Supporting Information for

Phase control of hierarchically structured mesoporous anatase TiO_2 microspheres covered with {001} facet†

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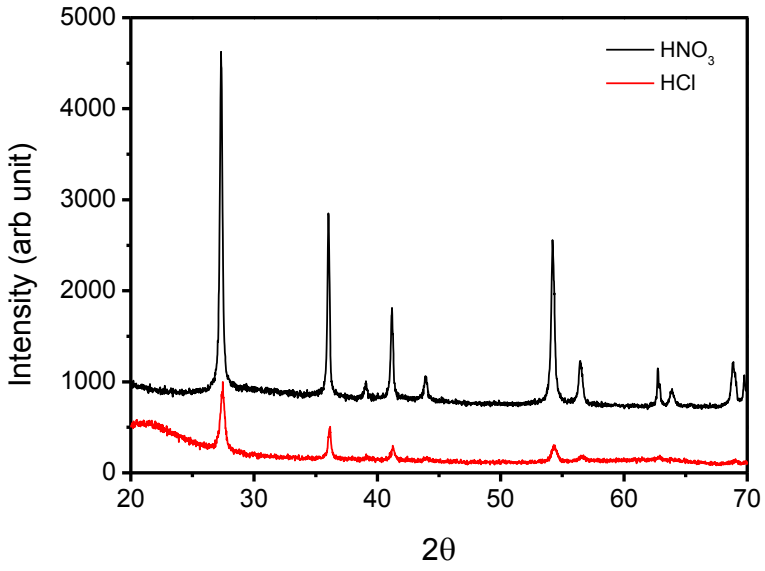

Figure S1. XRD patterns of the TiO_2 microspheres prepared in 4N HCl (red) and HNO_3 (black) solutions.

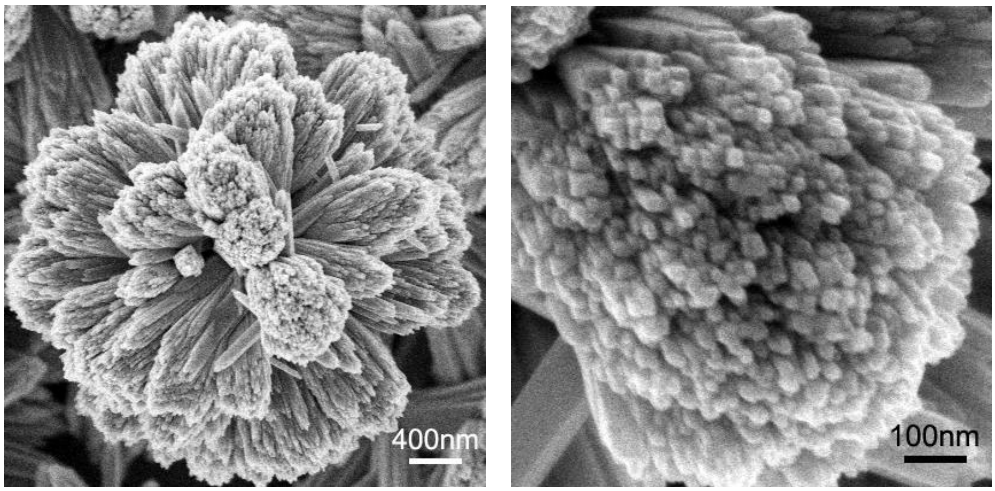

Figure S2. SEM images of TiO_2 microsphere prepared in 30 mL of 4 M HCl solution.

