

Supporting Information

MoSe₂ dispersed in stabilizing surfactant media: effect of surfactant type and concentration on electron transfer and catalytic properties

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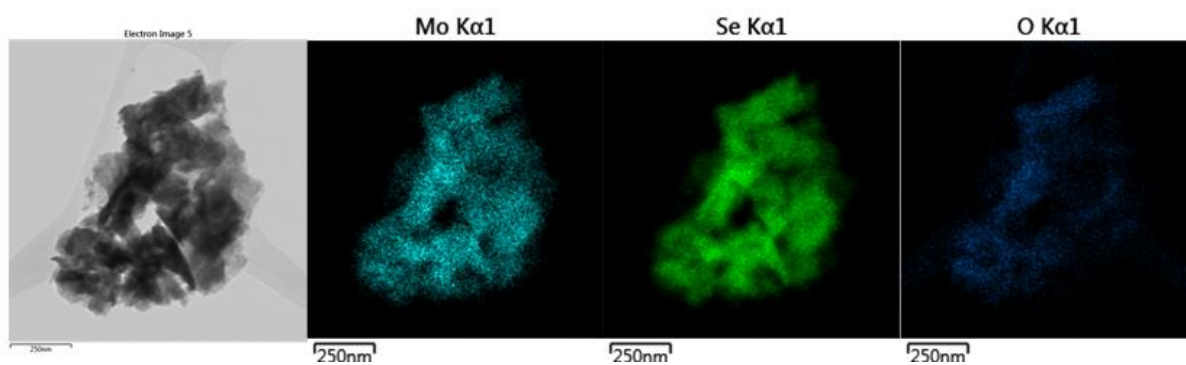


Figure S1. TEM image and corresponding EDS elemental distribution map of water-dispersed MoSe₂.

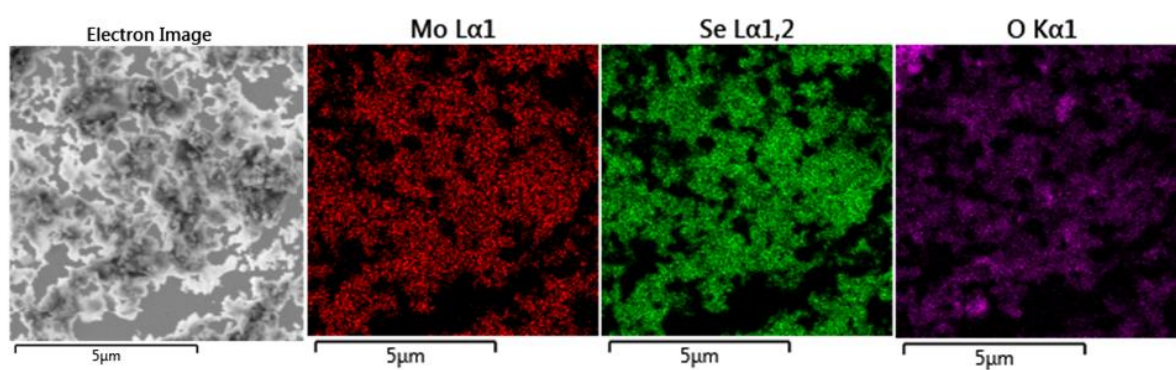


Figure S2. SEM image and corresponding elemental distribution mapping of water-dispersed MoSe_2 .

