

Electronic Supplementary Information to :

**TiO₂ supported Ru catalysts for the hydrogenation of succinic acid:
influence of the support**

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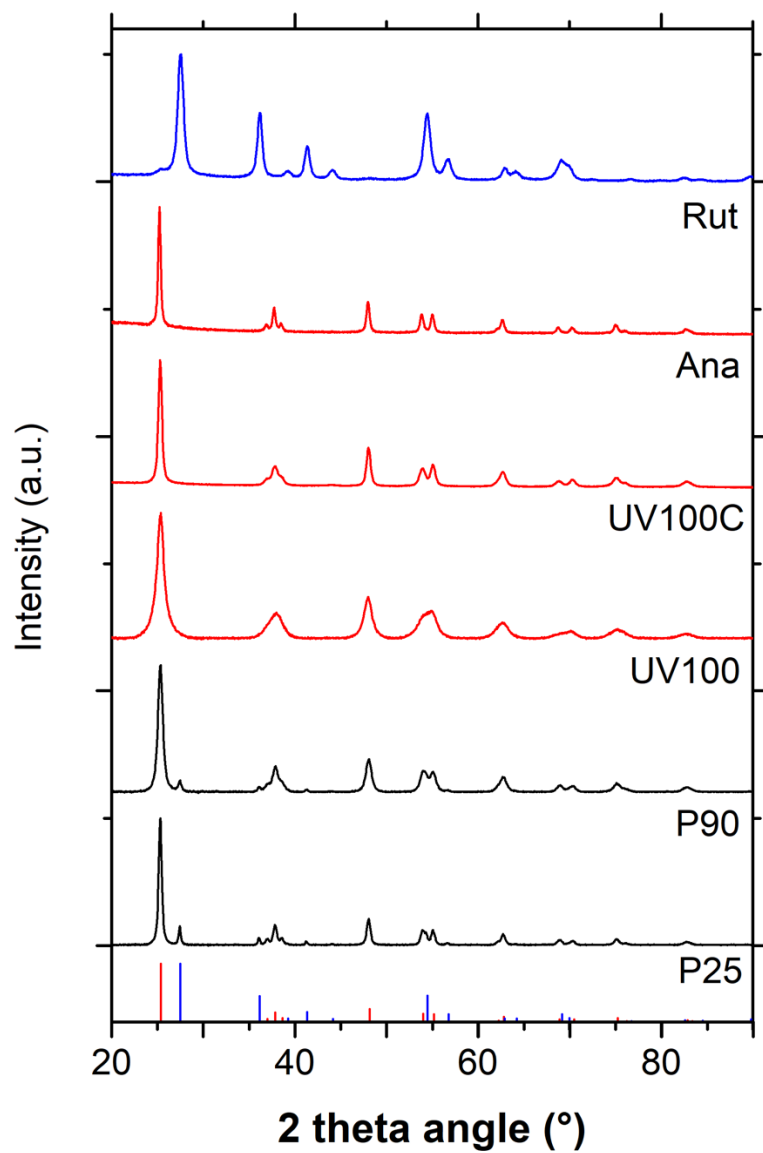


Figure S1. X-ray diffraction patterns of the TiO₂ supports. Reflexes were assigned to both anatase TiO₂ and rutile TiO₂ phases using 21-1272 and 21-1276 JCPDS cards, respectively.

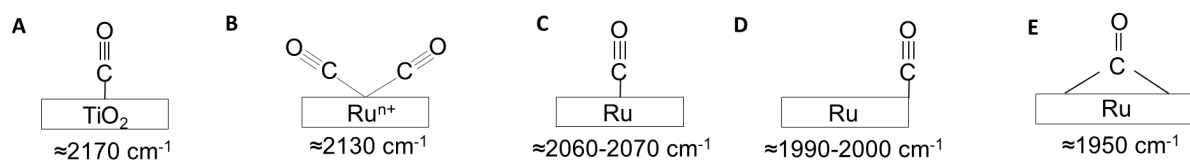


Figure S2. Simplified illustration of the different bonded CO species used for the band assignment in the FTIR spectra of adsorbed CO recorded for the Ru/TiO₂ catalysts. (A) CO adsorbed on the TiO₂ support surface, (B) multicarbonyl species on partially oxidized Ru crystallite, (C) , linear-bonded CO on facets, (D) linear bonded CO on steps and (E) bridge-bonded CO.

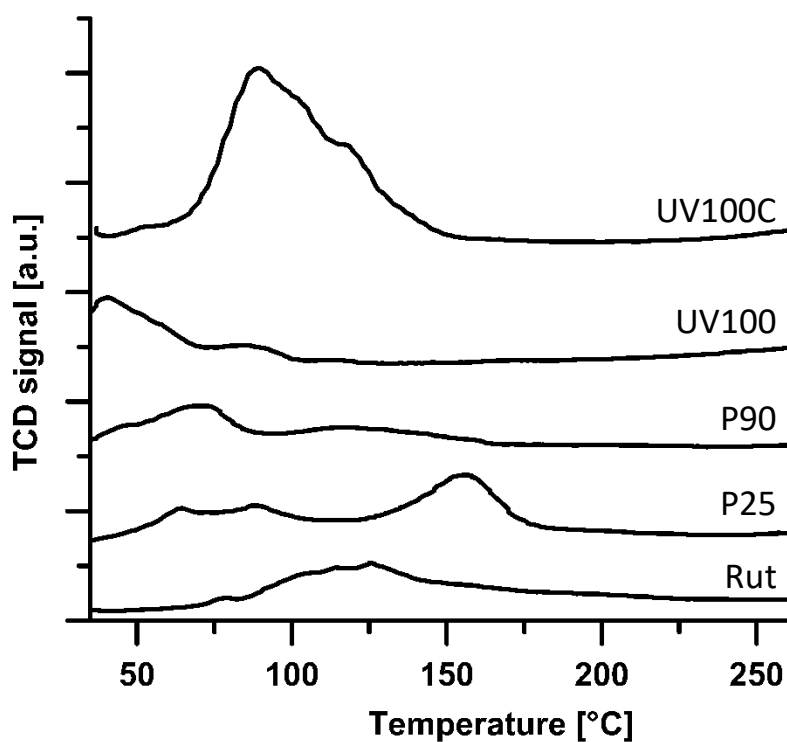


Figure S3. Temperature programmed reduction (TPR) profiles for the 1%Ru/TiO₂ catalysts after the oxidation step, for the catalysts prepared *via* the wet impregnation method.

No TPR signal can be obtained for the catalysts prepared at room temperature by direct chemical reduction with NaBH₄ or through the solar photon-assisted synthesis method.