

## 柠檬酸盐体系铜电沉积及其在微机电系统中的应用

吴伟刚<sup>1</sup> 杨防祖<sup>1,\*</sup> 骆明辉<sup>2</sup> 田中群<sup>1</sup> 周绍民<sup>1</sup>

<sup>1</sup>厦门大学化学化工学院, 固体表面物理化学国家重点实验室, 福建 厦门 361005;

<sup>2</sup>厦门大学物理与机电工程学院, 福建 厦门 361005)

## Electrodeposition of Copper in a Citrate Bath and Its Application to a Micro-Electro-Mechanical System

WU Wei-Gang<sup>1</sup> YANG Fang-Zu<sup>1,\*</sup> LUO Ming-Hui<sup>2</sup> TIAN Zhong-Qun<sup>1</sup> ZHOU Shao-Min<sup>1</sup>

<sup>1</sup>College of Chemistry and Chemical Engineering, State Key Laboratory of Physical Chemistry of Solid Surfaces,

Xiamen University, Xiamen 361005, Fujian Province, P. R. China; <sup>2</sup>School of Physics and Mechanical &

Electrical Engineering, Xiamen University, Xiamen 361005, Fujian Province, P. R. China)

\*Corresponding author. Email: fzyang@xmu.edu.cn; Tel: +86-592-2185957; Fax: +86-592-2181436.

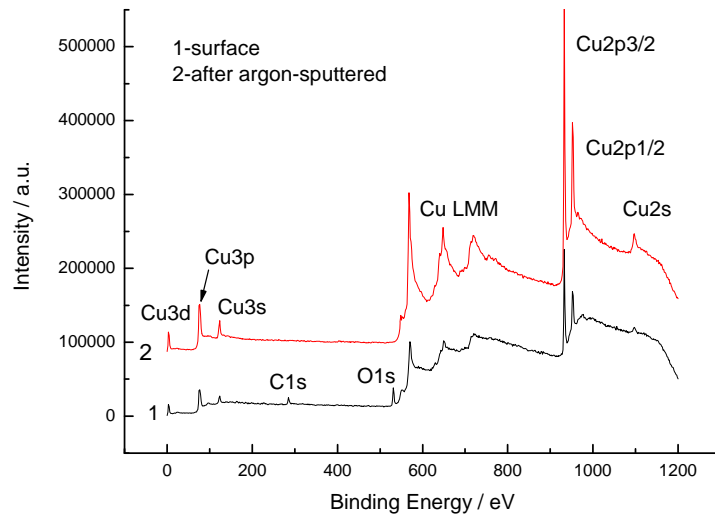


图 S1 铜镀层的 XPS 宽谱

Fig.S1 XPS survey spectra of copper deposit, (1) surface, (2) after argon-sputtered 100 nm.