

Size-dependent morphology of dealloyed bimetallic catalysts: Linking the nano to the macro scale

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Supporting online information

Table S1. Pt mass based and Pt surface area specific activities of dealloyed Pt-Co and Pt-Cu electrocatalysts for the oxygen reduction reaction compared with benchmark 28.2 wt. % Pt/HSAC catalyst.

catalyst	electrochemical surface area (ECSA) [m ² g _{Pt} ⁻¹]	Pt surface area specific based activity at 0.90 V/RHE [μA cm _{Pt} ⁻²]	Pt mass based activity at 0.90 V/RHE [A mg _{Pt} ⁻¹]
Pt-Co	45 ± 4	804 ± 146	0.38 ± 0.05
Pt-Cu	47 ± 2	873 ± 167	0.41 ± 0.09
Pt	73 ± 3	179 ± 4	0.13 ± 0.01

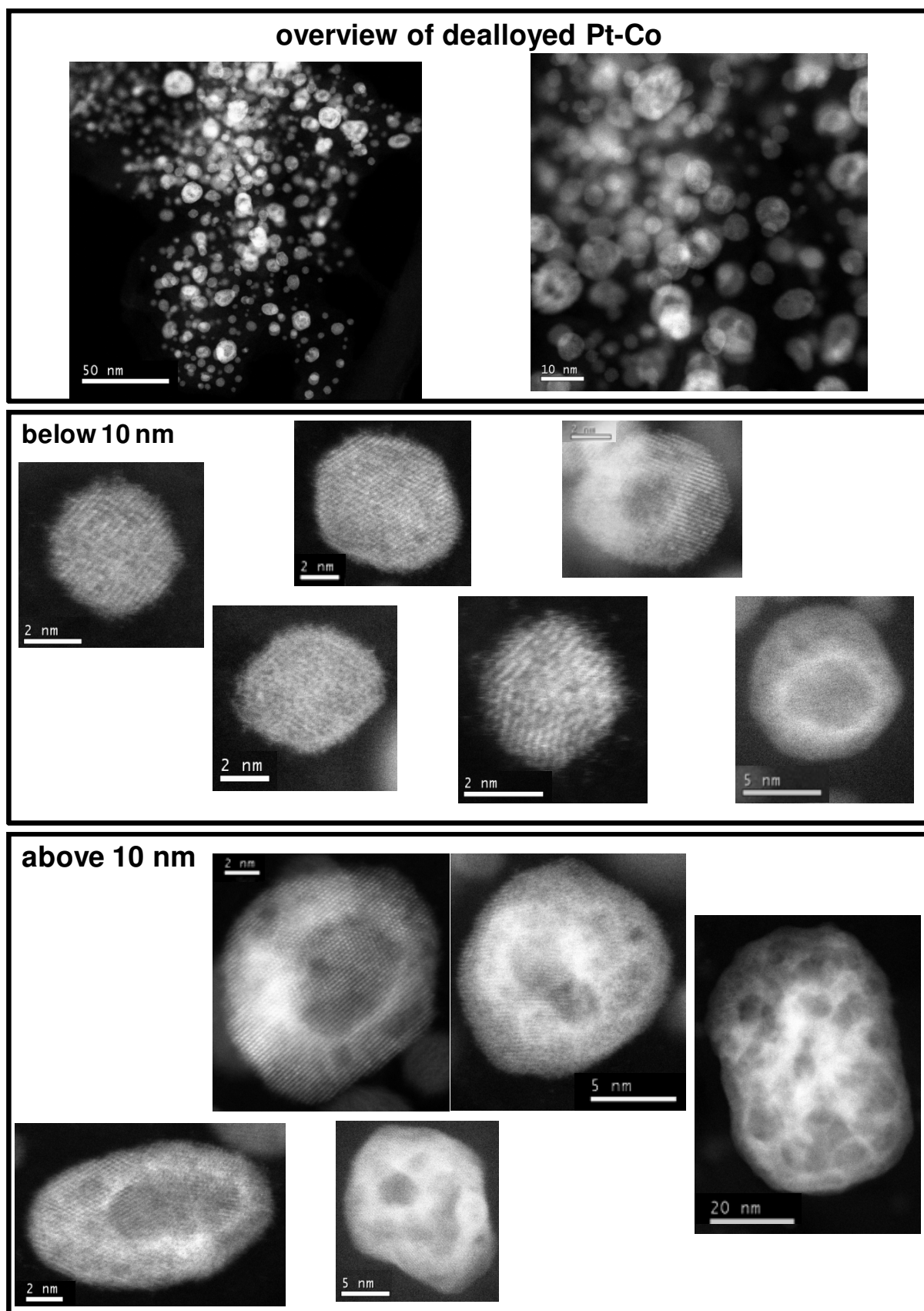


Figure S1. Collocation of high-resolution HAADF micrographs of dealloyed Pt-Co particles grouped by size.