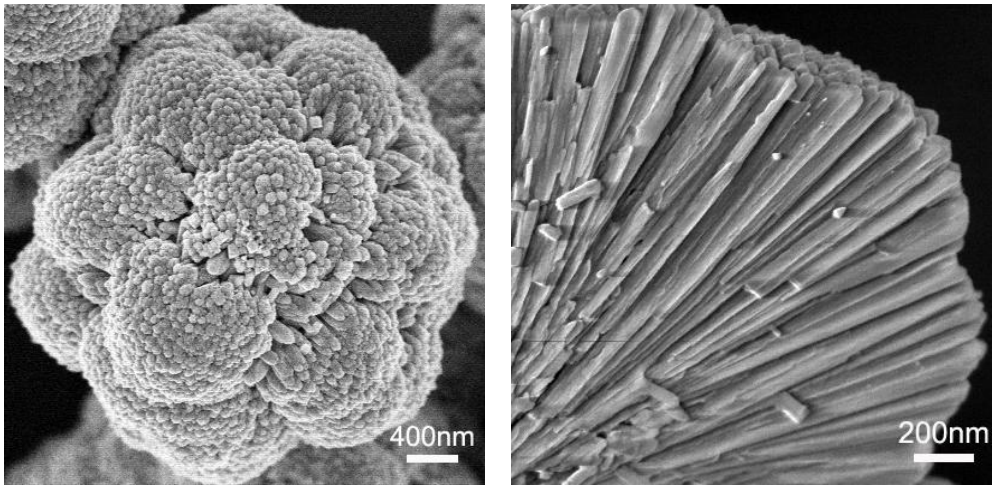

Figure S3. SEM images of TiO_2 microsphere prepared in 30 mL of 4 M HNO_3 solution.

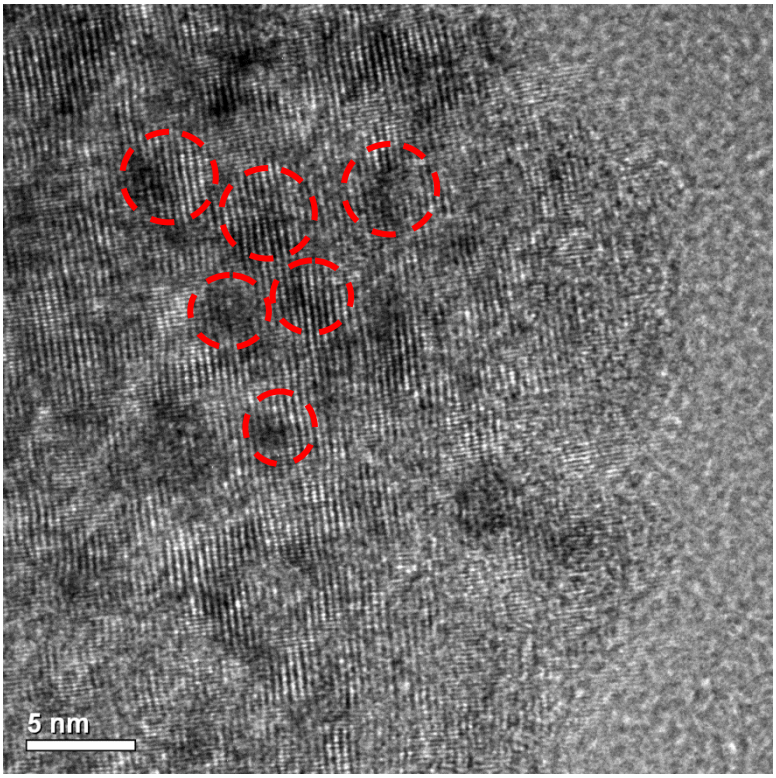

Figure S4. High-resolution TEM image of MATS synthesized for 1 hour.

