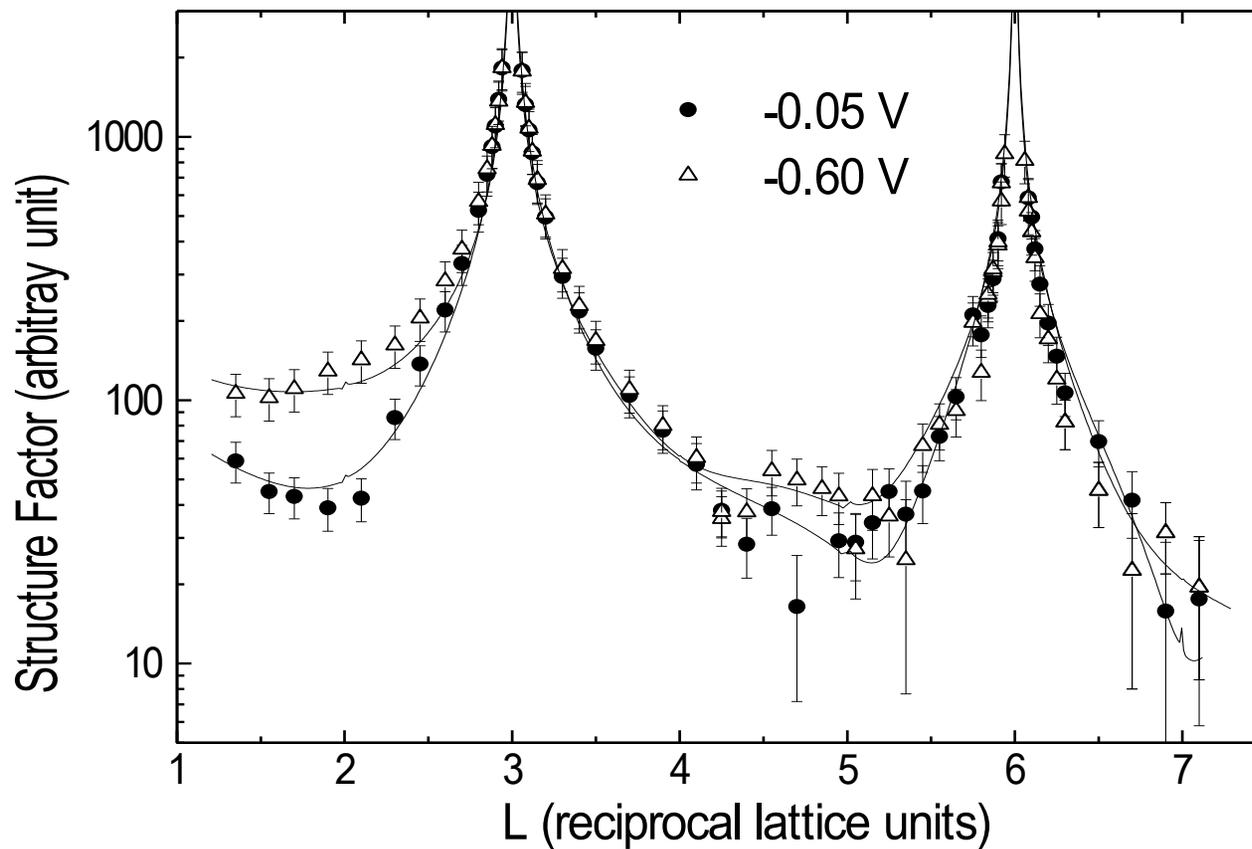


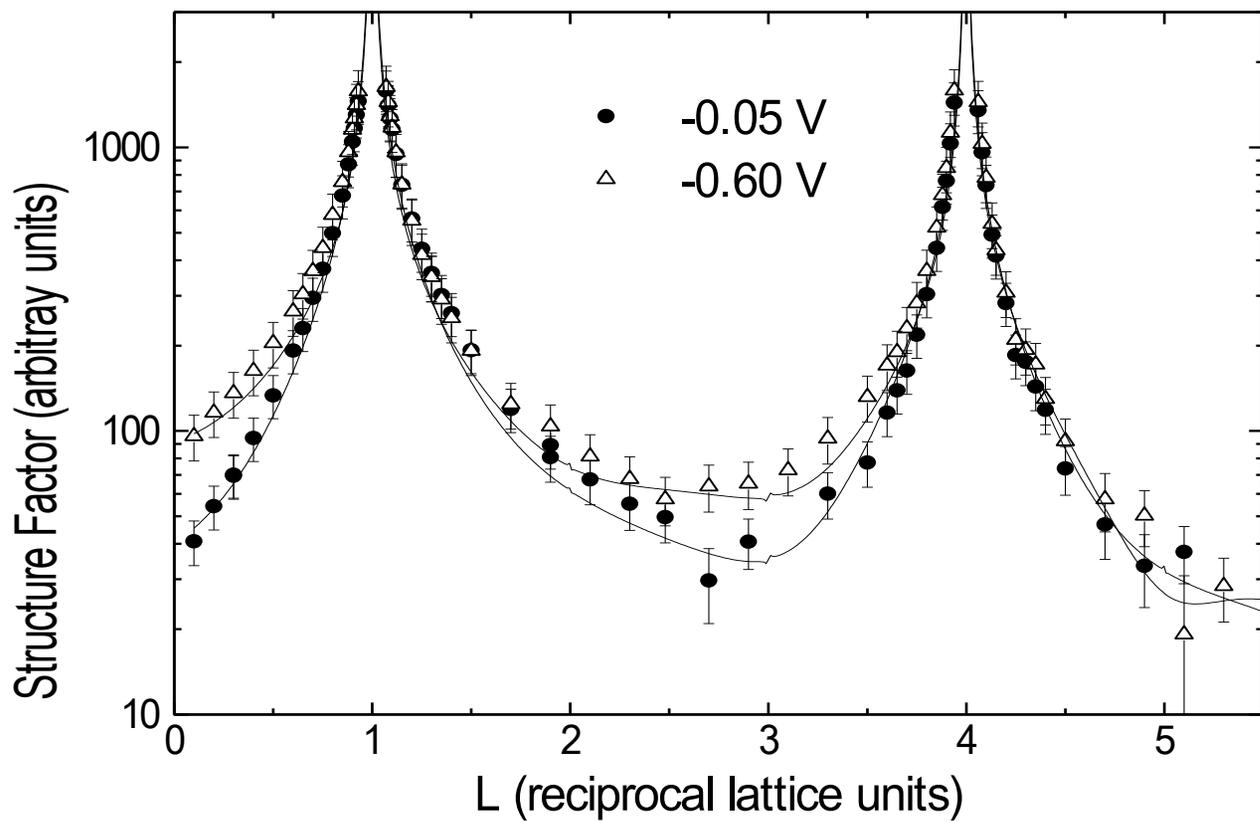
Interfacial Diffraction Methods for Investigating Chemical Reactions During Corrosion

