



Supporting Information

for

Electron beam-induced deposition of platinum from Pt(CO)₂Cl₂ and Pt(CO)₂Br₂

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Additional experimental data

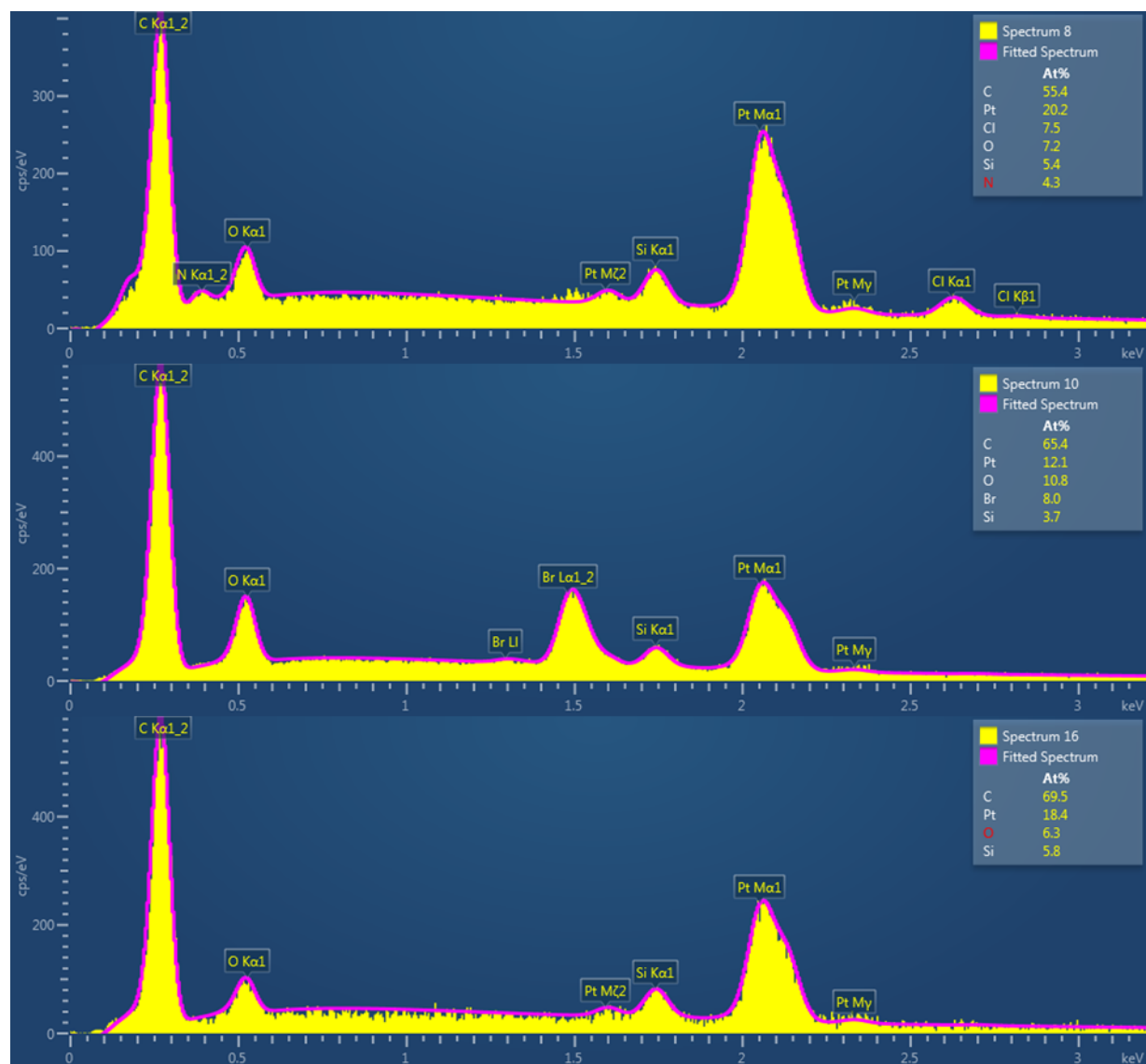


Figure S1: EDX spectra of deposits from the three platinum precursors. Top graph: $\text{PtCl}_2(\text{CO})_2$, middle graph: $\text{PtBr}_2(\text{CO})_2$, bottom graph: MeCpPtMe_3 . The deposition was done before plasma cleaning the SEM chamber. All values are in atom %.