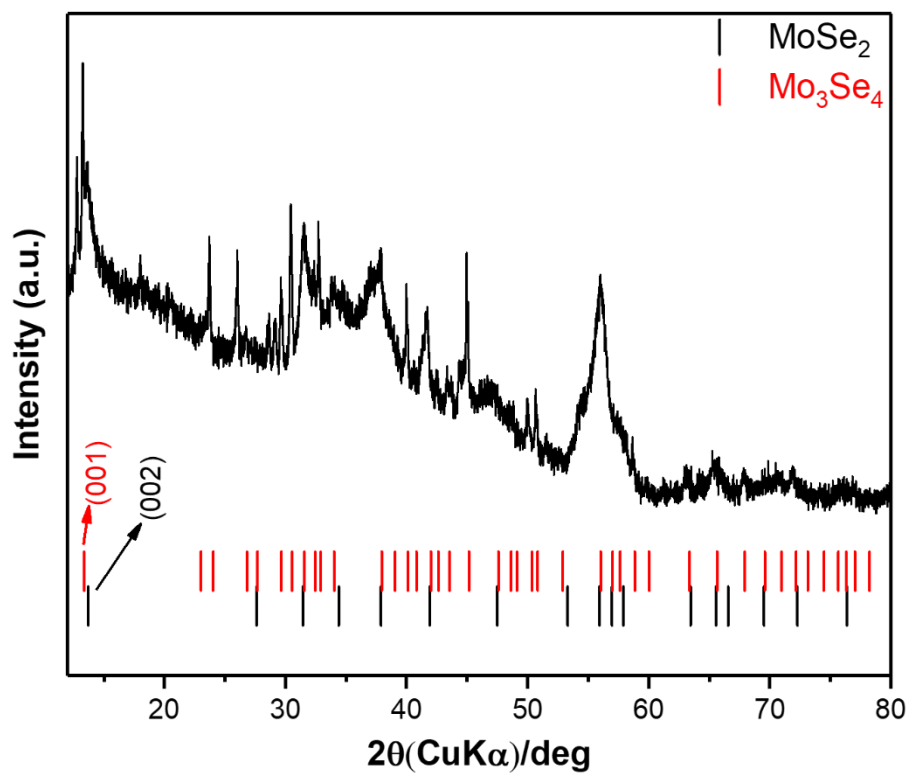


Figure S3. X-ray diffractogram of the exfoliated material showing two combined phases, MoSe₂ (PDF#29-0914) and Mo₃Se₄ (PDF#21-0575).