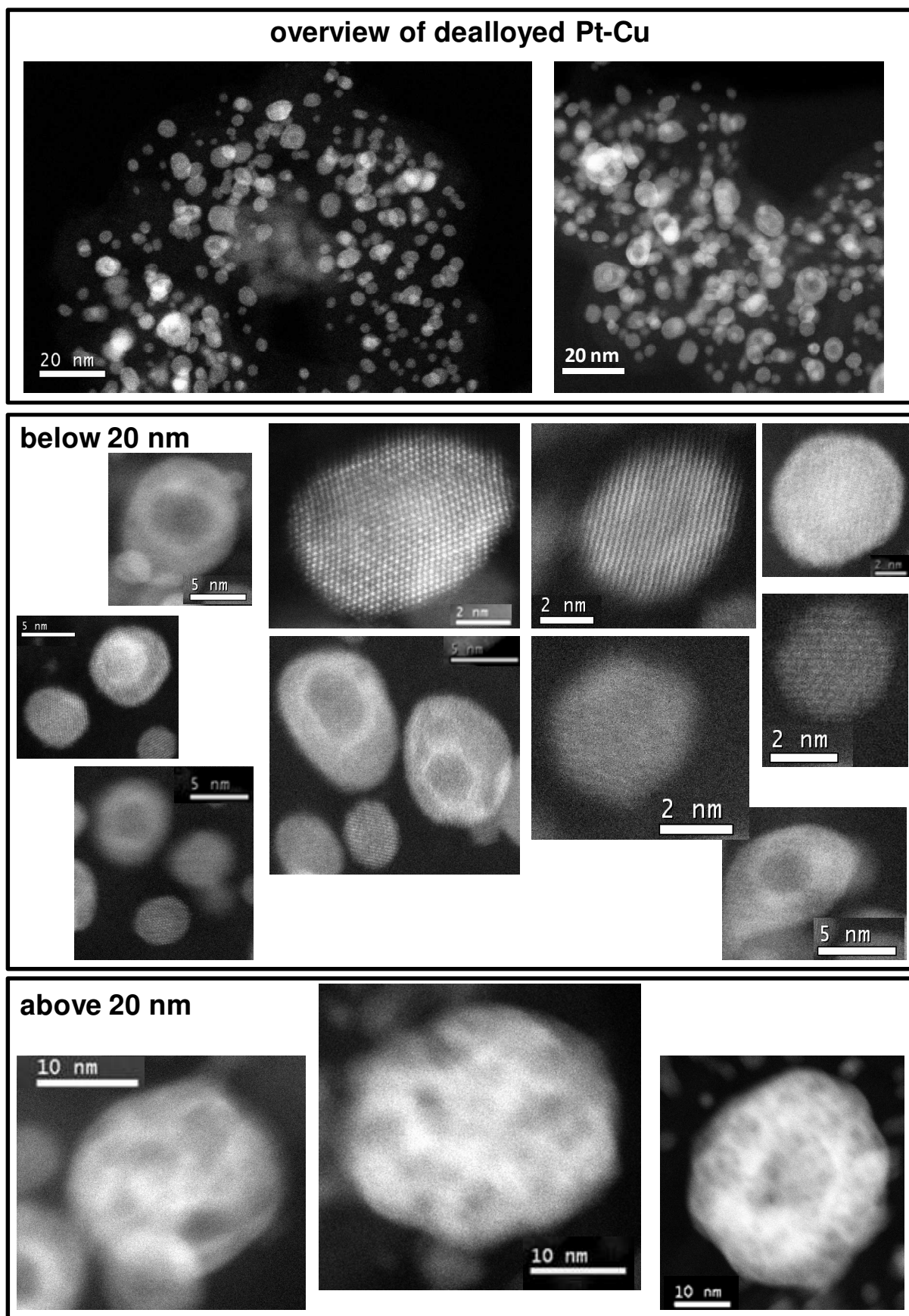


Figure S2. Collocation of high resolution HAADF micrographs of dealloyed Pt-Cu particles grouped by size.

