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Supporting Information

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Supporting Information

for

Electrochemical and Conformational Consequences of Copper
(Cu^I and Cu^{II}) Binding to β -Amyloid(1--40)

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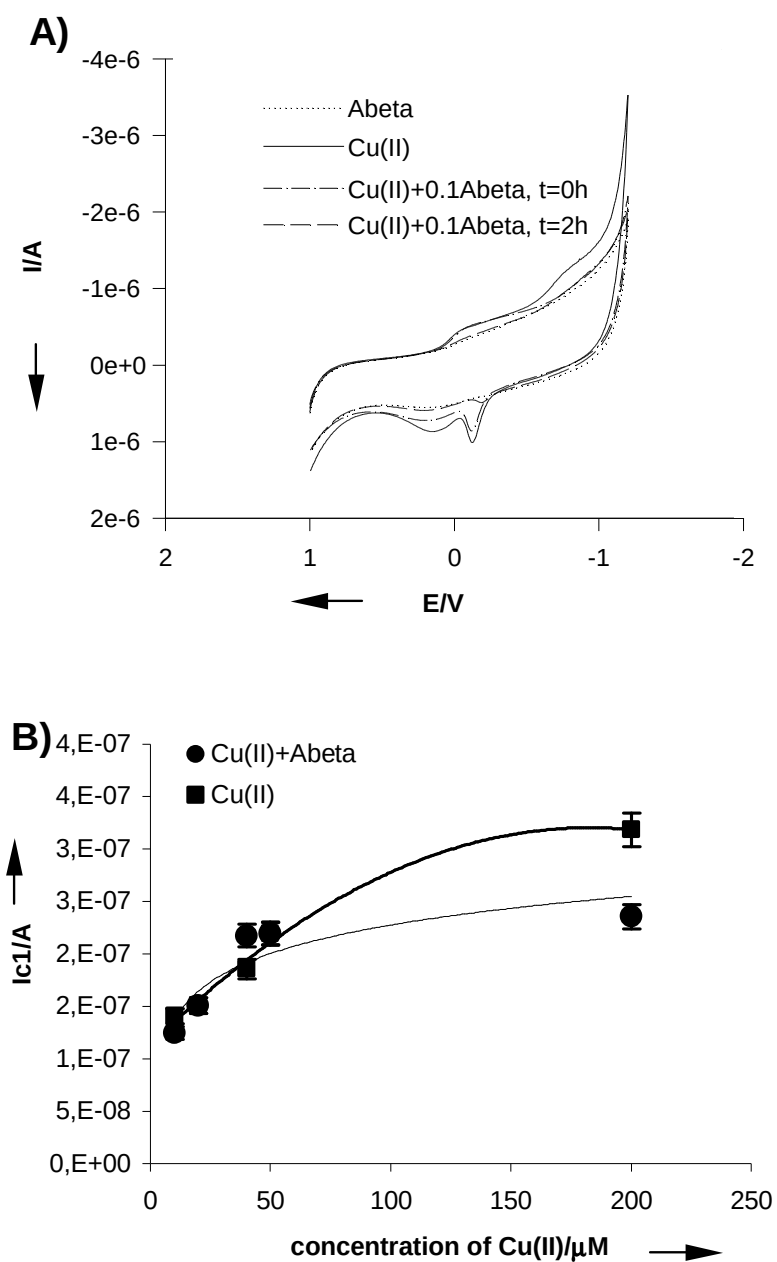


Figure S1. Voltammograms of 20 μM Abeta, 200 μM Cu^{II}, and relevant A β -Cu^{II} complex in PBS pH 7.2 under oxygen free conditions.