Ian Robinson
University of Illinois

Gordon Conference on Aqueous Corrosion, New London, NH, July 2002



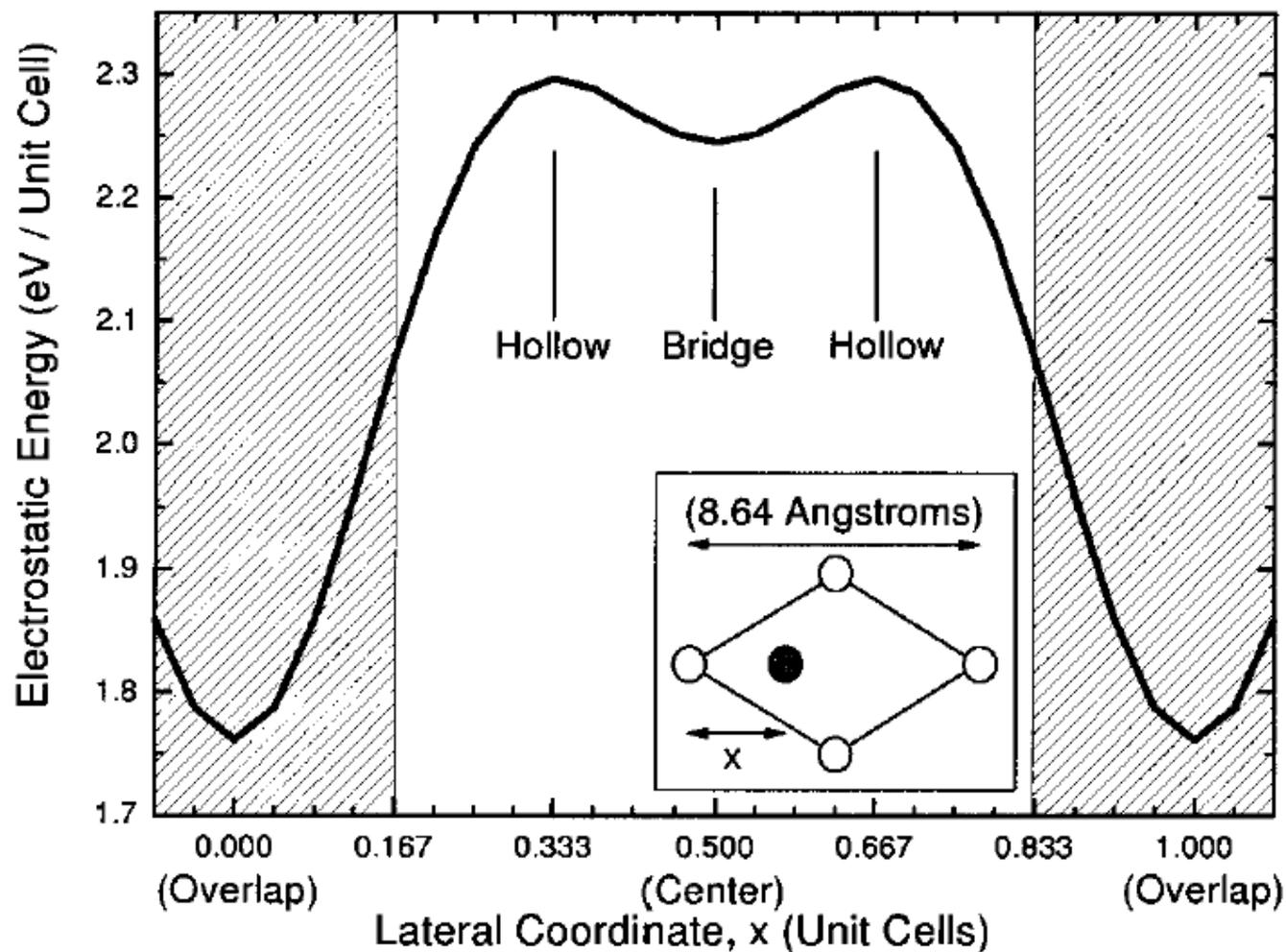
Gordon Conference on Aqueous Corrosion, New London, NH, July 2002



