

Figure S1 The experimental setup. B-Pt was an abiotic setup consisting of a titanium electrode connected to the battery (1.5 V AA type battery, Varta, Germany) in constant voltage. S-Pt was a biotic setup composed of a titanium electrode with a *S. oneidensis* MR-1 biofilm that was not connected to a battery. SB-Pt was a titanium electrode with a *S. oneidensis* MR-1 biofilm that was connected to a battery.

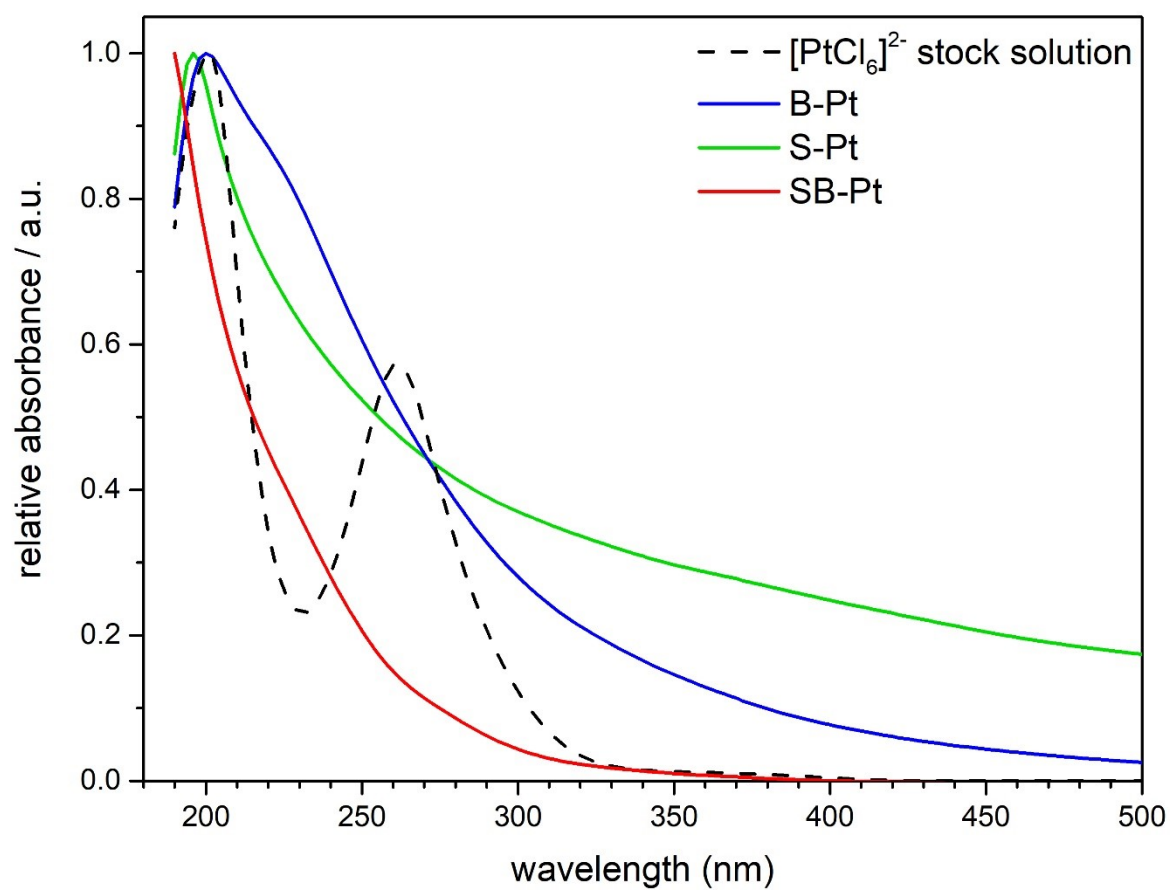


Figure S2 UV-Vis spectra collected from the solution at the end of each experiment and compared to the initial stock solution (1 mM H_2PtCl_6).

