

Supplementary Materials

for Materials

Modification of gold zeolitic supports for catalytic

oxidation of glucose to gluconic acid

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List of content:

Figure S1. ^{11}B MAS NMR spectrum of B/MCM-36 sample.

Figure S2. FTIR spectra after (a) adsorption of pyridine at 150 °C and desorption at (b) 150 °C, (c) 200 °C, (d) 250 °C, (e) 300 °C. All the spectra were obtained by subtraction the spectrum after activation and normalized to the density of a wafer of ca 10 mg cm⁻².

Figure S3. Representative TEM image of Au/HBeta showing Au NPs localization on the external surface of the zeolite.

Figure S4. ATR-FTIR spectra of selected materials before and after glucose solution treatment and drying at 80°C.

Figure S5. N 1s region of XP spectra of gold-containing zeolites for (A) HBeta; (B) MCM-36 series. The regions of BE values typical to the protonated and non-protonated amine groups are marked in yellow and blue, respectively.

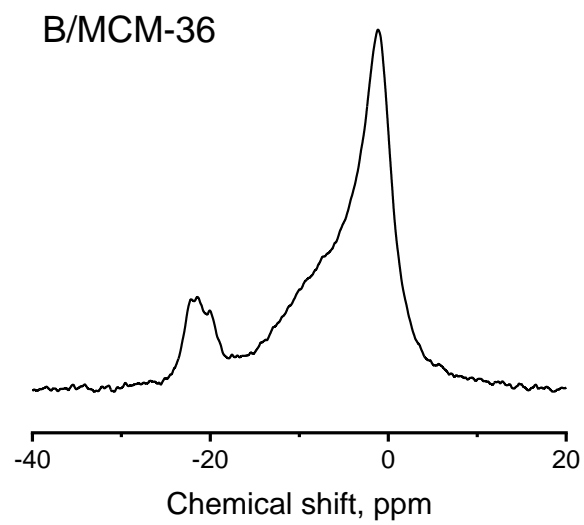


Figure S1. ^{11}B MAS NMR spectrum of B/MCM-36 sample.