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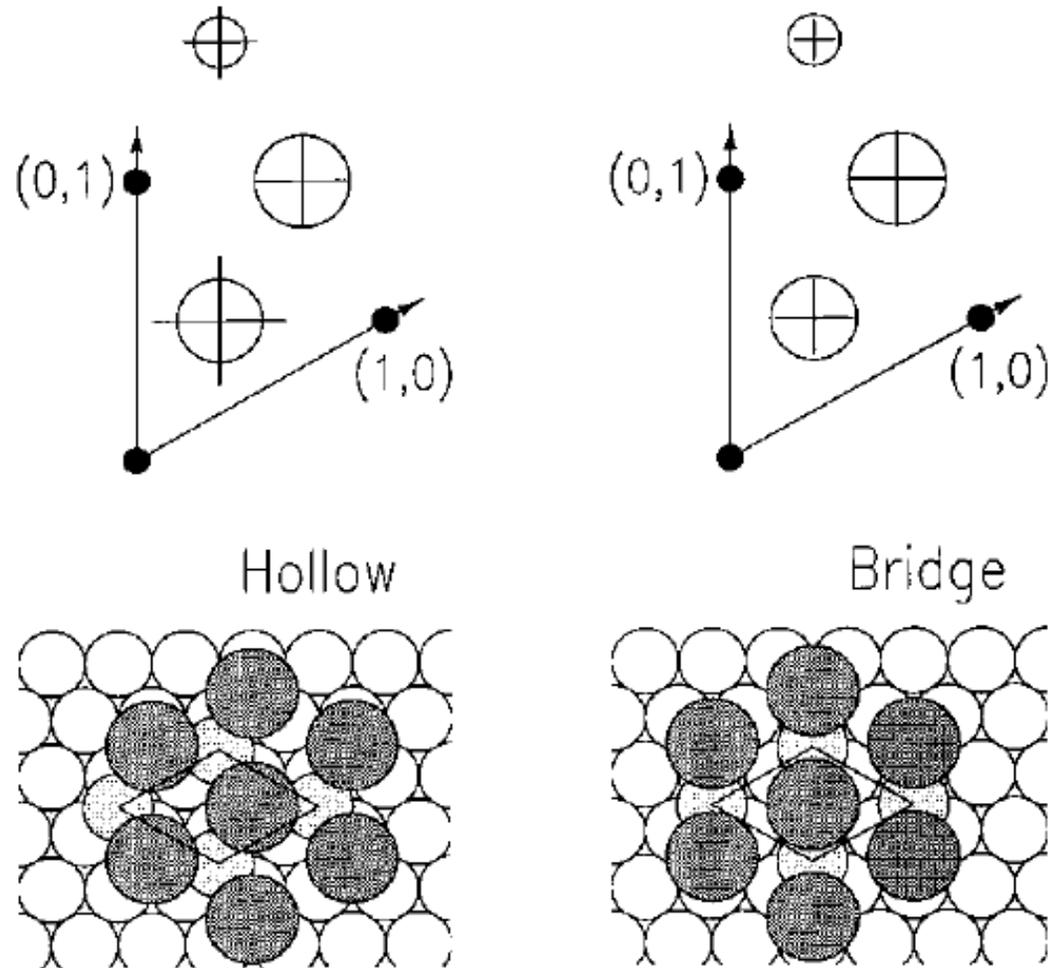
Madelung Electrostatic Sum