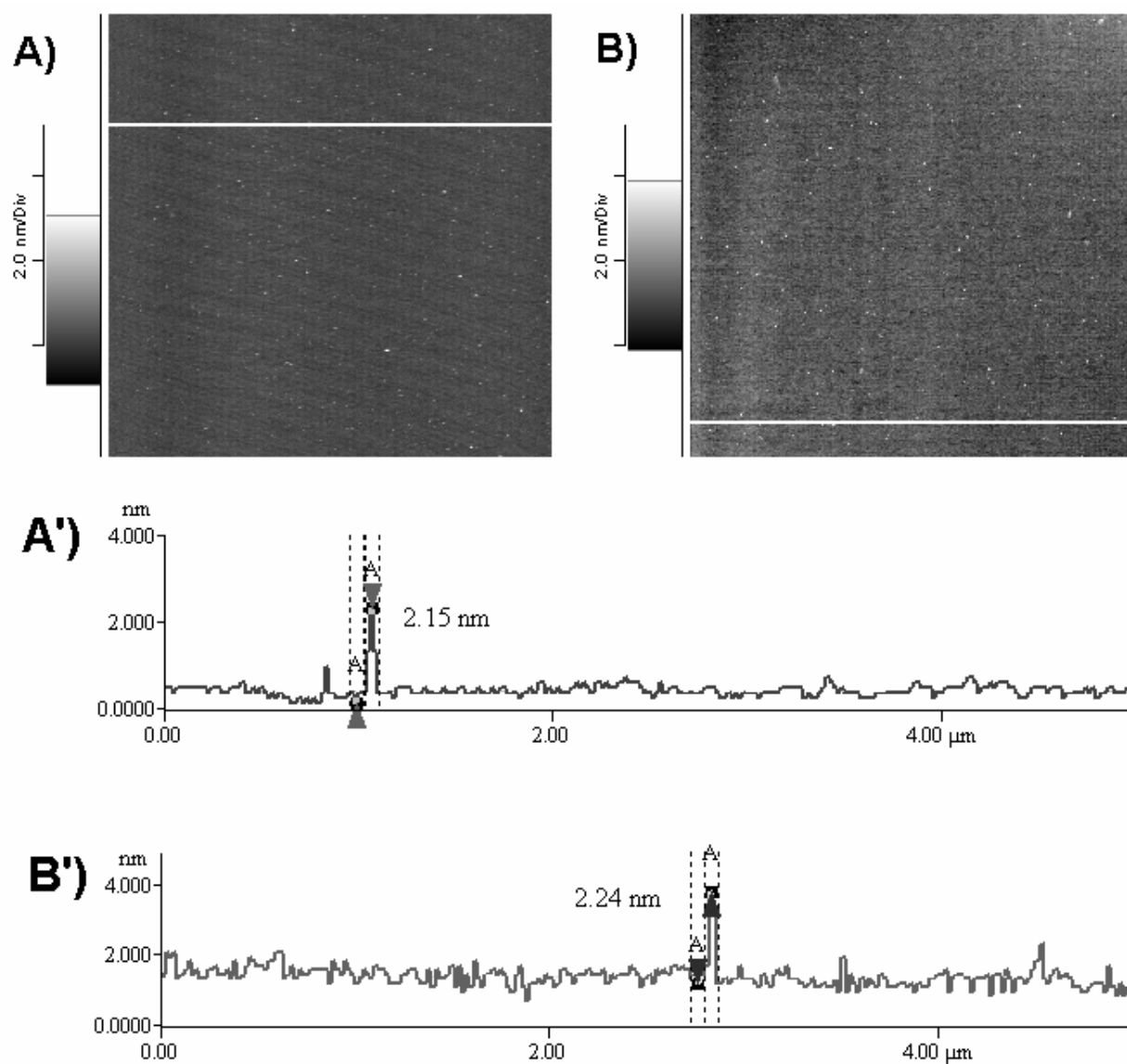
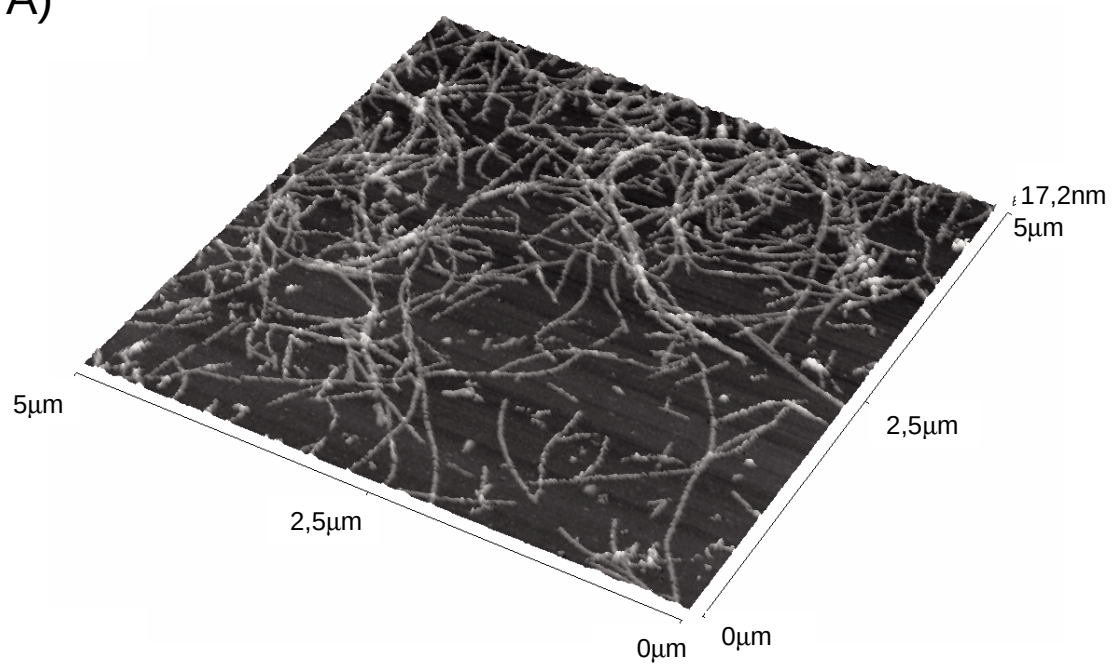


