Abbreviations

CV  Cyclic Voltammetry
EIS  Electrochemical Impedance Spectroscopy
CA  Chronoamperometry
CE  Chronopotentiometry
SWV  Square Wave Voltammetry
SAMs  Self-Assembled Monolayers
STM  Scanning Tunneling Microscopy
AFM  Atomic Force Microscopy
Au  Gold
Au NPs  Gold Nanoparticles
Pt  Platinum
Ag  Silver
Al  Aluminium
SCE  Saturated Calomel Electrode
mV  Milli Volts
mA  Milli Amps
μA  Micro Amps
Q  Constant Phase Element
R_a  Uncompensated Solution Resistance
R_{ct}  Charge Transfer Resistance
C_{dl}  Double Layer Capacitance
W  Warburg Impedance
4-ATP  4-Aminothiophenol
4-MBA  4-Mercaptobenzoic Acid
DT  Decanethiol
MUA  11-Mercaptoundecanoic Acid
Cyt c  Cytochrome c
Myb  Myoglobin
HRP  Horseradish Peroxidase
SWNTs  Single Walled Carbon Nanotubes
MPCs  Monolayer Protected Clusters
Uv-vis  Ultraviolet-Visible
FTIR  Fourier Transform Infrared
SPR  Surface Plasmon Resonance
XRD  X-ray Diffraction
FWHM  Full Width Half Maximum
SEM  Scanning Electron Microscopy
HRTEM  High Resolution Transmission Electron Microscopy
EDAX  Energy Dispersive X-ray
[Fe(CN)]^{-4/-3-}  Ferrocyanide/Ferricyanide
[Ru (NH3)6]^{2+/3+}  HexamminerutheniumII/III
NaF  Sodium Fluoride
KCl  Potassium Chloride
Na2HPO4  Disodium Hydrogen Phosphate
NaH2PO4  Sodium Dihydrogen Phosphate
NaBH4  Sodium Borohydride
H2O2  Hydrogen Peroxide
DA  Dopamine
AA  Ascorbic Acid
HER  Hydrogen Evolution Reaction
E_{1/2}  Half Peak Potential
E_a  Activation Energy
ν  Scan Rate
Γ  Surface Concentration
Au/Au  Gold on Gold
Au/Pt  Gold on Platinum
Au/C  Gold on Graphite
kJ/mol  Kilo Joules per Mole