Supplementary Information

Impedimetric measurement of DNA-DNA hybridisation using microelectrodes with different radii for detection of methicillin resistant *Staphylococcus aureus* (MRSA).

Poh Quan Li\(^ {1}\) and Damion K Corrigan\(^ {2}\)

\(^ {1}\) EastCHEM, School of Chemistry, The University of Edinburgh, Joseph Black Building, The King’s Buildings, West Mains Road, Edinburgh, EH9 3FJ, Scotland (UK)

\(^ {2}\) Department of Biomedical Engineering, University of Strathclyde, Glasgow, G4 0NS.

Corresponding author – Dr Damion Corrigan – damion.corrigan@strath.ac.uk

Figure S1. Cyclic voltammetry in 5 mM potassium ferrocyanide + 10 mM KCl following cleaning (black) probe modification (red) and 100 nM DNA target addition.

For \( r = (A) \) 50, (B) 25 (C) 15 & (D) 5 µm
Figure S2. EIS performed in 5 mM potassium ferrocyanide + 10 mM KCl before and after hybridisation with a non-complementary oligonucleotide sequence using a square microelectrode with an edge length of 30 µm.