-Supporting Information-

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

Jiating He,[†] Yawen Wang,[†] Zhanxi Fan,[‡] Zhenhui Lam,^{†,§} Hua Zhang,[‡] Bin Liu,[§] and Hongyu Chen*,[†]

[†]Division of Chemistry and Biological Chemistry, [‡]School of Materials Science and Engineering, and

[§]School of Chemical and Biomedical Engineering, Nanyang Technological University, 637371,

Singapore

Email: hongyuchen@ntu.edu.sg Web: http://www.ntu.edu.sg/home/hongyuchen/



In supernatant

Figure S1. TEM images of Pd nanowires grown on the wafer and in the supernatant with Na₂PdCl₄ (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_2PdCl_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.