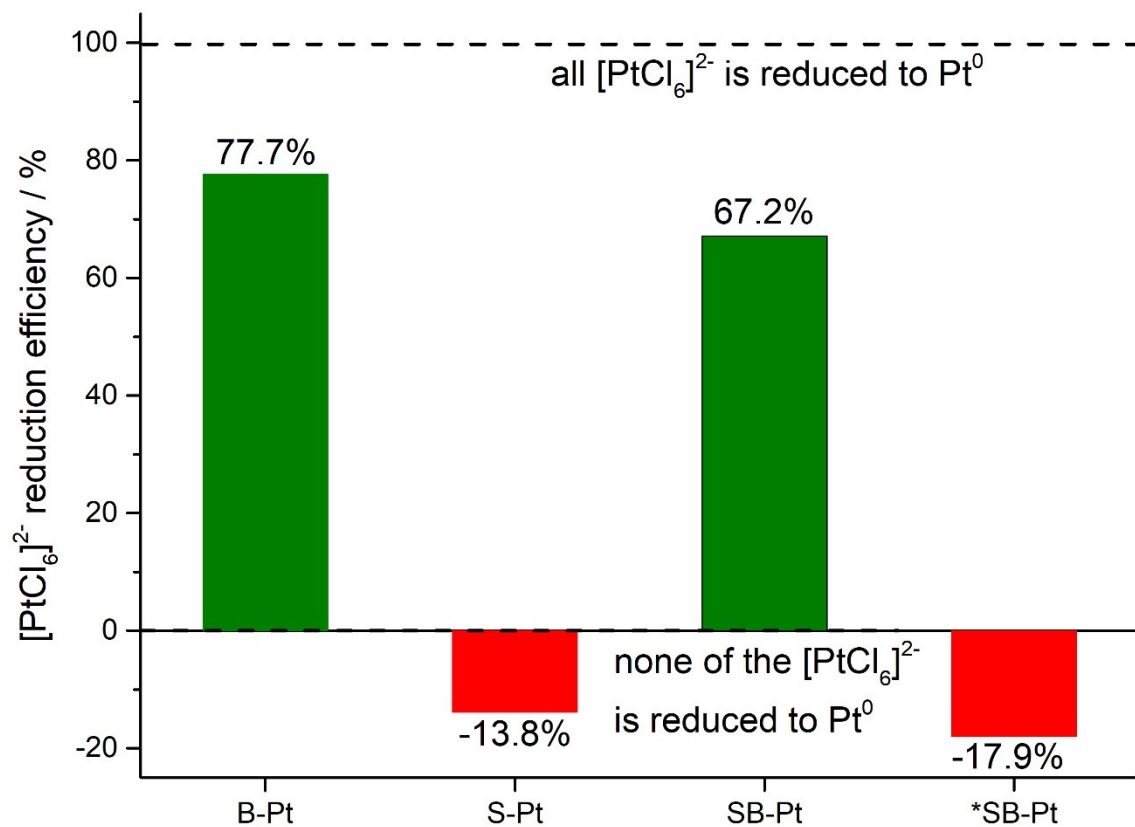


Figure S3 Reduction efficiency of $[\text{PtCl}_6]^{2-}$. Data was calculated by dividing the concentration of the final solution (determined from ICP-OES) to the initial concentration (1 mM = 195 mg/L). *SB-Pt is for the sample with the heat-degraded biofilm (blank sample).

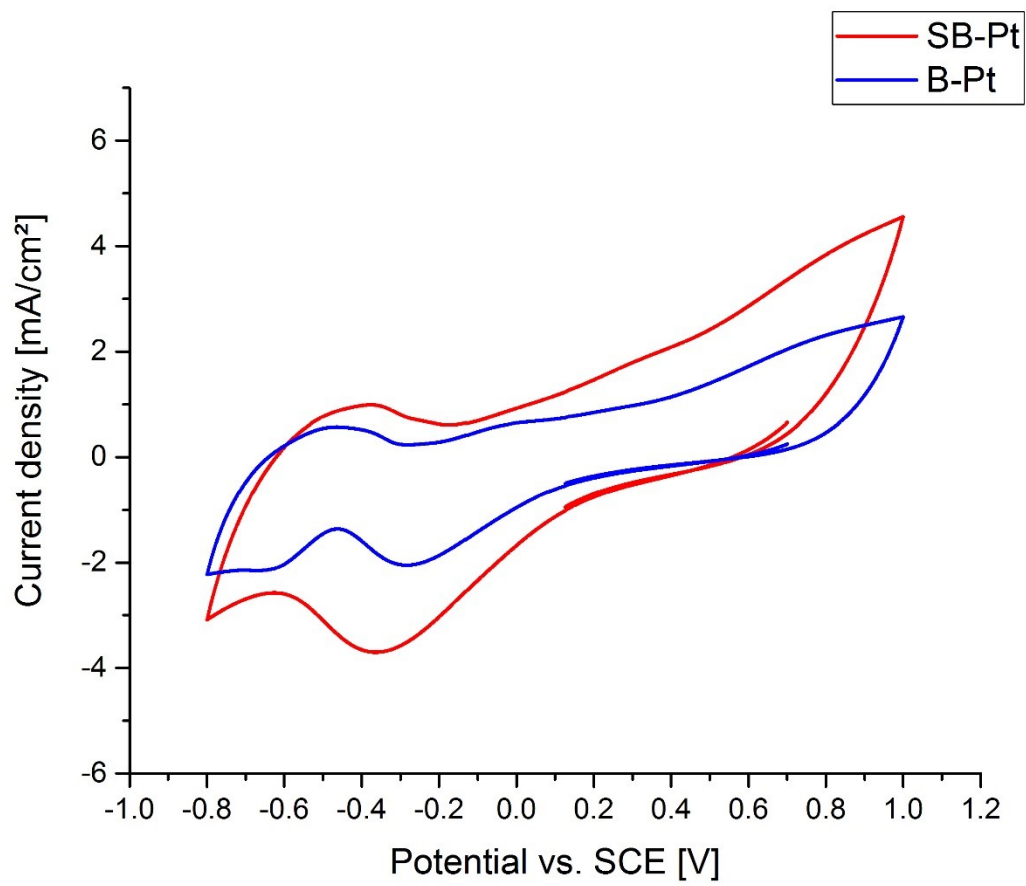


Figure 4 Cyclic voltammogram recorded at room temperature in 0.5 M NaHCO₃ (pH = 6.8) at 0.02 V/s from -0.8 to 1 V vs. SCE.