

# Laser-Induced Current Transient Technique

Niklas Arnold, Dominik Schiwietz, Simon Hofinger

November 16, 2021

# Contents

<b>1</b>	<b>Abstract</b>	<b>3</b>
<b>2</b>	<b>Scientific Background</b>	<b>3</b>
<b>3</b>	<b>Experiment</b>	<b>3</b>
3.1	Experimental set-up . . . . .	3
3.2	HClO <sub>4</sub> Solution . . . . .	3
3.3	Electrode . . . . .	3
3.4	LICT measurements . . . . .	3
<b>4</b>	<b>Measurement analysis</b>	<b>3</b>
<b>5</b>	<b>Conclusion</b>	<b>4</b>

- 1 Abstract
- 2 Scientific Background
- 3 Experiment
  - 3.1 Experimental set-up
  - 3.2  $\text{HClO}_4$  Solution
  - 3.3 Electrode
  - 3.4 LICT measurements
- 4 Measurement analysis

In order to analyze the retrieved data, the peaks of the measured currents are being shown in figure 1 for three different pH values. In order to find the PME of the Electrode in each specific setup, a fit is applied to the data points. Additionally, the

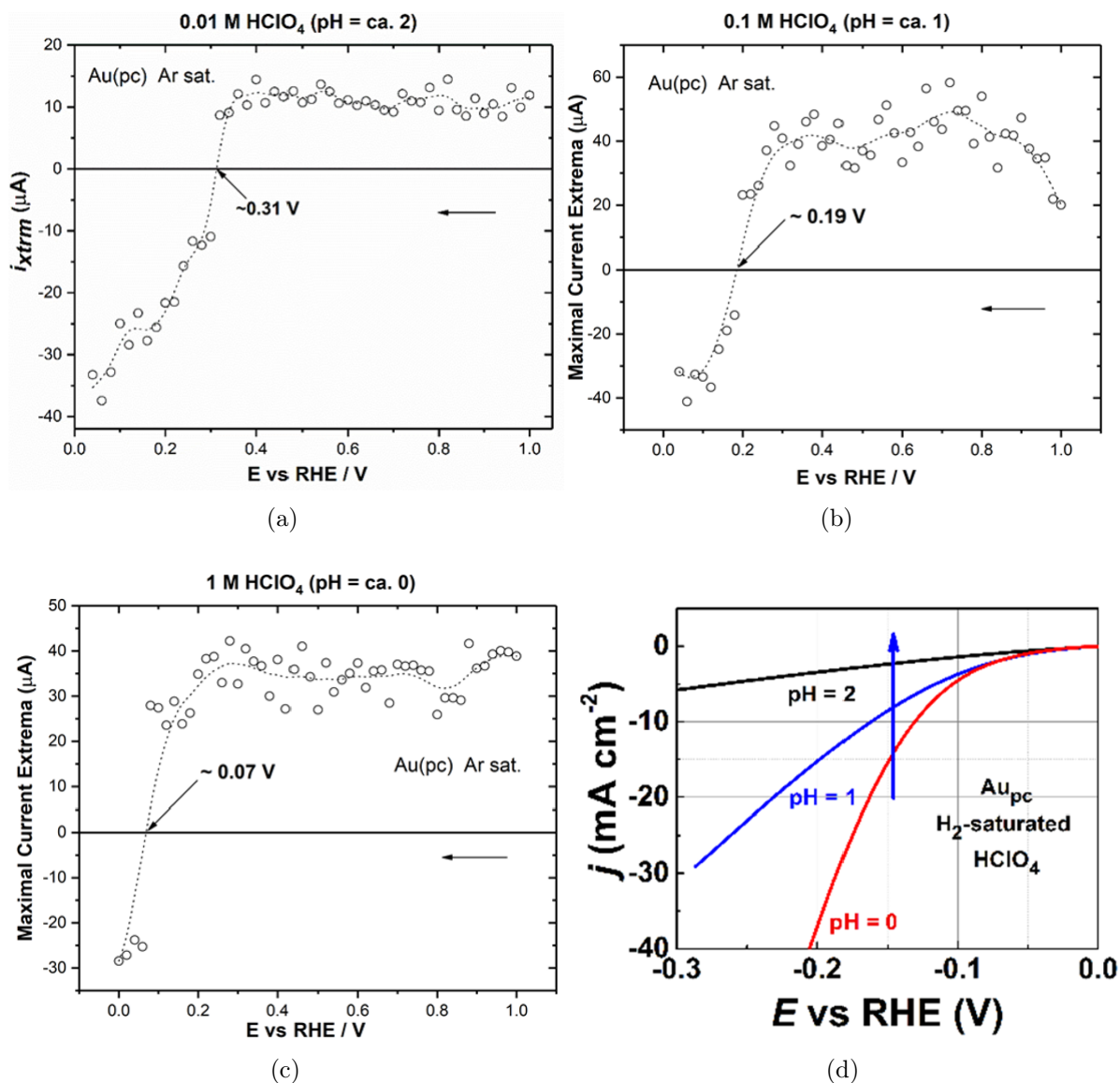


Figure 1: Measured peak currents shown against the applied Voltage for a polycrystalline gold Electrode (a,b,c). Figure (d) shows the pH sensitivity of the current curve against the Voltage. The zero-point of the Voltage is set to the RHE.

## 5 Conclusion