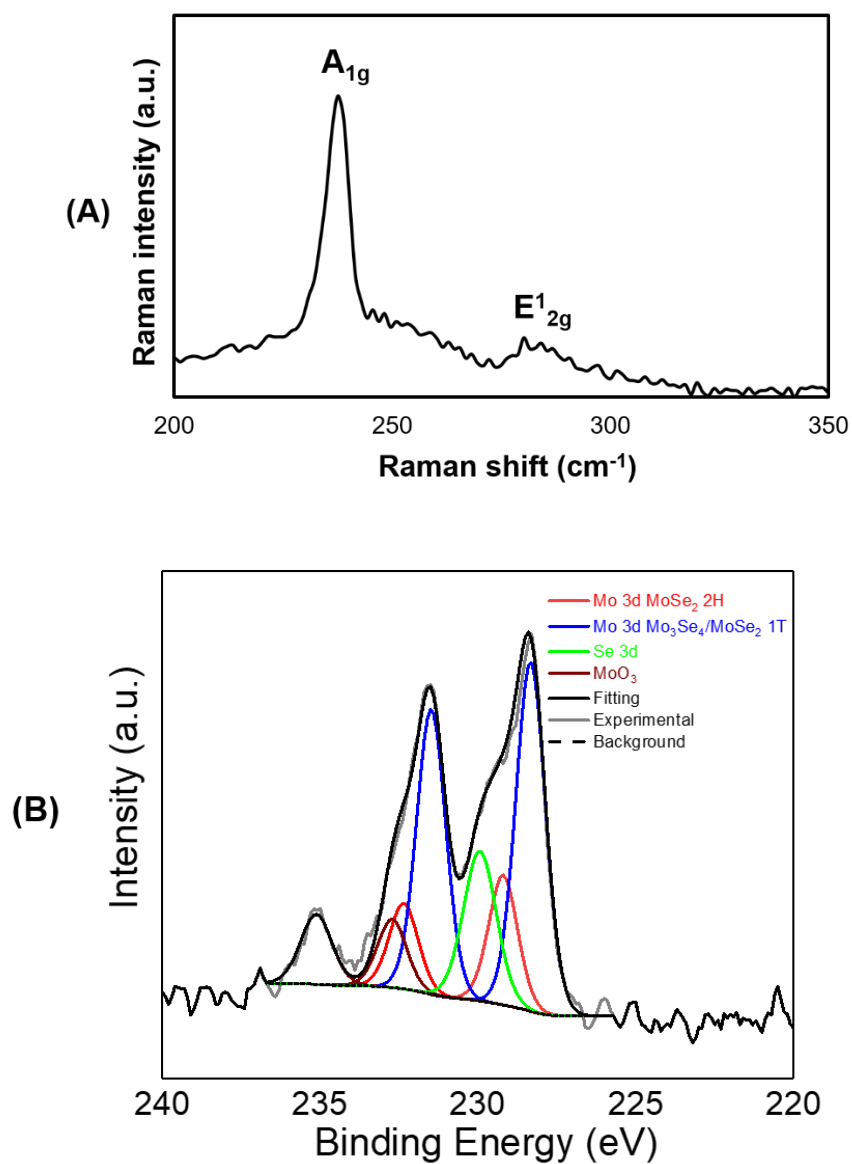


Figure S4. The Raman spectra of exfoliated MoSe₂ (A) and the high-resolution XPS spectrum of Mo 3d peak area (B).

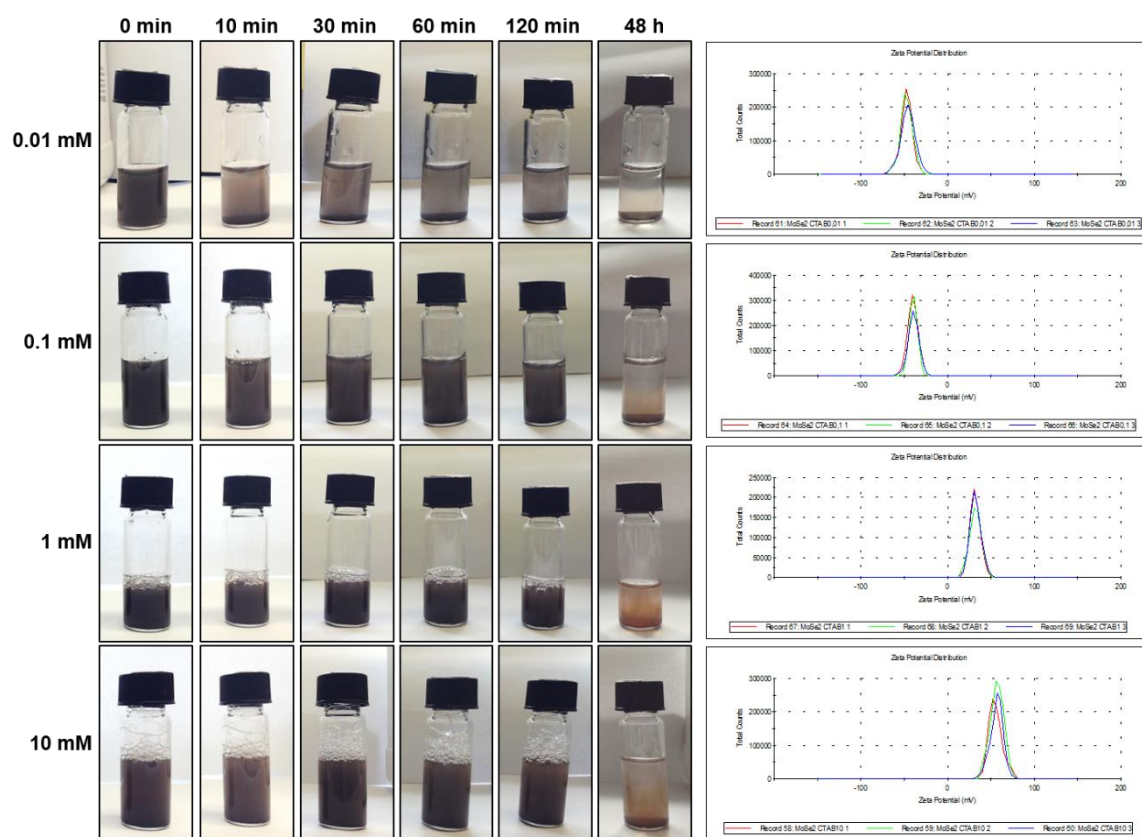


Figure S5. Photographs of the CTAB-dispersed MoSe_2 taken after different times post-sonication (left) and zeta potential plot displaying three measurements (right).

