

## Supporting information

# Study of the Cathode Pt-Electrocatalysts Based on Reduced Graphene Oxide with Pt-SnO<sub>2</sub> Hetero-Clusters

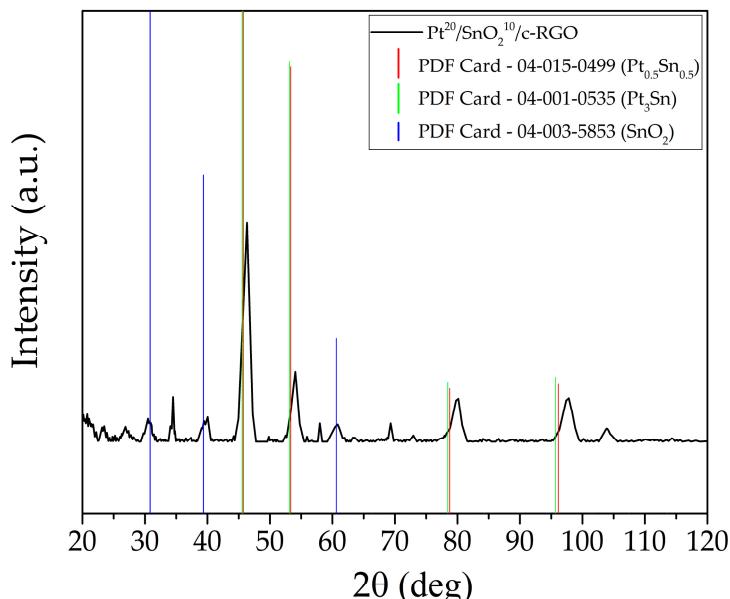
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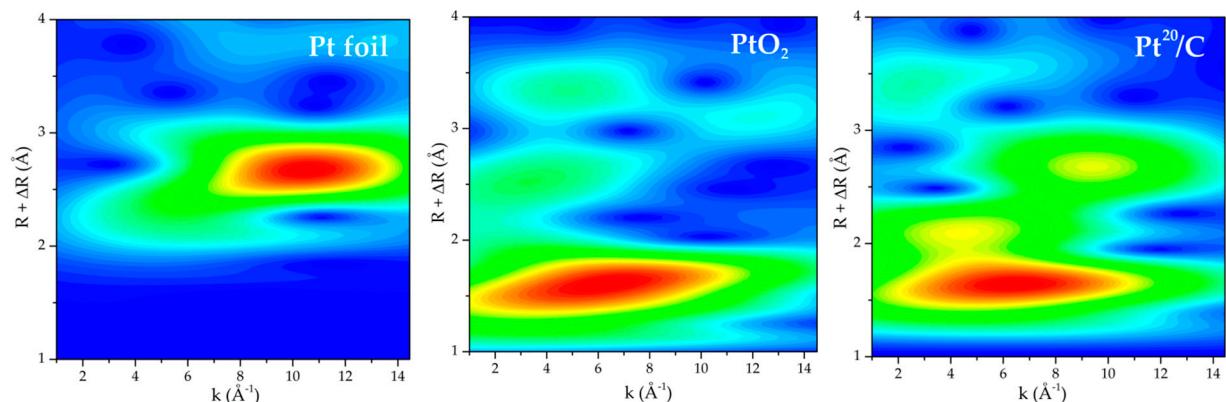
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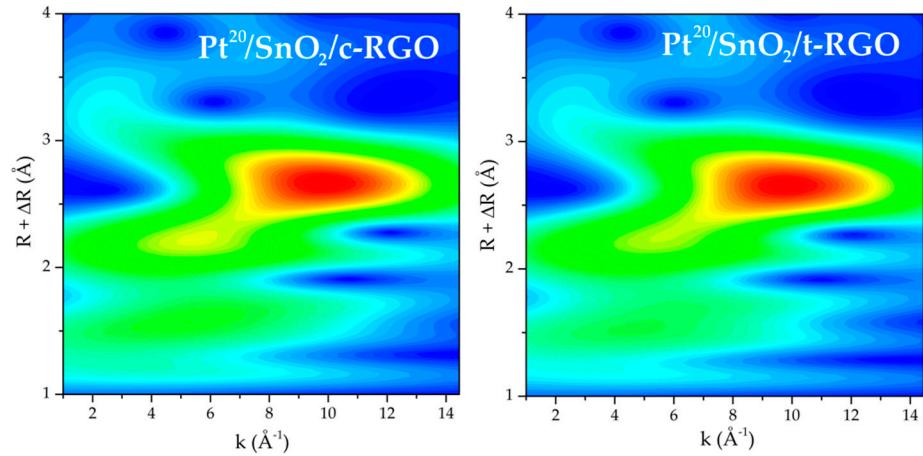
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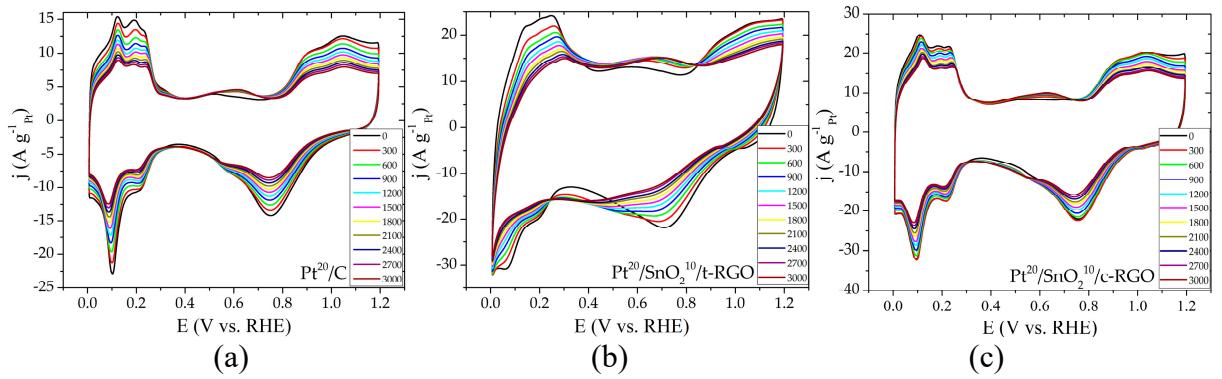


**Figure S1.** XRD pattern of Pt<sup>20</sup>/SnO<sub>2</sub><sup>10</sup>/c-RGO and PDF card (Pt<sub>0.5</sub>Sn<sub>0.5</sub>, Pt<sub>3</sub>Sn, SnO<sub>2</sub>).





**Figure S2.** Wavelet transform of Pt L<sub>3</sub>-edge EXAFS for Pt foil, PtO<sub>2</sub>, Pt<sup>20</sup>/C, Pt<sup>20</sup>/SnO<sub>2</sub><sup>10</sup>/c-RGO and Pt<sup>20</sup>/SnO<sub>2</sub><sup>10</sup>/t-RGO.



**Figure S3.** Changing CVs during AST samples Pt<sup>20</sup>/C (a), Pt<sup>20</sup>/SnO<sub>2</sub><sup>10</sup>/t-RGO (b) and Pt<sup>20</sup>/SnO<sub>2</sub><sup>10</sup>/c-RGO (c).