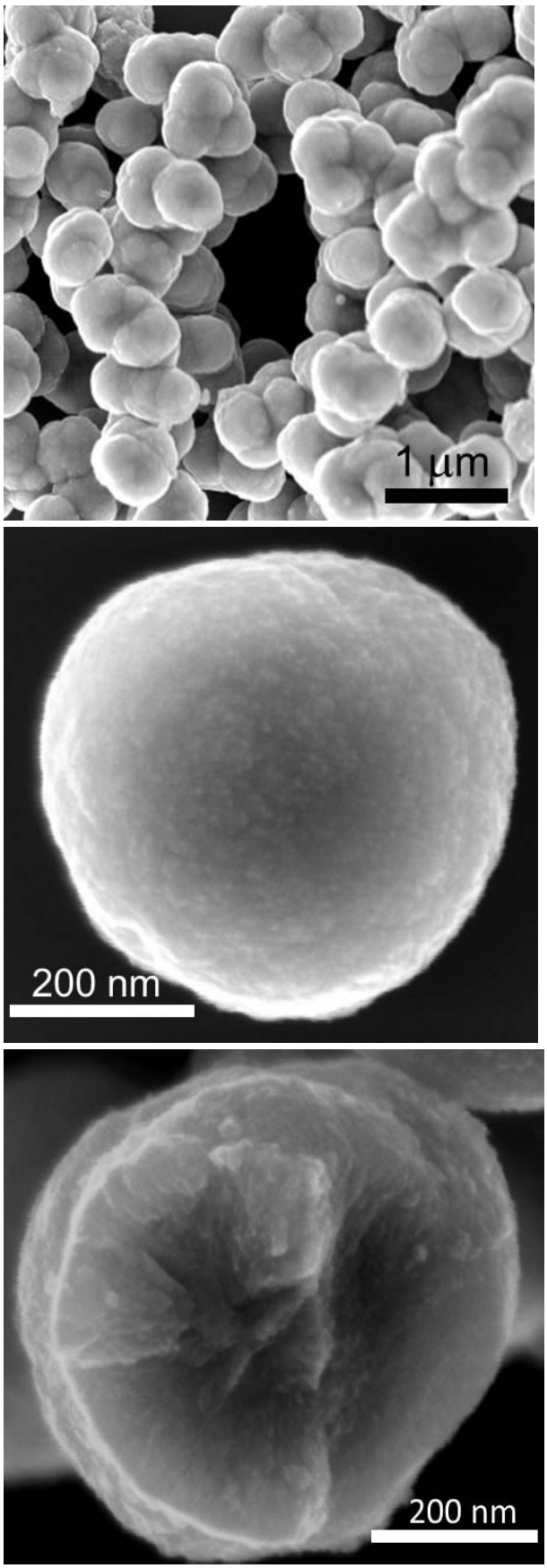

Figure S5. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ˚C for 30min.

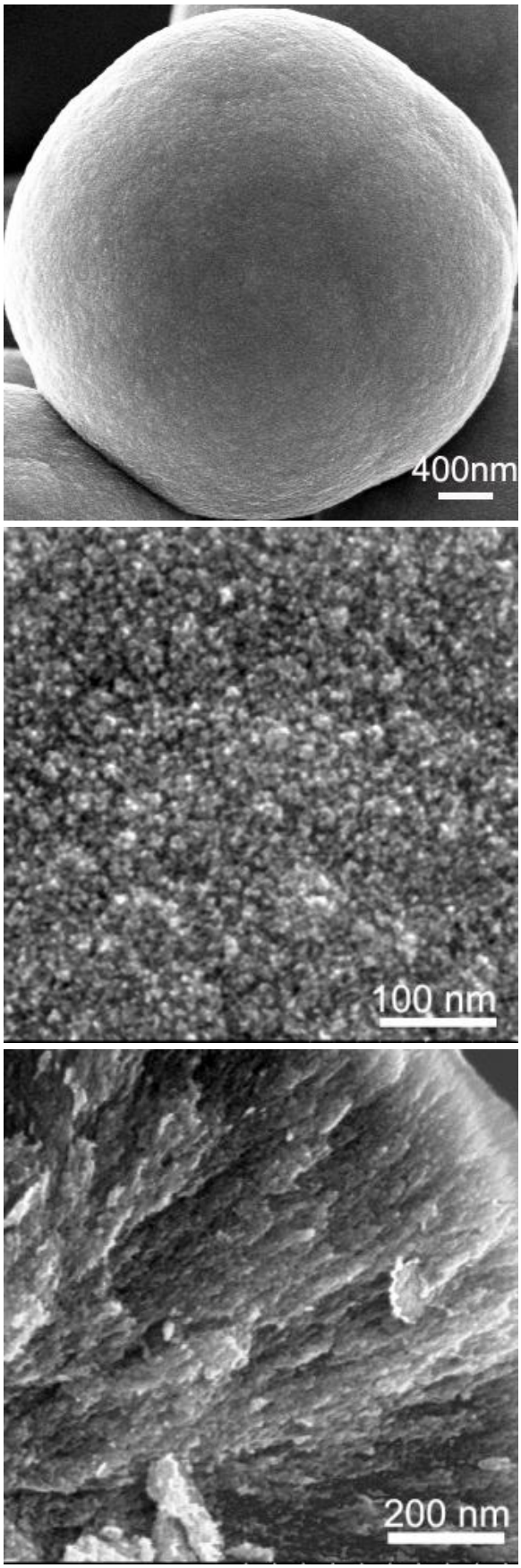

Figure S6. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 1 hour.

