

Aliaksandr S Bandarenka

List of Publications by Year in descending order

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134
papers

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137
docs citations

137
times ranked

6181
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Finding optimal surface sites on heterogeneous catalysts by counting nearest neighbors. <i>Science</i> , 2015, 350, 185-189. | 12.6 | 725 |
| 2 | Tailoring the catalytic activity of electrodes with monolayer amounts of foreign metals. <i>Chemical Society Reviews</i> , 2013, 42, 5210. | 38.1 | 202 |
| 3 | Direct instrumental identification of catalytically active surface sites. <i>Nature</i> , 2017, 549, 74-77. | 27.8 | 199 |
| 4 | Why conclusions from platinum model surfaces do not necessarily lead to enhanced nanoparticle catalysts for the oxygen reduction reaction. <i>Chemical Science</i> , 2017, 8, 2283-2289. | 7.4 | 173 |
| 5 | Structural and electronic effects in heterogeneous electrocatalysis: Toward a rational design of electrocatalysts. <i>Journal of Catalysis</i> , 2013, 308, 11-24. | 6.2 | 132 |
| 6 | Pt Alloy Electrocatalysts for the Oxygen Reduction Reaction: From Model Surfaces to Nanostructured Systems. <i>ACS Catalysis</i> , 2016, 6, 5378-5385. | 11.2 | 130 |
| 7 | Unprecedented High Oxygen Evolution Activity of Electrocatalysts Derived from Surface-Mounted Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 5926-5933. | 13.7 | 125 |
| 8 | Optimizing the Size of Platinum Nanoparticles for Enhanced Mass Activity in the Electrochemical Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9596-9600. | 13.8 | 100 |
| 9 | Advanced Bifunctional Oxygen Reduction and Evolution Electrocatalyst Derived from Surface-Mounted Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5837-5843. | 13.8 | 99 |
| 10 | Theoretical design and experimental implementation of Ag/Au electrodes for the electrochemical reduction of nitrate. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3196. | 2.8 | 98 |
| 11 | Making the hydrogen evolution reaction in polymer electrolyte membrane electrolyzers even faster. <i>Nature Communications</i> , 2016, 7, 10990. | 12.8 | 97 |
| 12 | Revealing the nature of active sites in electrocatalysis. <i>Chemical Science</i> , 2019, 10, 8060-8075. | 7.4 | 96 |
| 13 | Influence of Alkali Metal Cations on the Hydrogen Evolution Reaction Activity of Pt, Ir, Au, and Ag Electrodes in Alkaline Electrolytes. <i>ChemElectroChem</i> , 2018, 5, 2326-2329. | 3.4 | 95 |
| 14 | Design of an Active Site towards Optimal Electrocatalysis: Overlayers, Surface Alloys and Near-Surface Alloys of Cu/Pt(111). <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11845-11848. | 13.8 | 94 |
| 15 | Elucidating the activity of stepped Pt single crystals for oxygen reduction. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 13625. | 2.8 | 92 |
| 16 | Exploring the interfaces between metal electrodes and aqueous electrolytes with electrochemical impedance spectroscopy. <i>Analyst</i> , 2013, 138, 5540. | 3.5 | 89 |
| 17 | Synergistically Enhanced Electrochemical Performance of Hierarchical MoS ₂ /TiNb ₂ O ₇ Hetero-nanostructures as Anode Materials for Li-Ion Batteries. <i>ACS Nano</i> , 2017, 11, 1026-1033. | 14.6 | 89 |
| 18 | Determination of Electroactive Surface Area of Ni-, Co-, Fe-, and Ir-Based Oxide Electrocatalysts. <i>ACS Catalysis</i> , 2019, 9, 9222-9230. | 11.2 | 80 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copper–Platinum(111) Alloy. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2800-2805. | 13.8 | 72 |
