Supplementary Material (ESI) for The Analyst

Supporting Information

Nanometre-sized Molecular Oxygen Sensors Prepared from Polymer Stabilized Phospholipid Vesicles

Zhiliang Cheng and Craig A Aspinwall*

Department of Chemistry, University of Arizona, Tucson, Arizona 85721-0041

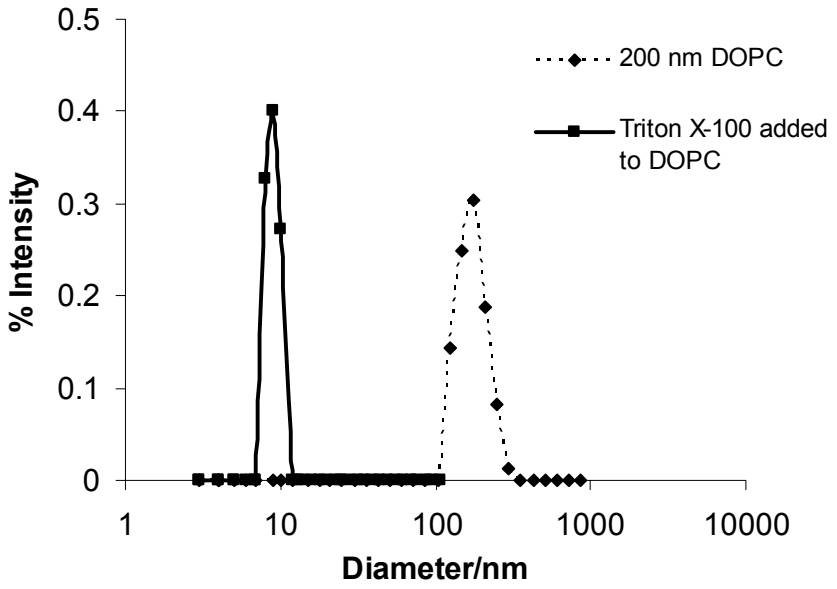
EXPERIMENTAL

Transmission Electron Microscopy (TEM). A 30 μL aliquot of ammonium molybdate solution (11% w/w, pH = 7.2) was added to 100 μL vesicle suspension (100 μM). A small piece of carbon-coated mica sheet was then immersed into the negative-stained sample. The carbon film was separated from the mica surface and floated on the surface of the sample solution. A freshly washed grid was placed underneath this floating specimen film and then raised with a pair of forceps to collect the sample and carbon film. The excess liquid was carefully removed. The vesicle suspensions were sandwiched between the copper grid and carbon film. The sample was observed with a JEM-100CX II (JEOL) electron microscope operated at 80 kV.

Figure S1: Intensity-weighted size distribution of DOPC vesicles in 50 mM Tris/acetate buffer solution, pH = 7.2: --♦-- 50 μM 200 nm filter membrane extruded DOPC vesicles; –■– Surfactant of Triton X-100 added to the above, mole ratio [Triton] : [DOPC] = 5 : 1. The measuring angle of DLS is 90 °.

Figure S2. Transmission electron micrographs of polymerized DOPC vesicles. Bar corresponds to 100 nm.

Figure S1



Supplementary Material (ESI) for The Analyst

Figure S2