(BI)SULFATE ADSORPTION ON QUASI PERFECT Pt(111) FACETS FROM ACIDIC AQUEOUS ELECTROLYTES AS MONITORED BY OPTICAL TECHNIQUES

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SUPPLEMENTARY MATERIAL

Fig. S.1. Plots of $\Delta R/R$ ($E_{\text{ref}} = 0.35$ V, Panel A) and $I_{\text{pp}}(2\omega)$ vs potential (Panel B) for a Pt(111) microfacet in 0.1 M $\text{HClO}_4 + x$ M H_2SO_4 where $x = 0$ (black), 3.75×10^{-4} (green), 1×10^{-3} (magenta), 3.75×10^{-3} (blue), 1×10^{-2} M (red). Scan rate, $v = 2$ V/s. The plots are raw data and they represent ca 700 acquisitions each.

Fig. S.2. Plots of experimental $-\Delta R/R$ ($E_{\text{ref}}=0.35$ V, scattered, panel A), calculated $\Delta R/R$ (solid line, panel A), experimental $-I_{\text{pp}}(2\omega)$ (scattered, panel B) and calculated $-I_{\text{pp}}(2\omega)$ vs potential (solid line, panel B) based on the (bi)sulfate coverage and the model proposed (see text for details) for a Pt(111) microfacet in $0.1 \text{ M HClO}_4 + x \text{ M H}_2\text{SO}_4$, where $x = 0$ (black), 3.75×10^{-4} (green), 1×10^{-3} (magenta), 1×10^{-2} M (red). For other conditions, see caption Fig.1.