Figure S2. AFM images of PBS A) and A β after 1 hour's incubation with Cu^{II} B). A β concentration 50 μ M, Cu^{II} concentration 50 μ M. Scan size 5 μ m $\times$ 5 μ m. A' and B' Height Profiles of A) and B) images, respectively. Note: Height(max)= 2.15nm in PBS, height(max)=2.24 nm in Cu-A β solution.

A)



B)

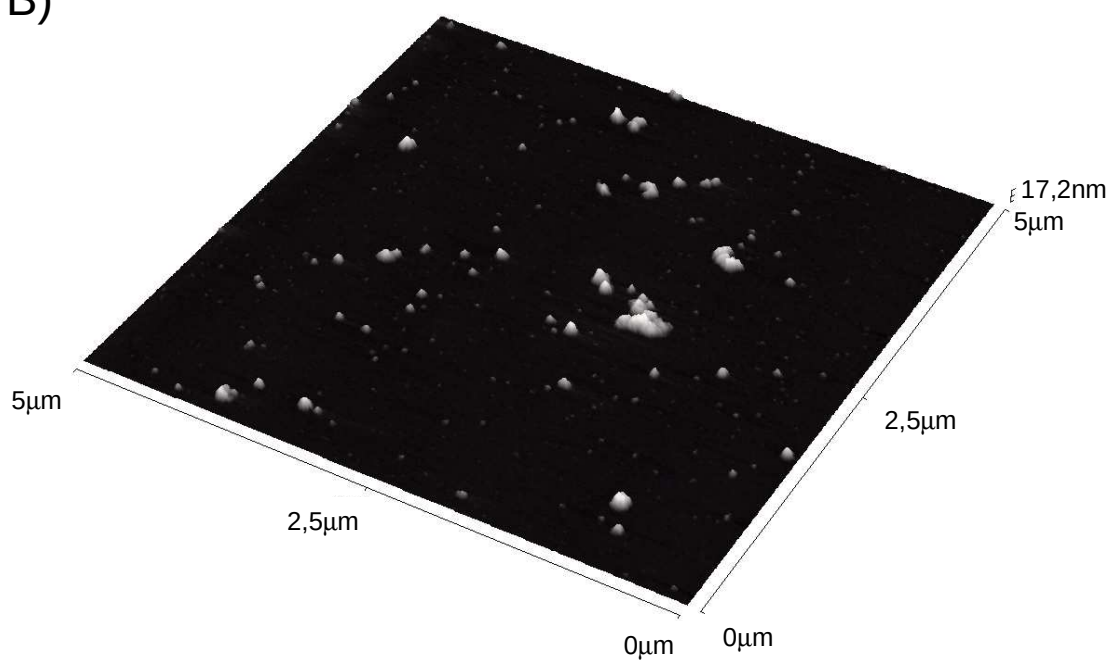


Figure S3. AFM images of A β aggregation after 48 hours' incubation without A) and with B) Cu^{II}. A β concentration 50 μ M, Cu^{II} concentration 50 μ M.

