Supplementary information

Figure S1. cartographical analysis of Si and Ti in TiO$_2$-Beta and SSD TiO$_2$/Beta samples.
Figure S2. Evolution of the IR spectra of Beta (A) and TiO$_2$-Beta (B) during Py desorption under vacuum at different temperature.
**Figure S3.** Bright field TEM image showing Beta TiO$_2$-Zeolite crystals. The corresponding ED pattern is given as insert at the upper right corner. Enlarged image of the region indicated with rectangle framework is given as insert in the bottom right corner.