

# Supplementary Material

## Optimized copper based microfeathers for glucose detection

Carlota Guati<sup>1\*</sup>, Lucía Gomez-Coma<sup>1</sup>, Marcos Fallanza<sup>1</sup> and Inmaculada Ortiz<sup>1</sup>

*Chemical and Biomolecular Engineering Department, University of Cantabria, 39005 Santander, Spain;*

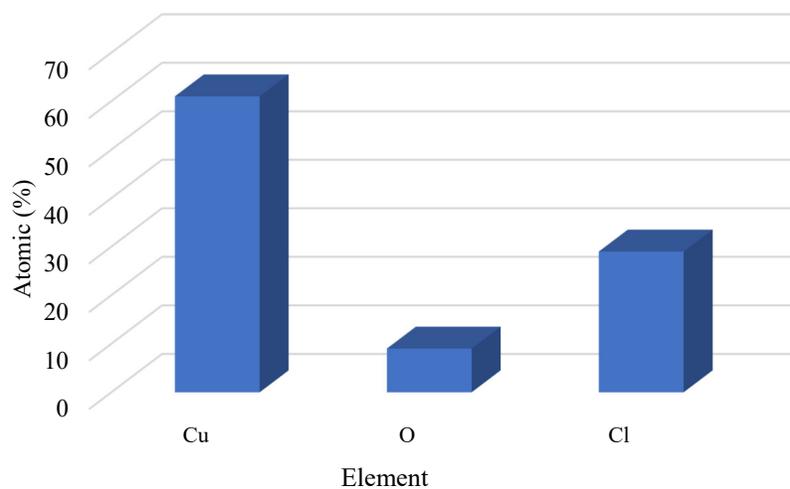


Figure S1. Atomic presence in the microfeather electrode

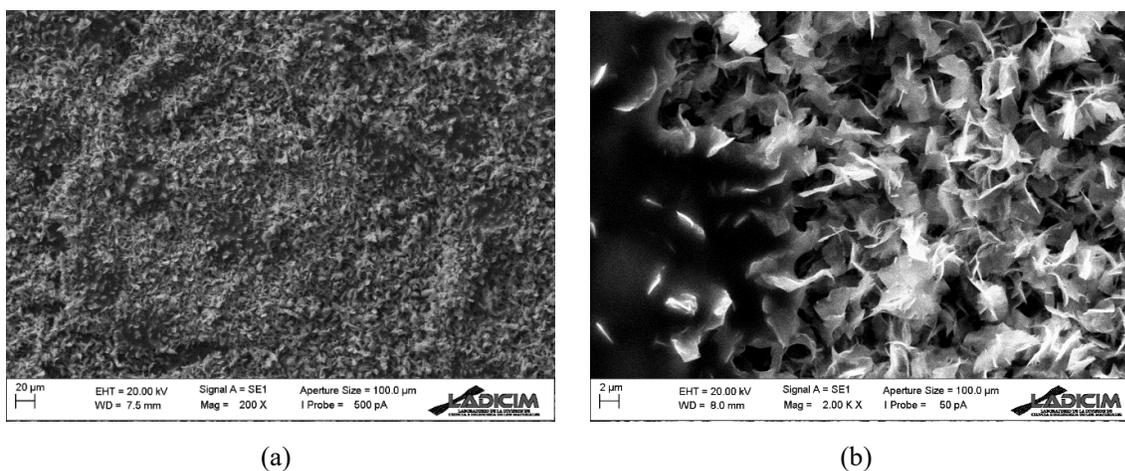
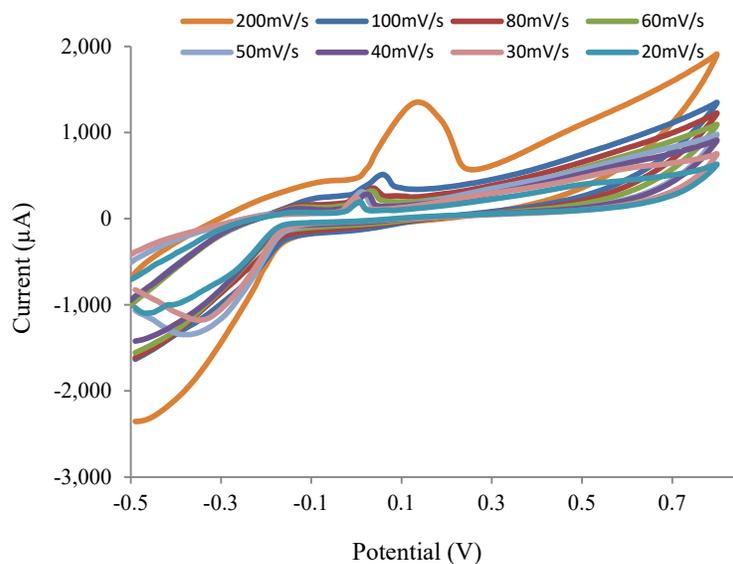
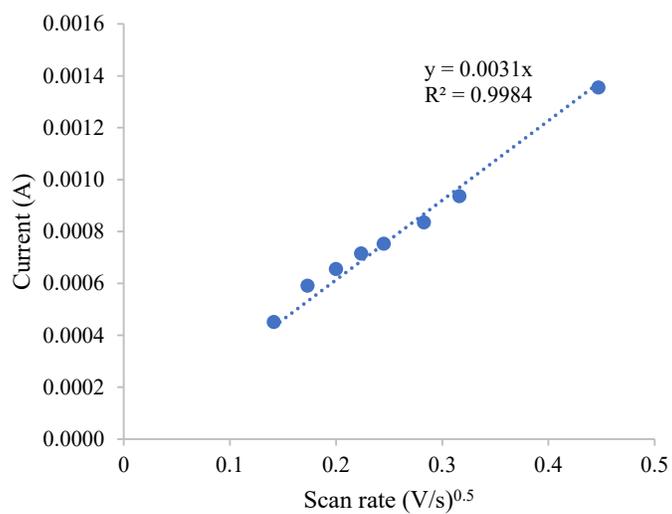


Figure S2. SEM images; (a) 200× and (b) 2000×



**Figure S3.** Cyclic voltammetry using 5 mM Ru(NH<sub>3</sub>)<sub>6</sub>Cl<sub>3</sub> in 0.1M KCl with a scan range from 200 to 20 mV s<sup>-1</sup>



**Figure S4.** Linear regression of the Randles–Sevcik equation

**Table S1.** Three Level Orthogonal Array. Ross, P. J. Taguchi Techniques for Quality Engineering. 2nd edn. Edit-ed by McGraw-Hill. 1996

<b>Trial no.</b>	<b>Column no.</b>			
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	1	1	1	1
<b>2</b>	1	2	2	2
<b>3</b>	1	3	3	3
<b>4</b>	2	1	2	3
<b>5</b>	2	2	3	1
<b>6</b>	2	3	1	2
<b>7</b>	3	1	3	2
<b>8</b>	3	2	1	3
<b>9</b>	3	3	2	1