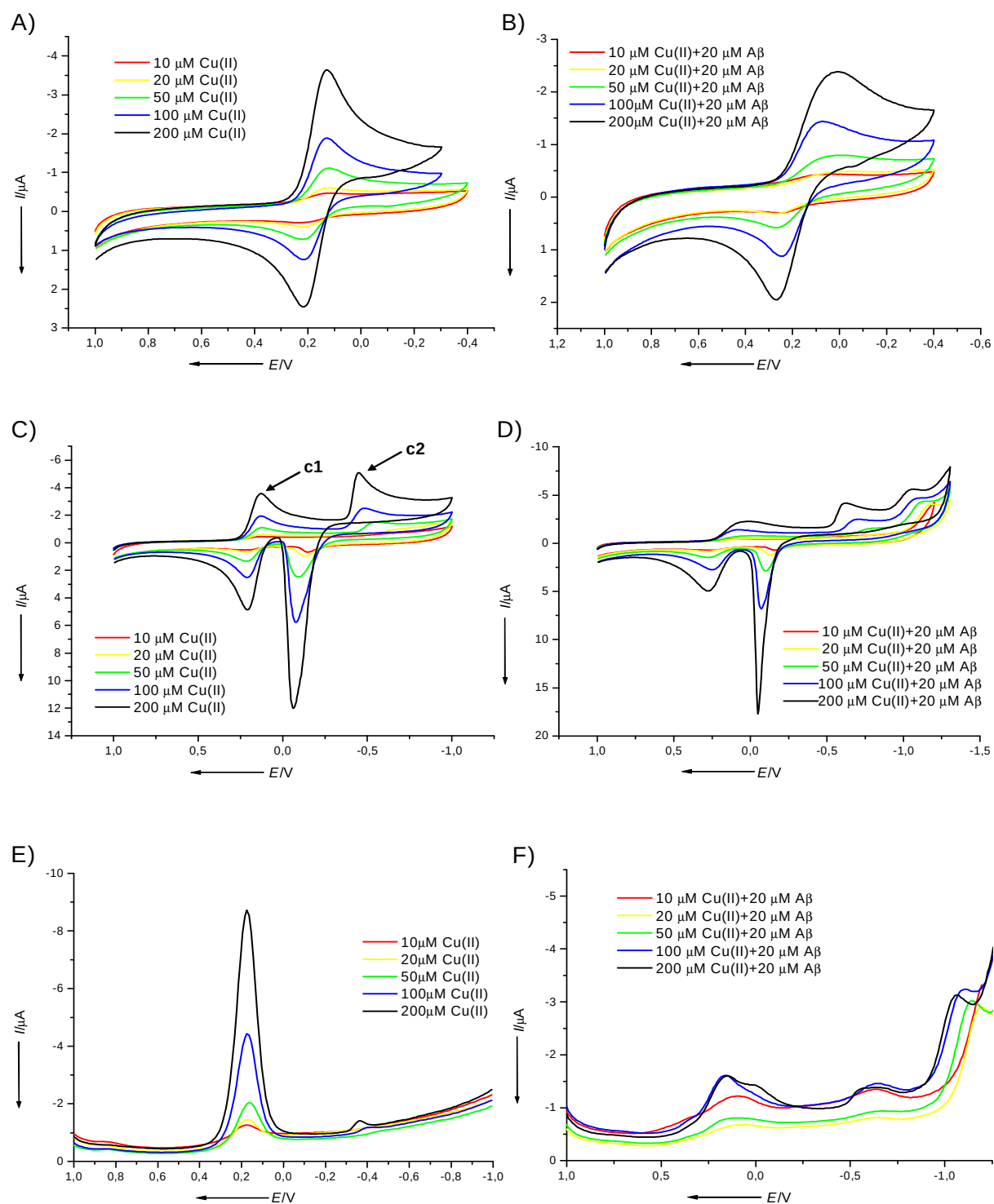


Figure S4. A comparison of cyclic (panels A-D) and differential pulse (E, F) voltammograms of free copper (A, C, E) and Abeta-copper complexes (B, D, F) in 0.2 M KCl under oxygen free conditions. Copper concentration range: $10\text{-}200 \times 10^{-6}$ M, Aβ concentration: 20×10^{-6} M.