

Supporting Information

Highly-Ordered Array of Nanoparticles on Large Areas from Diblock Copolymer Micelles in Hexagonal Self-Assembly

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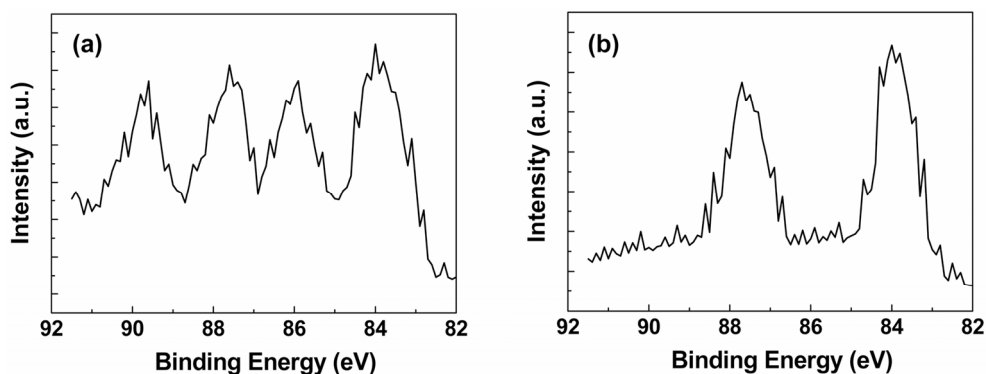


Figure 1S. X-ray photoelectron spectra of Au(4f) of an array of nanoparticles synthesized from a single-layered film of PS-P4VP micelles: (a) as-prepared; (b) after 7 days at room temperatures in air.

The photoelectron spectra of Au(4f) of an array of nanoparticles immediately after oxygen plasma treatment (Figure 1Sa) reveal four peaks corresponding to metallic Au (84.0 and 87.6 eV) and Au bonded oxygen (85.9 and 89.6 eV).^{S1} After 7 days at room temperature in air, however, two peaks of Au bonded oxygen disappeared and only two peaks of metallic Au remained due to the instability of gold oxide at room temperature in air.^{S1} Thus, the XPS result confirmed that an array of metallic Au nanoparticles was synthesized.

(S1) Boyen, H. -G.; Kästle, G.; Weigl, F.; Koslowski, B; Dietrich, C.; Ziemann, P.; Spatz, J. P.; Riethmüller, S.; Hartmann, C.; Möller, M.; Schmid, G.; Garnier, M. G.; Oelhafen, P. *Science*, **2002**, 297, 1533.