

Supplementary Materials:

# "Storage-discharge" ethanol cold plasma for synthesizing high performance Pd/Al<sub>2</sub>O<sub>3</sub> catalysts

Hongyang Wang, Tengda Zhang, Yufa Zhou, Xiuling Zhang\*, Lanbo Di\*

College of Physical Science and Technology, Dalian University, Dalian 116622, China

\* Correspondence: Correspondence: [zhangxiuling@dlu.edu.cn](mailto:zhangxiuling@dlu.edu.cn), [xiulz@sina.com](mailto:xiulz@sina.com) (X.Z.); [dilanbo@dlu.edu.cn](mailto:dilanbo@dlu.edu.cn), [dilanbo@163.com](mailto:dilanbo@163.com) (L.D.); Tel.: +86-411-8740-2712 (X.Z. & L.D.)

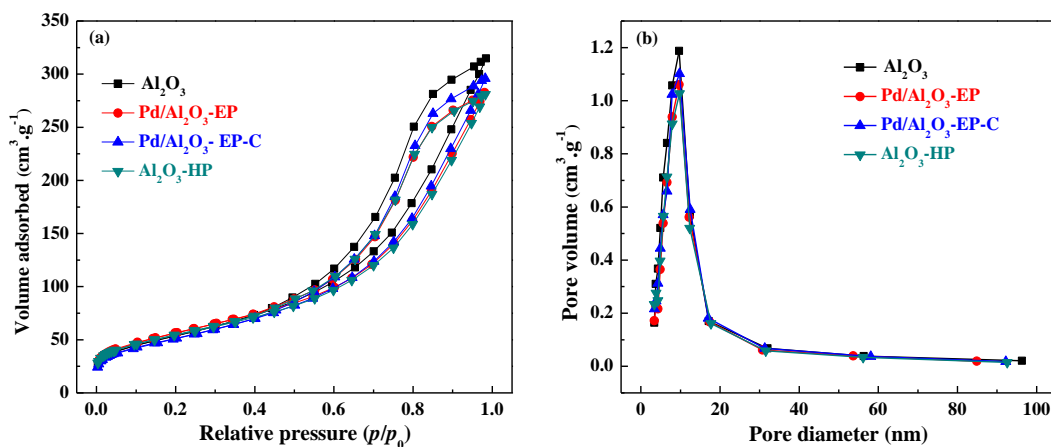


Figure S1: N<sub>2</sub> sorption isotherms (a) and pore size distributions (b) of Pd/Al<sub>2</sub>O<sub>3</sub>-EP, Pd/Al<sub>2</sub>O<sub>3</sub>-EP-C, Pd/Al<sub>2</sub>O<sub>3</sub>-HP, and the Al<sub>2</sub>O<sub>3</sub> support.

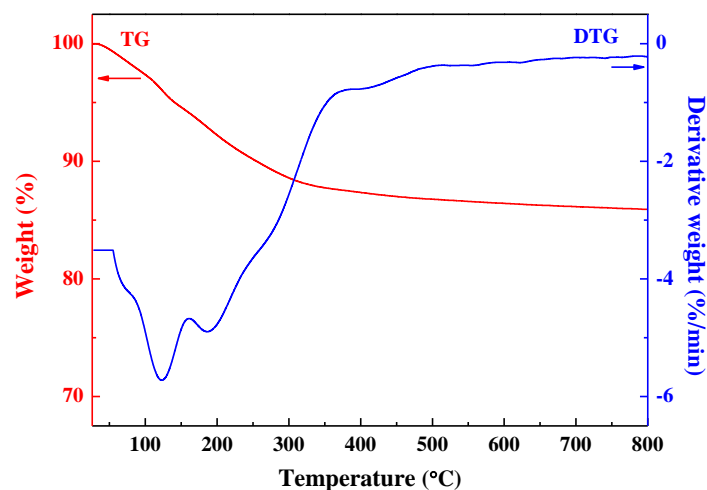


Figure S2: The TG and DTG curves of the Pd/Al<sub>2</sub>O<sub>3</sub>-EP catalyst in Ar atmosphere at a heating rate of 10 °C·min<sup>-1</sup>.