

Supplementary Information

Electronic modification of platinum-based nanomaterials for use as tolerant cathodes in air-breathing methanol microfluidic fuel cells

Jiwei Ma, Aurélien Habrioux, Cláudia Morais, Nicolas Alonso-Vante *

IC2MP, UMR-CNRS 7285, University of Poitiers, 4 rue Michel Brunet, 86022 Poitiers, France.

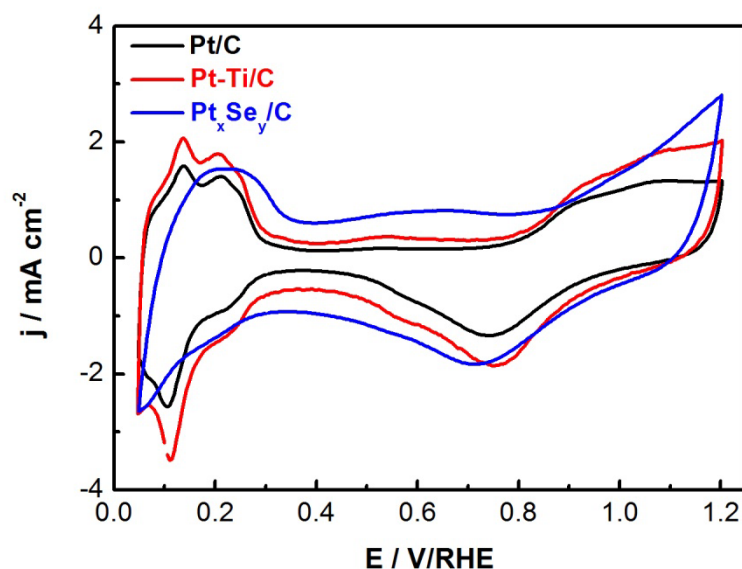


Figure S1. Cyclic voltammograms of carbon-supported Pt, Pt_xTi_y and Pt_xSe_y catalysts in 0.5 M H₂SO₄ from 0.05 to 1.2 V vs. RHE at a scan rate of 50 mV s⁻¹.

*To whom correspondence should be addressed. Tel: +33 54945-3625; Fax: +33 54945-3580; E-mail address: nicolas.alonso.vante@univ-poitiers.fr

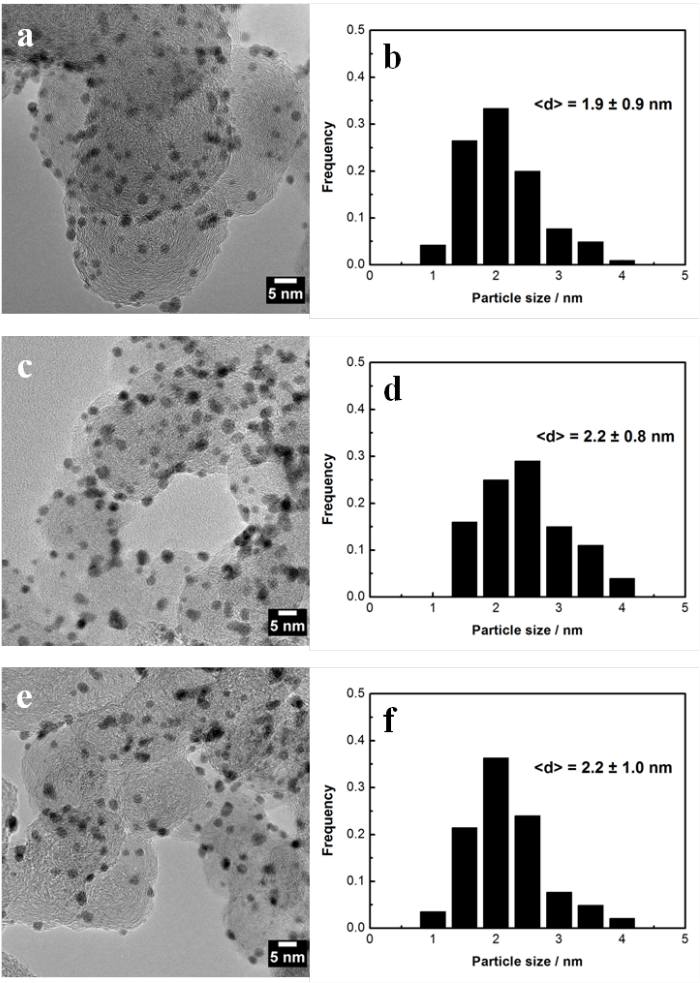


Figure S2. TEM images and corresponding size histograms of carbon-supported (a,b) Pt, (c,d) Pt_xTi_y and (e, f) Pt_xSe_y catalysts.