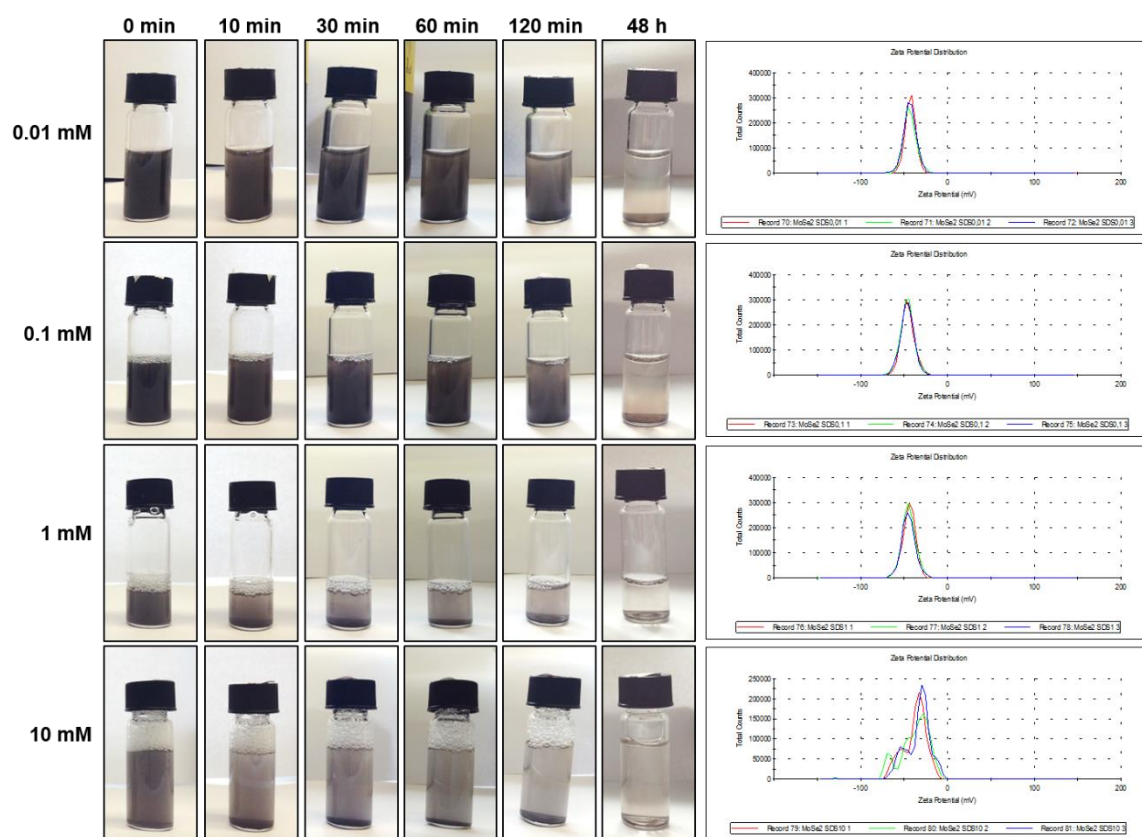


Figure S6. Photographs of the SDS-dispersed MoSe_2 taken after different times post-sonication (left) and zeta potential plot displaying three measurements (right).

