

Controlled synthesis of Au₂₅ superatom using a dendrimer template

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Figure S11. (a) STEM image, (b) STEM/EDS mapping image and (c) EDS spectrum (purple: whole image, gray: blank area) of PdAu₂₄PET₁₈.

Figure S12. (a) Synthetic scheme of thiol-protected Au clusters blended with different elements (Pt), (b) the image of the possible structures of PtAu₂₄PET₁₈ (note: draw a figure with reference to the previous report [20]), (c) MS spectrum of PtAu₂₄SR₁₈.

Figure S13. (a) STEM image, (b) STEM/EDS mapping image and (c,d) EDS spectrum (light blue: whole image, gray: blank area) of PtAu₂₄PET₁₈.

Figure S14. A comparison of the simulated values (light blue: PtAu₂₄PET₁₈ and yellow: Au₂₅PET₁₈) and the measured value of PtAu₂₄PET₁₈ (red).

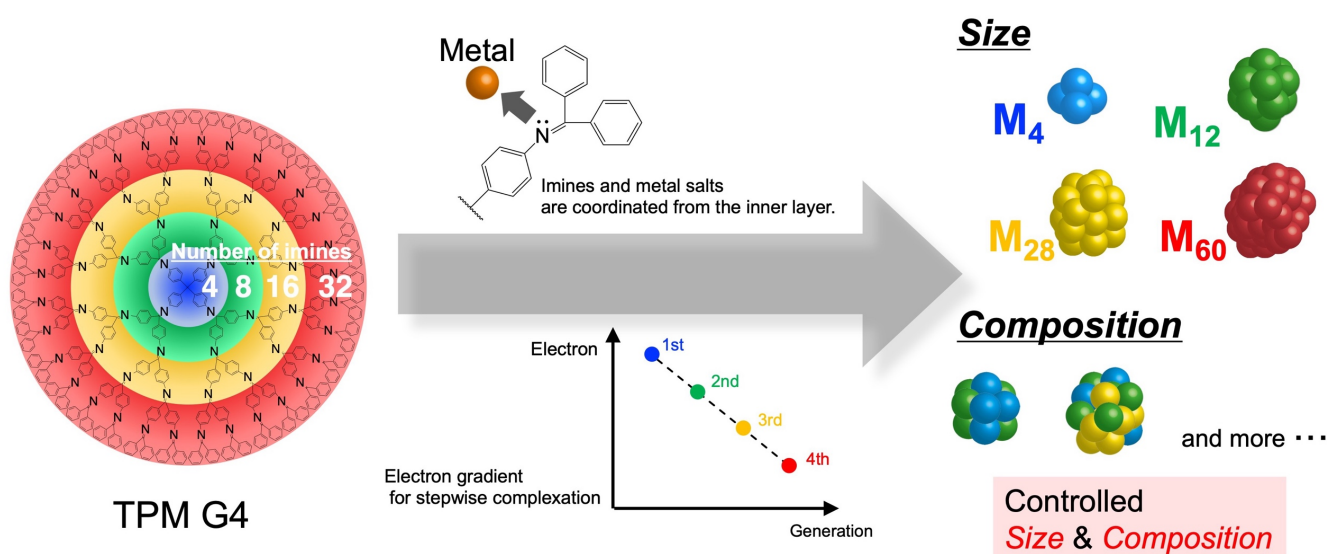


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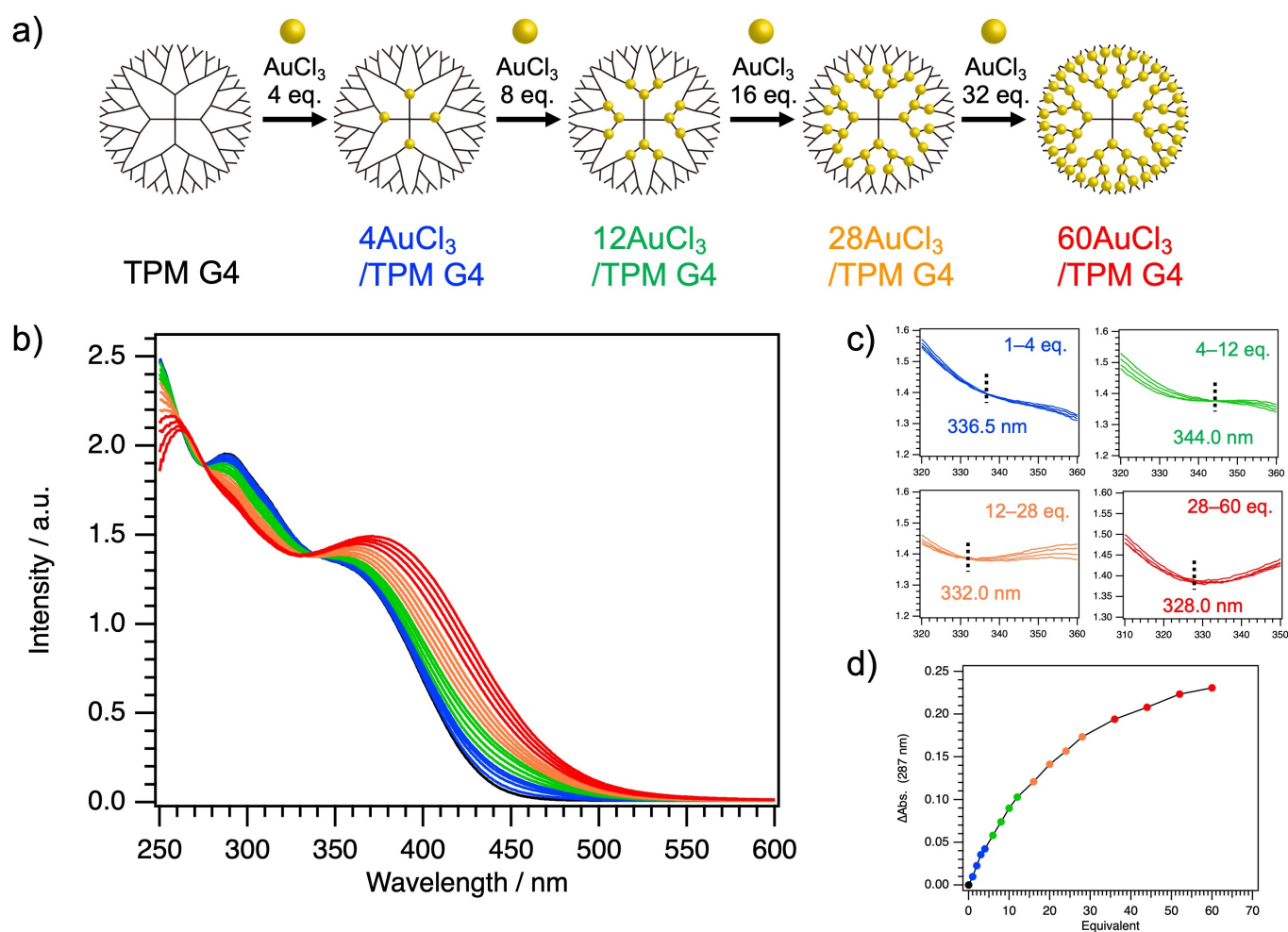


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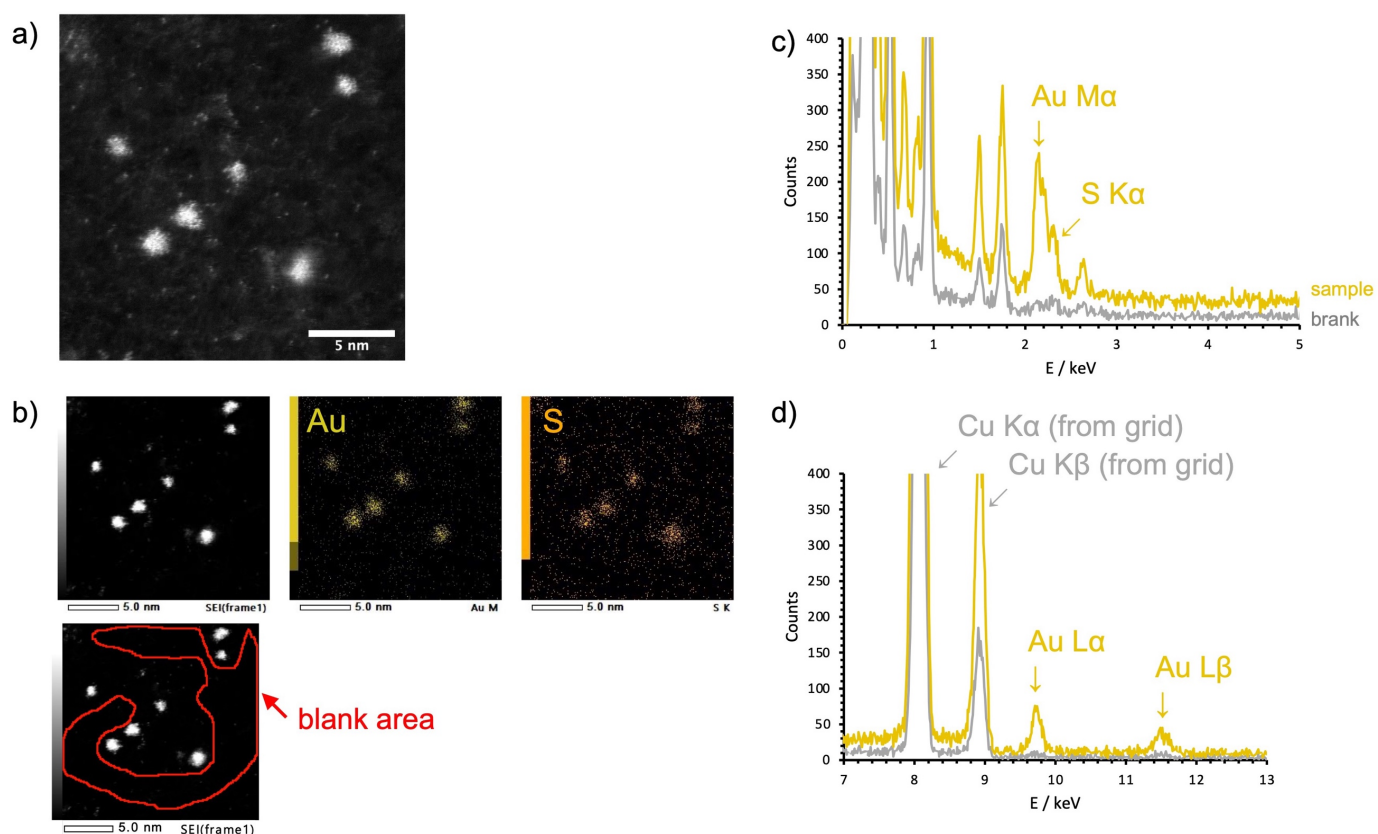