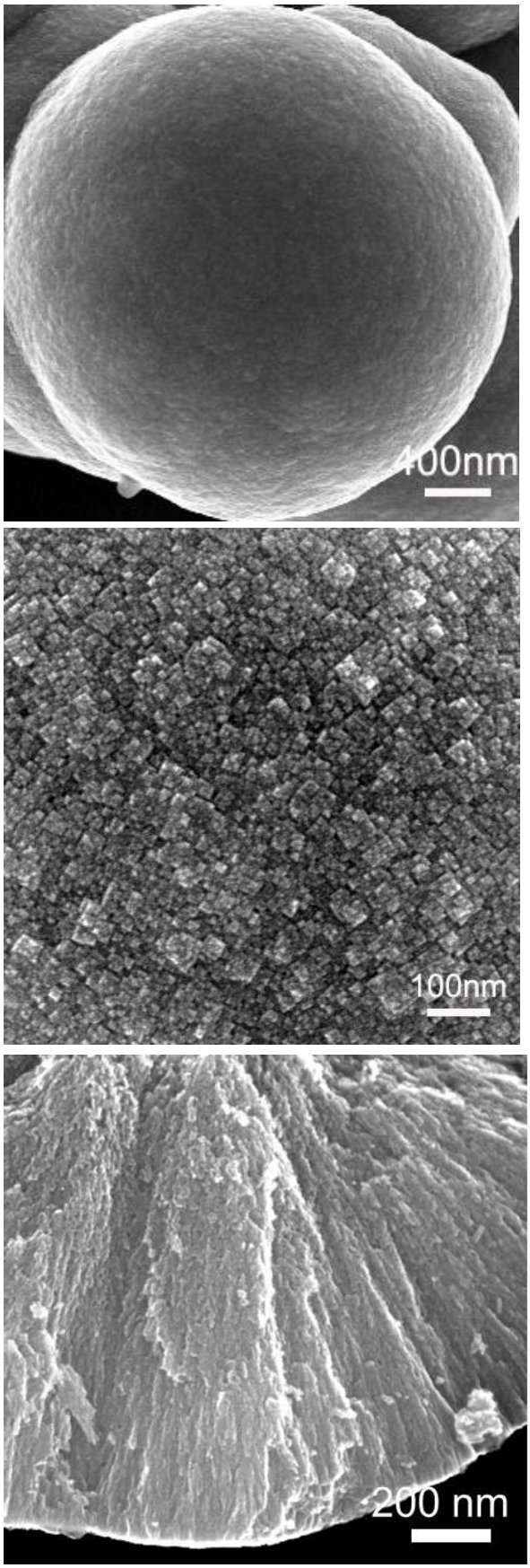

Figure S7. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 2 hours.