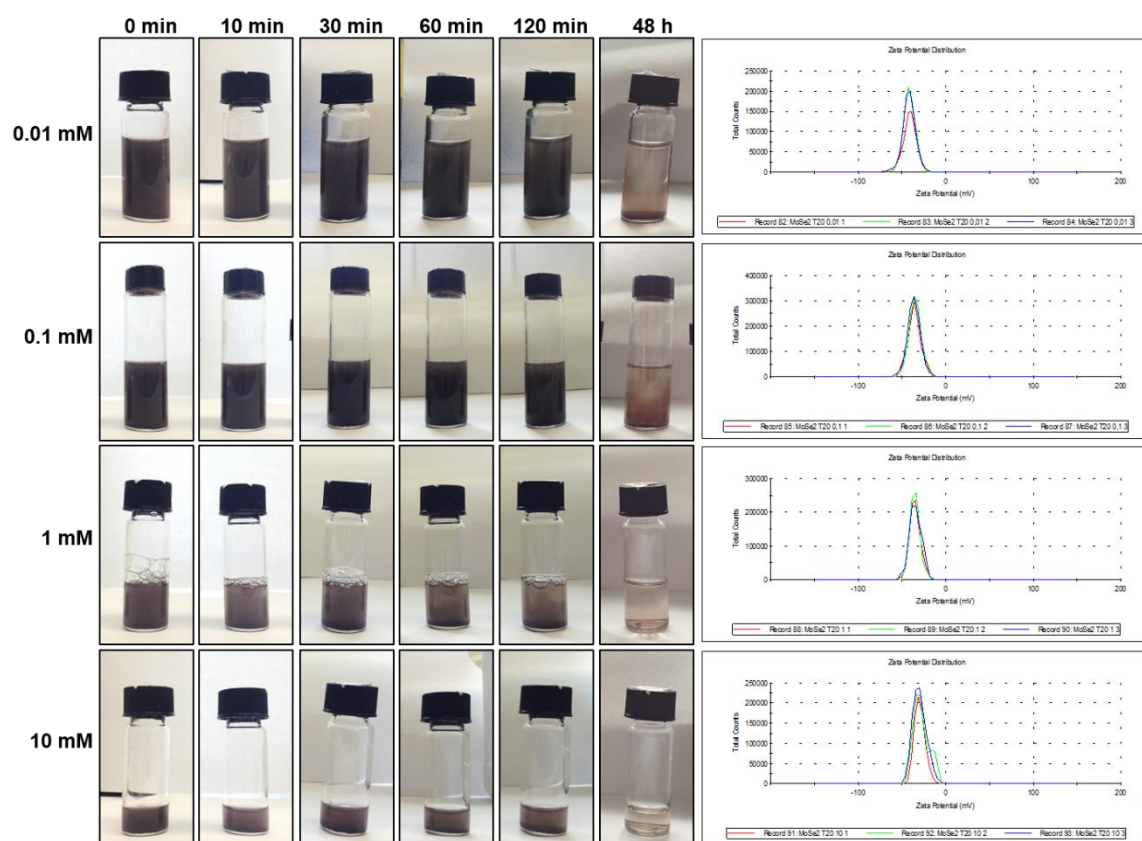


Figure S7. Photographs of the Tween-20-dispersed MoSe_2 taken after different times post-sonication (left) and zeta potential plot displaying three measurements (right).

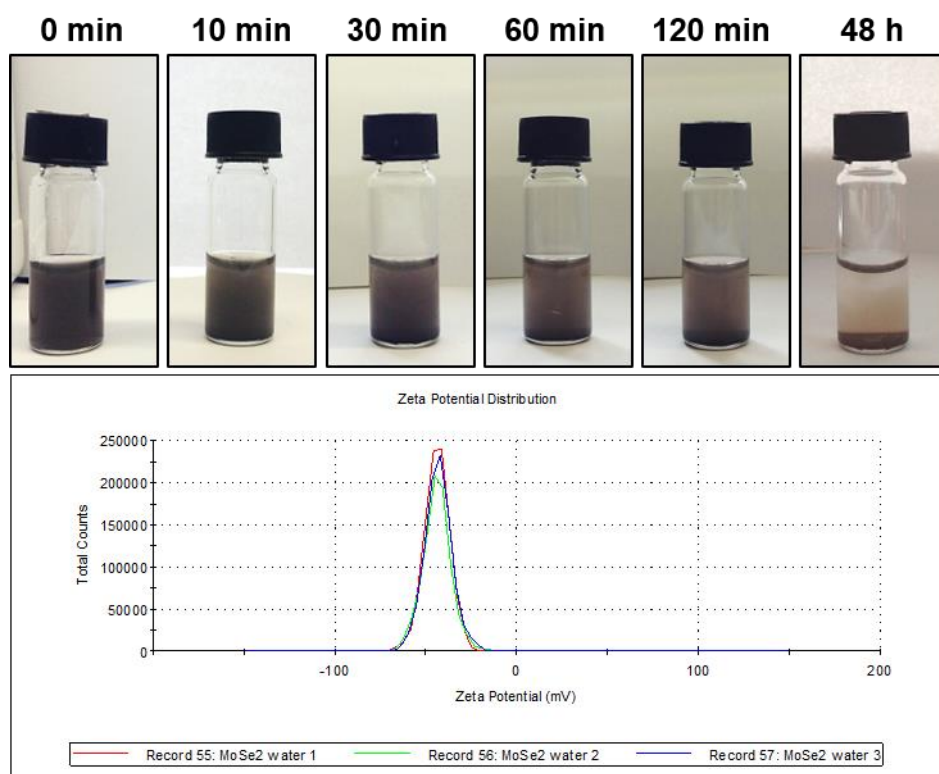


Figure S8. Photographs of the water-dispersed MoSe₂ taken after different times post-sonication (above) and zeta potential plot displaying three measurements (below).