| 20 | Enhancing the Hydrogen Evolution Reaction Activity of Platinum Electrodes in Alkaline Media Using Nickel–Iron Clusters. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10934-10938. | 13.8 | 70 |
| 21 | Prospects of Value-Added Chemicals and Hydrogen via Electrolysis. <i>ChemSusChem</i> , 2020, 13, 2513-2521. | 6.8 | 70 |
| 22 | Electrodeposited Na ₂ VO ₆ [Fe(CN) ₆] films As a Cathode Material for Aqueous Na-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8107-8112. | 8.0 | 69 |
| 23 | Influence of the Nature of the Alkali Metal Cations on the Electrical Double-Layer Capacitance of Model Pt(111) and Au(111) Electrodes. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1927-1930. | 4.6 | 68 |
| 24 | Top-Down Synthesis of Nanostructured Platinum–Lanthanide Alloy Oxygen Reduction Reaction Catalysts: Pt _x Pr/C as an Example. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5129-5135. | 8.0 | 60 |
| 25 | Experimental Aspects in Benchmarking of the Electrocatalytic Activity. <i>ChemElectroChem</i> , 2015, 2, 143-149. | 3.4 | 57 |
| 26 | Quick Determination of Electroactive Surface Area of Some Oxide Electrode Materials. <i>Electroanalysis</i> , 2016, 28, 2394-2399. | 2.9 | 57 |
| 27 | Enabling Generalized Coordination Numbers to Describe Strain Effects. <i>ChemSusChem</i> , 2018, 11, 1824-1828. | 6.8 | 57 |
| 28 | How simple are the models of Na intercalation in aqueous media?. <i>Energy and Environmental Science</i> , 2016, 9, 955-961. | 30.8 | 51 |
| 29 | Electrochemical Scanning Probe Microscopies in Electrocatalysis. <i>Small Methods</i> , 2019, 3, 1800387. | 8.6 | 50 |
| 30 | Tailoring the Oxygen Reduction Activity of Pt Nanoparticles through Surface Defects: A Simple Top-Down Approach. <i>ACS Catalysis</i> , 2020, 10, 3131-3142. | 11.2 | 50 |
| 31 | Influence of the electrolyte composition on the activity and selectivity of electrocatalytic centers. <i>Catalysis Today</i> , 2016, 262, 24-35. | 4.4 | 48 |
| 32 | Oxygen Reduction at a Cu-Modified Pt(111) Model Electrocatalyst in Contact with Nafion Polymer. <i>ACS Catalysis</i> , 2014, 4, 3772-3778. | 11.2 | 47 |
| 33 | Nature of Highly Active Electrocatalytic Sites for the Hydrogen Evolution Reaction at Pt Electrodes in Acidic Media. <i>ACS Omega</i> , 2017, 2, 8141-8147. | 3.5 | 46 |
| 34 | On the Dominating Mechanism of the Hydrogen Evolution Reaction at Polycrystalline Pt Electrodes in Acidic Media. <i>ACS Catalysis</i> , 2018, 8, 9456-9462. | 11.2 | 46 |
| 35 | Quantitative Coordination–Activity Relations for the Design of Enhanced Pt Catalysts for CO Electro-oxidation. <i>ACS Catalysis</i> , 2017, 7, 4355-4359. | 11.2 | 45 |
| 36 | Oxygen Reduction Reaction: Rapid Prediction of Mass Activity of Nanostructured Platinum Electrocatalysts. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4463-4468. | 4.6 | 43 |

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|----|---|------|-----------|
| 37 | Metamorphosis of Heterostructured Surface-Mounted Metal-Organic Frameworks Yielding Record Oxygen Evolution Mass Activities. <i>Advanced Materials</i> , 2021, 33, e2103218. | 21.0 | 43 |
| 38 | Localized Electrochemical Impedance Spectroscopy: Visualization of Spatial Distributions of the Key Parameters Describing Solid/Liquid Interfaces. <i>Analytical Chemistry</i> , 2013, 85, 2443-2448. | 6.5 | 42 |
| 39 | Non-covalent interactions in water electrolysis: influence on the activity of Pt(111) and iridium oxide catalysts in acidic media. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8349-8355. | 2.8 | 39 |