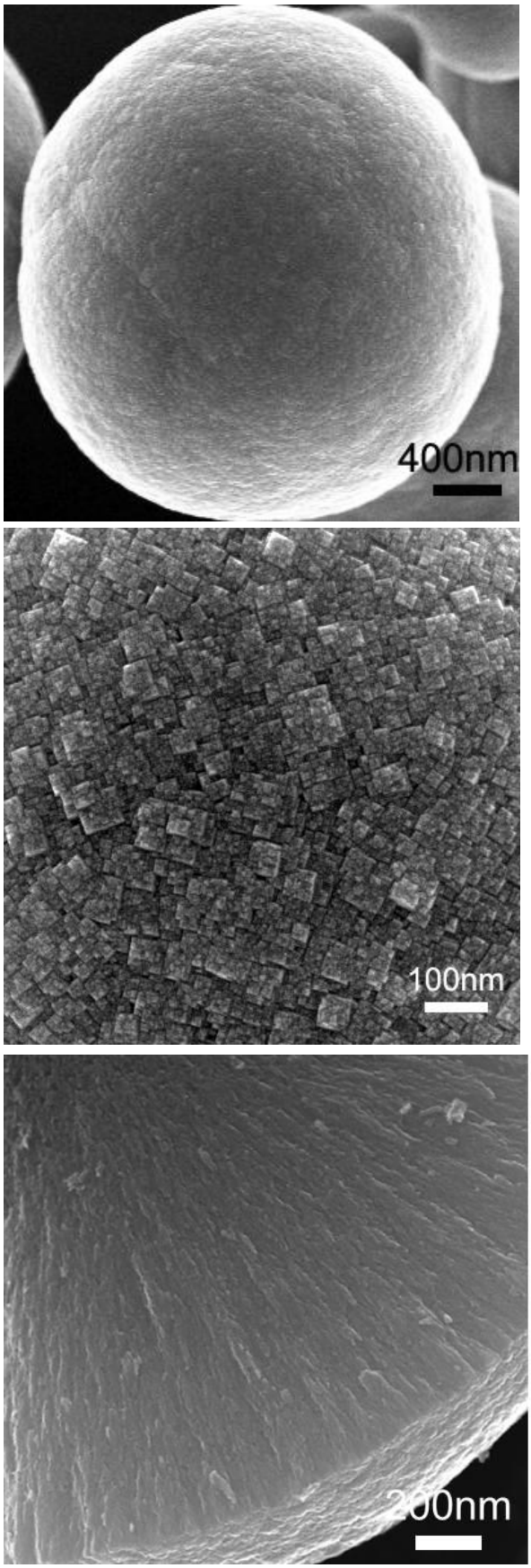

Figure S8. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 3 hours.

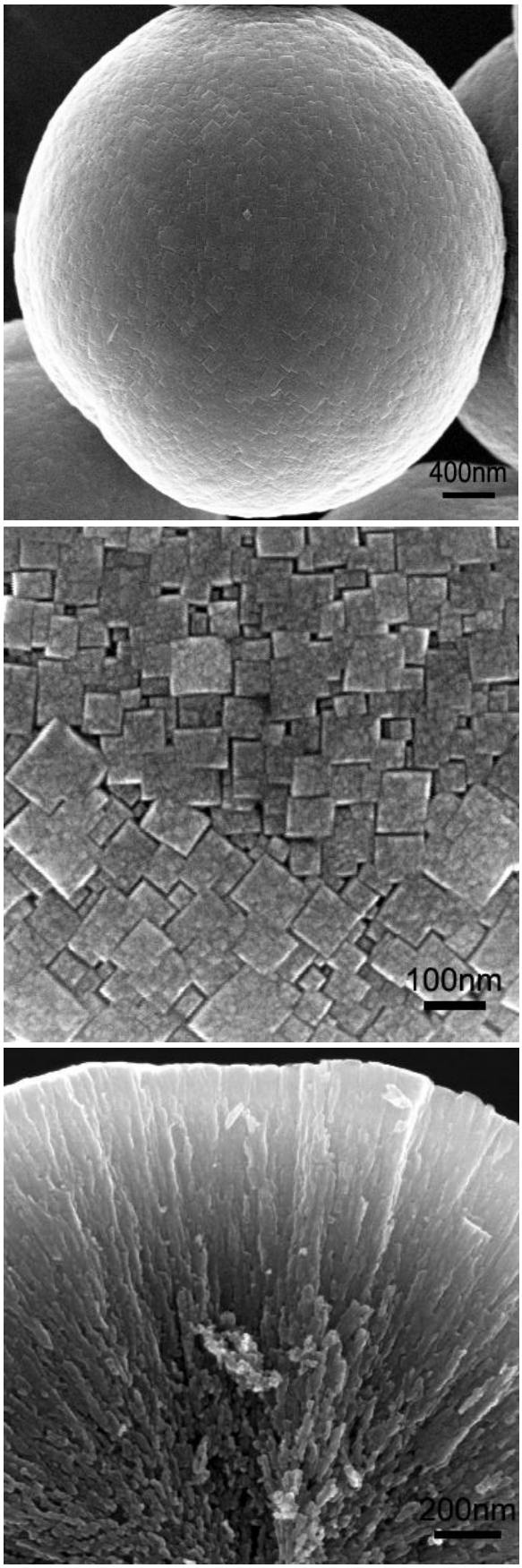

Figure S9. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 5 hours.