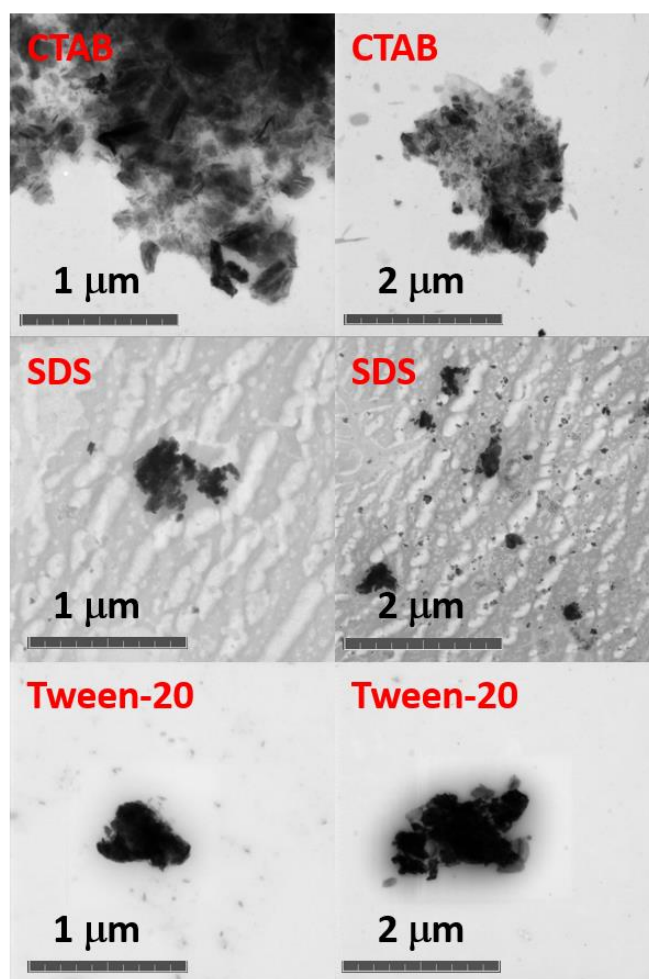


Figure S9. Typical STEM images of MoSe₂ dispersed in 1 mM solution of surfactant.

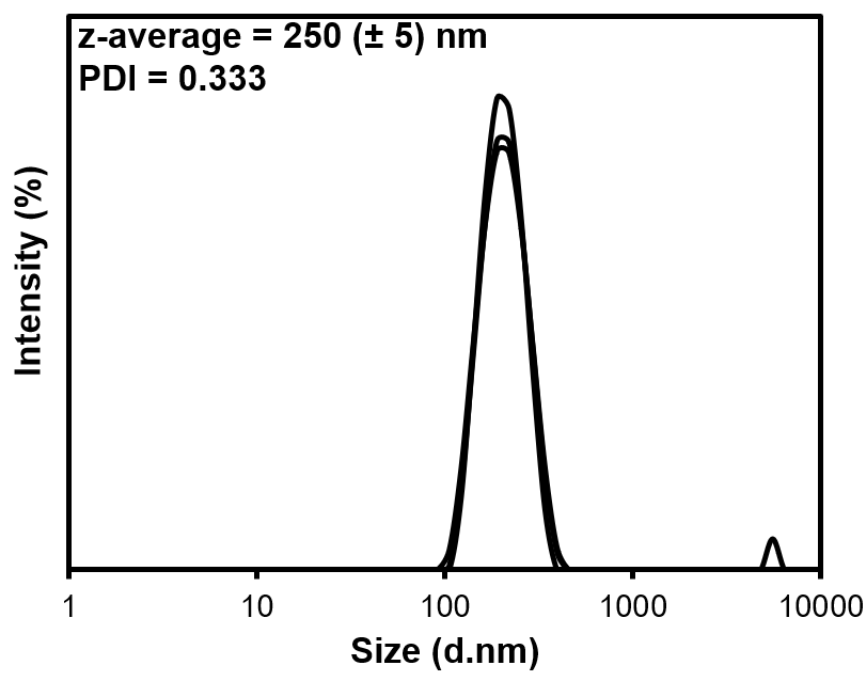


Figure S10. DLS measurements of the MoSe₂ dispersion in water.