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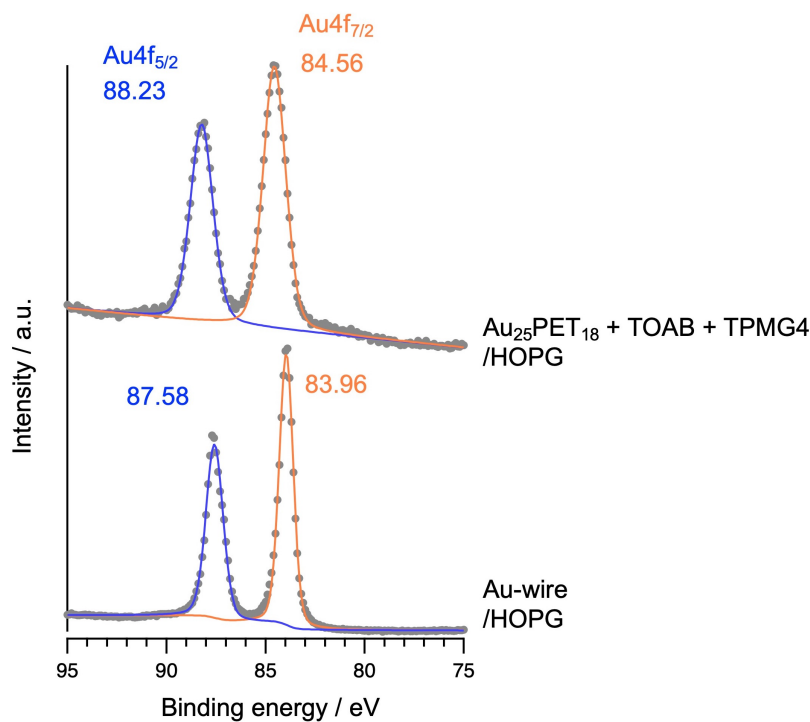


Figure S4. XPS spectrum of Au₂₅PET₁₈ and Au wire. X-ray source is monochrome Al K α (1486.7 eV). Neutralizer's emission current is 1 μ A.