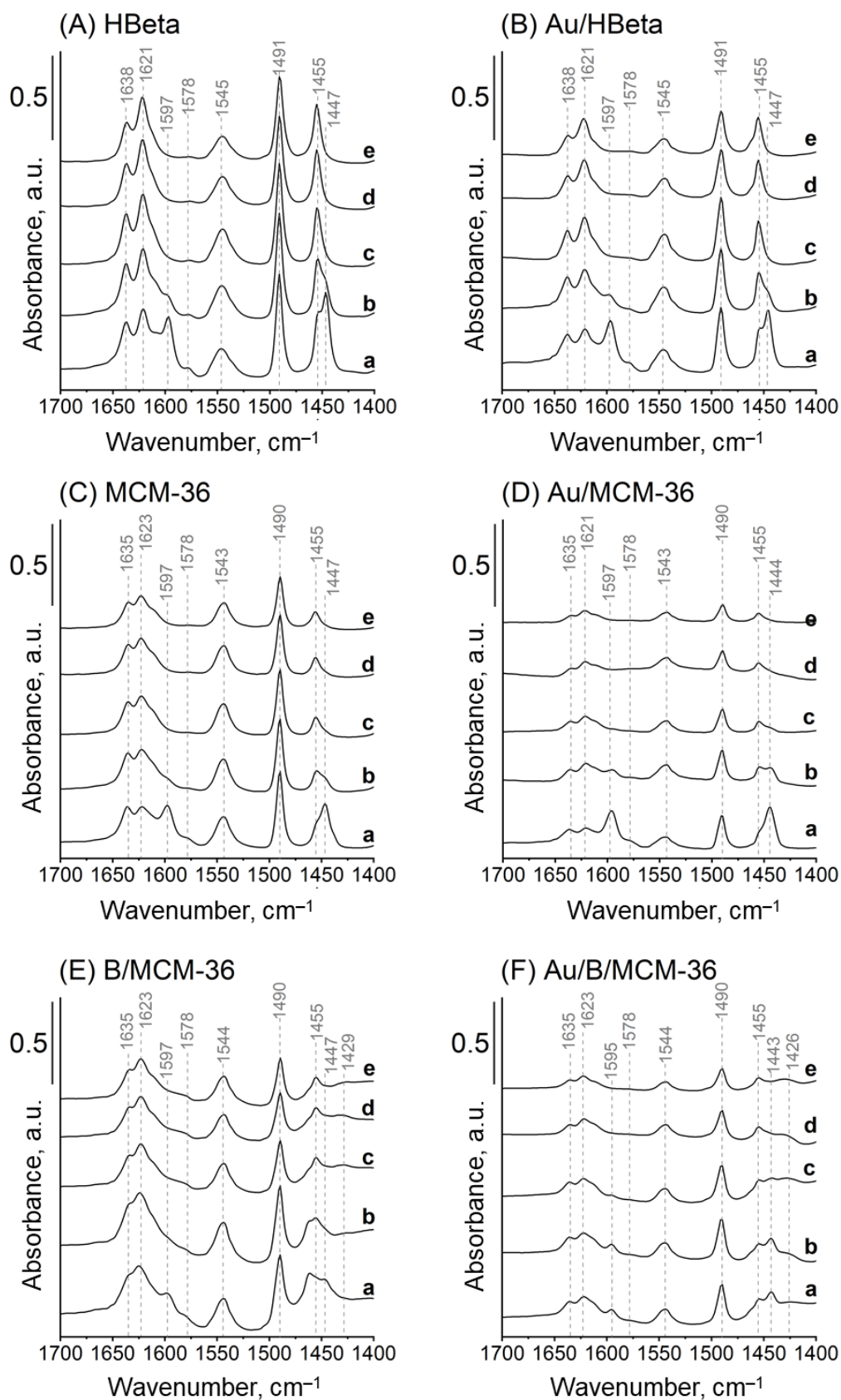


Figure S2. FTIR spectra after (a) adsorption of pyridine at 150 °C and desorption at (b) 150 °C, (c) 200 °C, (d) 250 °C, (e) 300 °C. All the spectra were obtained by subtraction the spectrum after activation and normalized to the density of a wafer of 10 mg cm^{-2} .