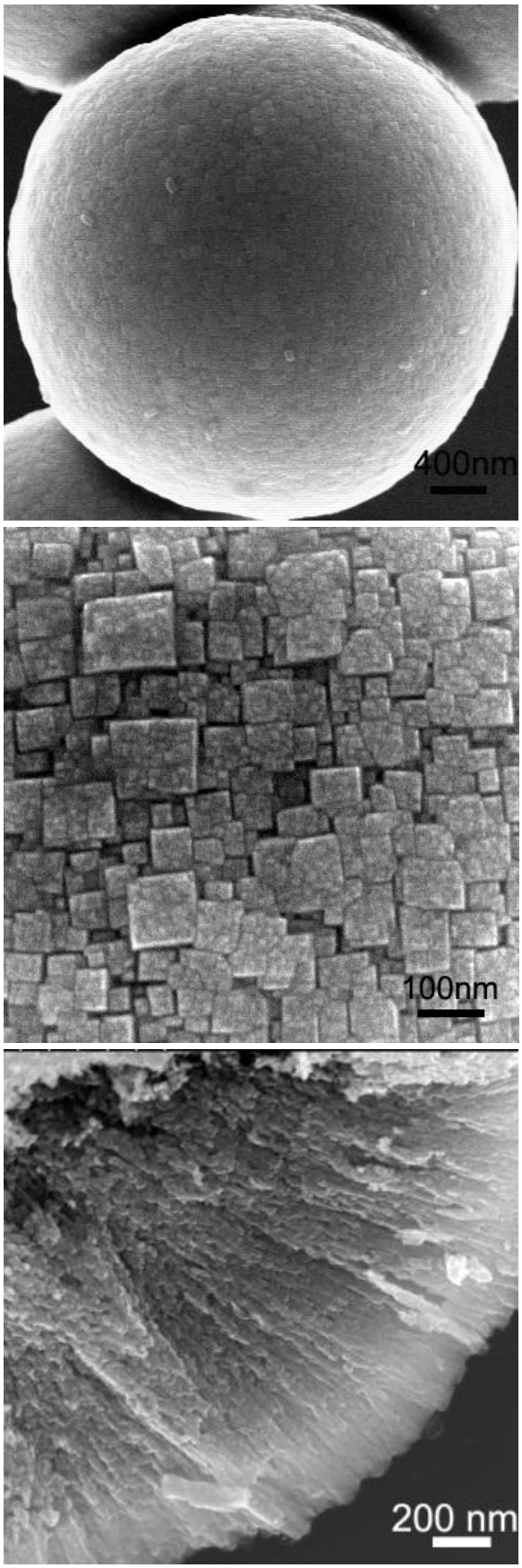

Figure S10. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 10 hours.

