

Design of artificial membrane transporters from gold nanoparticles with controllable hydrophobicity

Marcin P. Grzelczak, Alexander P. Hill, Domagoj Belic, Dan Bradley, Casper Kunstmann-Olsen, and Mathias Brust*

Affiliation: *University of Liverpool, Department of Chemistry, Crown Street, Liverpool L69 7ZD*

Supporting information

*Corresponding author: mbrust@liverpool.ac.uk

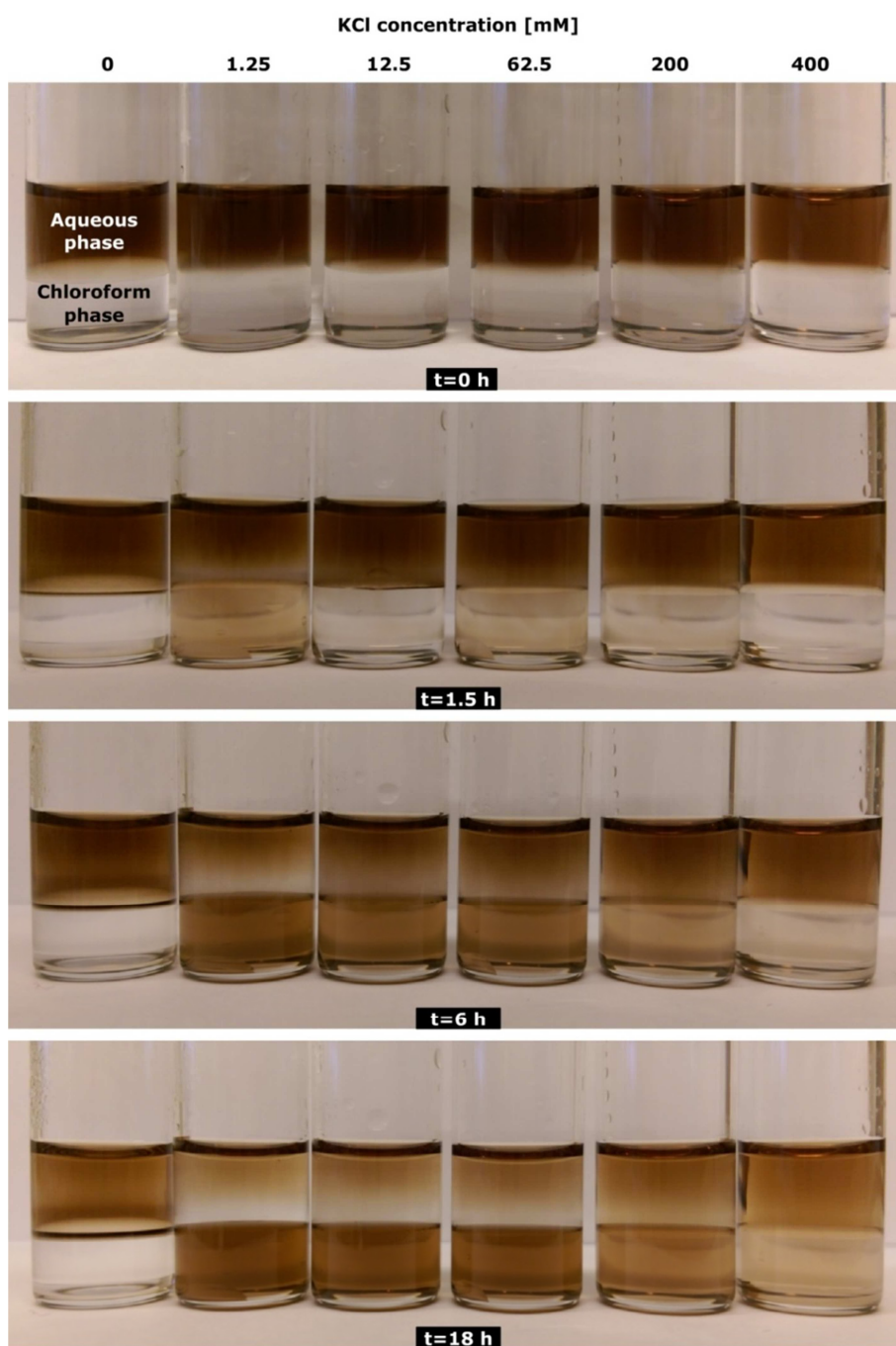


Figure S1. Photos of time evolution of phase transfer experiments of 2 nm Au/18-C-6-CH₂-SH NPs.

