

List of publications: Dr. Viktor Čolić

2022

- Y. E. Firat, **V. Čolić**, *Electrochemical Deposition of Multicomponent Mixed Metal Oxides on rGO/Ni Foam for All-Solid-State Asymmetric Supercapacitor Device: Mn, Co, and Ni Oxides with Ag Doping*, **Energies** 2022, 15, 8559. [DOI: 10.3390/en15228559](https://doi.org/10.3390/en15228559)
- V. Ramesh, N. Stratmann, V. Schaufler, S. D. Angelov, I. D. Nordhorn, H. E Heissler, R. Martínez-Hincapié, **V. Čolić**, C. Rehbock, K. Schwabe, U. Karst, J. K. Krauss, S. Barcikowski, *Mechanical Stability of Nano-Coatings on Clinically Applicable Electrodes, Generated by Electrophoretic Deposition*, **Adv. Healthcare Mater.**, 2022, 2102637. [DOI:10.1002/adhm.202102637](https://doi.org/10.1002/adhm.202102637)
- F. Stein, S. Kohsakowski, R. Martinez-Hincapie, S. Reichenberger, C. Rehbock, **V. Čolić**, D. Guay, S. Barcikowski, *Disproportional surface segregation in ligand-free gold–silver alloy solid solution nanoparticles, and its implication for catalysis and biomedicine*, **Faraday Discussions** 2022. [DOI:10.1039/d2fd00092j](https://doi.org/10.1039/d2fd00092j)
- R. Martínez-Hincapié, **V. Čolić**, *Electrocatalysts for the Oxygen Reduction Reaction: From Bimetallic Platinum Alloys to Complex Solid Solutions*, **ChemEngineering**, 2022, 6, 19. [DOI:10.3390/chemengineering6010019](https://doi.org/10.3390/chemengineering6010019)

2019

- A. C. Nielander, J. M. McEnaney, J. A. Schwalbe, J. G. Baker, S. J. Blair, L. Wang, J. G. Pelton, S. Z. Andersen, K. Enemark-Rasmussen, **V. Čolić**, S. Yang, S. F. Bent, M. Cargnello, J. Kibsgaard, P. C. K. Vesborg, I. Chorkendorff, T. F. Jaramillo, *A Versatile Method for Ammonia Detection in a Range of Relevant Electrolytes via Direct Nuclear Magnetic Resonance Techniques*, **ACS Catalysis**, 2019, 9, 7, 5797-5802. [DOI:10.1021/acscatal.9b00358](https://doi.org/10.1021/acscatal.9b00358)
- S. Z. Andersen*, **V. Čolić***, S. Yang*, J.A. Schwalbe, A.C. Nielander, J.M. McEnaney, K. Enemark-Rasmussen, J.G. Baker, A.R. Singh, B.A. Rohr, M.J. Statt, S.J. Blair, S. Mezzavilla, J. Kibsgaard, P.C.K. Vesborg, M. Cargnello, S.F. Bent, T.F. Jaramillo, I.E.L. Stephens, J.K. Nørskov, I. Chorkendorff, *A rigorous electrochemical ammonia synthesis protocol with quantitative isotope measurements*, **Nature**, 2019, 570, 504–508. [DOI:10.1038/s41586-019-1260-x](https://doi.org/10.1038/s41586-019-1260-x)

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2018

- **V. Čolić**, S. Yang, Z. Revay, I. E. L. Stephens, I. Chorkendorff, *Carbon Catalysts for Electrochemical Hydrogen Peroxide Production in Acidic Media*, **Electrochimica Acta**, 2018, 272, 192-202. [DOI:10.1016/j.electacta.2018.03.170](https://doi.org/10.1016/j.electacta.2018.03.170)
- S. Yang, A. Verdager-Casadevall, L. Arnarson, L. Silvioli, **V. Čolić**, R. Frydendal, J. Rossmeisl, I. Chorkendorff, I. E. L. Stephens, *Toward the Decentralized Electrochemical Production of H₂O₂: A Focus on the Catalysis*, **ACS Catalysis**, 2018, 8, 4064-4081. [DOI:10.1021/acscatal.8b00217](https://doi.org/10.1021/acscatal.8b00217)
- B. Garlyyev, M. D. Pohl, **V. Čolić**, Y. Liang, F. K. Butt, A. Holleitner, A.S. Bandarenka, *High Oxygen Reduction Reaction Activity of Pt₅Pr Electrodes in Acidic Media*, **Electrochemistry Communications**, 2018, 88, 10-14. [DOI:10.1016/j.elecom.2018.01.005](https://doi.org/10.1016/j.elecom.2018.01.005)

