Supporting information

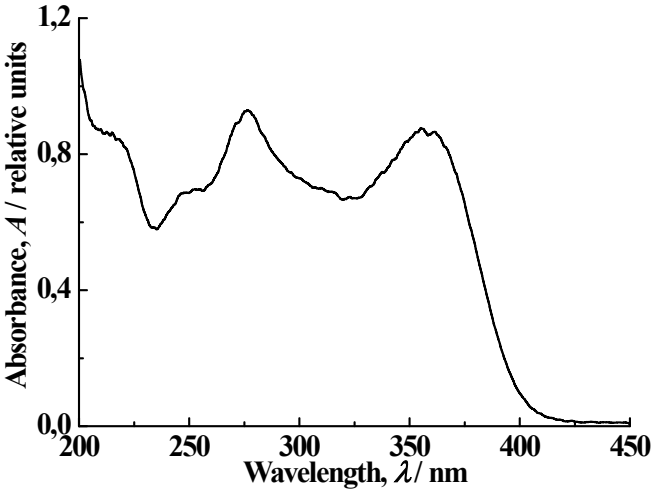



Fig. S1 UV-visible spectrum of tetracycline in aqueous solution ($c_{in}$ = 20 mg·L$^{-1}$, pH = 1.7).

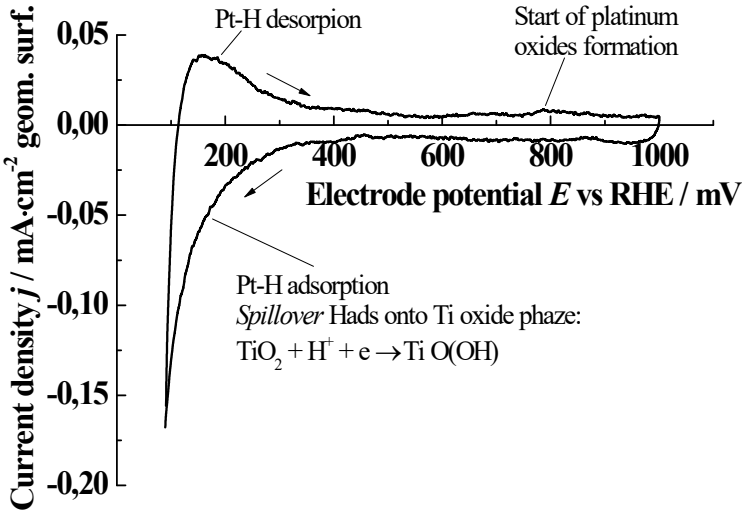
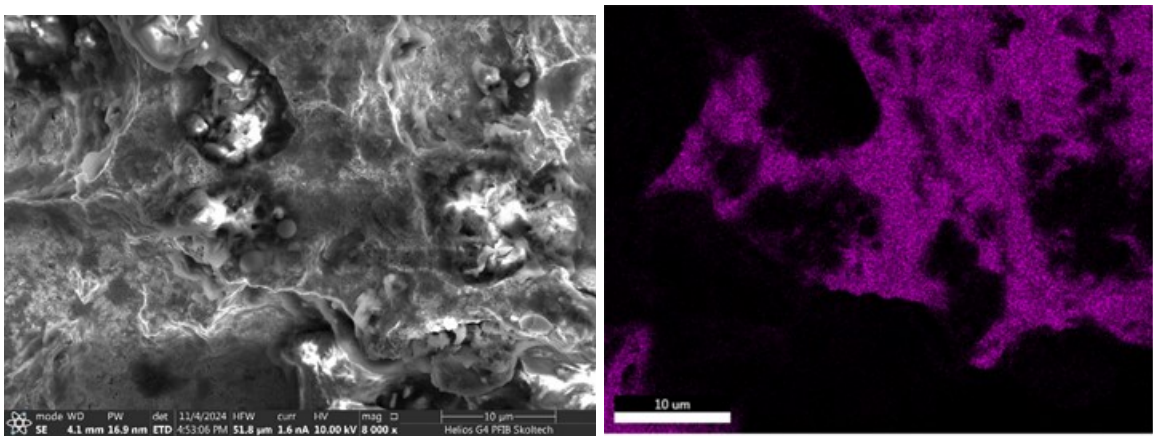



Fig. S2 Cyclic voltammogram of Pt(Ti) electrode in 0.5 M $H_2SO_4$. $v$ = 5 mV s$^{-1}$.



