Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Synergistic Roles of Vapor- and Liquid-Phase Epitaxy in the Seed-Mediated Synthesis of Substrate-Based Noble Metal Nanostructures

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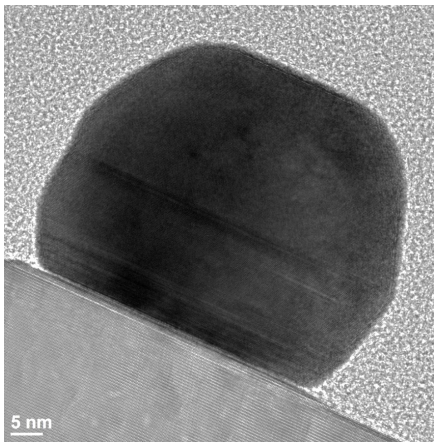

Fig. S1. TEM image of a Au seed on a sapphire substrate that shows stacking faults that extend from one side of the seed to the other.

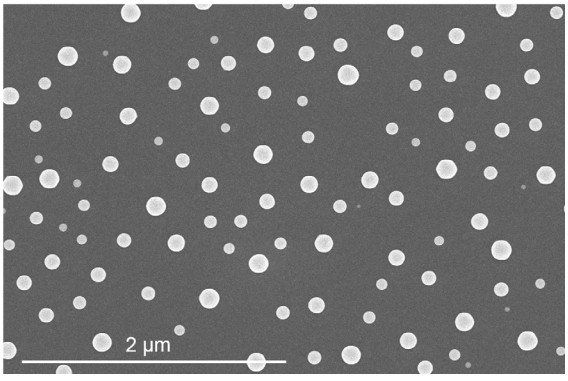

Fig. S2. SEM image of the Pt nanostructures that act as the core material for Pt@Ag core−shell structures.

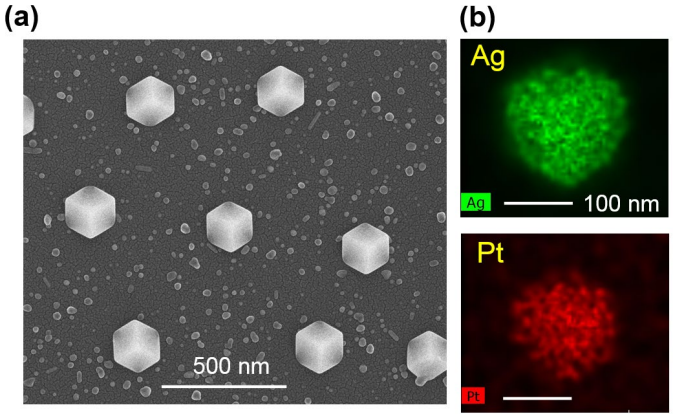

Fig. S3. (a) SEM image of Ag@Pt core−shell nanocubes formed on [0001]-oriented sapphire substrates that have their [111]-axis normal to the substrate surface. (b) EDS elemental maps for Ag and Pt.

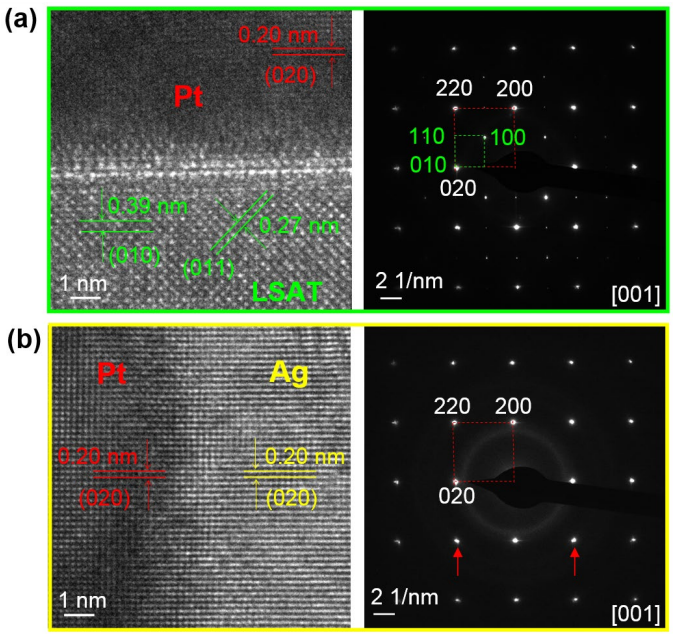

Fig. S4. HRTEM image and the corresponding SAED pattern for (a) Pt/LSAT and (b) Pt/Ag interfaces. It should be noted that the SAED pattern for the Ag/Pt interface shows reflections that exhibit a slight splitting (red arrows).