Supporting Information

Structural Development of Gold and Silver Nanoparticles Within Hexagonally Ordered Spherical Micellar Diblock Copolymer Thin Films

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Figure S1. (a, c) TEM images and (b, d) corresponding size distributions of (a, b) TOP-Ag and (c, d) Py-Ag NPs. (e) TEM image of the PS-b-(Py-Ag_{1.0}@P4VP) composites and (f) detailed view of the P4VP cores; the dark spots in (e) and (f) represent the Py-Ag NPs.



Figure S2. (a) TEM image of the (TOP-Au_{1.0}@PS)-b-(Py-Ag_{1.0}@P4VP) composite drop-cast on a Cu net, with a Py-Ag@P4VP core and its surroundings highlighted for EDX analysis. (b, c) EDX spectra recorded from the respective zones of the Au NPs (in the PS phase) and the Ag NPs (in the P4VP phase) within the BCP/metal NP composite. Because the width of the electron beam was larger than the dimensions of the Py-Ag@P4VP core, signals for both Ag and Au elements appear in (c).



Figure S3. Representative AFM patterns of thin films of the (a) (DT-Ag_{0.6}@PS)-b-P4VP and (b) (DT-Ag_{1.0}@PS)-b-P4VP BCP/metal NP composites. Bright spots (local high lands) and coffee-colored regions (lower zones) in (a) and (b) represent P4VP cores and the quasi-two-dimensional, circular mat. Insets to (a): Detailed view of the P4VP cores and their surroundings.