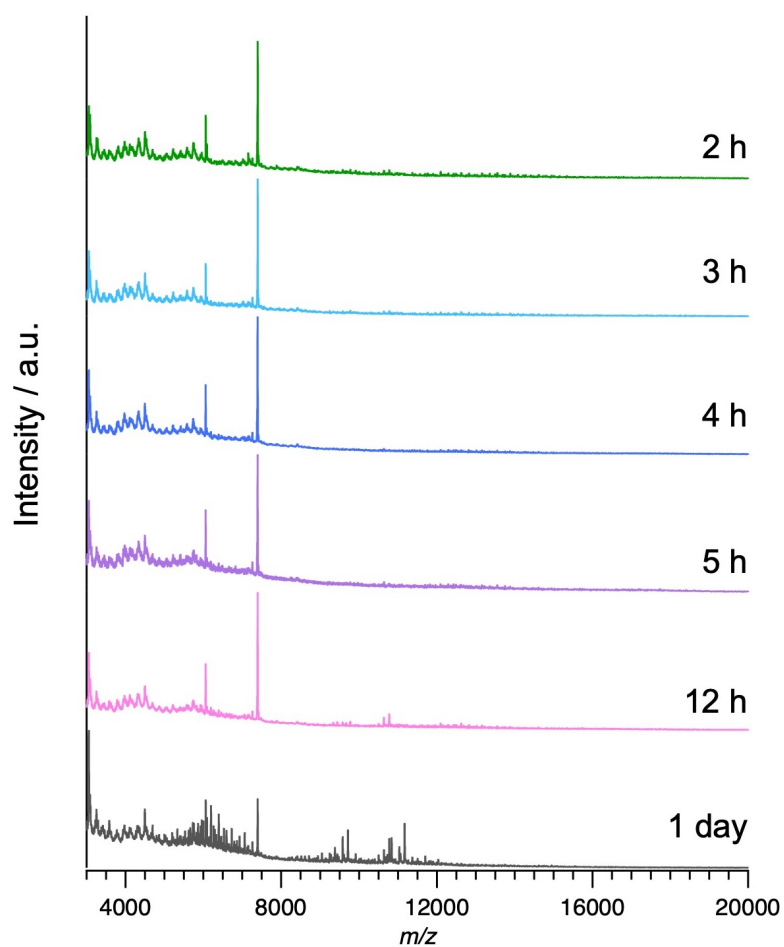


Figure S5. MALDI-TOF-MS spectra after 2 hours of the $\text{Au}_{25}\text{PET}_{18}$ synthesis reaction with TPM G4.

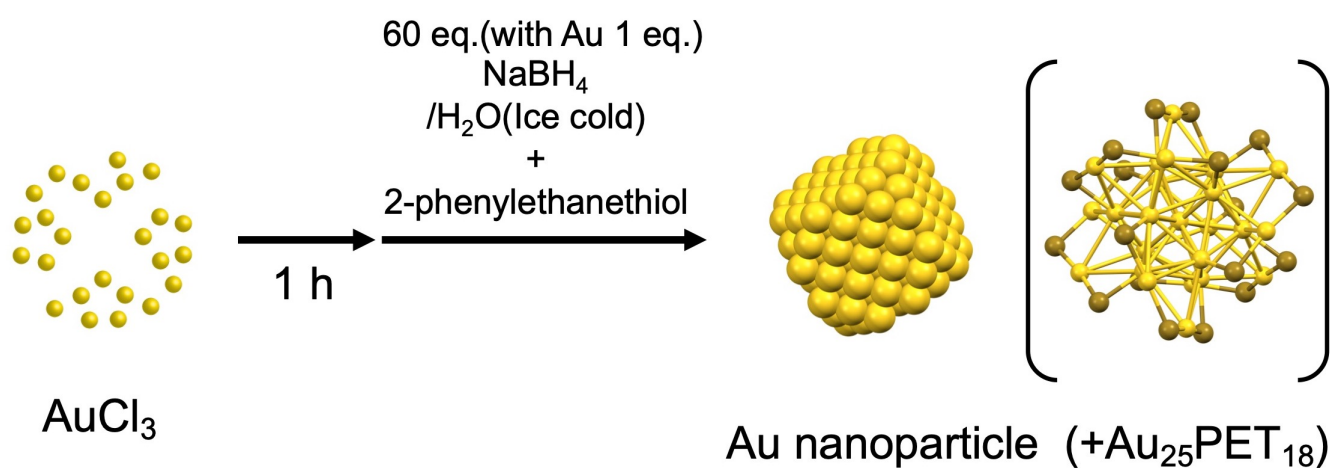


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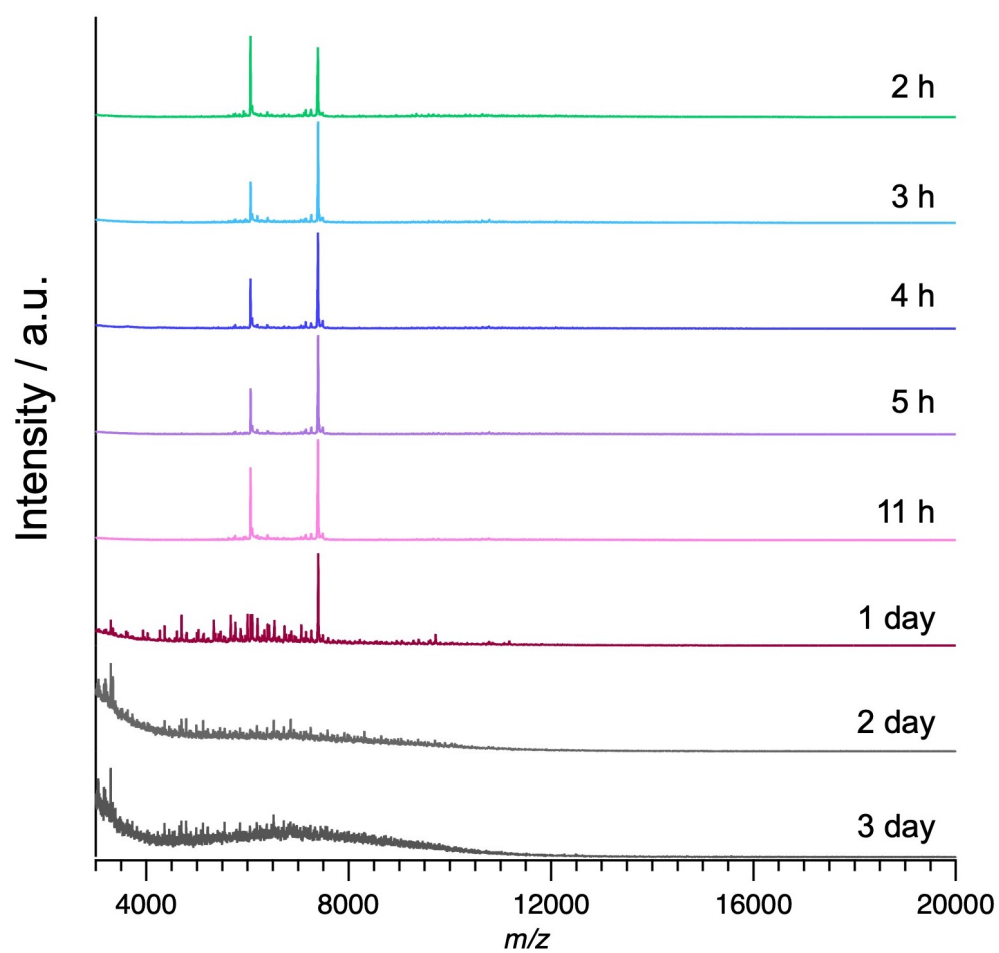