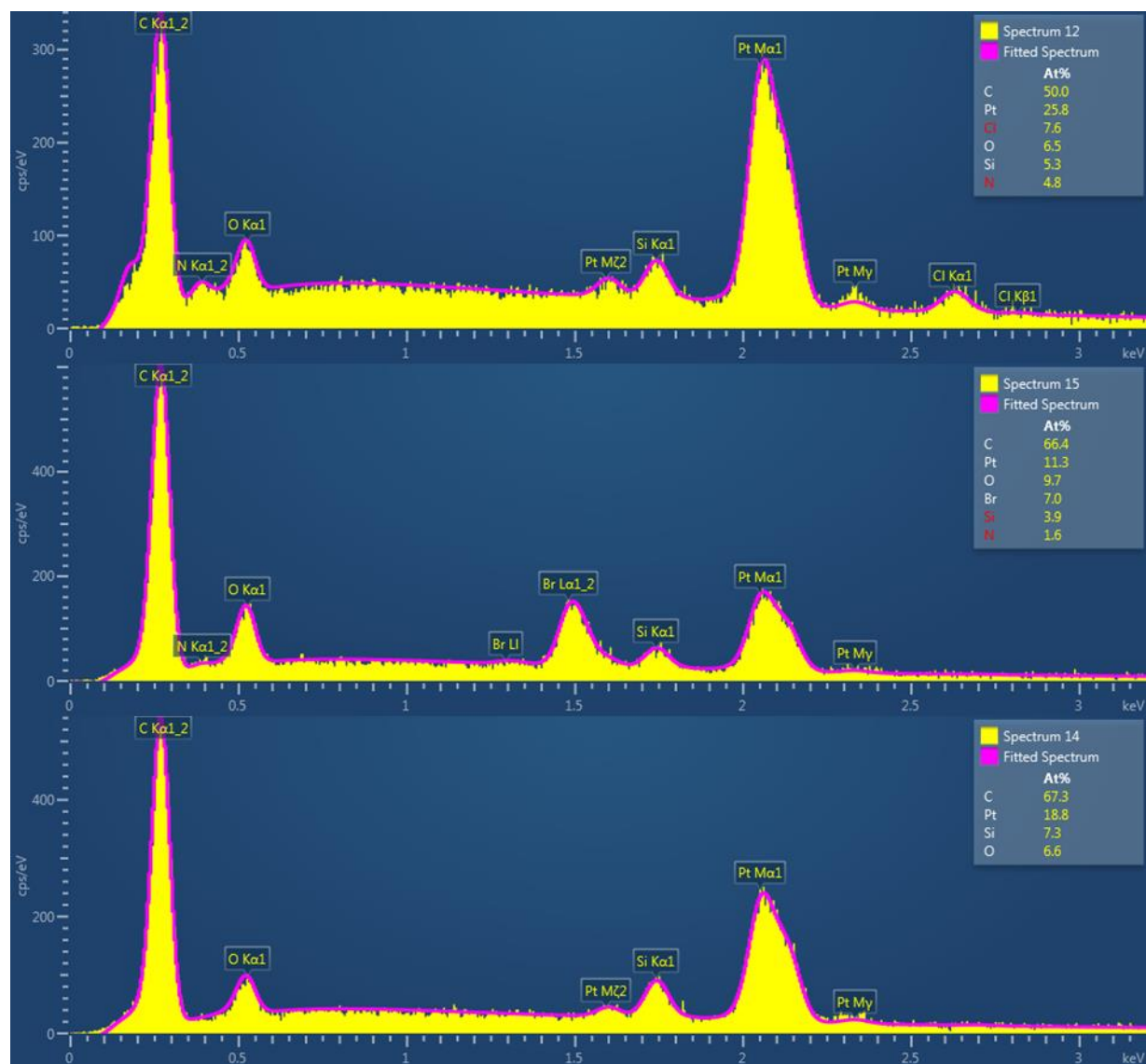


Figure S2: EDX spectra of deposits from the three platinum precursors. Top graph: $\text{PtCl}_2(\text{CO})_2$, middle graph: $\text{PtBr}_2(\text{CO})_2$, bottom graph: MeCpPtMe_3 . The deposits were made after plasma cleaning the SEM chamber. All values are in atom %.

