

Coordination chemistry for antibacterial materials: a monolayer of a Cu^{2+} 2,2'-bipyridine complex grafted on a glass surface

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Electronic Supplementary Informations

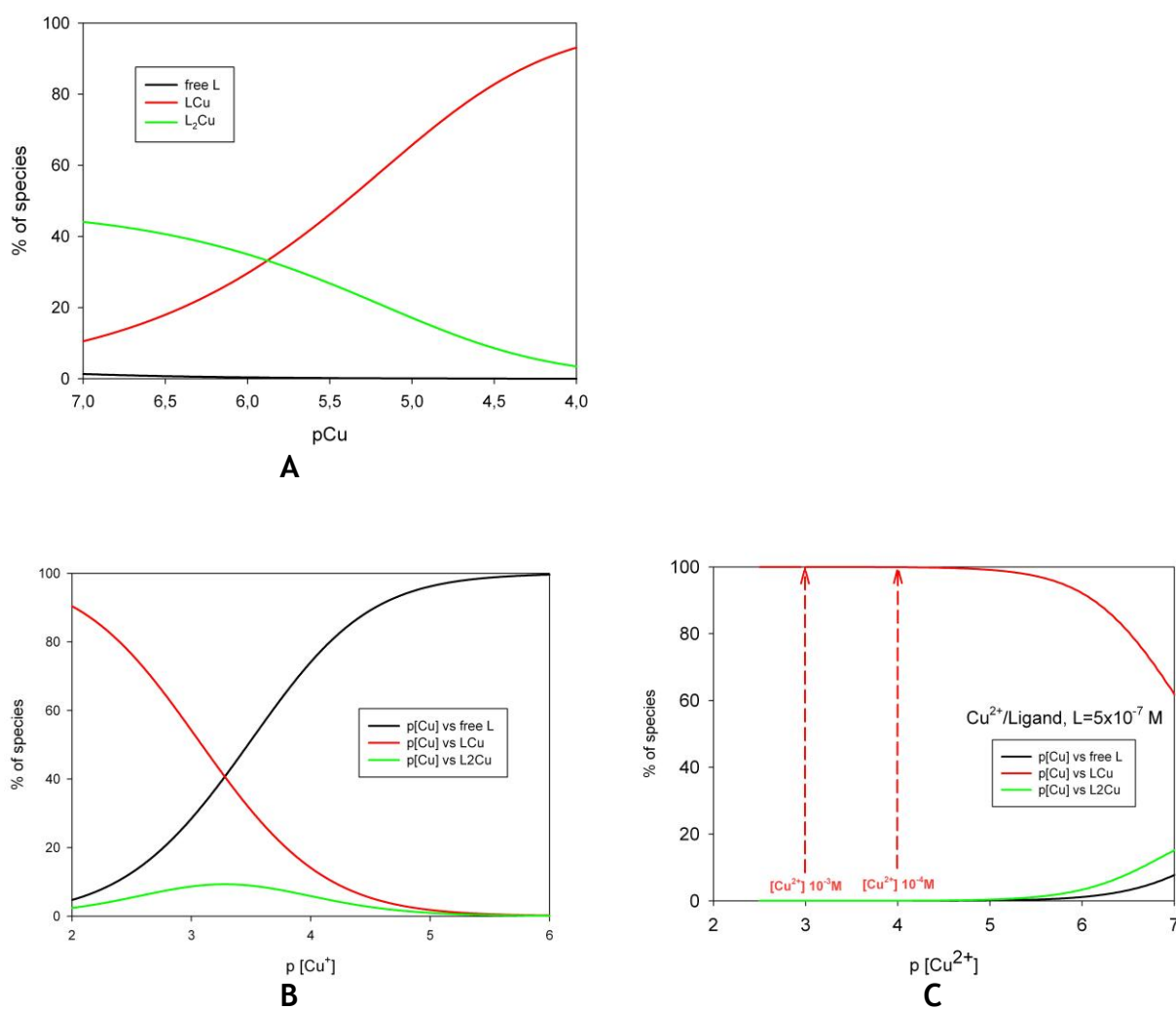
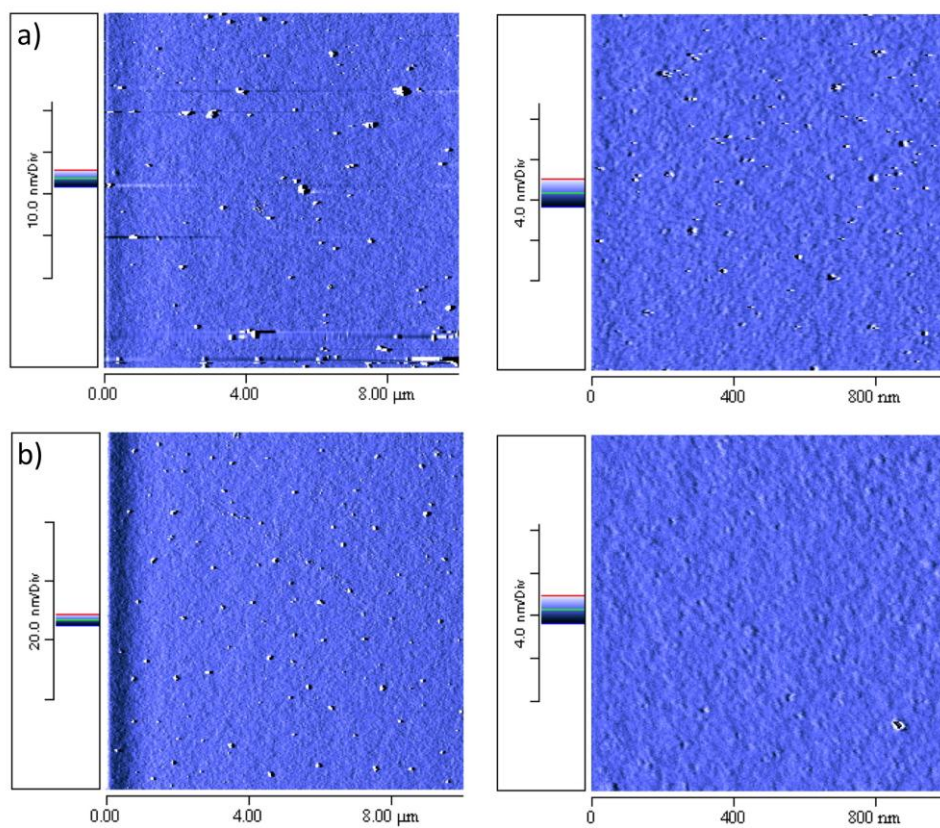