Figure S7. MALDI-TOF-MS spectra after 2 hours of the Au₂₅PET₁₈ synthesis reaction without TPM G4.

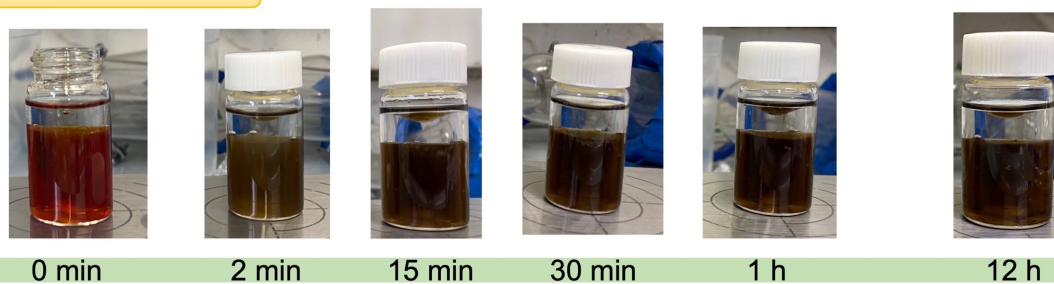
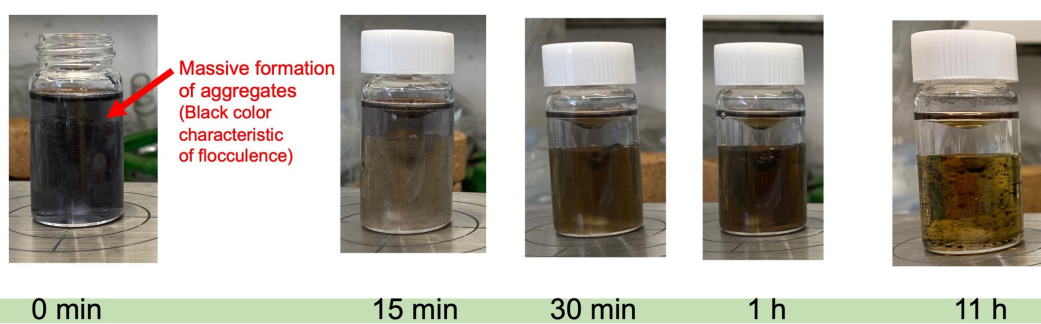
Au₂₅PET₁₈ with TPM G4**Au₂₅PET₁₈ not TPM G4**