| 40 | Oxygen Electroreduction at High-Index Pt Electrodes in Alkaline Electrolytes: A Decisive Role of the Alkali Metal Cations. <i>ACS Omega</i> , 2018, 3, 15325-15331. | 3.5 | 39 |
| 41 | Techniques and methodologies in modern electrocatalysis: evaluation of activity, selectivity and stability of catalytic materials. <i>Analyst</i> , The, 2014, 139, 1274. | 3.5 | 38 |
| 42 | The nature of active centers catalyzing oxygen electro-reduction at platinum surfaces in alkaline media. <i>Energy and Environmental Science</i> , 2019, 12, 351-357. | 30.8 | 38 |
| 43 | On the pH Dependence of the Potential of Maximum Entropy of Ir(111) Electrodes. <i>Scientific Reports</i> , 2017, 7, 1246. | 3.3 | 37 |
| 44 | Electrodeposited $\text{Na}_2\text{Ni}[\text{Fe}(\text{CN})_6]$ Thin-Film Cathodes Exposed to Simulated Aqueous Na-Ion Battery Conditions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8760-8768. | 3.1 | 37 |
| 45 | How the Nature of the Alkali Metal Cations Influences the Double-Layer Capacitance of Cu, Au, and Pt Single-Crystal Electrodes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 12442-12447. | 3.1 | 37 |
| 46 | Degradation mechanisms in polymer electrolyte membrane fuel cells caused by freeze-cycles: Investigation using electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 2019, 311, 21-29. | 5.2 | 36 |
| 47 | In-situ visualization of hydrogen evolution sites on helium ion treated molybdenum dichalcogenides under reaction conditions. <i>Npj 2D Materials and Applications</i> , 2019, 3, . | 7.9 | 35 |
| 48 | Recent Approaches to Design Electrocatalysts Based on Metal-Organic Frameworks and Their Derivatives. <i>Chemistry - an Asian Journal</i> , 2019, 14, 3474-3501. | 3.3 | 34 |
| 49 | Temperature Effects in Polymer Electrolyte Membrane Fuel Cells. <i>ChemElectroChem</i> , 2020, 7, 3545-3568. | 3.4 | 34 |
| 50 | Review on physical impedance models in modern battery research. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 12926-12944. | 2.8 | 34 |
| 51 | Novel approach of processing electrical bioimpedance data using differential impedance analysis. <i>Medical Engineering and Physics</i> , 2013, 35, 1349-1357. | 1.7 | 33 |
| 52 | Influence of the alkali metal cations on the activity of Pt(111) towards model electrocatalytic reactions in acidic sulfuric media. <i>Catalysis Today</i> , 2015, 244, 96-102. | 4.4 | 33 |
| 53 | The Potential of Zero Charge and the Electrochemical Interface Structure of Cu(111) in Alkaline Solutions. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5020-5028. | 3.1 | 33 |
| 54 | The Mechanism of the Interfacial Charge and Mass Transfer during Intercalation of Alkali Metal Cations. <i>Advanced Science</i> , 2016, 3, 1600211. | 11.2 | 32 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Oxygen Reduction Activities of Strained Platinum Core-Shell Electrocatalysts Predicted by Machine Learning. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1773-1780. | 4.6 | 31 |
| 56 | Electropolymerization: Further Insight into the Formation of Conducting Polyindole Thin Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1996-2003. | 3.1 | 30 |
| 57 | Multistage Mechanism of Lithium Intercalation into Graphite Anodes in the Presence of the Solid Electrolyte Interface. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14063-14069. | 8.0 | 30 |