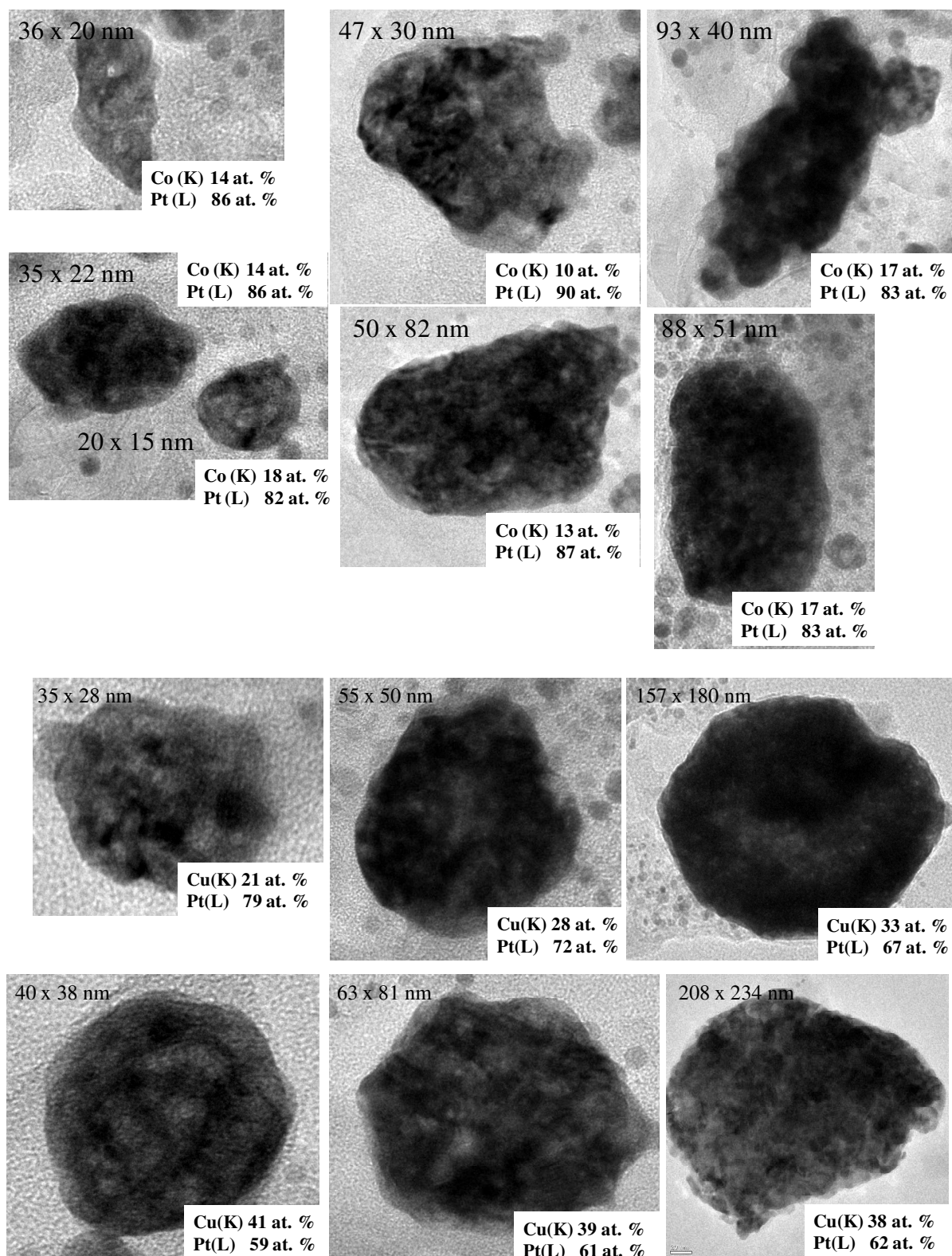


Figure S3. TEM images and EDS measurements of single dealloyed Pt-Cu and Pt-Co particles larger than 30 nm diameter after dealloying.