

Effect of carbon support, capping agent amount and metal Pd NPs size for bio-adipic acid production from muconic acid and sodium muconate

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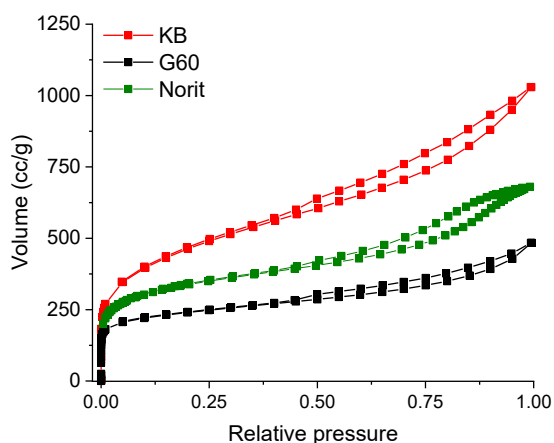


Figure S1: Adsorption isotherm performed on different AC support.

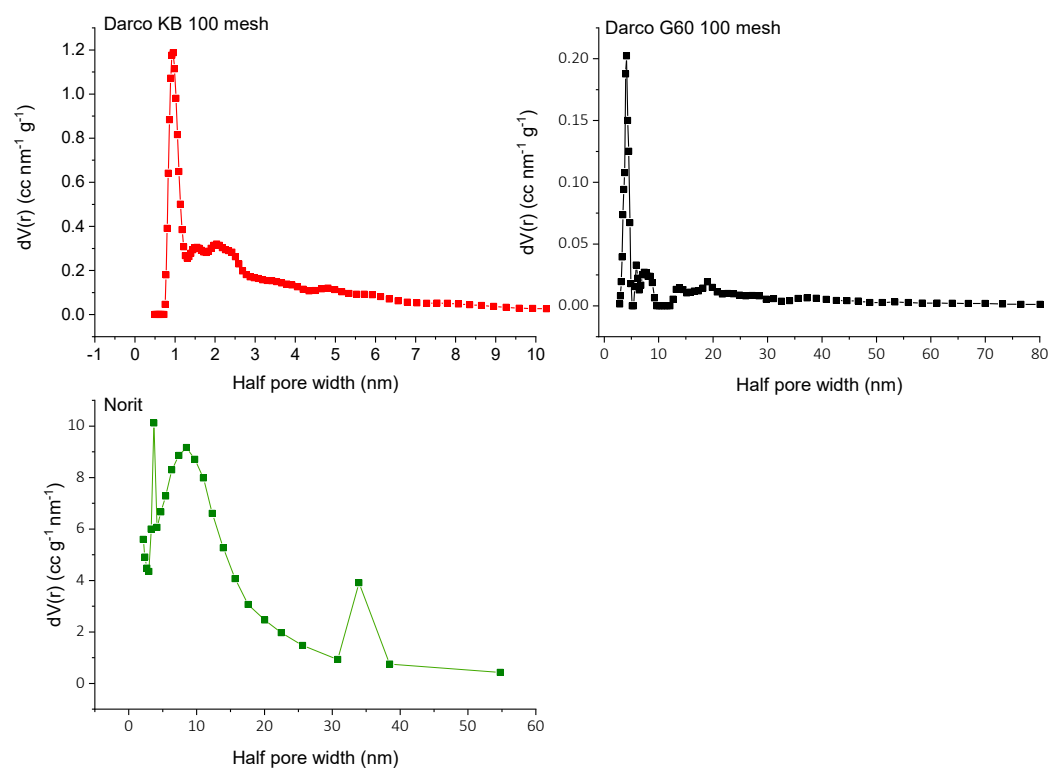


Figure S2: Pore size distribution of bare activated carbon support.

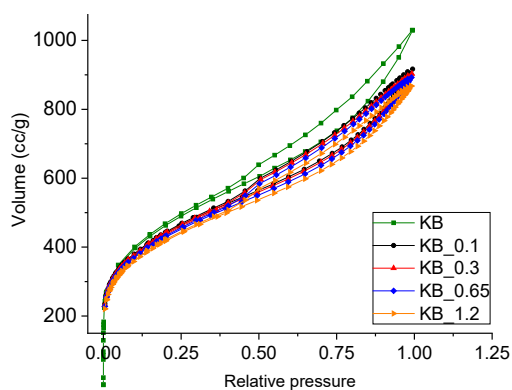


Figure S3: Adsorption isotherm performed on KB series catalysts.