Figure S1 - A) distribution diagram for $\text{bipy-PR}/\text{Cu}^{2+}$ in acetonitrile solution, calculated for $\text{bipy-PR} = 2.5 \times 10^{-5} \text{ M}$; B) distribution diagram for $\text{bipy-PR}/\text{Cu}^+$ in acetonitrile solution for $\text{bipy-PR} = 5 \times 10^{-5} \text{ M}$; C) distribution diagram for $\text{bipy-PR}/\text{Cu}^{2+}$ in acetonitrile solution, calculated for $\text{bipy-PR} = 5 \times 10^{-7} \text{ M}$ (% of $[\text{LCu}]^{2+}$ for Cu^{2+} concentrations = 10^{-3} and 10^{-4} M are evidenced by red dotted arrows)



FigureS2. AFM images (error signal) of: a) Glass|bipy surface on a 10 micron scale (left panel) and 1 micron scale (right panel); b) the same for Glass|(bipy)Cu²⁺ surface

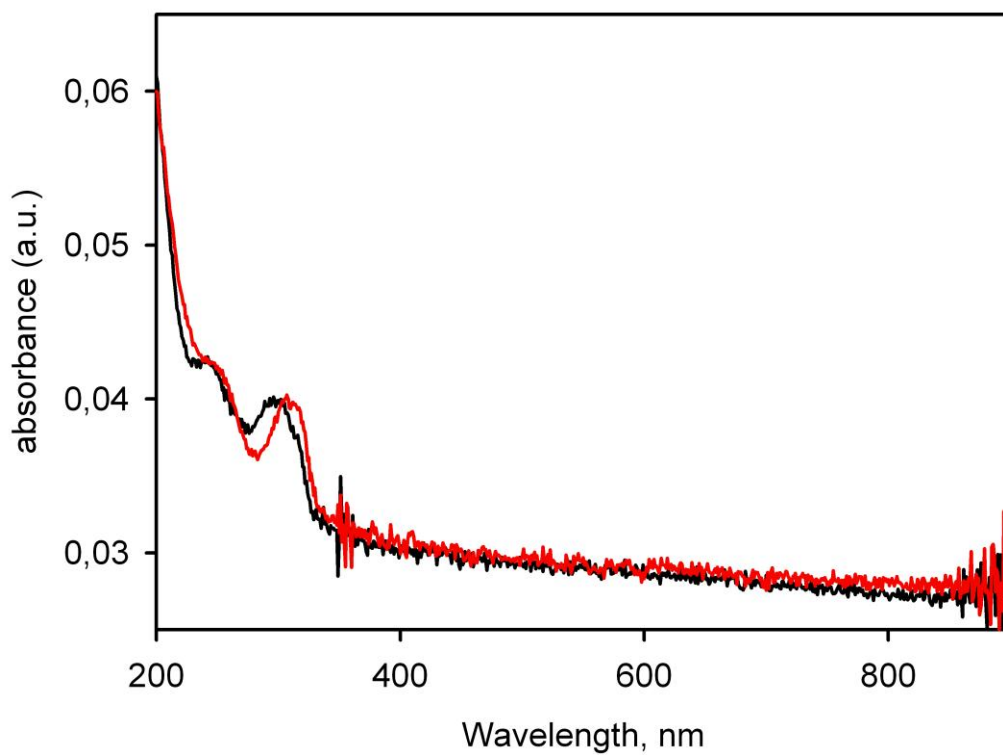


Figure S3. Uncorrected spectra for Glass|bipy (black spectrum) and Glass|(bipy)Cu²⁺ (the slide is actually made of quartz, not glass). The two spectra were recorded on the same slide, before and after complexation

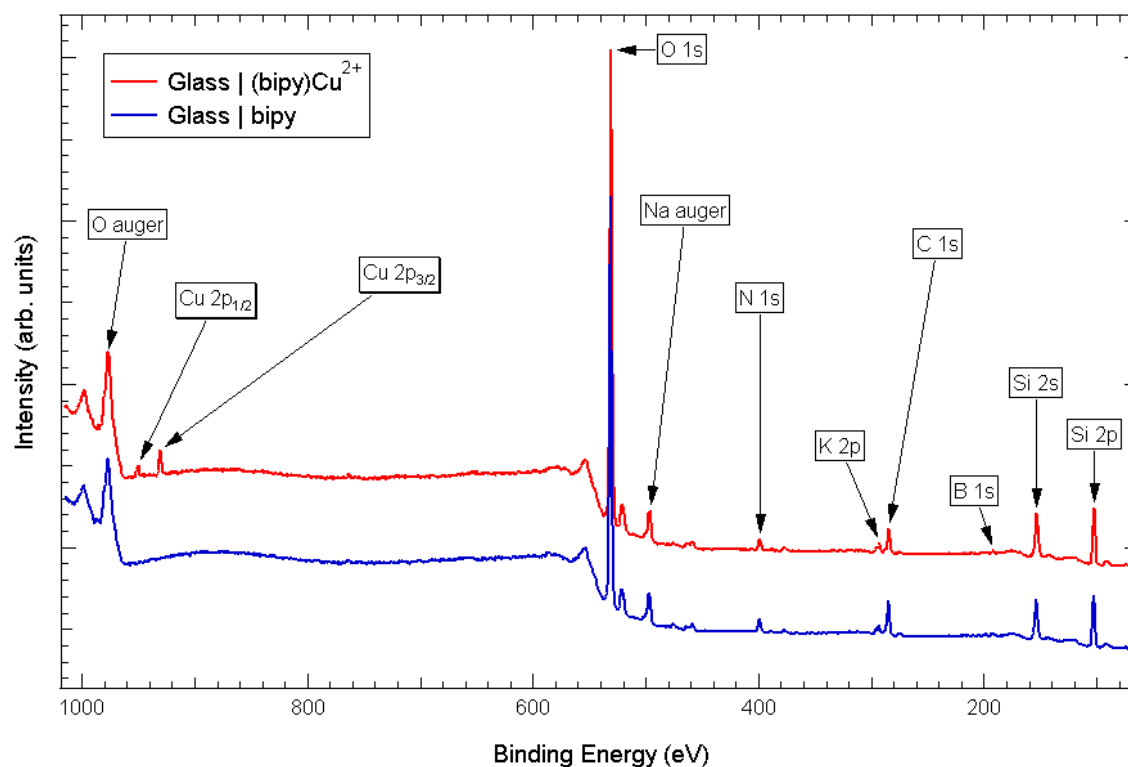


Figure S4. full range XPS spectra: red line Glass|(bipy)Cu²⁺; blue line Glass|bipy. The XPS data have been collected with the Al k_{α} line ($h\nu=1486.6$ eV, resolution 1.00 eV) of a non-monochromatized dual-anode x-ray source and a SCIENTA R3000 electron analyzer, with a pass energy set at 100 eV