| 58 | Characterisation of localised corrosion processes using scanning electrochemical impedance microscopy. <i>Electrochemistry Communications</i> , 2014, 44, 38-41. | 4.7 | 28 |
| 59 | Local visualization of catalytic activity at gas evolving electrodes using frequency-dependent scanning electrochemical microscopy. <i>Chemical Communications</i> , 2014, 50, 13250-13253. | 4.1 | 27 |
| 60 | Reconsidering Water Electrolysis: Producing Hydrogen at Cathodes Together with Selective Oxidation of <i>n</i> -Butylamine at Anodes. <i>ChemSusChem</i> , 2017, 10, 4812-4816. | 6.8 | 27 |
| 61 | A Comprehensive Physical Impedance Model of Polymer Electrolyte Fuel Cell Cathodes in Oxygen-free Atmosphere. <i>Scientific Reports</i> , 2018, 8, 4933. | 3.3 | 27 |
| 62 | Properties of the Space Charge Layers Formed in Li-Ion Conducting Glass Ceramics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5853-5860. | 8.0 | 27 |
| 63 | Electrolyte Effects on the Stabilization of Prussian Blue Analogue Electrodes in Aqueous Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3515-3525. | 8.0 | 27 |
| 64 | Benchmarking the Performance of Thin-Film Oxide Electrocatalysts for Gas Evolution Reactions at High Current Densities. <i>ACS Catalysis</i> , 2016, 6, 3017-3024. | 11.2 | 26 |
| 65 | High oxygen reduction reaction activity of Pt5Pr electrodes in acidic media. <i>Electrochemistry Communications</i> , 2018, 88, 10-14. | 4.7 | 26 |
| 66 | The constant phase element reveals 2D phase transitions in adsorbate layers at the electrode/electrolyte interfaces. <i>Electrochemistry Communications</i> , 2013, 27, 42-45. | 4.7 | 25 |
| 67 | Correlative Electrochemical Microscopy for the Elucidation of the Local Ionic and Electronic Properties of the Solid Electrolyte Interphase in Li-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 25 |
| 68 | Localized Impedance Measurements for Electrochemical Surface Science. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8952-8959. | 3.1 | 24 |
| 69 | Revealing Active Sites for Hydrogen Evolution at Pt and Pd Atomic Layers on Au Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12476-12480. | 8.0 | 23 |
| 70 | In Situ Quantification of the Local Electrocatalytic Activity via Electrochemical Scanning Tunneling Microscopy. <i>Small Methods</i> , 2021, 5, e2000710. | 8.6 | 23 |
| 71 | Assessment of active areas for the oxygen evolution reaction on an amorphous iridium oxide surface. <i>Journal of Catalysis</i> , 2021, 396, 14-22. | 6.2 | 23 |
| 72 | Revealing onset potentials using electrochemical microscopy to assess the catalytic activity of gas-evolving electrodes. <i>Electrochemistry Communications</i> , 2014, 38, 142-145. | 4.7 | 22 |

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|----|--|------|-----------|
| 73 | In Situ Characterization of Ultrathin Films by Scanning Electrochemical Impedance Microscopy. <i>Analytical Chemistry</i> , 2016, 88, 3354-3362. | 6.5 | 21 |
| 74 | What Do Laser-Induced Transient Techniques Reveal for Batteries? Na- and K-Intercalation from Aqueous Electrolytes as an Example. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 20213-20222. | 8.0 | 21 |
| 75 | Monitoring the active sites for the hydrogen evolution reaction at model carbon surfaces. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10051-10058. | 2.8 | 21 |
| 76 | Electrochemical top-down synthesis of C-supported Pt nano-particles with controllable shape and size: Mechanistic insights and application. <i>Nano Research</i> , 2021, 14, 2762-2769. | 10.4 | 18 |