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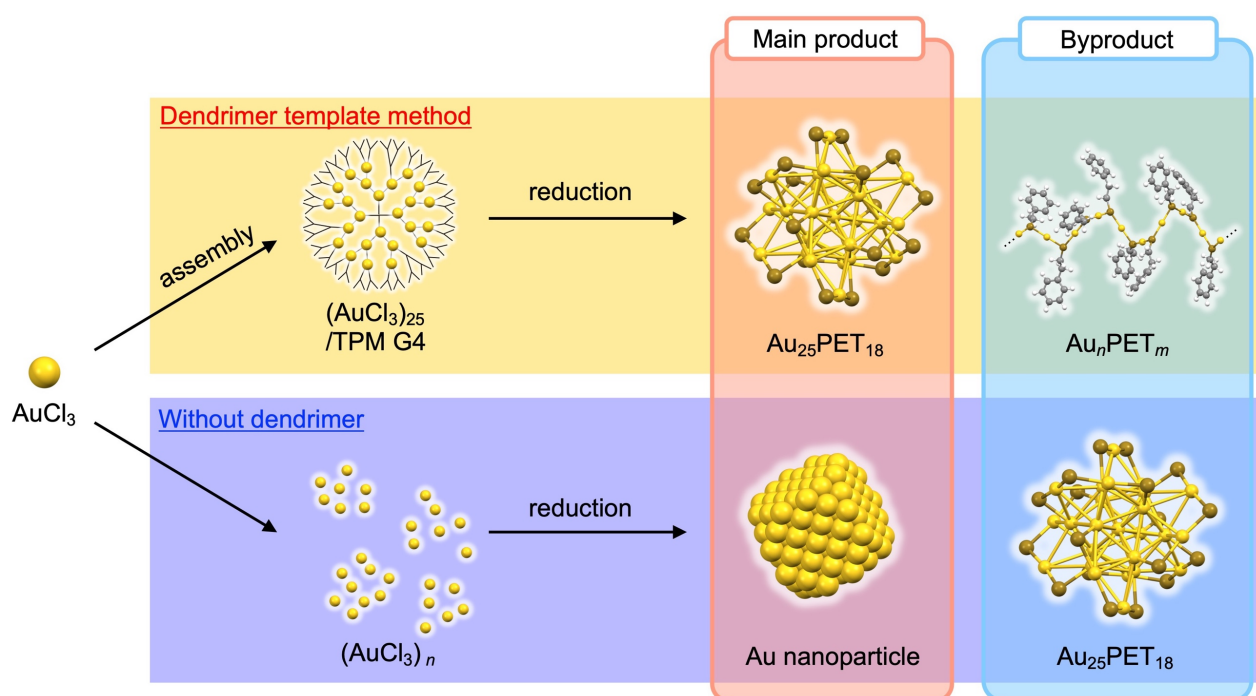


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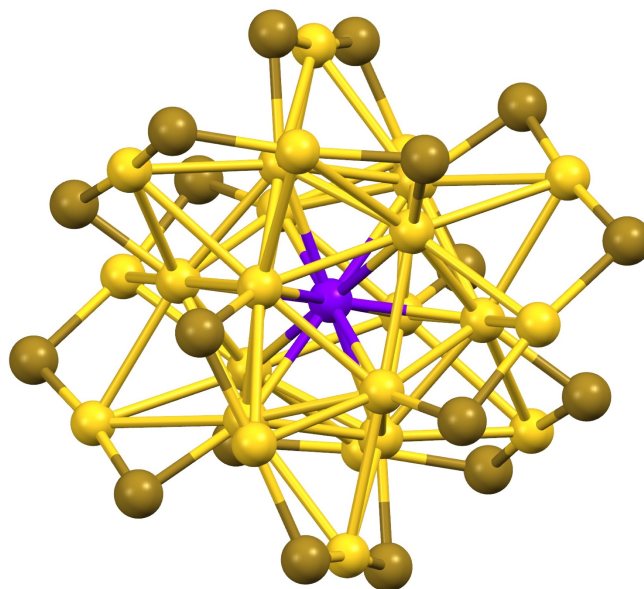