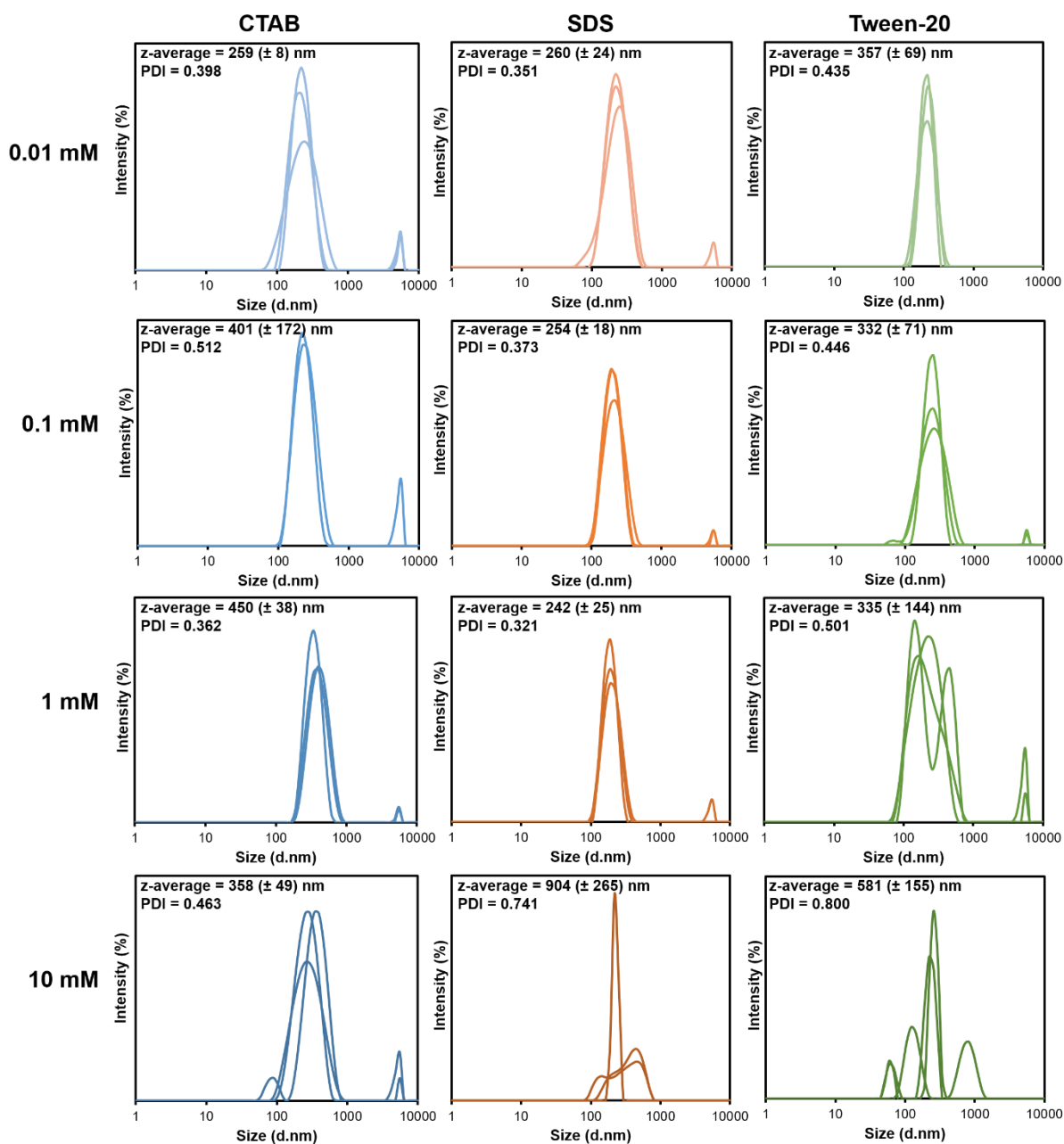


Figure S11. DLS measurements of the MoSe₂ dispersions in CTAB, SDS and Tween-20 at different surfactant concentration levels.