

*Supporting information*

*for*

Synthesis of double-shelled hollow inorganic nanospheres through  
block copolymer-metal coordination and atomic layer deposition

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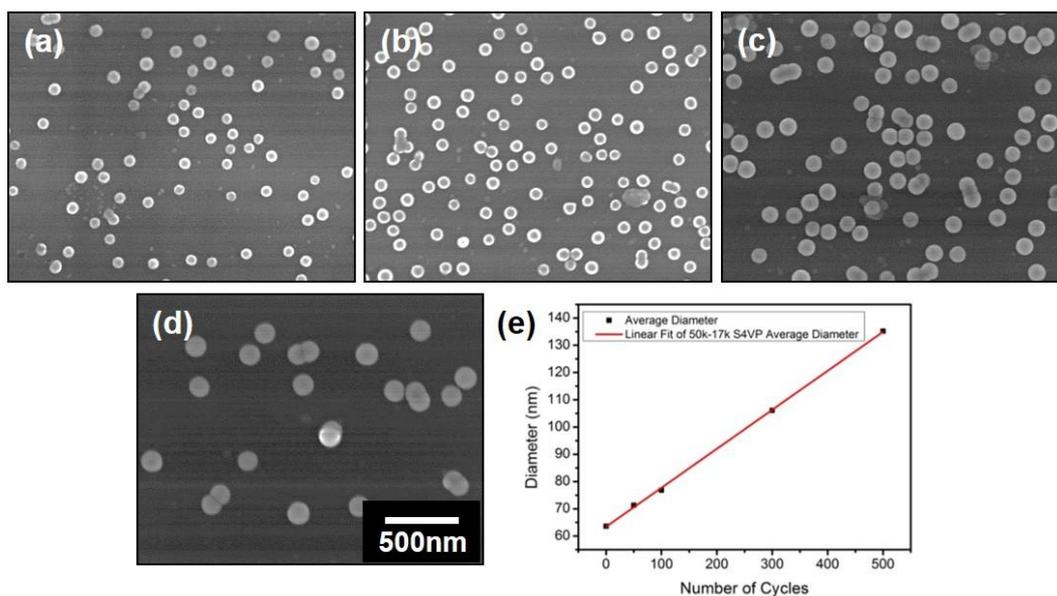
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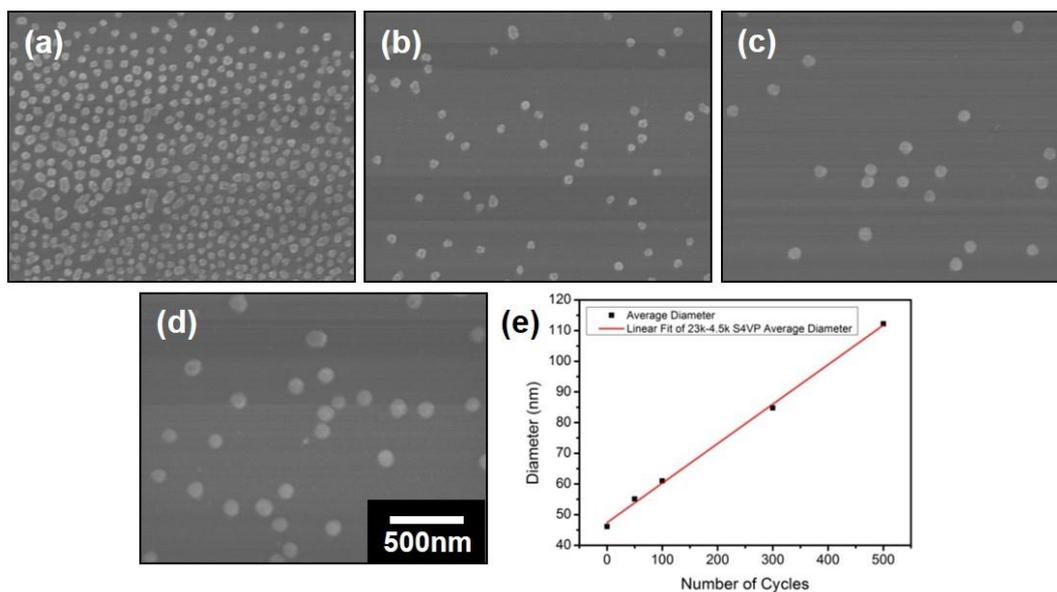
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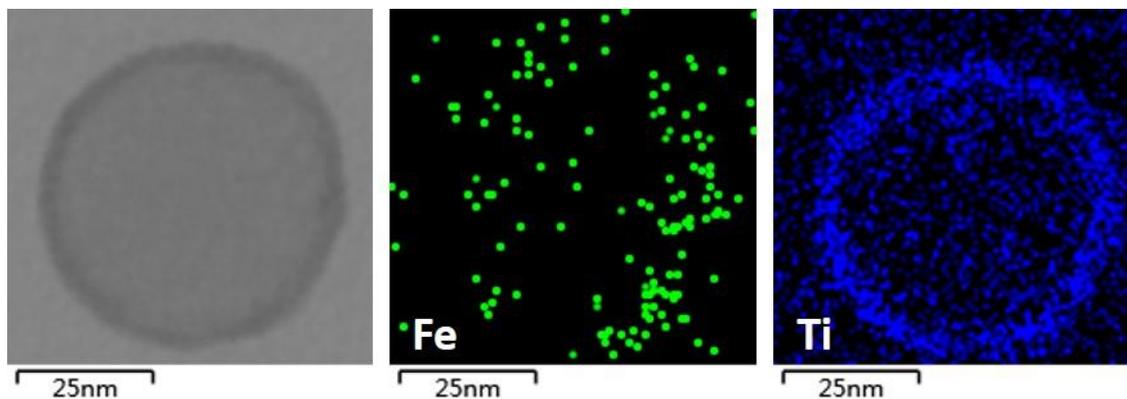


