mo_2C and Cu-Mo_2C catalysts.

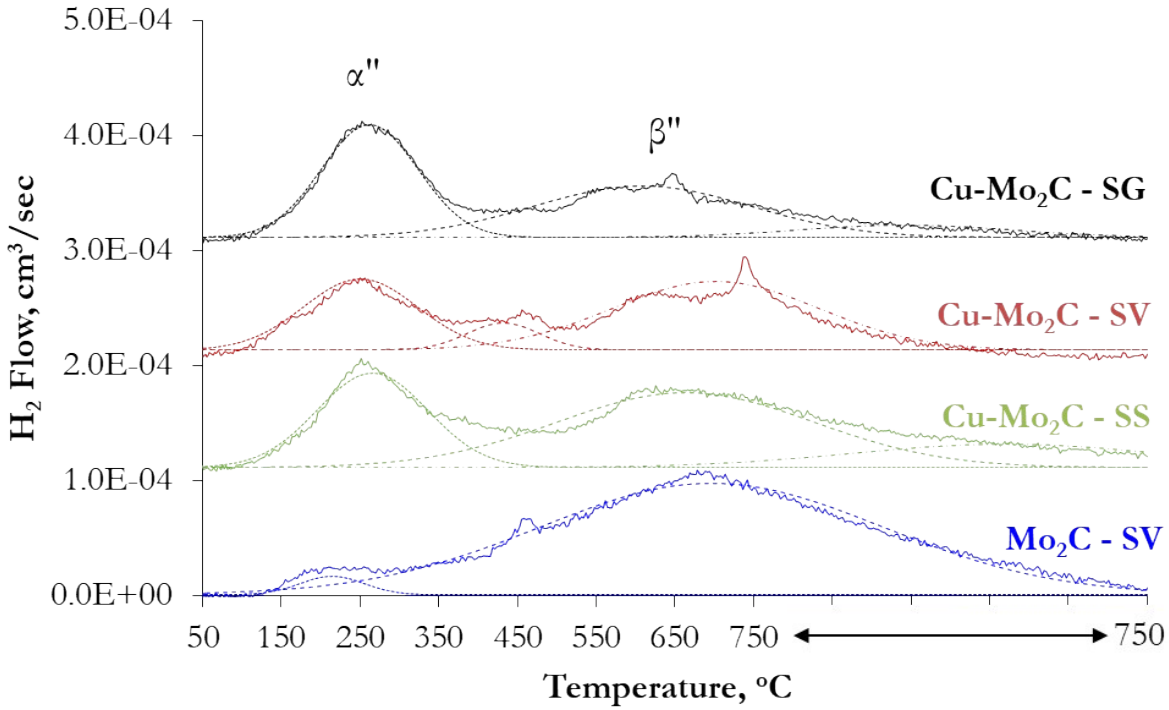

Figure S6. Deconvoluted desorption profiles of H_2 as a function of temperature following H_2 adsorption on the Mo_2C and Cu-Mo_2C catalysts.