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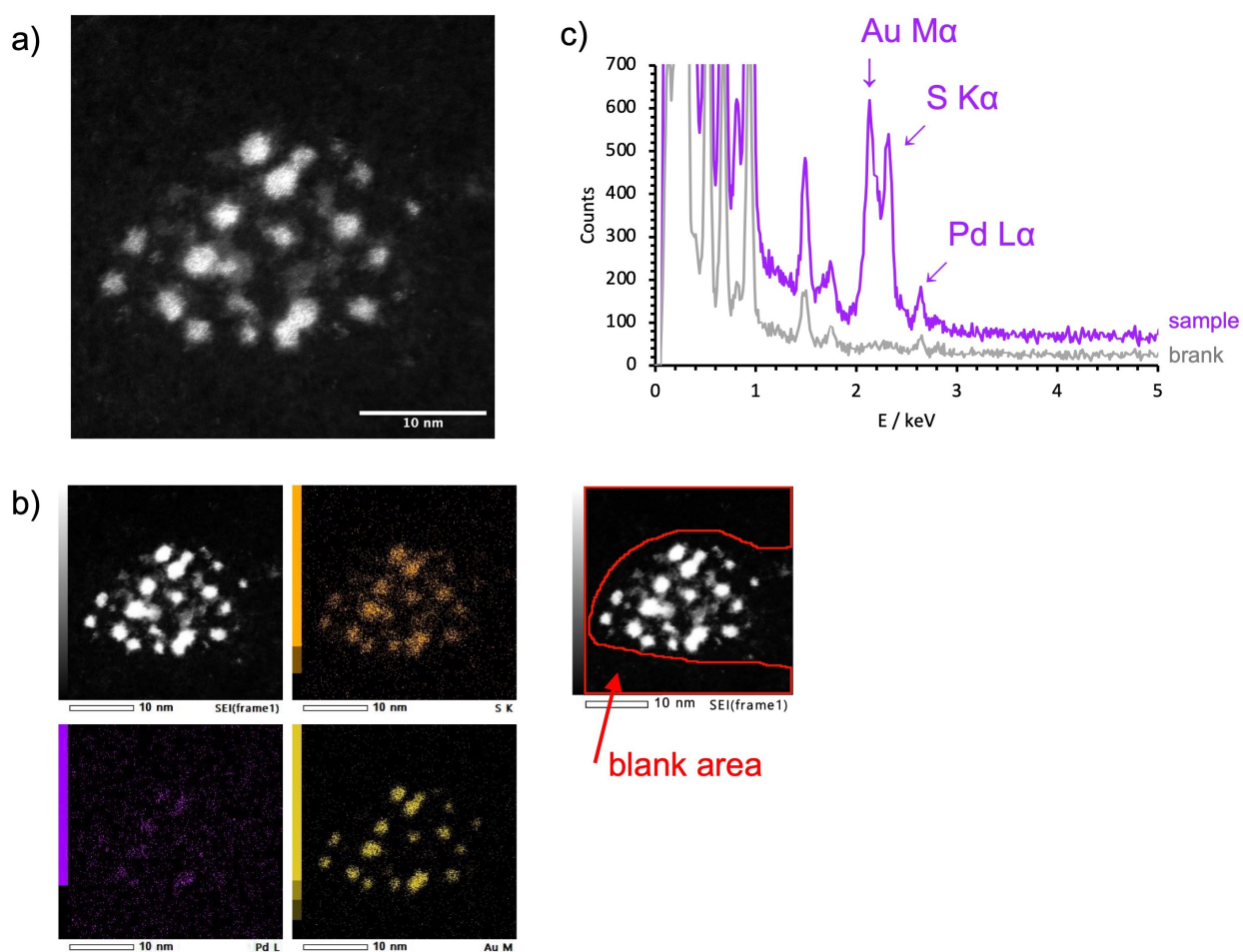


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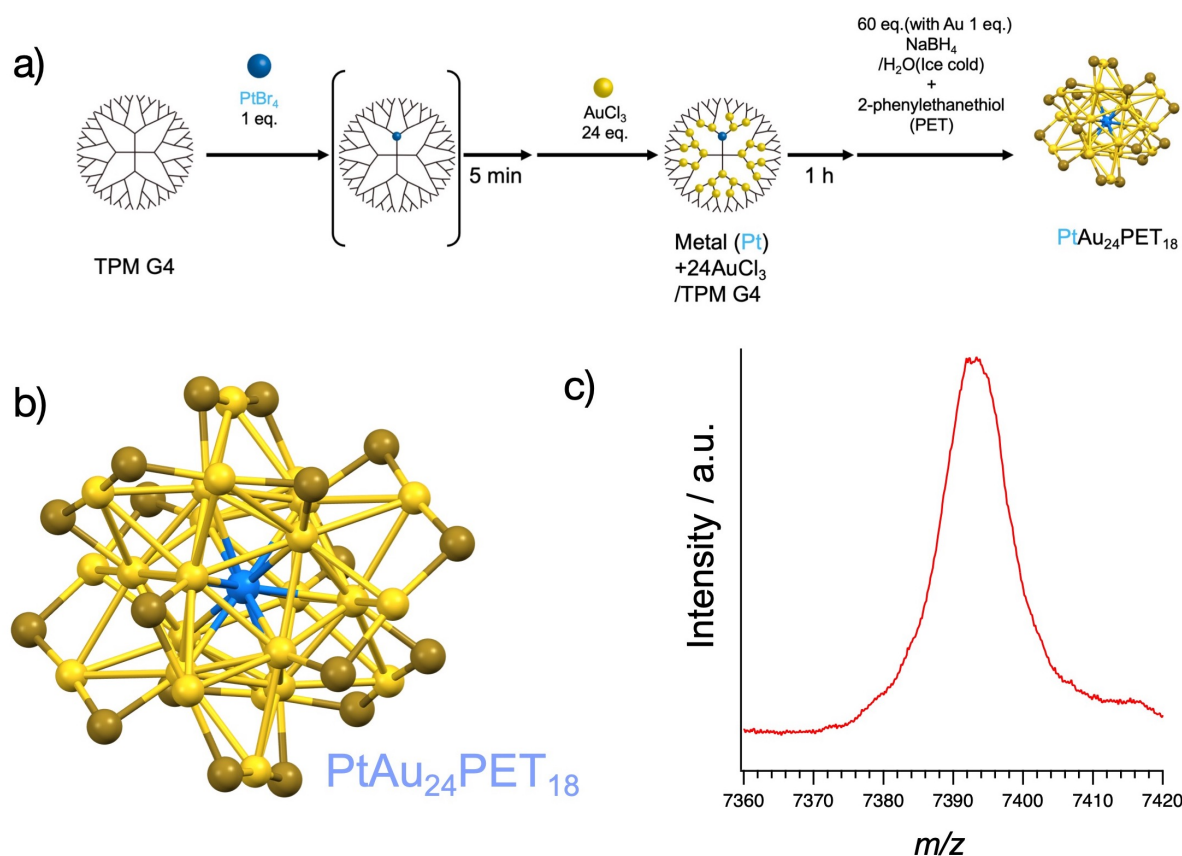