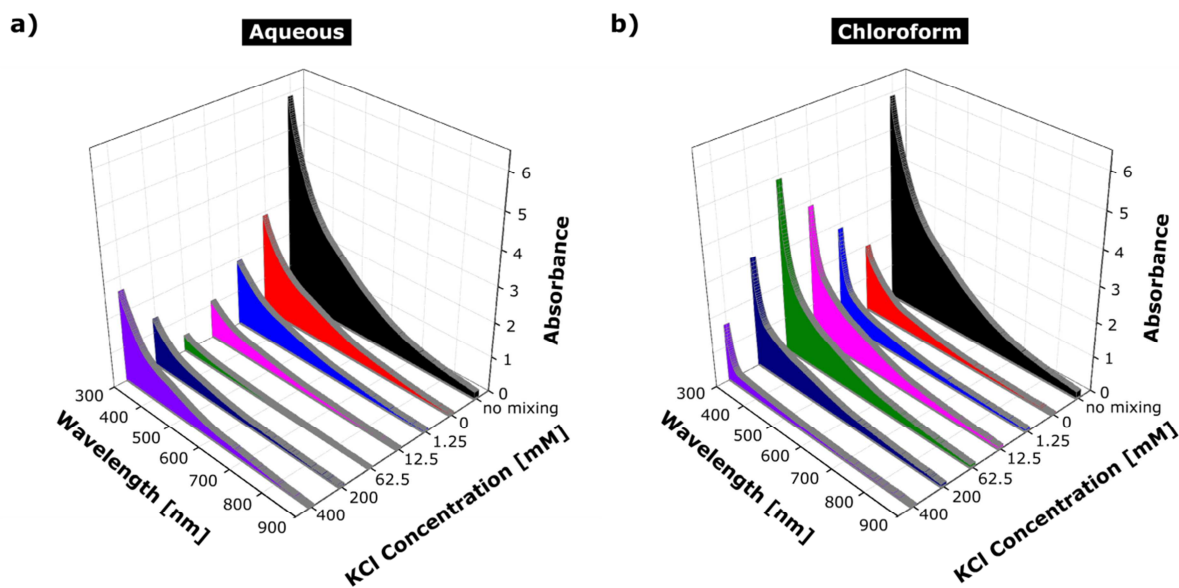


Figure S2. Three dimensional UV-Vis spectra of 2 nm Au/18-C-6-CH₂-SH.

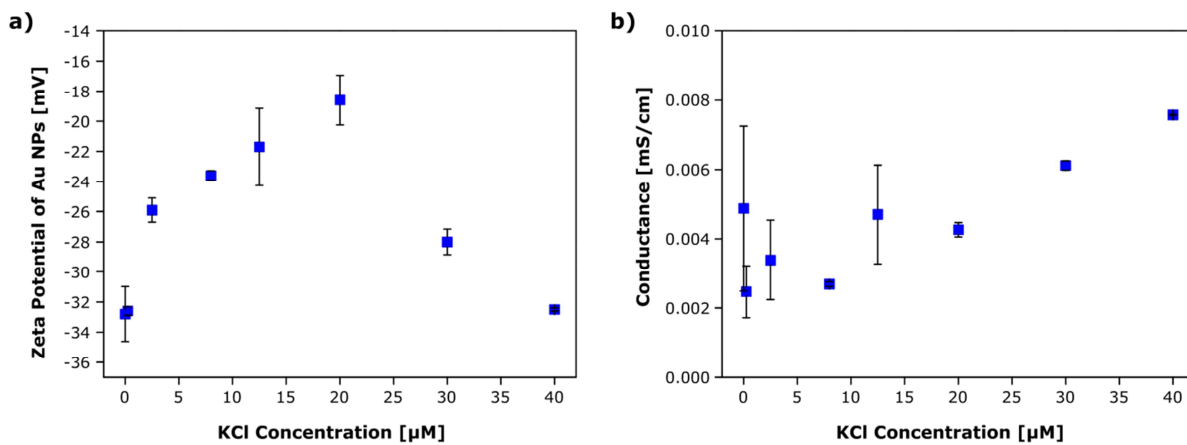


Figure S3. (a) Zeta potential as a function of KCl salt concentrations. (b) Conductivity of the solutions as a function of KCl concentration. Note: over the concentration range the zeta potential was measured, no major changes in conductivity of the solution were manifested.

