Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supplementary information

Biofouling affects the redox kinetics of outer and inner sphere probes on carbon surfaces drastically differently - implications to biosensing

Emilia Peltola[1], Anja Aarva[1], Sami Sainio[2, 3], Joonas J. Heikkinen[4], Niklas Wester[4], Ville Jokinen[4], Jari Koskinen[4], Tomi Laurila[1]*

[1] Department of Electrical Engineering and Automation, School of Electrical Engineering, Aalto University, Espoo, Finland

[2] Stanford Synchrotron Radiation Lightsource, SLAC National Accelerator Laboratory, Menlo Park, CA 94025, USA

[3] Microelectronics Research Unit, Faculty of Information Technology and Electrical Engineering, University of Oulu, Oulu, Finland

[4] Department of Chemistry and Materials Science, School of Chemical Technology, Aalto University, Espoo, Finland

* Corresponding Author: emilia.peltola@aalto.fi

Table S1: $E_{1/2}$ (mV) values for DA measurements before and after fouling in BSA and FBS. Shown error is a standard deviation of at least two samples.

	ta-C	**nanograss-ta-C**	**PyC**	**nanograss-PyC**
DA	206 ± 5	178 ± 2	172 ± 0	171 ± 3
BSA	275 ± 16	185 ± 3	190 ± 0	182 ± 7
BSA pristine*	316 ± 25	181 ± 0	220 ± 4	150 ± 16
FBS	281 ± 6	187 ± 4	176 ± 6	186 ± 46
FBS pristine*	305 ± 23	161 ± 4	234 ± 8	186 ± 4

** 'Pristine' refers to measurements conducted on pristine samples (i.e. no previous DA measurements) after fouling.*