

Supporting Information for

Electrocatalysis on Shape-Controlled Palladium Nanocrystals: Oxygen Reduction Reaction and Formic Acid Oxidation

Minhua Shao,^{*,†} Jonathan Odell,[†] Michael Humbert,[‡] Taekyung Yu,^{#,§} Younan Xia[#]

[†] UTC Power, South Windsor, CT 06074, United States

[‡] United Technologies Research Center, East Hartford, CT 06108, United States

[#] Department of Biomedical Engineering, Washington University in St. Louis, Saint Louis, MO 63130, United States

[§] Current address: *Department of Chemical Engineering, College of Engineering, Kyung Hee University, Youngin, 446-701, Korea*

*Minhua.shao@utcpower.com

Tel: (+1) 860-727-7251; Fax: (+1) 860-660-7384

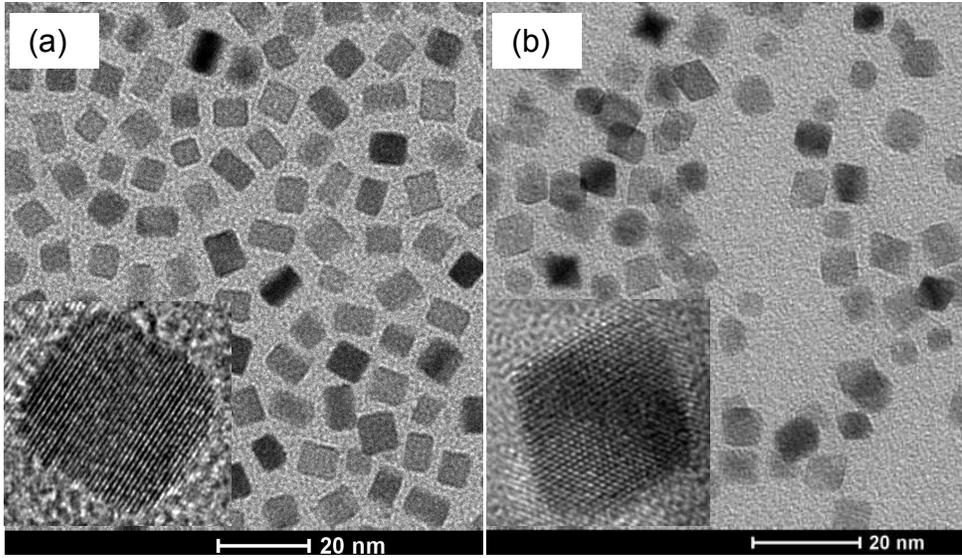


Figure S1. TEM and high resolution TEM images (insets) of Pd nanocrystals with two different shapes: (a) cubes and (b) octahedra.

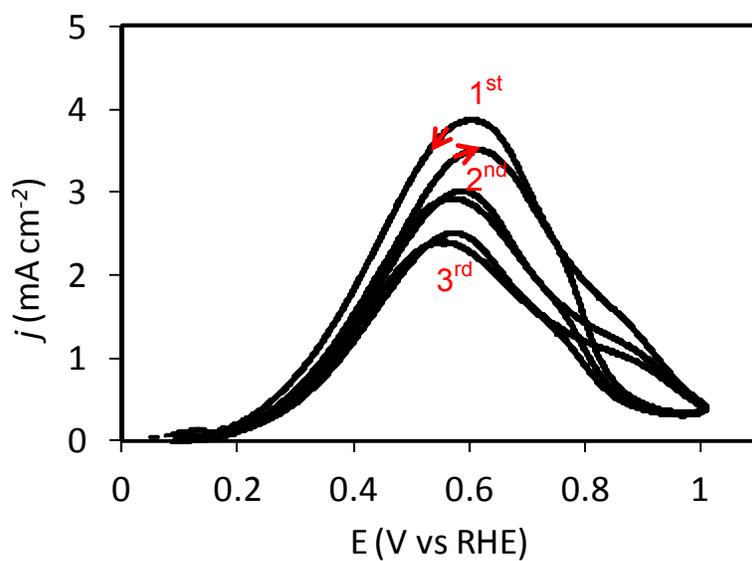


Figure S2. Cyclic voltammetry curves of cubic Pd/C in a nitrogen-saturated 0.5 M HClO₄ + 0.5 M HCOOH solution between 0.05 and 1.0 V for the first three cycles. Scanning rate = 50 mV s⁻¹. The currents were normalized to the electrochemical area.