2017

- S. Xue, S. Watzel, **V. Čolić**, K. Brandl, B. Garlyyev, A.S. Bandarenka, *Reconsidering Water Electrolysis: Producing Hydrogen at Cathodes together with Selective Oxidation of n-Butylamine at Anodes*. **ChemSusChem**, 2017, 10, 4812-4816. [DOI:10.1002/cssc.201701802](https://doi.org/10.1002/cssc.201701802)

2016

- V. Čolić, A.S. Bandarenka, *Pt-Alloy Electrocatalysts for the Oxygen Reduction Reaction: From Model Surfaces to Nanostructured Systems*. **ACS Catalysis**, 2016, 6, 5378-5385. [DOI:10.1021/acscatal.6b00997](https://doi.org/10.1021/acscatal.6b00997)
- A. Ganassin, A. Maljusch, V. Čolić, L. Spanier, K. Brandl, W. Schuhmann, A. Bandarenka, *Benchmarking the Performance of Thin Film Oxide Electrocatalysts for Gas Evolution Reactions at High Current Densities*. **ACS Catalysis**, 2016, 6(5), 3017-3024. [DOI:10.1021/acscatal.6b00455](https://doi.org/10.1021/acscatal.6b00455)
- M. Pohl, V. Čolić, D. Scieszka, A.S. Bandarenka, *Elucidation of Adsorption Processes at the Surface of Pt(331) Model Electrocatalysts in Acidic Aqueous Media*. **Physical Chemistry Chemical Physics**, 2016, 18, 10792-10799. [DOI:10.1039/C5CP08000B](https://doi.org/10.1039/C5CP08000B)

2015

- F. Calle-Vallejo, J. Tymoczko, V. Čolić, Q.H. Vu, M.D. Pohl, K. Morgenstern, D. Loffreda, P. Sautet, W. Schuhmann, A.S. Bandarenka, *Finding Optimal Surface Sites on Heterogeneous Catalysts by Counting Nearest Neighbors*. **Science**, 2015, 350(6257), 185-189. [DOI:10.1126/science.aab3501](https://doi.org/10.1126/science.aab3501)
- V. Čolić, M. Pohl, D. Scieszka, A.S. Bandarenka, *Influence of the Electrolyte Composition on the Activity and Selectivity of Electrocatalytic Centers*. **Catalysis Today**, 2015, 262, 24-35. [DOI:10.1016/j.cattod.2015.08.003](https://doi.org/10.1016/j.cattod.2015.08.003)
- J. Tymoczko, F. Calle-Vallejo, V. Čolić, W. Schuhmann, A.S. Bandarenka, *Evaluation of the Electrochemical Stability of Model Cu-Pt(111) Near-Surface Alloy Catalysts*. **Electrochimica Acta**, 2015, 179, 469-474. [DOI:10.1016/j.electacta.2015.02.110](https://doi.org/10.1016/j.electacta.2015.02.110)
- V. Čolić, J. Tymoczko, A. Maljusch, A. Ganassin, W. Schuhmann, A.S. Bandarenka, *Experimental Aspects in Benchmarking of the Electrocatalytic Activity*. **ChemElectroChem**, 2015, 2, 143-149. [DOI:10.1002/celec.201402295](https://doi.org/10.1002/celec.201402295)
- A. Ganassin, V. Čolić, J. Tymoczko, A.S. Bandarenka, W. Schuhmann, *Non-Covalent Interactions in Water Electrolysis: Influence on the Activity of Pt(111) and Iridium Oxide Catalysts in Acidic Media*. **Physical Chemistry Chemical Physics**, 2015, 17, 8349-8355. [DOI:10.1039/C4CP04791E](https://doi.org/10.1039/C4CP04791E)
- J. Tymoczko, V. Čolić, A. Ganassin, W. Schuhmann, A.S. Bandarenka, *Influence of the Alkali Metal Cations on the Activity of Pt(111) towards Model Electrocatalytic Reactions in Acidic Sulfuric Media*. **Catalysis Today**, 2015, 244, 96-102. [DOI:10.1016/j.cattod.2014.07.007](https://doi.org/10.1016/j.cattod.2014.07.007)
- J. Tymoczko, V. Čolić, A.S. Bandarenka, W. Schuhmann, *Detection of 2D Phase Transitions at the Electrode/Electrolyte Interface Using Electrochemical Impedance Spectroscopy*. **Surface Science**, 2015, 631, 81-87. [DOI: 10.1016/j.susc.2014.04.014](https://doi.org/10.1016/j.susc.2014.04.014)

2014

- J. Tymoczko, F. Calle-Vallejo, V. Čolić, M.T.M. Koper, W. Schuhmann, A.S. Bandarenka, *Oxygen Reduction at a Cu-Modified Pt(111) Model Electrocatalyst in Contact with Nafion Polymer*. **ACS Catalysis**, 2014, 4, 3772-3778. [DOI:10.1021/cs501037y](https://doi.org/10.1021/cs501037y)