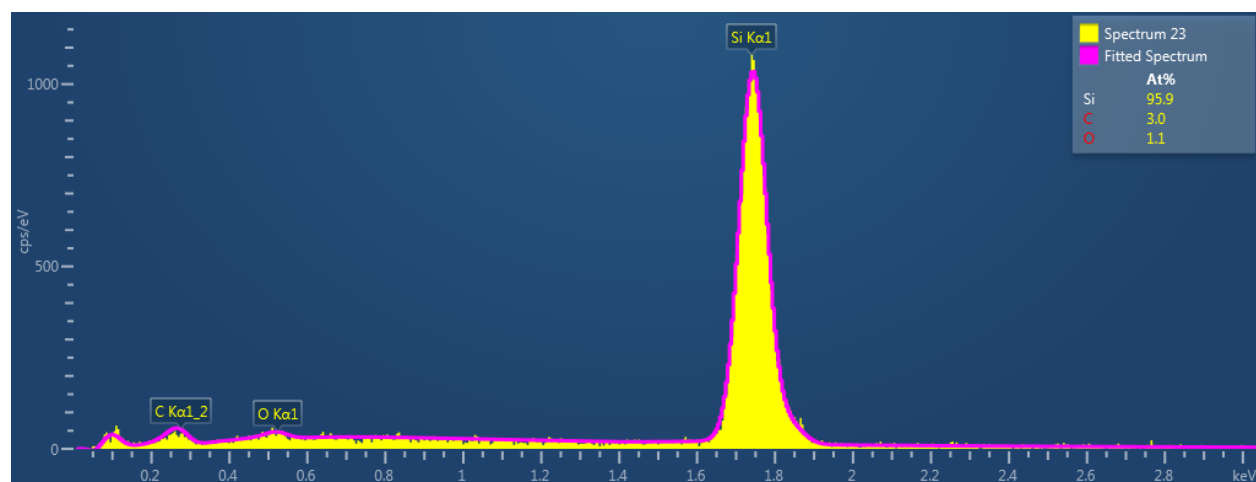


Figure S3: EDX spectrum of the Si substrate. All values are in atom %.

