Supporting information

Effect of phosphorus precursor, reduction temperature, and support on the catalytic properties of nickel phosphide catalysts in continuous-flow reductive amination of ethyl levulinate

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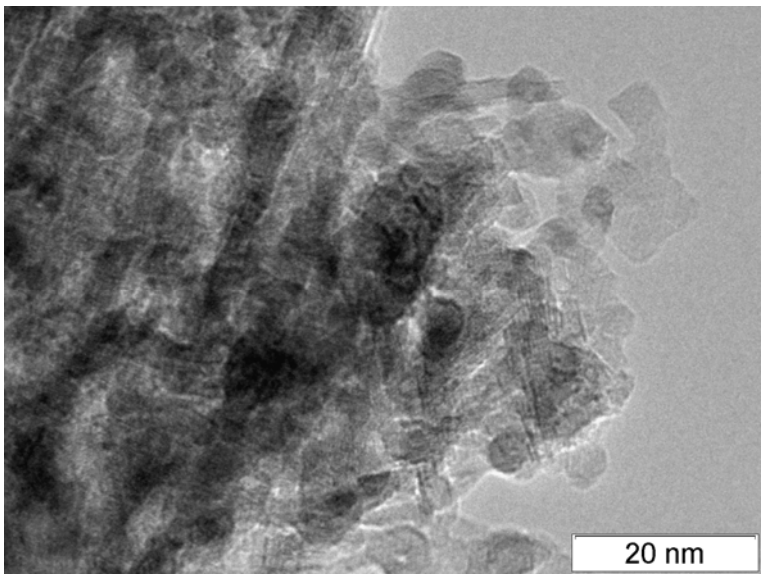
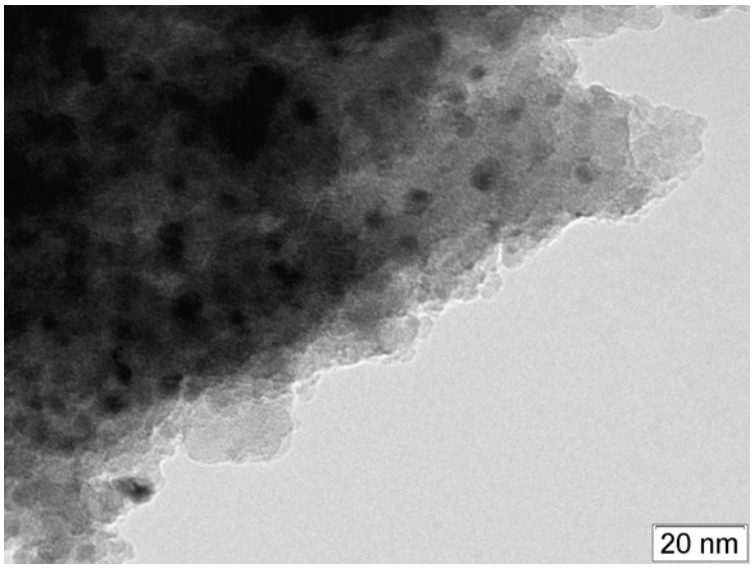


(a)



(b)

Figure S1 TEM data of (**a**) Ni/Al_2O_3 and (**b**) Ni/SiO_2.

Table S1. Physicochemical properties of the supports and diluters.

Catalyst	S_{BET}, $m^2\ g^{-1}$	V_{pore}, $cm^3\ g^{-1}$	NH_3-TPD, μmol g^{-1}
SiO_2	300	0.80	84
γ-Al_2O_3	235	0.79	421
SiC	1	–	0
SAPO-11	295	0.26	1110
zeolite β	609	0.49	1920