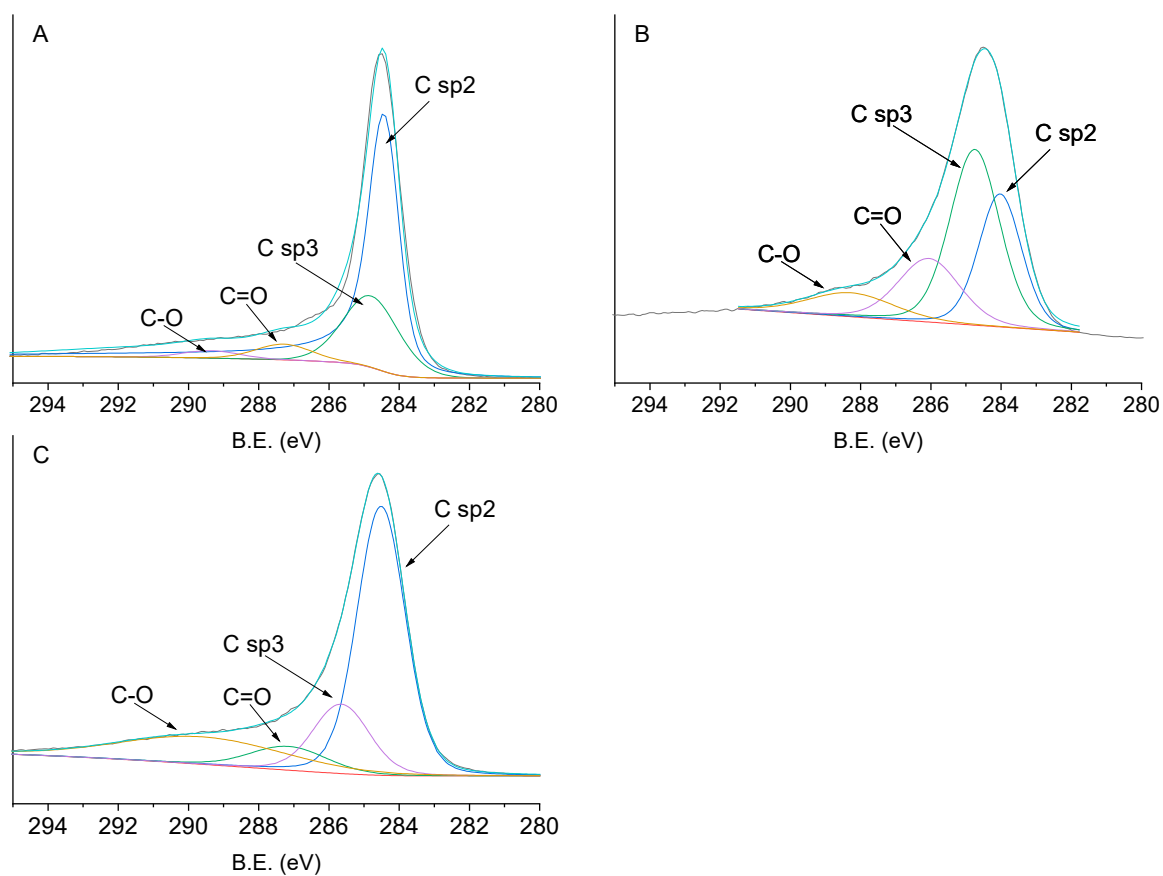


Figure S4: Deconvolution of C 1s of the A) Pd/KB_0.65, B) Pd/Norit_0.65 and C) Pd/G60_0.65.