assuming planar separation of 3.15Å



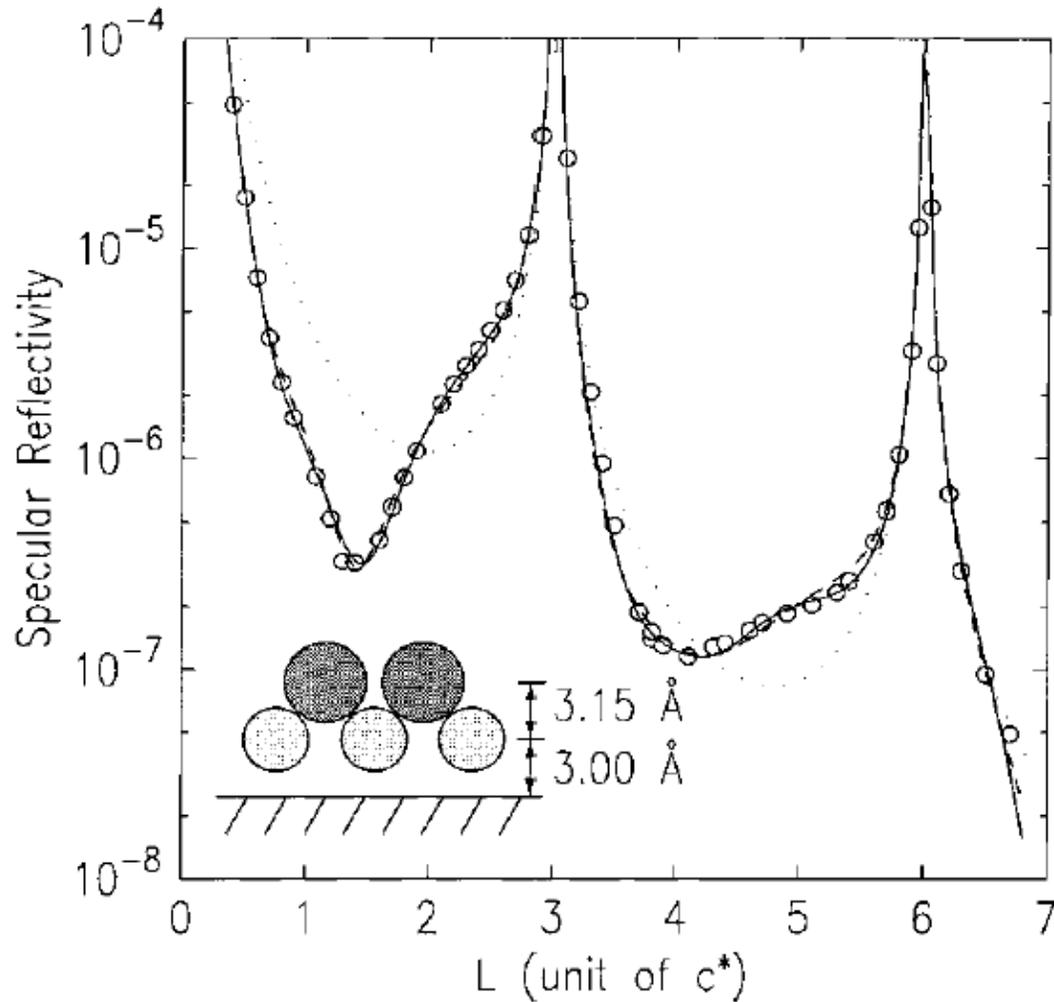
Structure of PbBr/Au(111) rt3

J. X. Wang et al J. Phys. Chem. B **104** 7951 (2000)