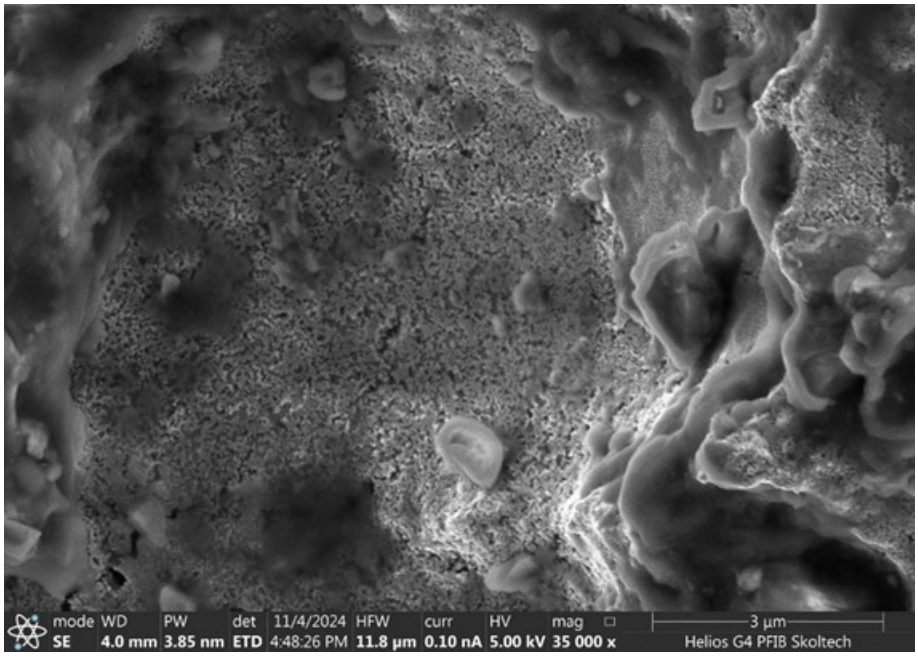




Fig. S3 Morphology of Pt/Ti electrodes used for tetracycline oxidation. Platinum distribution map is given in the left right image (in purple).

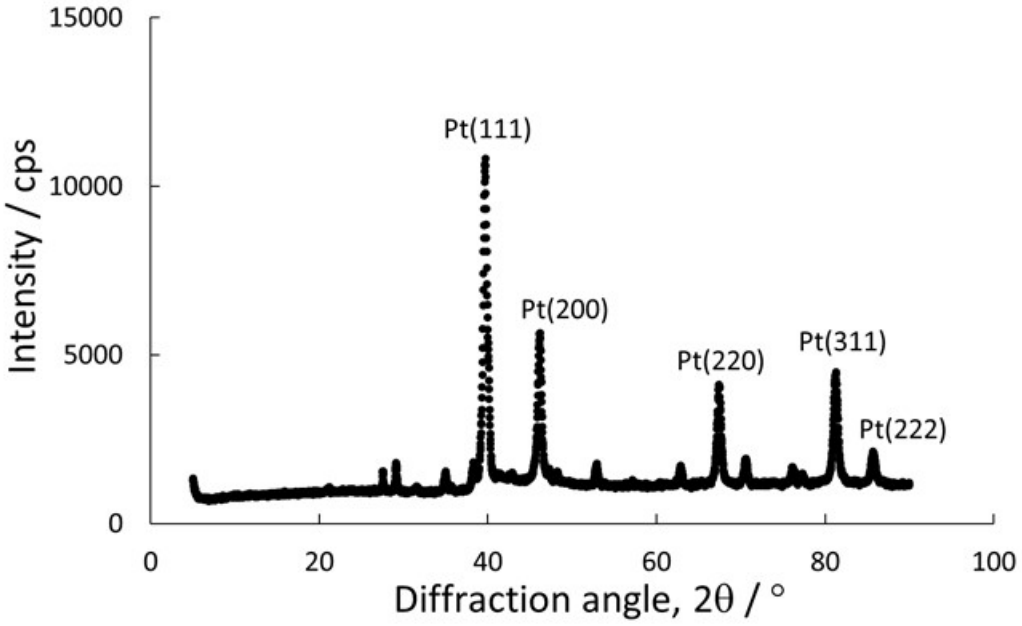



Fig. S4 X-ray diffraction pattern of Pt/Ti electrode.