| 77 | In depth analysis of complex interfacial processes: in situ electrochemical characterization of deposition of atomic layers of Cu, Pb and Te on Pd electrodes. <i>RSC Advances</i> , 2012, 2, 10994. | 3.6 | 17 |
| 78 | Elucidation of adsorption processes at the surface of Pt(331) model electrocatalysts in acidic aqueous media. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 10792-10799. | 2.8 | 17 |
| 79 | Intercalation of Mg ²⁺ into electrodeposited Prussian Blue Analogue thin films from aqueous electrolytes. <i>Electrochimica Acta</i> , 2019, 307, 157-163. | 5.2 | 17 |
| 80 | Characterization and Quantification of Depletion and Accumulation Layers in Solid-State Li ⁺ -Conducting Electrolytes Using In Situ Spectroscopic Ellipsometry. <i>Advanced Materials</i> , 2021, 33, e2100585. | 21.0 | 17 |
| 81 | A versatile electrochemical cell for the preparation and characterisation of model electrocatalytic systems. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12998. | 2.8 | 16 |
| 82 | Electrochemically Formed Na _x Mn[Mn(CN) ₆] Thin Film Anodes Demonstrate Sodium Intercalation and Deintercalation at Extremely Negative Electrode Potentials in Aqueous Media. <i>ACS Applied Energy Materials</i> , 2018, 1, 123-128. | 5.1 | 16 |
| 83 | Advanced Bifunctional Oxygen Reduction and Evolution Electrocatalyst Derived from Surface-Mounted Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2020, 132, 5886-5892. | 2.0 | 16 |
| 84 | Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 16 |
| 85 | Revealing the Nature of Active Sites on Pt-Gd and Pt-Pr Alloys during the Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 19604-19613. | 8.0 | 16 |
| 86 | Investigation of degradation mechanisms in PEM fuel cells caused by low-temperature cycles. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 15951-15964. | 7.1 | 15 |
| 87 | In-situ detection of active sites for carbon-based bifunctional oxygen reduction and evolution catalysis. <i>Electrochimica Acta</i> , 2021, 382, 138285. | 5.2 | 15 |
| 88 | Nanosized and metastable molybdenum oxides as negative electrode materials for durable high-energy aqueous Li-ion batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 15 |
| 89 | Intrinsic Activity of Some Oxygen and Hydrogen Evolution Reaction Electrocatalysts under Industrially Relevant Conditions. <i>ACS Applied Energy Materials</i> , 2018, 1, 4196-4202. | 5.1 | 14 |
| 90 | Detection of 2D phase transitions at the electrode/electrolyte interface using electrochemical impedance spectroscopy. <i>Surface Science</i> , 2015, 631, 81-87. | 1.9 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Engineering of Highly Active Silver Nanoparticles for Oxygen Electroreduction via Simultaneous Control over Their Shape and Size. <i>Advanced Sustainable Systems</i> , 2017, 1, 1700117. | 5.3 | 13 |
| 92 | Multiple Potentials of Maximum Entropy for a Na ₂ Co[Fe(CN) ₆] Battery Electrode Material: Does the Electrolyte Composition Control the Interface?. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 21688-21695. | 8.0 | 13 |
| 93 | A Review on Experimental Identification of Active Sites in Model Bifunctional Electrocatalytic Systems for Oxygen Reduction and Evolution Reactions. <i>ChemElectroChem</i> , 2021, 8, 3433-3456. | 3.4 | 13 |
| 94 | Evaluation of the Electrochemical Stability of Model Cu-Pt(111) Near-Surface Alloy Catalysts. <i>Electrochimica Acta</i> , 2015, 179, 469-474. | 5.2 | 12 |
| 95 | Fast identification of optimal pure platinum nanoparticle shapes and sizes for efficient oxygen electroreduction. <i>Nanoscale Advances</i> , 2019, 1, 2901-2909. | 4.6 | 12 |