Gordon Conference on Aqueous Corrosion, New London, NH, July 2002

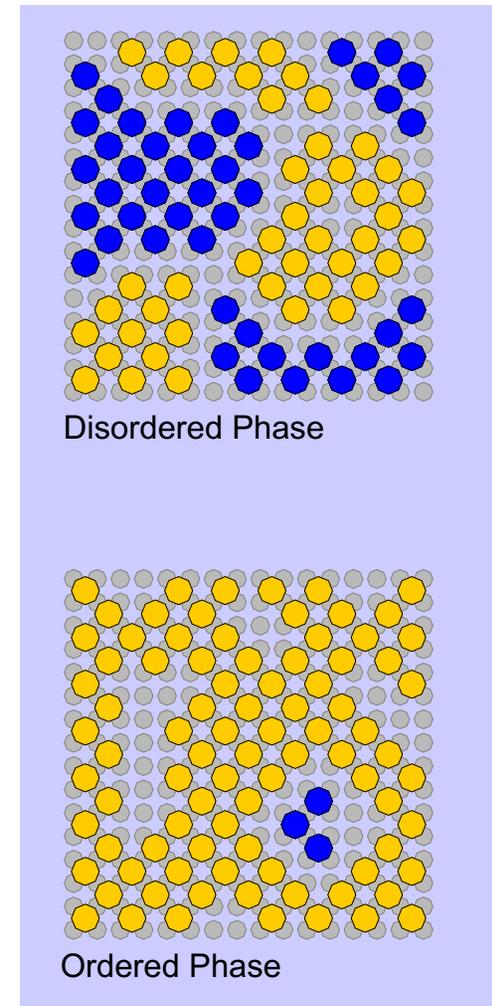
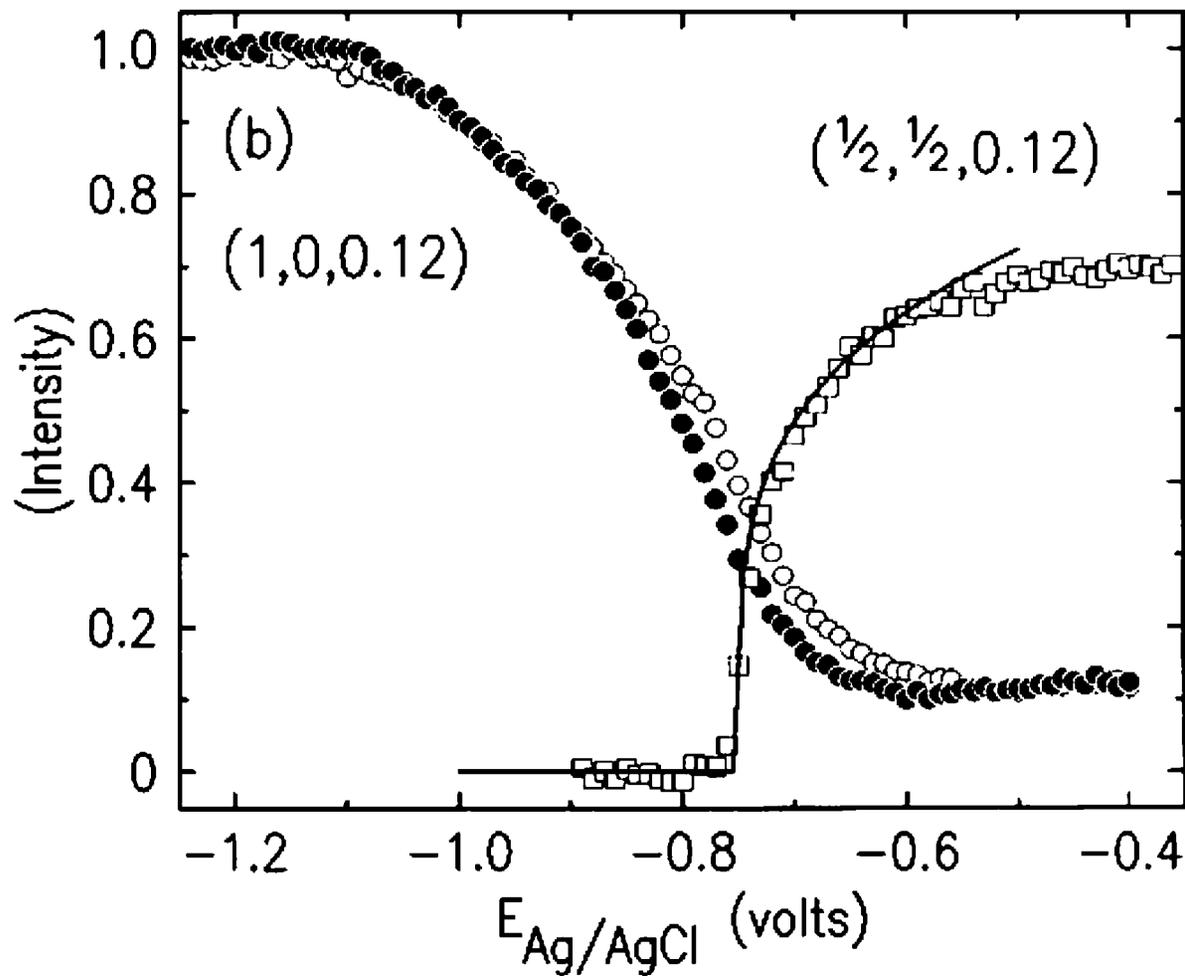
X-ray Reflectivity of PbBr/Au(111)