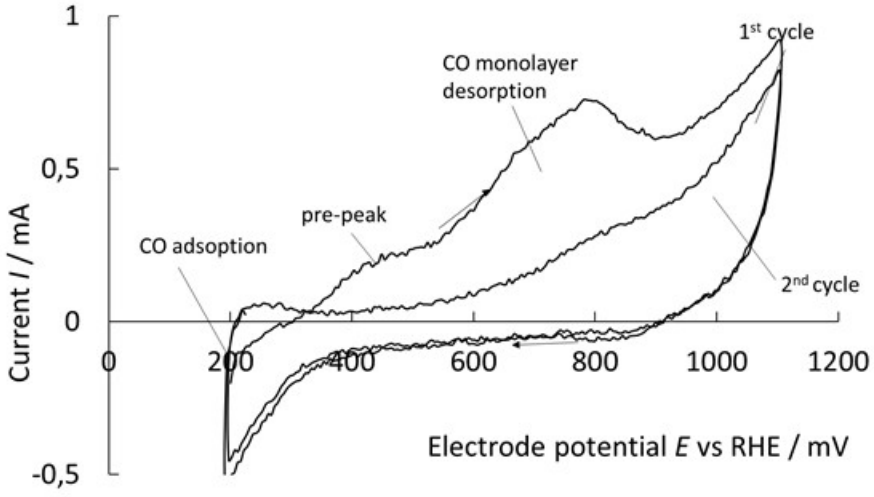


Fig. S5 Desorption of carbon monoxide monolayer from the surface of Pt/Ti electrode. The adsorbate was accumulated at $E$ = 200 mV for 10 min. The solution was then purged with argon to remove dissolved carbon monoxide. $v$ = 5 mV $s^{-1}$.