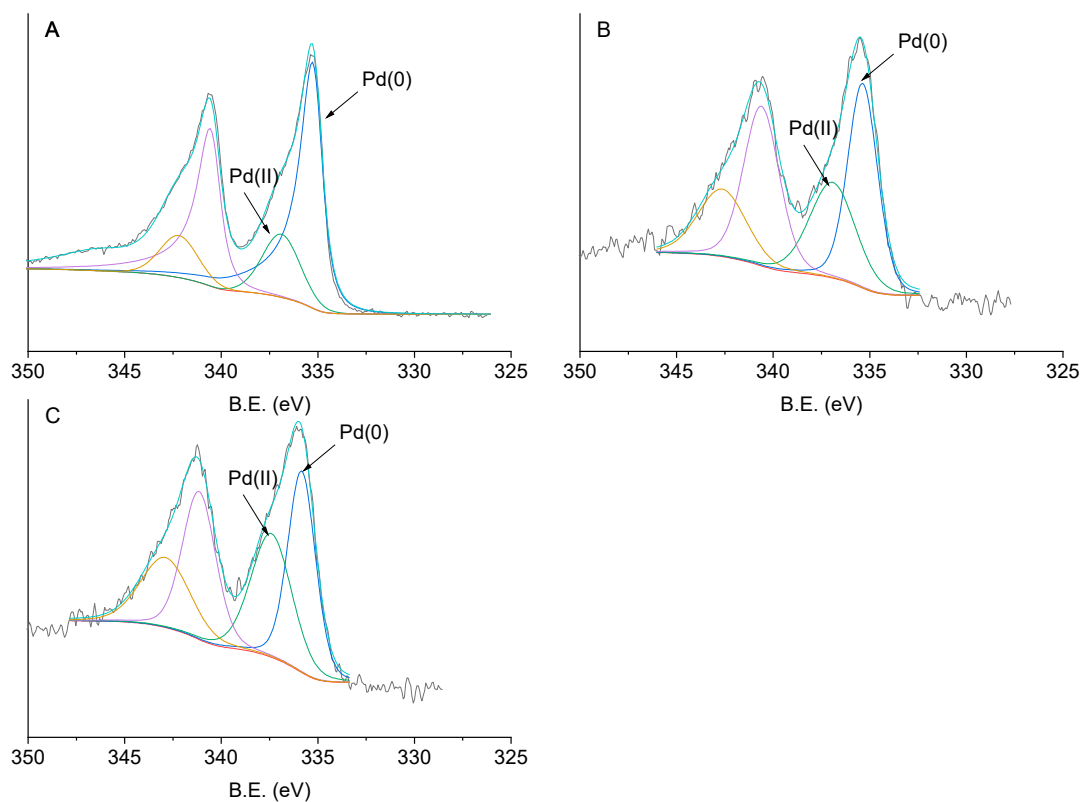


Figure S5: Deconvolution of Pd 3d of the A) Pd/KB_{0.65}, B) Pd/Norit_{0.65} and C) Pd/G60_{0.65}.

