SUPPORTING INFORMATION

- Figure S1. IR spectra of as-prepared Au/NaY zeolite sample (a) and "air-avoided" sample (b).
- Figure S2. IR spectra of CO adsorbed at 85 K on activated NaY zeolite. Equilibrium CO pressure of 10 Pa (a) and evolution of the spectra during evacuation at 85 K (b–d).
- Figure S3. IR spectra of CO adsorbed at room temperature on Au/NaY zeolite sample (A) and "air-avoided" Au/NaY sample (B), each evacuated at room temperature. Equilibrium CO pressure: 1.1 kPa (top curves) and after progressive decrease of the pressure (lower curves): 570, 280, 140, 70 and 30 Pa and during outgassing.
- Figure S4. IR spectra of CO adsorbed at room temperature on Au/NaY zeolite sample subjected to different pretreatments: evacuated overnight at room temperature (A) and for 1 h at 323 (B), 373 (C), 423 (D), 473 (E), 523 (F), 573 (G), 623 (H), 673 (I) and 723 K (J). Equilibrium CO pressure: 9.75 kPa (top curves) and after progressive decrease of the pressure (lower curves): 4.8 kPa, 2.4 kPa, 1.2 kPa, 280 Pa, 60 Pa and during outgassing.
- Figure S5. Deconvolution of the spectra presented in Figure 5: IR spectra of CO (equilibrium pressure of 1.1 kPa) adsorbed at room temperature on the Au/NaY zeolite sample subjected to various pretreatments: sample evacuated at 573 K for 1 h (a) and sample reoxidized with O₂ at room temperature (b), 373 (c) and 473 K (d).
- Figure S6. IR spectra of CO (equilibrium pressure of 1.1 kPa) adsorbed at room temperature on Au/NaY zeolite sample subjected to different pretreatments. Sample heated in oxygen at 573 K, then evacuated at the same temperature, exposed to a NO + O₂ mixture, and then evacuated for 5 min at 473 K (a);

sample heated in oxygen at 573 K, then evacuated at the same temperature, exposed to NO (equilibrium pressure of 2 kPa) and then evacuated for 30 min at room temperature (b).

Figure S7. XRD patterns of Au/NaY zeolite sample subjected to different pretreatments.
Sample evacuated at room temperature (a), evacuated at room temperature and then reoxidized with NO + O₂ at room temperature (b), evacuated at 573 K (c), evacuated at 723 K and then reoxidized with NO + O₂ at 573 K (d).

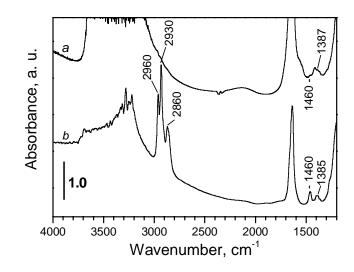


Figure S1

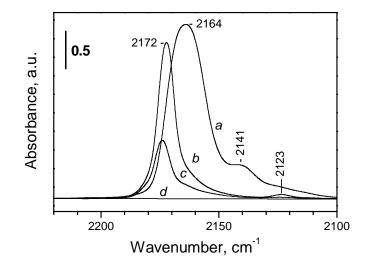


Figure S2

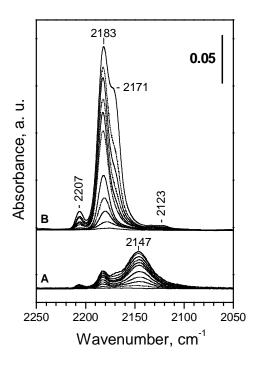


Figure S3

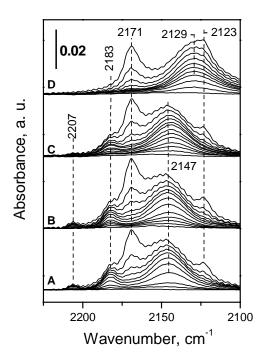


Figure S4A

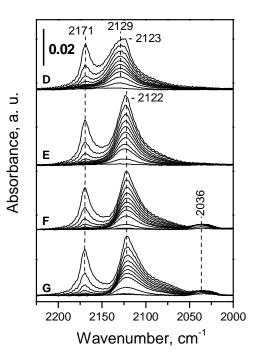


Figure S4B

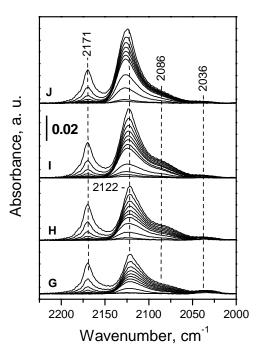


Figure S4C

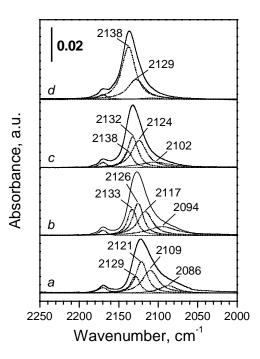


Figure S5

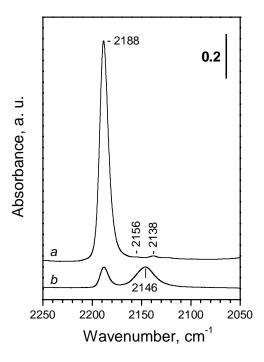


Figure S6

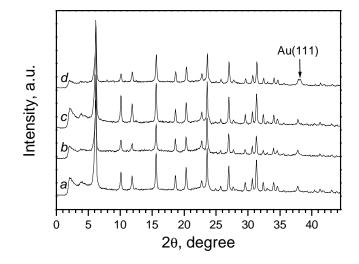


Figure S7