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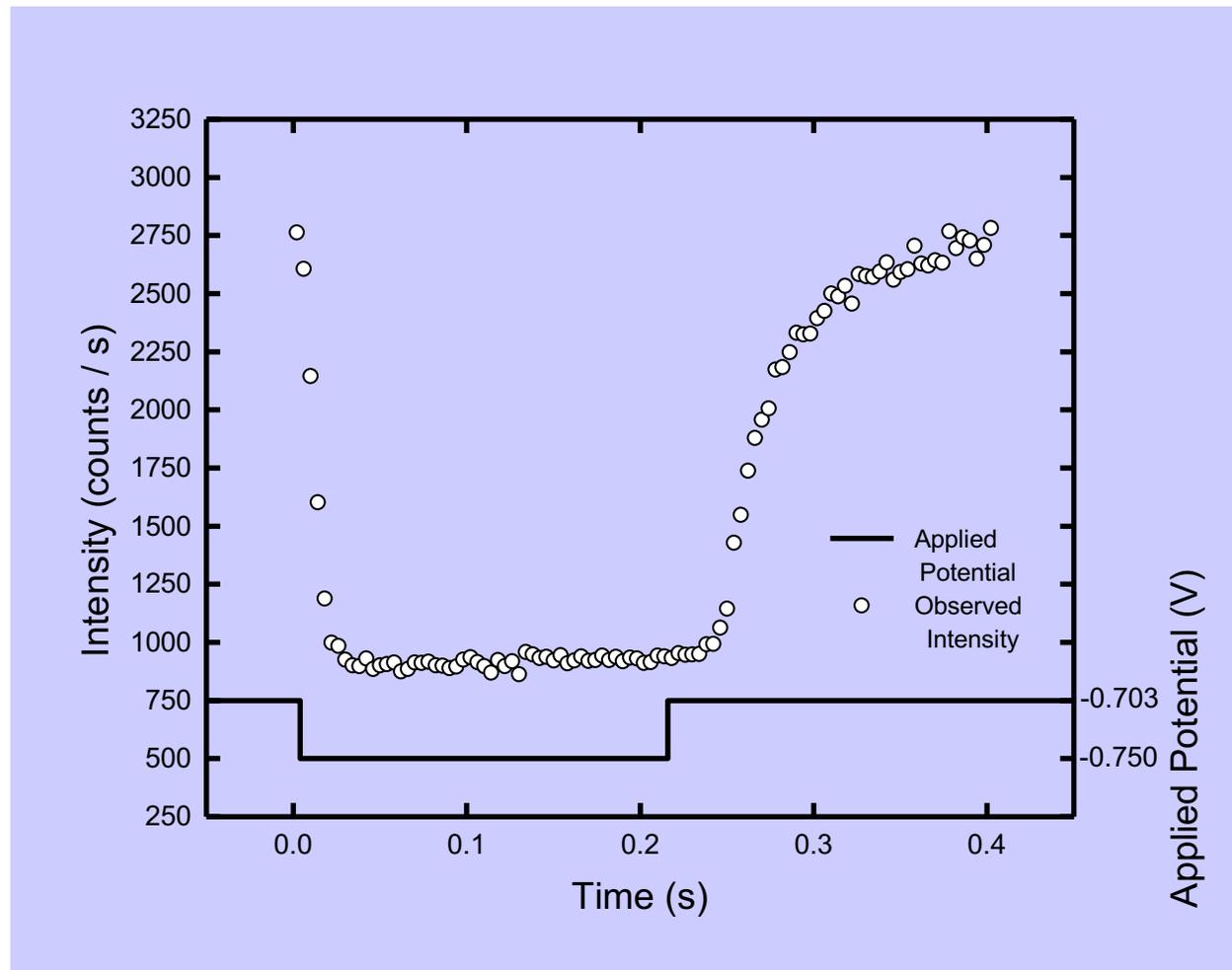
Ordering of Bromide on Ag(100)