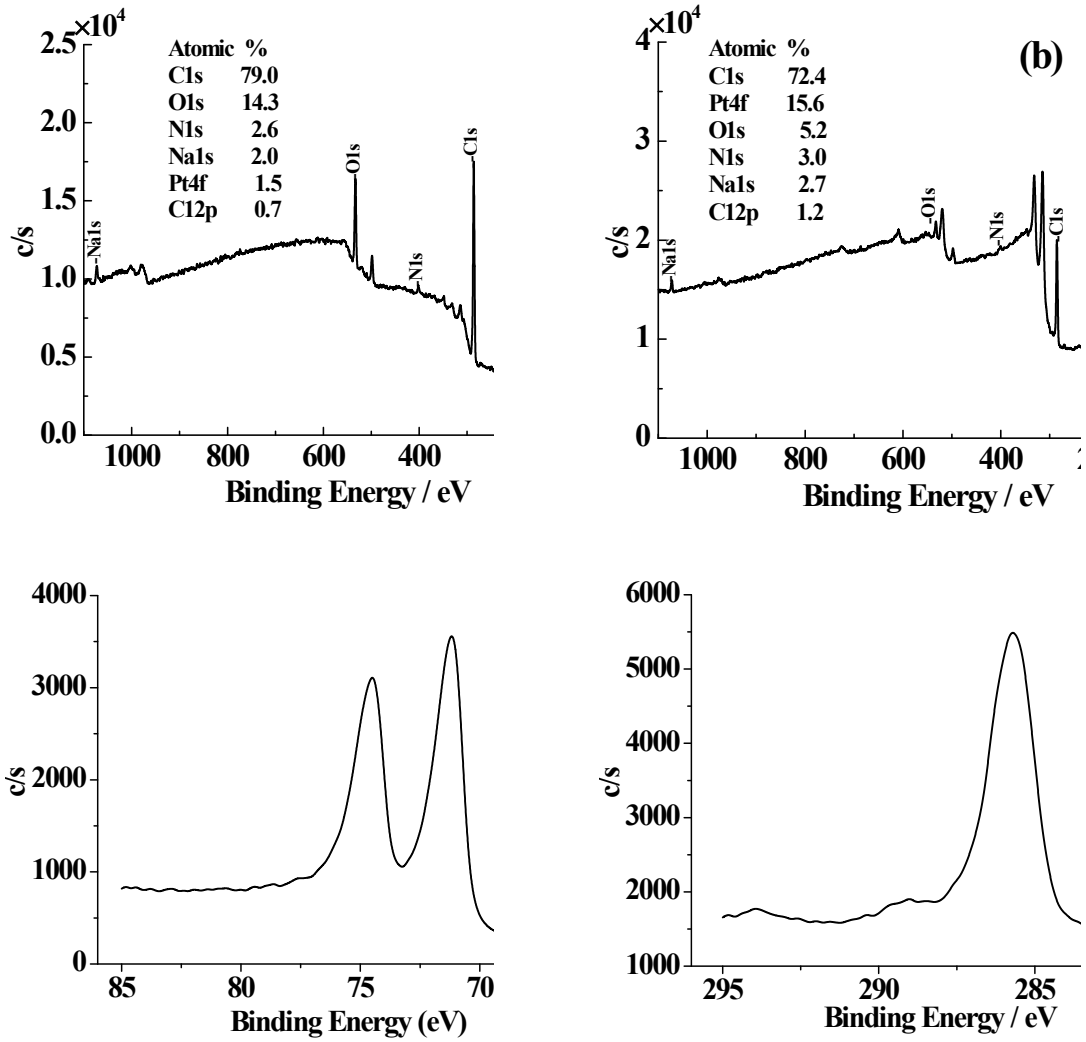



Fig. S6 XPS spectra of Pt/Ti electrode after the oxidation of tetracycline. Spectra at the electrode surface (a) and at the depth of 5 nm (b). Pt 4*f* (c) and C 1*s* (d) high-resolution spectra at the electrode surface.

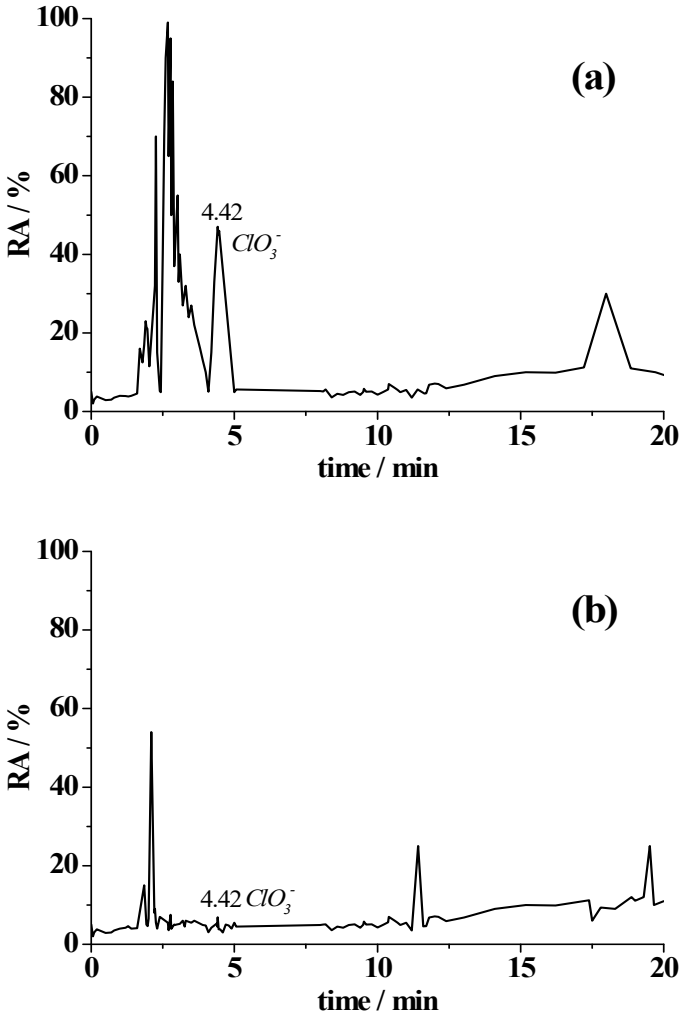



Fig. S7 Chromatograms of solution after 30 min of electrochemical treatment in 0.64 wt.% NaCl (a) and 0.64 wt.% HCl (b) solutions in negative mode.