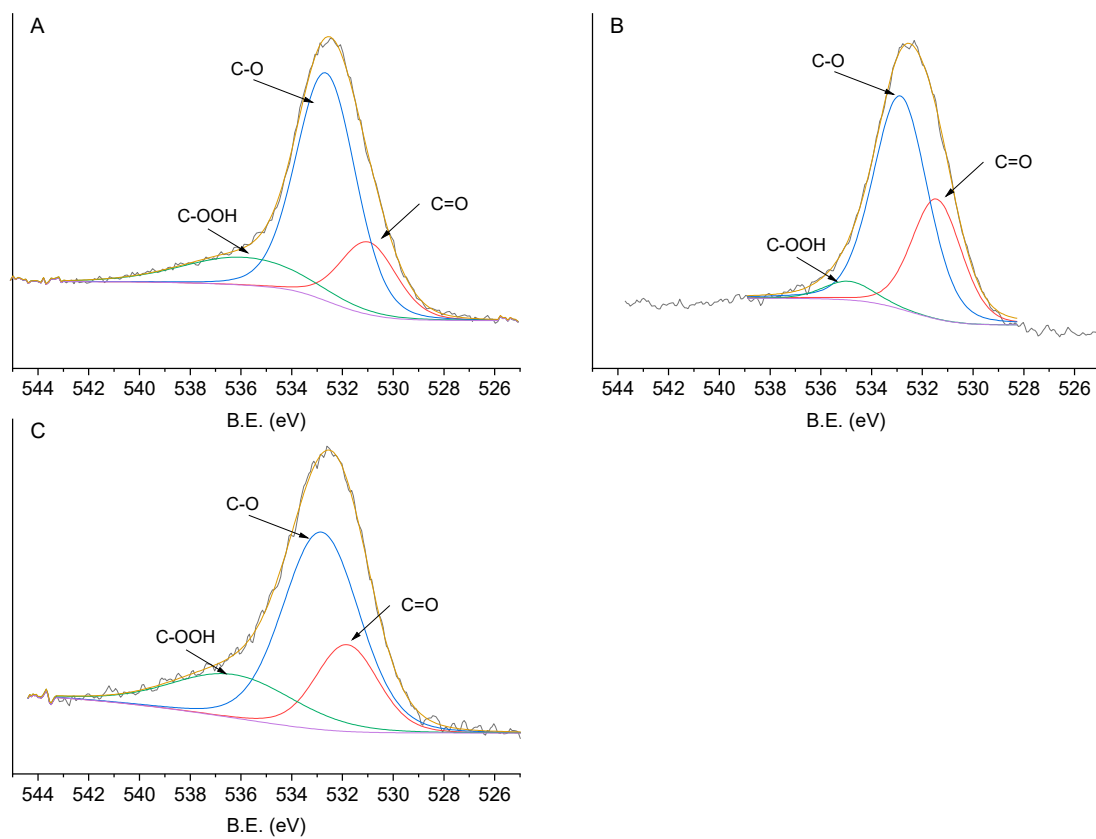


Figure S6: Deconvolution of O 1s of the A) Pd/KB_{0.65}, B) Pd/Norit_{0.65} and C) Pd/G60_{0.65}.

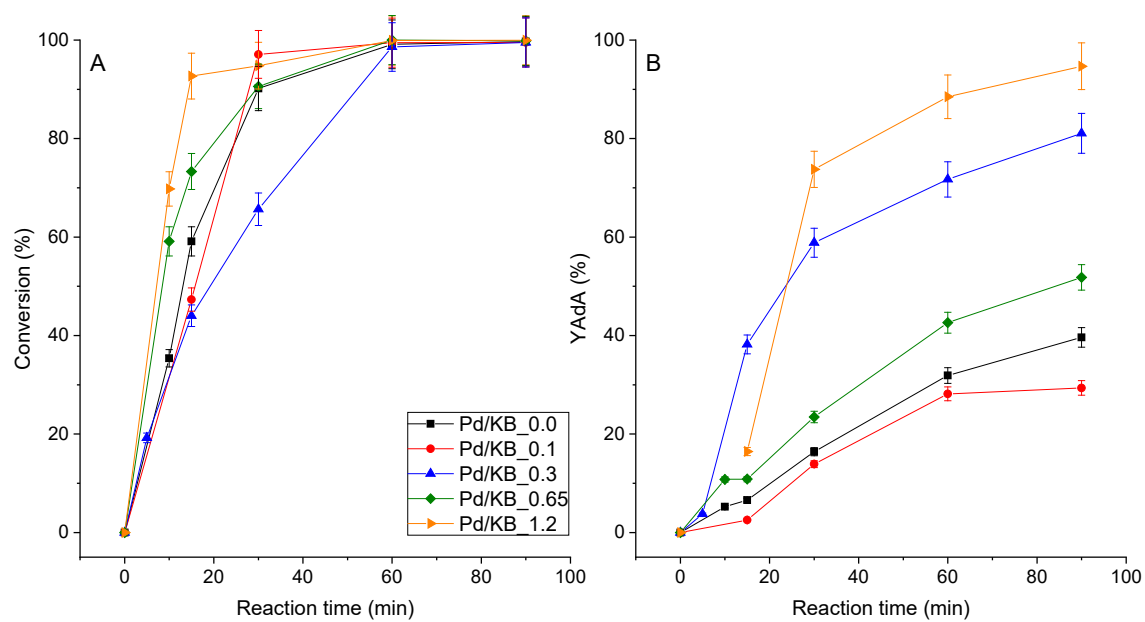


Figure S7: Conversion and AdA yield (YAdA) obtained during Na-Muc hydrogenation.

