**Supporting information**

# Difficulties and flaws in performing accurate determinations of zeta potentials of metal nanoparticles in complex solutions – Four case studies

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**X-ray photoelectron spectroscopy**



Figure S1. XPS spectra of Cu 2p for Cu NPs of the different investigated exposure and preparation: unexposed, exposed in ultrapure water for 15 min, sonicated in ultrapure water for 15 min.