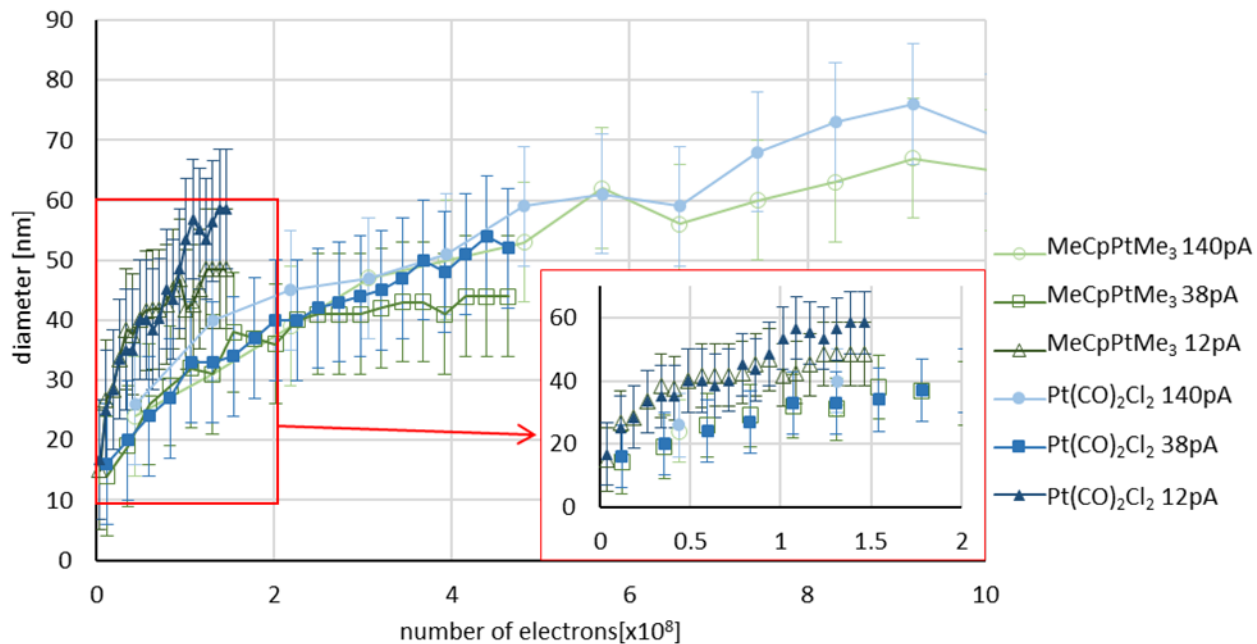


Figure S4: Pillar diameter versus number of electrons per pillar, for pillars deposited at 12, 38 and 140 pA from MeCpPtMe₃ (open symbols) and Pt(CO)₂Cl₂ (closed symbols). The ± 10 nm error bars originate from size measurements taken manually from SEM images. The lines between the points serve as a guide to the eye and the inset shows an expansion of the data in the rectangular (red) area.

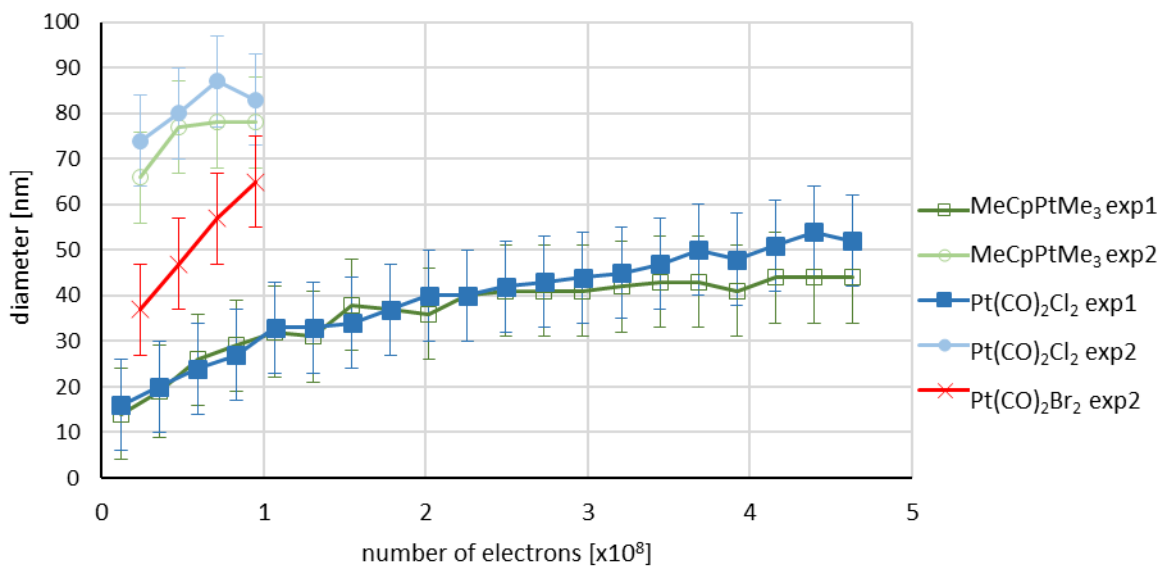


Figure S5: Pillar diameter versus number of electrons per pillar, for pillars deposited at 38 pA from MeCpPtMe₃, Pt(CO)₂Cl₂ and Pt(CO)₂Br₂. For comparison the graph also contains the diameters obtained from MeCpPtMe₃ and Pt(CO)₂Cl₂ in experiment 1. The ± 10 nm error bars originate from size measurements taken manually from SEM images. The lines between the points serve as a guide to the eye.