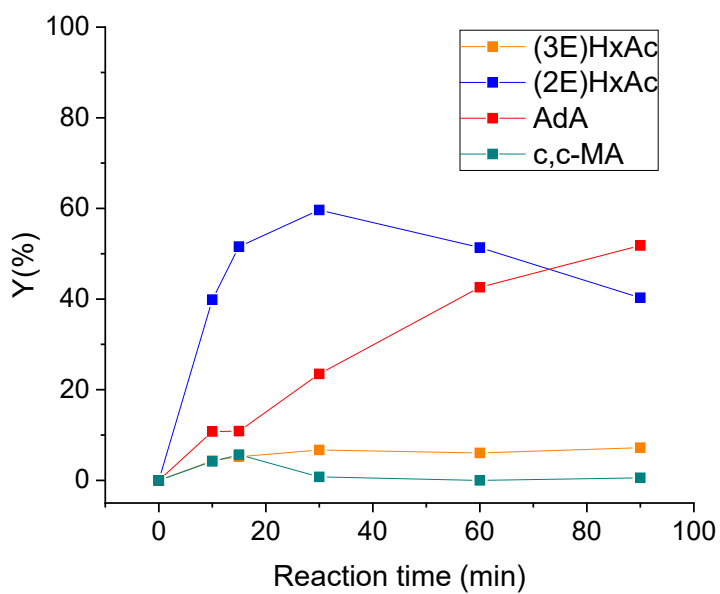


Figure S8: Yield of products, intermediate and substrate during Na-Muc hydrogenation with Pd/KB_0.65 catalyst.

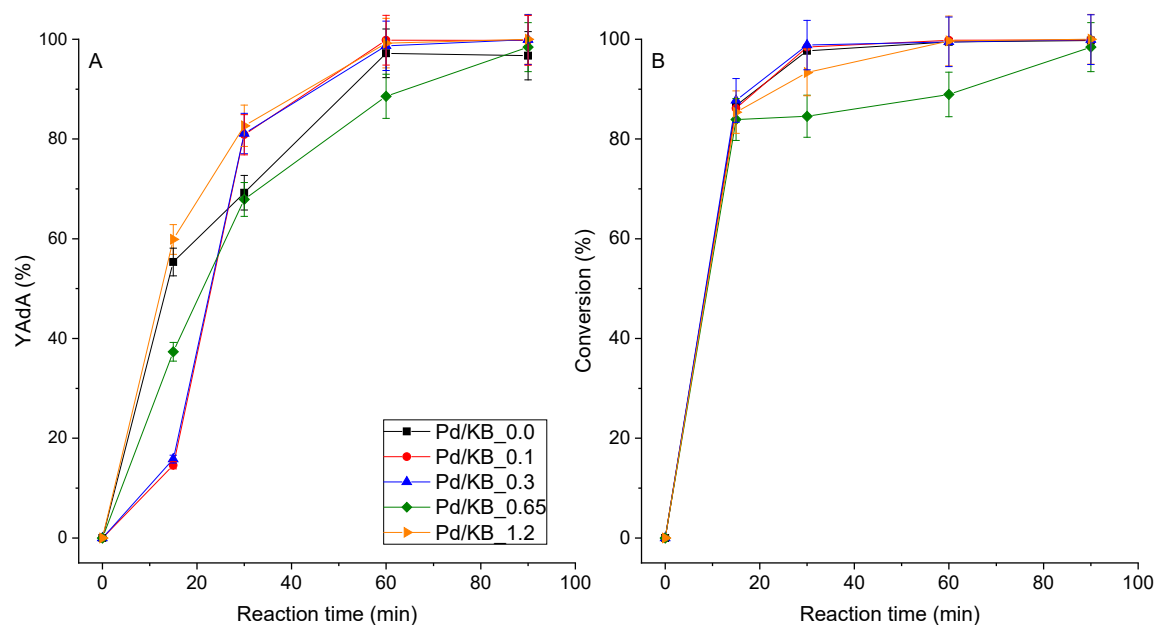


Figure S9: Conversion and AdA yield (YAdA) obtained during *t,t*-MA hydrogenation.

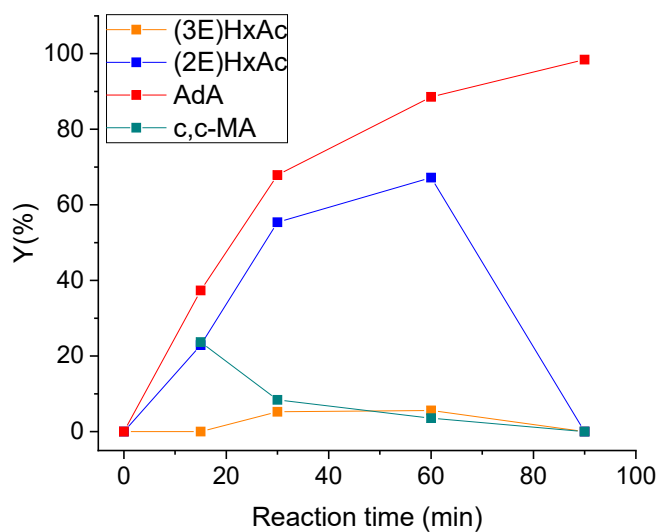


Figure S10: Yield of products, intermediate and substrate during *t,t*-MA hydrogenation with Pd/KB_0.65 catalyst.