B. M. Ocko, J.X. Wang, T. Wandlowski, Phys. Rev. Lett. 79 (1997) 1511.

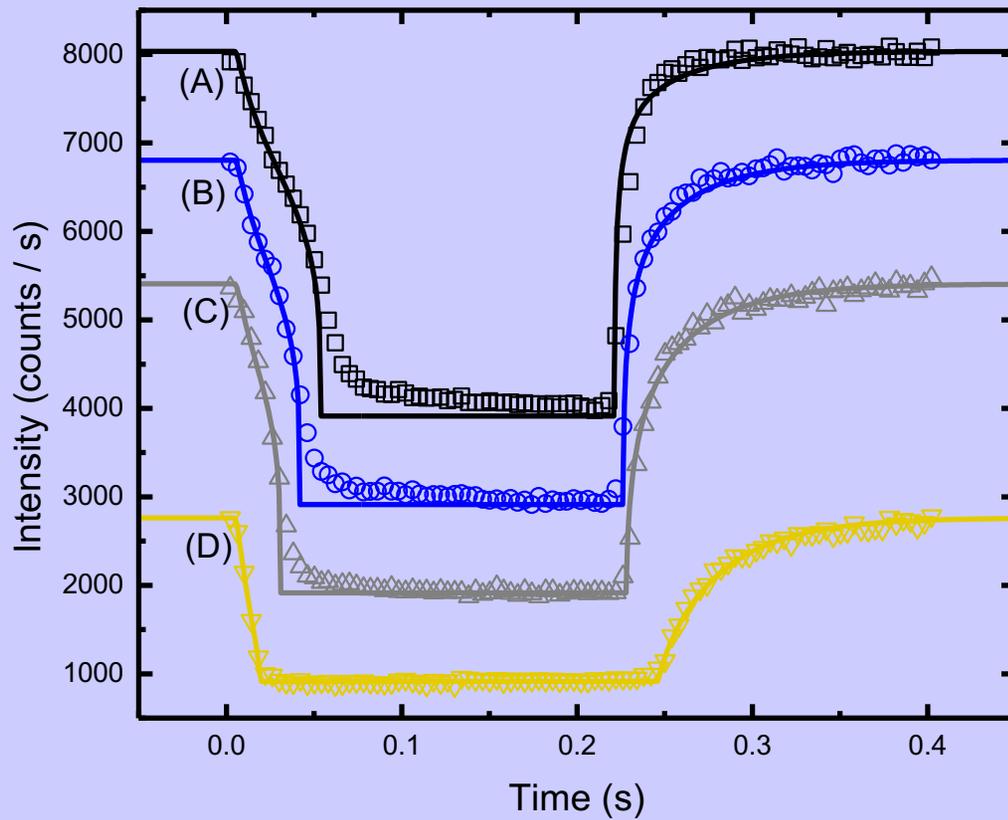


Time-Response of Thin-Layer Cell

Crossing Order-Disorder Phase Transition



Model using 2D Diffusion Equation



- -0.51 V to -0.75 V
- -0.60 V to -0.75 V
- -0.65 V to -0.75 V
- -0.70 V to -0.75 V

$$V(r, t) = 2 \sum_{n=1}^{\infty} \frac{J_0(\xi_n \frac{r}{R})}{\xi_n \cdot J_1(\xi_n)} e^{-\left(\frac{(\xi_n)^2 \kappa}{R^2} t\right)}$$

