Here, we present results concerning molecules and their charge-state determination and control on multilayer NaCl films. We demonstrate lateral single electron transfer between molecules (1) and gain insight into charging processes via single-electron tunneling spectroscopy, where we quantify the reorganization energy of a molecule on a NaCl substrate (7). Finally, we show results where the charge state of a complex on top of an insulator plays a key role in its on-surface chemical reaction.

References