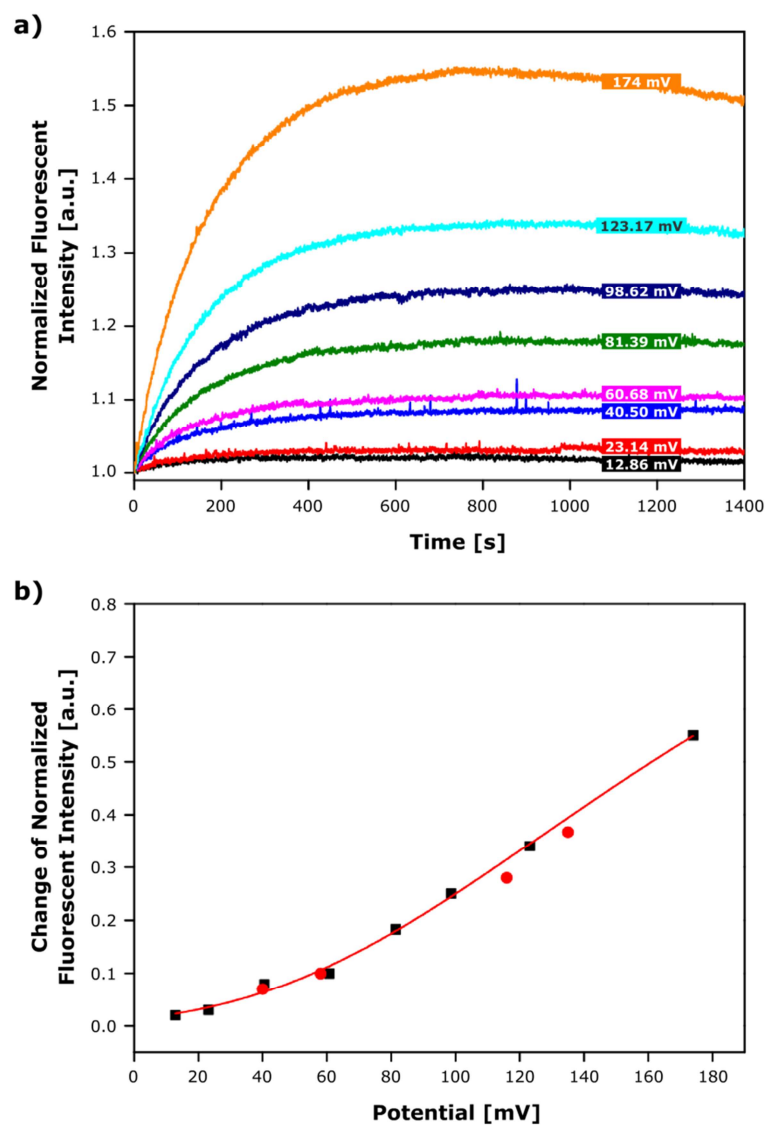


Figure S4. Calibration of membrane potential measurement by fluorescent spectroscopy using Safranin O as probe. Potentials were calculated by using the Nernst Donnan equation. Red and black data points are coming from two different vesicle samples prepared and measured in the very same conditions.

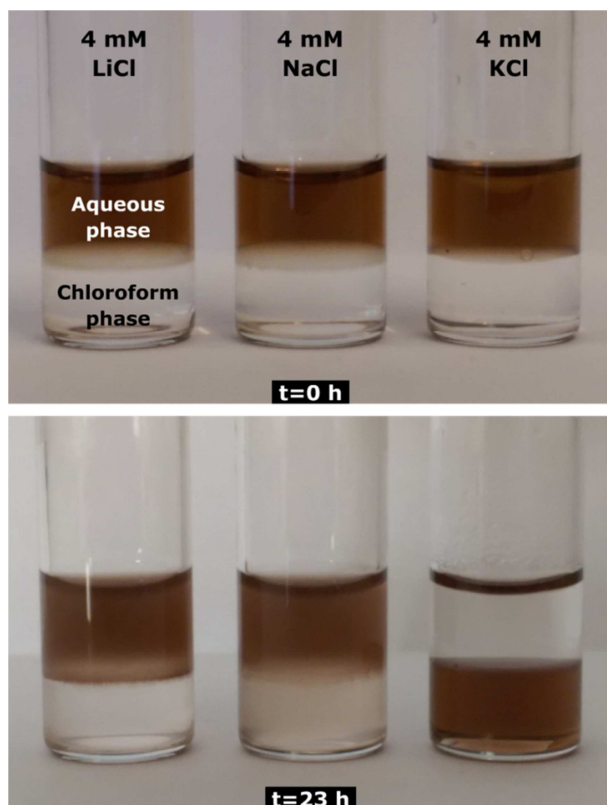


Figure S5. Photos of time evolution of phase transfer experiments of 2 nm Au/18-C-6-CH₂-SH NPs using different cations. Note: only potassium work.