Supporting Information

Substrate-Bound Growth of Au-Pd Diblock Nanowire and Hybrid Nanorod-plate

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Figure S1. TEM images of Pd nanowires grown on the wafer and in the supernatant with Na$_2$PdCl$_4$ (2.4 mM) and L-ascorbic acid (4.3 mM) at different ligand concentration: (a,d) 1.7 mM; (b,e) 2.0 mM; and (c,f) 2.3 mM.
Figure S2. TEM images of Pd nanowires grown on the wafer and in the supernatant with 2.0 mM 4-MBA at different Na$_2$PdCl$_4$ and L-ascorbic acid concentrations (constant ratio): (a,d) 2.0 mM and 3.6 mM, respectively; (b,e) 2.4 mM and 4.3 mM, respectively; and (c,f) 2.8 mM and 5.0 mM, respectively.
Figure S3. (a) Low- and (b) high-magnification SEM images of the Ag nanoplate clusters grown from the substrate-bound seeds.
Figure S4. TEM images of diblock Pd-Au NWs where Au segments were grown from the previously grown Pd segments (i.e. in reverse sequence as in Figure 4c). The samples for TEM characterization were detached from substrates by sonication.