| 96 | Theoretical and experimental identification of active electrocatalytic surface sites. <i>Current Opinion in Electrochemistry</i> , 2019, 14, 206-213. | 4.8 | 12 |
| 97 | In situ Probing of Mn ₂ O ₃ Activation toward Oxygen Electroreduction by the Laser-Induced Current Transient Technique. <i>ACS Applied Energy Materials</i> , 2020, 3, 9151-9157. | 5.1 | 12 |
| 98 | Avoiding Pyrolysis and Calcination: Advances in the Benign Routes Leading to MOF-Derived Electrocatalysts. <i>ChemElectroChem</i> , 2022, 9, . | 3.4 | 12 |
| 99 | Li ⁺ Conductivity of Space Charge Layers Formed at Electrified Interfaces Between a Model Solid-State Electrolyte and Blocking Au-Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15811-15817. | 8.0 | 12 |
| 100 | Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copper-Platinum(111) Alloy. <i>Angewandte Chemie</i> , 2018, 130, 2850-2855. | 2.0 | 10 |
| 101 | Spotlight on the Effect of Electrolyte Composition on the Potential of Maximum Entropy: Supporting Electrolytes Are Not Always Inert. <i>Chemistry - A European Journal</i> , 2021, 27, 10016-10020. | 3.3 | 10 |
| 102 | Exploration of the electrical double-layer structure: Influence of electrolyte components on the double-layer capacitance and potential of maximum entropy. <i>Current Opinion in Electrochemistry</i> , 2022, 32, 100882. | 4.8 | 10 |
| 103 | Chromium(II) Hexacyanoferrate-Based Thin Films as a Material for Aqueous Alkali Metal Cation Batteries. <i>ACS Omega</i> , 2018, 3, 5111-5115. | 3.5 | 9 |
| 104 | Optimierung der Groe von Platin-Nanopartikeln fur eine erhoherte Massenaktivitat der elektrochemischen Sauerstoffreduktion. <i>Angewandte Chemie</i> , 2019, 131, 9697-9702. | 2.0 | 9 |
| 105 | Temperature dependences of the double layer capacitance of some solid/liquid and solid/solid electrified interfaces. An experimental study. <i>Electrochimica Acta</i> , 2021, 391, 138969. | 5.2 | 9 |
| 106 | Electrochemical formation and surface characterisation of Cu _{2-x} Te thin films with adjustable content of Cu. <i>RSC Advances</i> , 2013, 3, 21648. | 3.6 | 8 |
| 107 | Real-Time Impedance Analysis for the On-Road Monitoring of Automotive Fuel Cells. <i>ChemElectroChem</i> , 2020, 7, 2784-2791. | 3.4 | 8 |
| 108 | Aktivitatssteigerung der Wasserstoffentwicklung von Platinelektroden in alkalischen Medien unter Verwendung von Ni-Fe-Clustern. <i>Angewandte Chemie</i> , 2020, 132, 11026-11031. | 2.0 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 109 | Fast and accurate determination of the electroactive surface area of MnOx. <i>Electrochimica Acta</i> , 2021, 389, 138692. | 5.2 | 8 |
| 110 | A Systematic Study of the Influence of Electrolyte Ions on the Electrode Activity. <i>ChemElectroChem</i> , 2022, 9, . | 3.4 | 8 |
| 111 | Preparation of thin film Cu-Pt(111) near-surface alloys: One small step towards up-scaling model single crystal surfaces. <i>Electrochimica Acta</i> , 2013, 112, 887-893. | 5.2 | 7 |
| 112 | Dual In Situ Laser Techniques Underpin the Role of Cations in Impacting Electrocatalysts. <i>Angewandte Chemie</i> , 2022, 134, . | 2.0 | 7 |
| 113 | Elucidation of Structure-Activity Relations in Proton Electroreduction at Pd Surfaces: Theoretical and Experimental Study. <i>Small</i> , 2022, 18, . | 10.0 | 7 |
| 114 | Characterisation of non-uniform functional surfaces: towards linking basic surface properties with electrocatalytic activity. <i>RSC Advances</i> , 2014, 4, 1532-1537. | 3.6 | 6 |