Table S1: XPS results for used Pd/KB_0.65 catalyst.

Reaction time	O/C	Pd/C	Pd(0)/Pd(II)
0 min	0.13	0.017	0.30
90 min (<i>t,t</i> -MA)	0.17	0.014	0.38
90 min (Na-Muc)	0.20	0.019	0.34

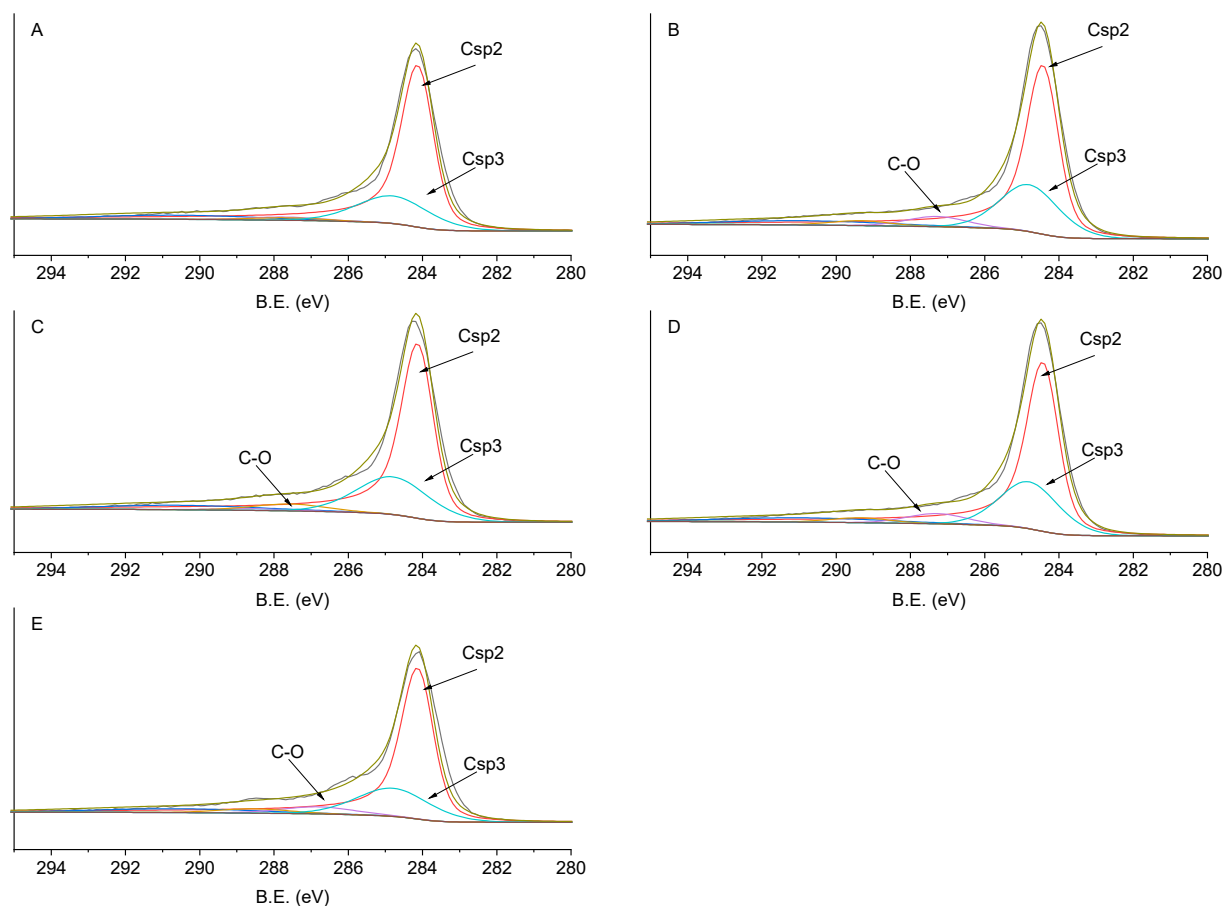


Fig S12: XPS of C 1s specie for A) Pd/KB_0.0, B) Pd/KB_0.1, C) Pd/KB_0.3, D) Pd/KB_0.65, E) Pd/KB_1.2 catalysts.