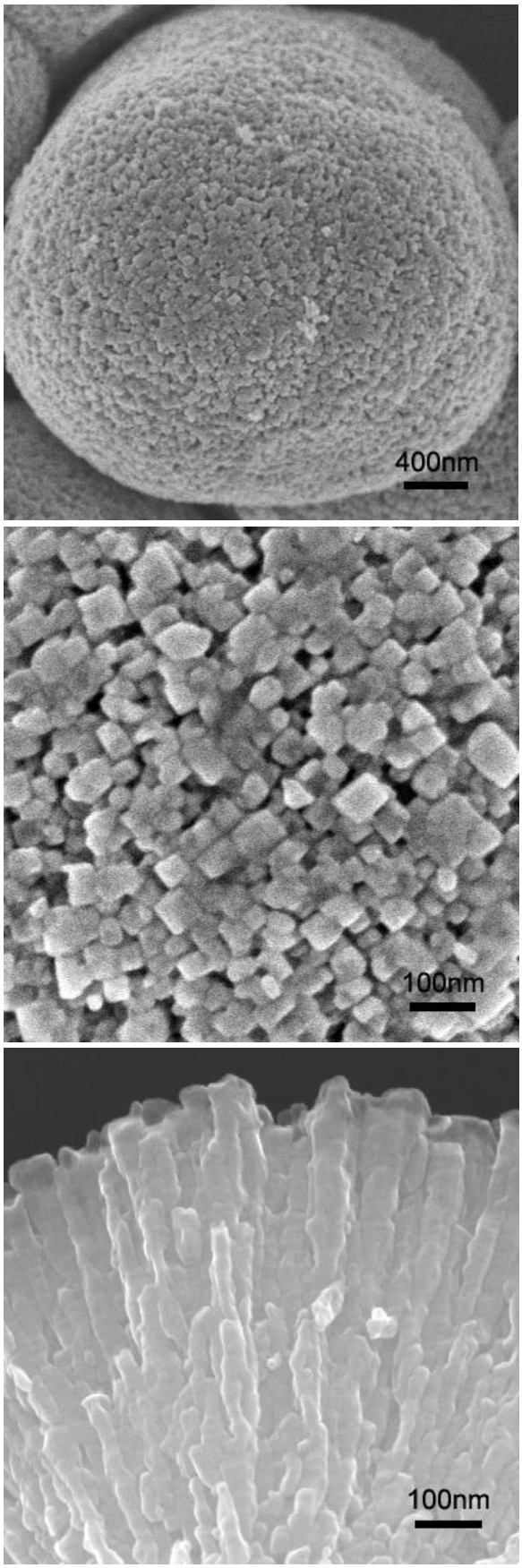

Figure S10. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 15 hours.

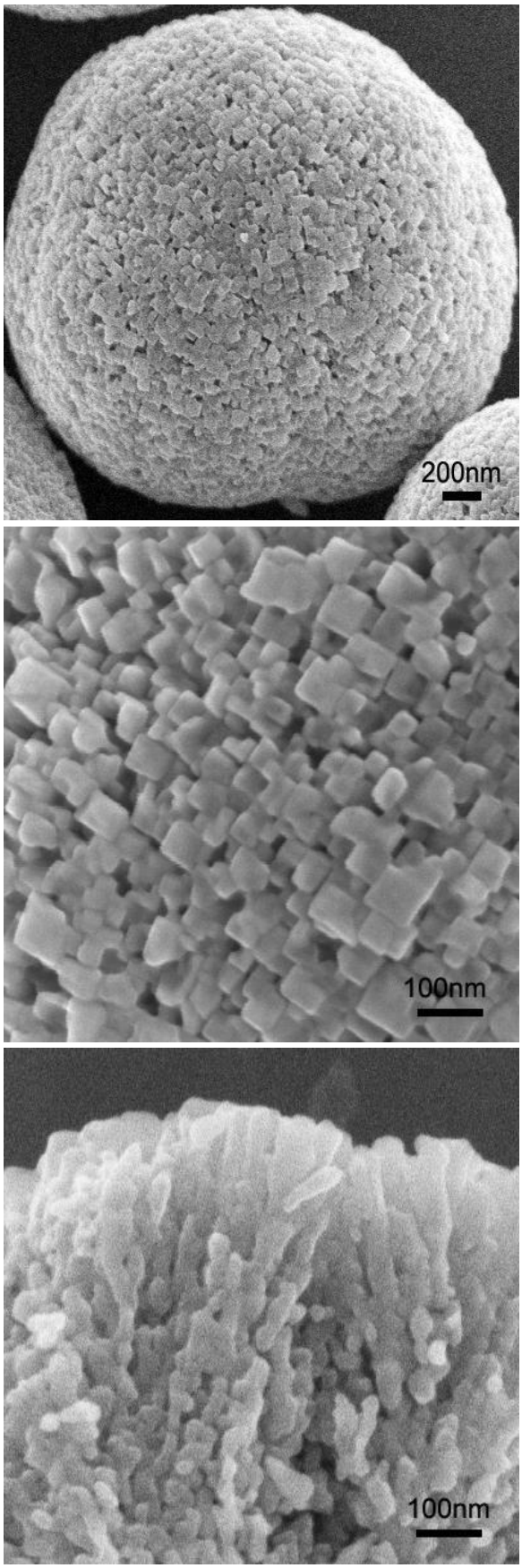

Figure S10. SEM images of TiO_2 microspheres prepared from a reaction from 0.5 mL TBT in 30 mL of 2 M H_2SO_4 solution heated at 180 ^oC for 24 hours.

