Supplementary Information

Surface charge effects in protein adsorption on nanodiamonds

Morteza Aramesh^{1,3,*}, Olga Shimoni², Kostya (Ken) Ostrikov^{3,4}, Steven Prawer¹ and Jiri Cervenka¹

- 1. School of Physics, The University of Melbourne, Melbourne, Victoria 3010, Australia
- School of Physics and Advanced Materials, University of Technology, Sydney, New South
 Wales 2007, Australia
 - Plasma Nanoscience Laboratories, Commonwealth Scientific and Industrial Research
 Organisation (CSIRO), PO Box 218, Lindfield, NSW 2070, Australia
 - School of Chemistry, Physics, and Mechanical Engineering, Queensland University of Technology, Brisbane QLD 4000, Australia
 - * Corresponding authors: mrtz.aramesh@gmail.com

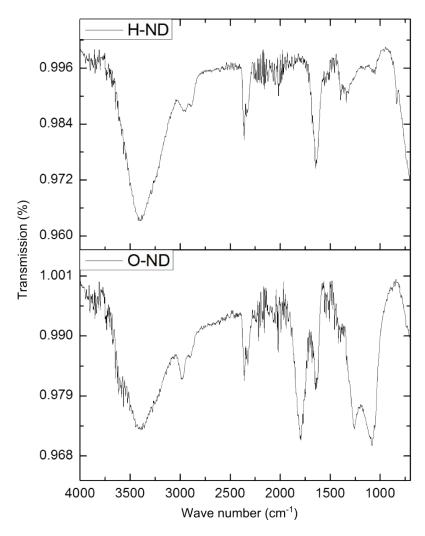


Figure S1. FTIR spectrum of oxygen- (O-ND) and hydrogen-terminated (H-ND) nanodiamonds.

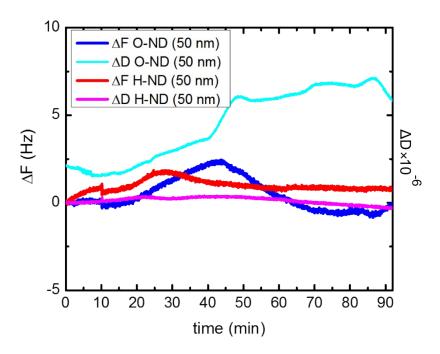


Figure S2. QCM-D profiles of 50 nm H-ND and O-ND adsorption on silica surfaces.

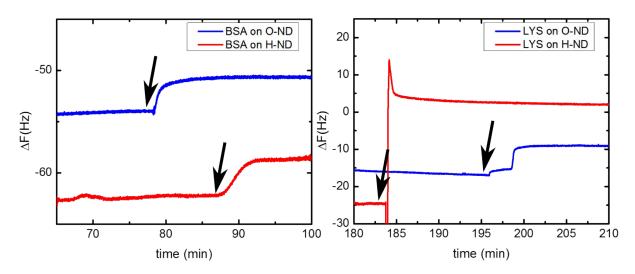


Figure S3. QCM-D profiles of protein desorption from H-ND and O-ND coated-silica surfaces after rinsing with water (rinsing experiment). The arrows show approximately the time that the rinsing has started.

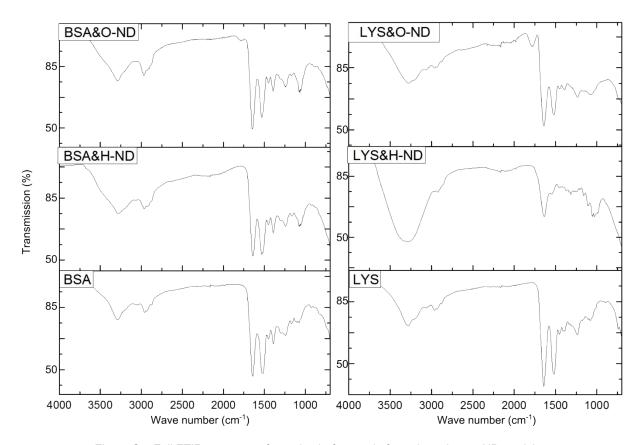


Figure S4. Full FTIR spectrum of proteins before and after adsorption on ND particles.