

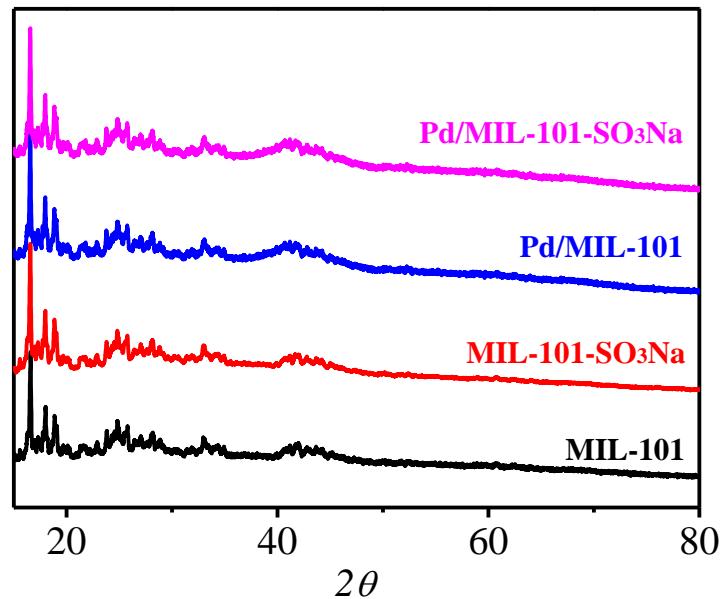
## **Electronic Supplementary Information**

### **Enhancing the Biofuel Upgrade Performance for Pd Nanoparticles via Increasing the Support Hydrophilicity of Metal-Organic Frameworks**

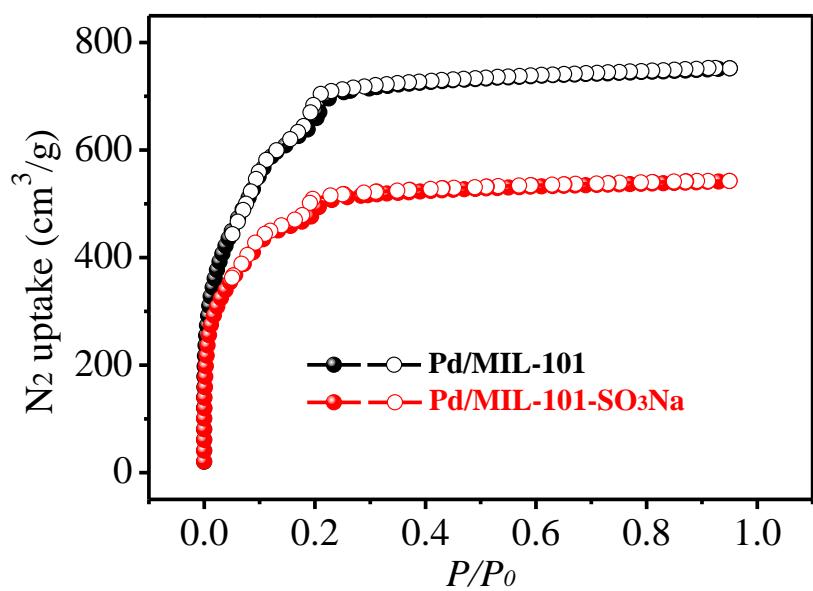
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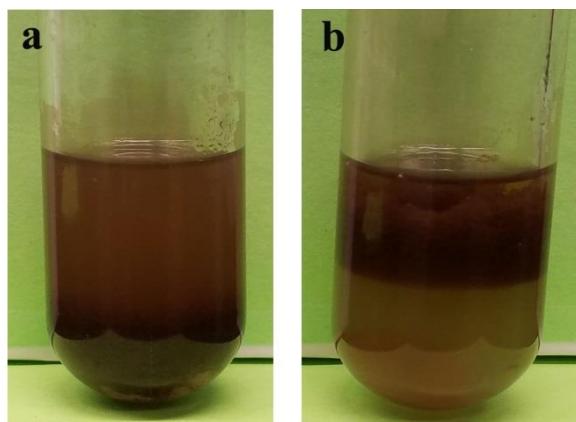
E-mail: [sqma@usf.edu](mailto:sqma@usf.edu)



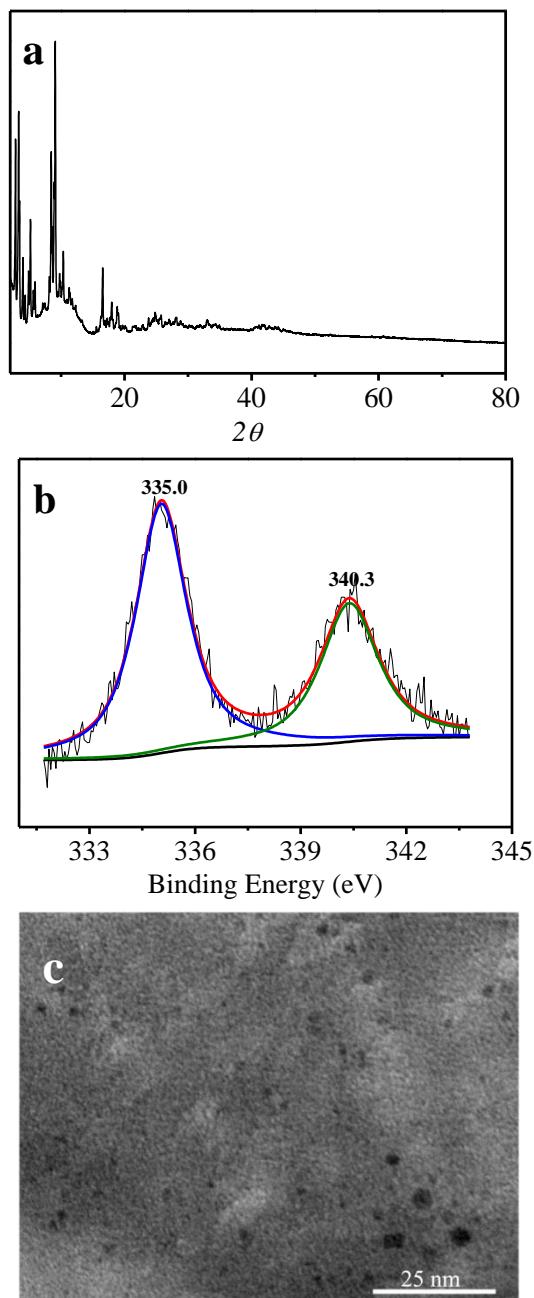
**Fig. S1** PXRD patterns.



**Fig. S2** N<sub>2</sub> sorption isotherms collected at 77K.



**Fig. S3** Photos of Pd/MIL-101-SO<sub>3</sub>Na (left) and Pd/MIL-101 (right) distribution in a biphasic solution of ethyl acetate (upper) and water solution (bottom) after catalytic hydrodeoxygénéation of vanillin.



**Fig. S4** (a) XRD pattern, (b) Pd 3d XPS spectrum, and (c) TEM image of Pd/MIL-101-SO<sub>3</sub>Na after catalytic hydrodeoxygénération of vanillin.