**Figure S1.** SEM images of the nanospheres of PS-*b*-P4VP-2 subjected to TiO<sub>2</sub> deposition for (a) 50, (b) 100, (c) 300 and (d) 500 cycles, respectively. All of the images have the same magnification and the scale bar is shown in (d). (e) The plot of the diameters of the nanospheres with the number of ALD cycles.

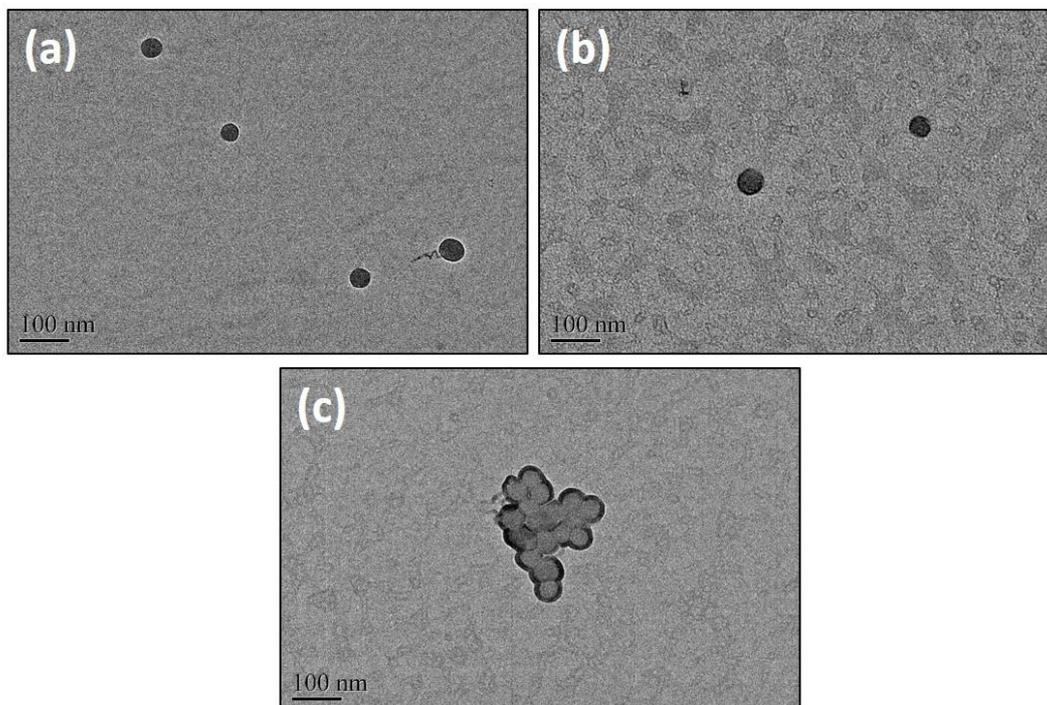


**Figure S2.** SEM images of the nanospheres of PS-*b*-P4VP-3 subjected to TiO<sub>2</sub> deposition for (a) 50, (b) 100, (c) 300 and (d) 500 cycles, respectively. All of the

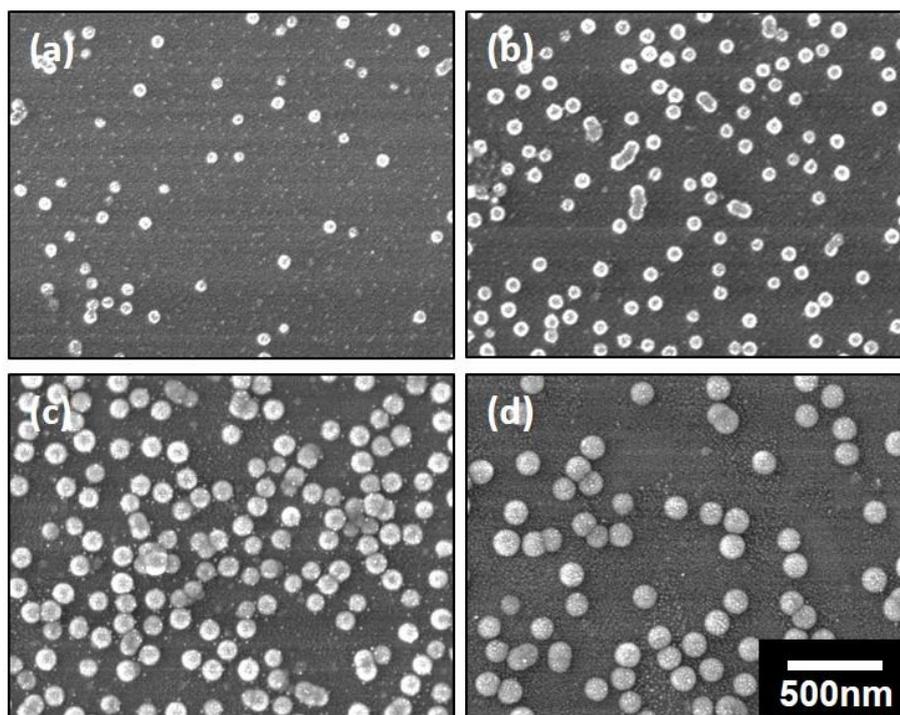
images have the same magnification and the scale bar is shown in (d). (e) The plot of the diameters of the nanospheres with the number of ALD cycles.



**Figure S3.** EDX mapping of the micelles of PS-*b*-P4VP-1 subjected to TiO<sub>2</sub> deposition for 50 cycles.



**Figure S4.** TEM images of the nanospheres of PS-*b*-P4VP-3 subjected to TiO<sub>2</sub> deposition for (a) 0, (b) 50 and (c) 100 cycles, respectively.



**Figure S5.** SEM images of the nanospheres of PS-*b*-P4VP-2 subjected to TiO<sub>2</sub> deposition for (a) 50, (b) 100, (c) 300 and (d) 500 cycles followed with calcination. All of the images have the same magnification and the scale bar is shown in (d).