Electronic Supplementary Information

Operando study of palladium nanoparticles inside UiO-67 MOF for catalytic hydrogenation of hydrocarbons

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S1. Analysis of electron diffraction pattern of UiO-67

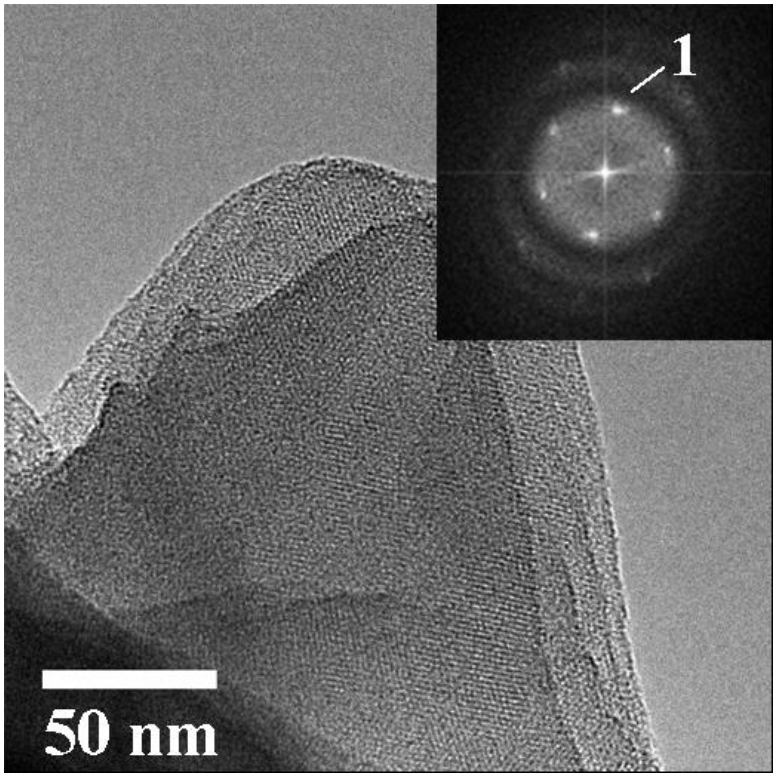

Figure S1. TEM image with its FT shown in the inset of UiO-67 material.

Table S1. Summary of electron diffraction analysis performed on the data reported in Figure S1.

Spot #	d-spacing (nm)	Rec. pos. (1/nm)	Degrees to Spot 1	Degrees to x-axis	Amplitude
1	1.546	0.6469	0.00	78.46	1325211.63
2	1.479	0.6760	58.13	20.33	596891.13
3	1.504	0.6650	115.64	-37.18	545962.44
4	1.538	0.6503	179.55	-101.09	1325211.63
5	1.483	0.6741	122.22	-159.32	596891.13
6	1.514	0.6605	64.37	142.83	545962.44

S2. Analysis of electron diffraction pattern of activated UiO-67-Pd samples

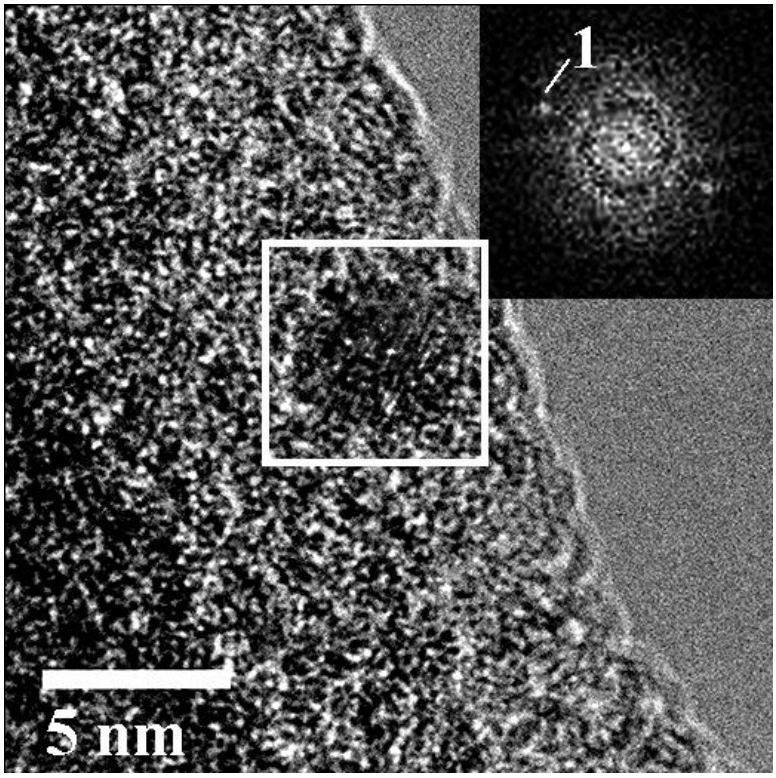

Figure S1. TEM image of activated UiO-67-Pd material with FT of the area highlighted by white square.

Table S2. Summary of electron diffraction analysis performed on the data reported in Figure S2.

Spot #	d-spacing (nm)	Rec. pos. (1/nm)	Degrees to Spot 1	Degrees to x-axis	Amplitude
1	0.2185	4.577	0.00	-25.10	113277.54
2	0.2212	4.521	179.63	155.27	113277.54