Monodisperse Pt nanoparticle arrays *via* block copolymer nanopatterning and their reaction kinetics on CO oxidation

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Corresponding author(s) e-mail: swlee@hanbat.ac.kr (S. Lee), wcjung@snu.ac.kr (W. Jung), sangouk.kim@kaist.ac.kr (S. O. Kim) Keywords: catalyst, carbon monoxide (CO), oxidation, block copolymer self-assembly, Pt

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Figure S1. Cross-sectional view of SEM image of CeO₂/Si-wafer.



Figure S2. SEM image of vertically aligned cylindrical PS-*b*-P4VP after selective swelling of P4VP domain by ethanol.



Figure S3. (a) HR-TEM image of Pt/SiO_x . (b) The FFT pattern from the region within the green-colored square in (a). (c) The FFT pattern from the region within the blue-colored square in (a).



Figure S4. (a) HAADF-STEM image of Pt/CeO_2 along with (b-d) the corresponding elemental maps for Pt, Ce, and O. It should be noted that Pt particle appears smaller compared to that observed in the SEM analysis, likely due to edge trimming during the focused ion beam (FIB) preparation process.