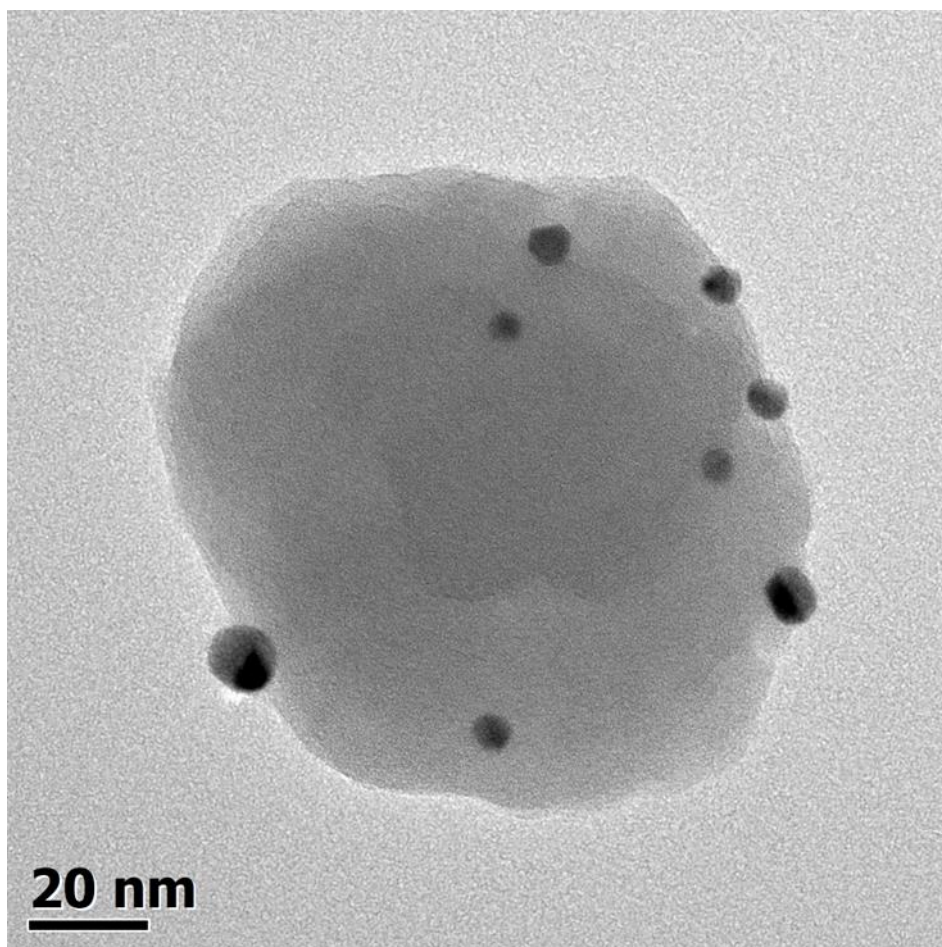


Figure S3. Representative TEM image of Au/HBeta showing Au NPs localization on the external surface of the zeolite grain.

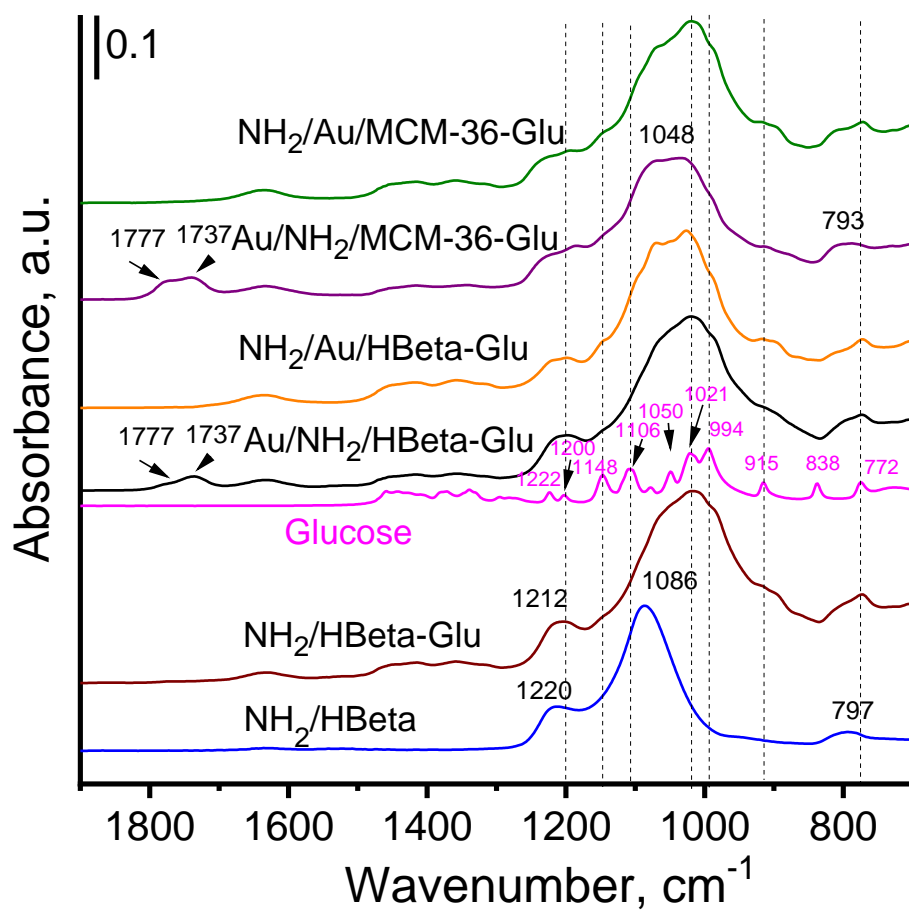


Figure S4. ATR-FTIR spectra of selected materials before and after glucose solution treatment and drying at 80°C.

Adnotation: "-Glu" in the catalyst symbol means sample after glucose adsorption and drying.