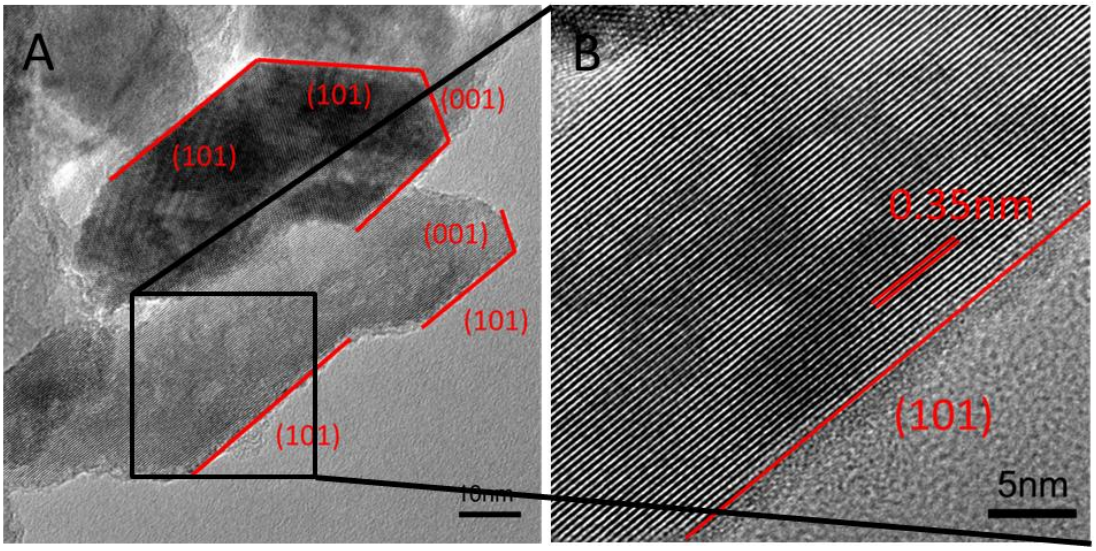

Figure S11. TEM and HRTEM images of small pieces of MATS.

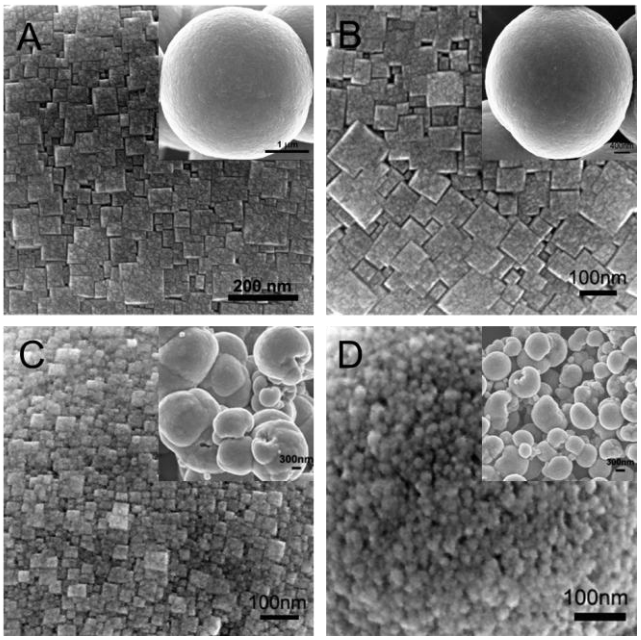

Figure S12. FE-SEM images of MATS obtained at different amount of TBT. A 0.25 ml, B 0.5 ml, C 1.0 ml, and D 1.5 ml TBT was added into 30 ml 2 mol/L H_2SO_4 at 180^{o}C for 5 hours.