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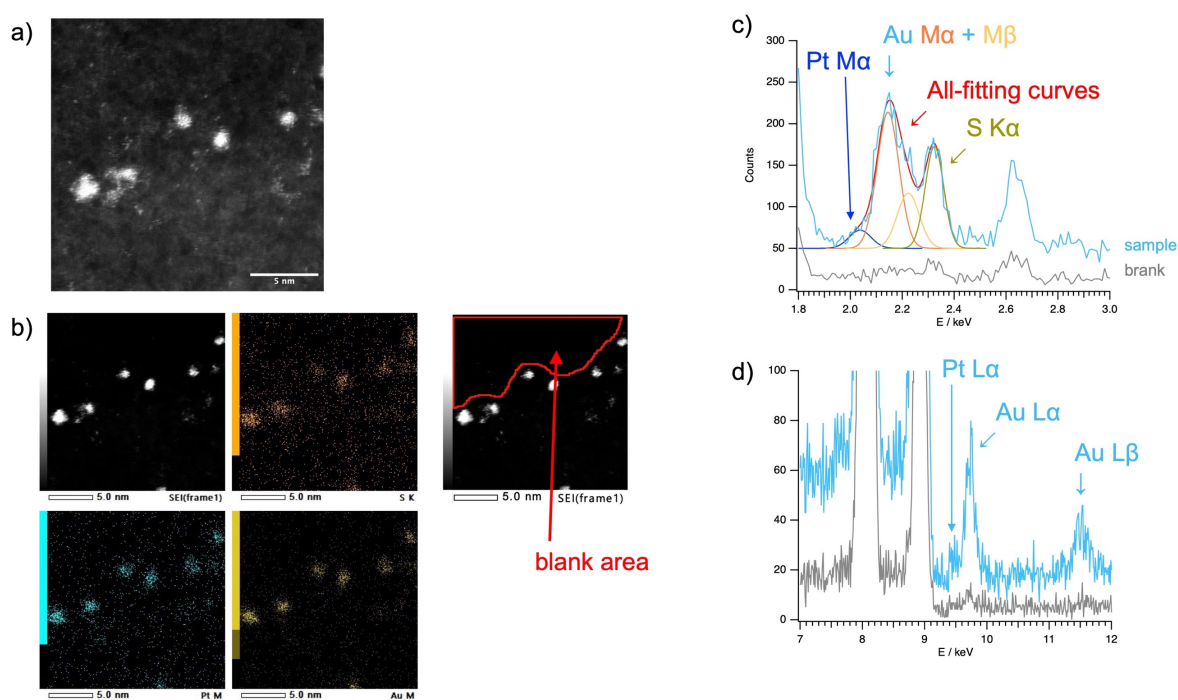


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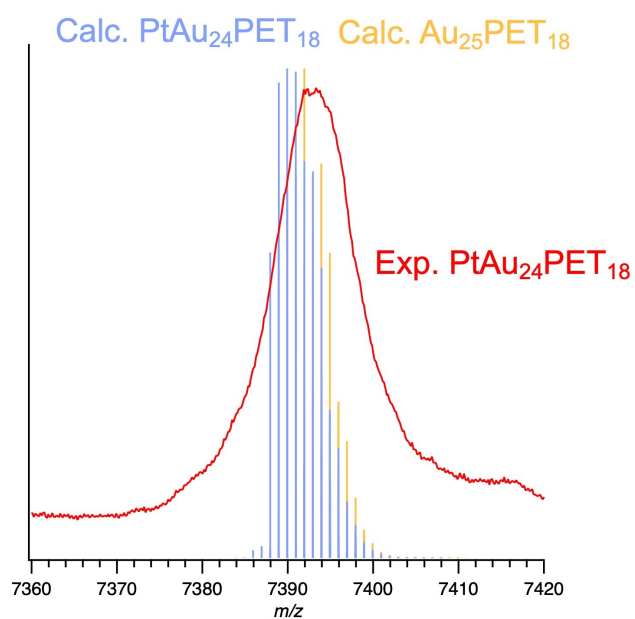


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