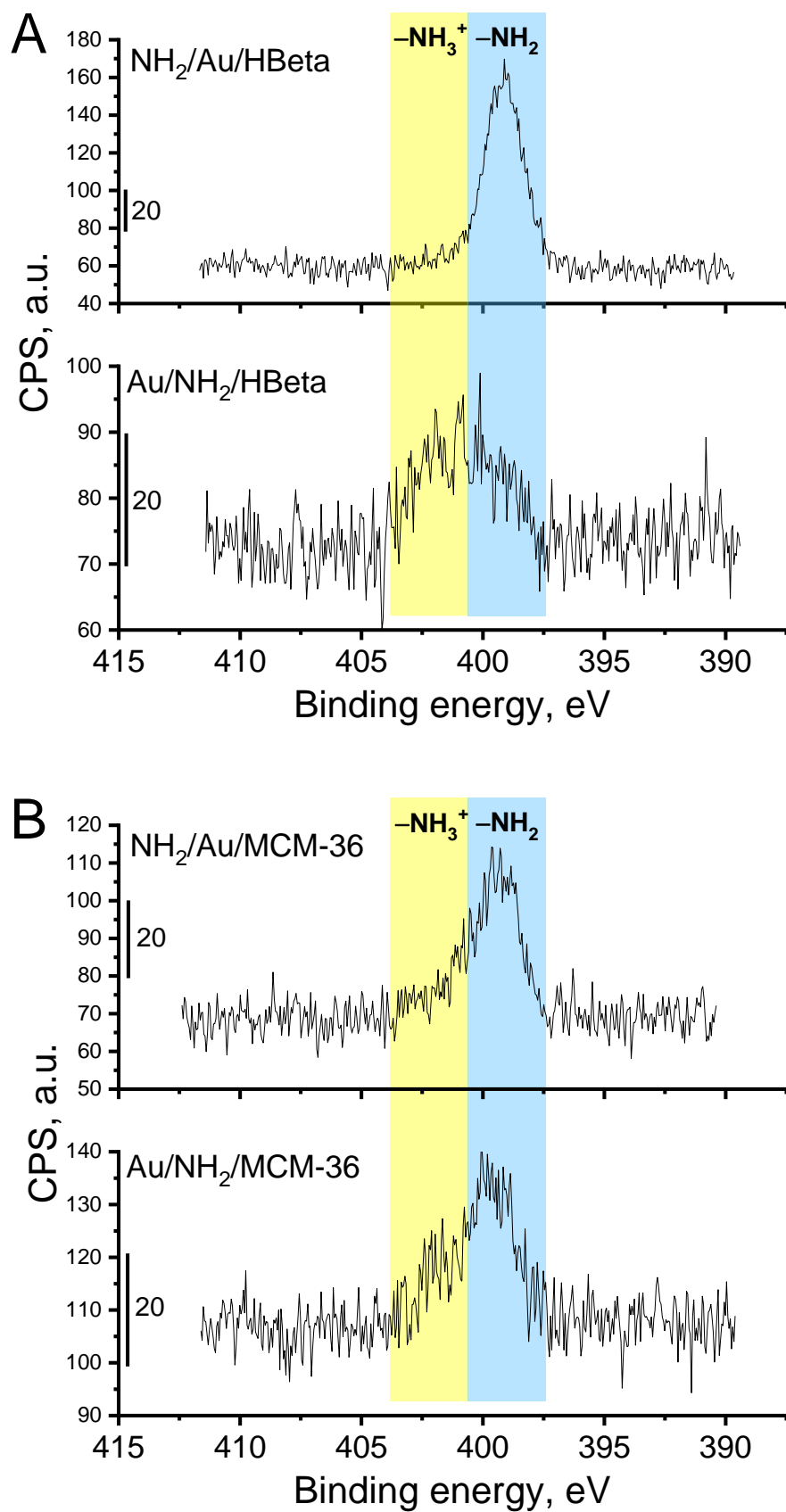


Figure S5. N 1s region of XP spectra of gold-containing zeolites for (A) HBeta; (B) MCM-36 series. The regions of BE values typical to the protonated and non-protonated amine groups [Graf et al. *Surf. Sci.* **2009**, 603, 2849–2860, doi:10.1016/j.susc.2009.07.029] are marked in yellow and blue, respectively.