

Publications

1. A. Villordon, **J. H. Baricuatro**. "Variation in Root System Architecture Response to Arsenic during Establishment and Onset of Storage Root Formation in Two Sweetpotato (*Ipomoea batatas* L.) Cultivars" Horticultural Science Vol. 59 (2024) 489-495.
2. **J. H. Baricuatro**. "Mass Spec Live" Nature Catalysis 5 (2022) 1077-1078.
3. **J. H. Baricuatro**, S. Kwon, Y.-G. Kim, K. D. Cummins, S. Naserifar, W. A. Goddard. "Operando Electrochemical Spectroscopy for CO on Cu(100) at pH 1 to 13: Validation of Grand Canonical Potential Predictions" ACS Catalysis 11 (2021) 3173-3181
4. **J. H. Baricuatro**, Y.-G. Kim, C. Korzeniewski, M. P. Soriaga. "Tracking the Prelude of the Electroreduction of Carbon Monoxide via its Interaction with Cu(100): Studies by Operando Scanning Tunneling Microscopy and Infrared Spectroscopy." Catalysis Today 358 (2020) 210-214.
5. **J. H. Baricuatro**, Y.-G. Kim, C. F. Tsang, A. Javier, K. D. Cummins, J. C. Hemminger. "Selective Conversion of CO into Ethanol on Cu(511) Surface Reconstructed from Cu(pc): Operando Studies by Electrochemical Scanning Tunneling Microscopy, Mass Spectrometry, Quartz Crystal Nanobalance, and Infrared Spectroscopy." Journal of Electroanalytical Chemistry 857 (2020) 113704.
6. **J. H. Baricuatro**, Y.-G. Kim, "Seriatim methods in the *operando* surface electrochemical studies of carbon monoxide reduction at selected well-defined copper surfaces." Current Topics in Electrochemistry, 204 (2019) Vol. 21, 119-130.
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9. M. P. Soriaga, **J. H. Baricuatro**, A. C. Javier, Y.-G. Kim and K. D. Cummins, C. F. Tsang, J. C Hemminger, N. N. Bui, J. L. Stickney. "Electrochemical Surface Science of CO₂ Reduction at Well-Defined Cu Electrodes: Surface Characterization by Emersion, *Ex Situ*, *In Situ*, and *Operando* Methods." Encyclopedia of Interfacial Chemistry: Surface Science and Electrochemistry. <https://doi.org/10.1016/B978-0-12-409547-2.13643-1>.
10. Y.-G. Kim, **J. H. Baricuatro**, M. P. Soriaga. "Surface Reconstruction of Polycrystalline Cu Electrodes in Aqueous KHCO₃ Electrolyte at Potentials in the Early Stages of CO₂ Reduction." Electrocatalysis 9 (2018) 526-530.
11. Y.-G. Kim, A. Javier, **J. H. Baricuatro**, M. P. Soriaga. "Seriatim ECSTM-DEMS of Cu-catalyzed Reduction of CO in Alkaline Solution: *Operando* Correlation of Electrode-Surface Atomic Structure with Product Selectivity." Current Topics in Catalysis 13 (2017) 1-9.
12. F. H. Saadi, A. I. Carim, W. S. Drisdell, S. Gul, **J. H. Baricuatro**, J. Yano, M. P. Soriaga, N. S. Lewis. "Operando Spectroscopic Analysis of CoP Films Electrocatalyzing the Hydrogen-evolution Reaction." Journal of the American Chemical Society 139 (2017) 12927-12930.
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 16. Y.-G. Kim, A. Javier, **J. H. Baricuatro**, D. Torelli, K.D. Cummins, C.F. Tsang, J.C. Hemminger, M. P. Soriaga. "Surface Reconstruction of Pure-Cu Single-crystal Electrodes under CO-reduction Potentials in Alkaline Solutions: A Study in Seriatim ECSTM-DEMS." *Journal of Electroanalytical Chemistry* 780 (2016) 290–295.
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