| 115 | Modeling of Space-Charge Layers in Solid-State Electrolytes: A Kinetic Monte Carlo Approach and Its Validation. <i>Journal of Physical Chemistry C</i> , 2022, 126, 10900-10909. | 3.1 | 6 |
| 116 | Position of Cu Atoms at the Pt(111) Electrode Surfaces Controls Electrosorption of (H)SO ₄ ²⁻ from H ₂ SO ₄ Electrolytes. <i>ChemElectroChem</i> , 2014, 1, 213-219. | 3.4 | 5 |
| 117 | Applicability of double layer capacitance measurements to monitor local temperature changes at polymer electrolyte membrane fuel cell cathodes. <i>Results in Chemistry</i> , 2020, 2, 100078. | 2.0 | 5 |
| 118 | Structure-Dependent Electrical Double-Layer Capacitances of the Basal Plane Pd(<i>hkl</i>) Electrodes in HClO ₄ . <i>Journal of Physical Chemistry C</i> , 2022, 126, 11414-11420. | 3.1 | 5 |
| 119 | Kinetic Passivation Effect of Localized Differential Aeration on Brass. <i>ChemPlusChem</i> , 2016, 81, 49-57. | 2.8 | 4 |
| 120 | A Cell for Controllable Formation and In Operando Electrochemical Characterization of Intercalation Materials for Aqueous Metal-Ion Batteries. <i>Small Methods</i> , 2019, 3, 1900445. | 8.6 | 4 |
| 121 | Multiparametric Characterization of Nonelectroactive Self-Assembled Monolayers During Their Formation. <i>Langmuir</i> , 2013, 29, 9909-9917. | 3.5 | 3 |
| 122 | Characterisation of Complex Electrode Processes using Simultaneous Impedance Spectroscopy and Electrochemical Nanogravimetric Measurements. <i>ChemPlusChem</i> , 2014, 79, 348-358. | 2.8 | 3 |
| 123 | Structure-reactivity relations in electrocatalysis. , 2023, , 419-436. | | 2 |
| 124 | Korrelative elektrochemische Mikroskopie zur Aufklärung der lokalen ionischen und elektronischen Eigenschaften der Festkörper-Elektrolyt Zwischenphase in Lithionen-Batterien. <i>Angewandte Chemie</i> , 2022, 134, . | 2.0 | 2 |
| 125 | Spatially Resolved Electrochemical Impedance Spectroscopy of Automotive PEM Fuel Cells. <i>ChemElectroChem</i> , 2022, 9, . | 3.4 | 2 |
| 126 | Frontispiece: Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copper-Platinum(111) Alloy. <i>Angewandte Chemie - International Edition</i> , 2018, 57, . | 13.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Analysis of the Capacitive Behavior of Polymer Electrolyte Membrane Fuel Cells during Operation. ChemElectroChem, 2021, 8, 96-102. | 3.4 | 1 |
| 128 | Solidâ€State Electrolytes: Characterization and Quantification of Depletion and Accumulation Layers in Solidâ€State Li⁺â€Conducting Electrolytes Using In Situ Spectroscopic Ellipsometry (Adv. Tj ETQq0 20.0gBT /Overlock 10 | | |
| 129 | Dynamic and precise temperature control unit for <scp>PEMFC</scp> singleâ€cell testing. Engineering Reports, 2021, 3, e12345. | 1.7 | 1 |
| 130 | Prospects of Using the Laserâ€Induced Temperature Jump Techniques for Characterisation of Electrochemical Systems. ChemElectroChem, 0, , . | 3.4 | 1 |
| 131 | Anodic Desorption Monitored by Voltammetric and Gravimetric Measurements for Fast Estimation of Surface Coverage of Complex Organic Molecules on Au Electrodes. Electroanalysis, 2016, 28, 2382-2388. | 2.9 | 0 |
| 132 | Frontispiz: Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copperâ€Platinum(111) Alloy. Angewandte Chemie, 2018, 130, . | 2.0 | 0 |
| 133 | Cover Feature: Avoiding Pyrolysis and Calcination: Advances in the Benign Routes Leading to MOFâ€Derived Electrocatalysts (ChemElectroChem 7/2022). ChemElectroChem, 2022, 9, . | 3.4 | 0 |
| 134 | Finding efficient catalyst designs: A high-precision method to reveal active sites. Chem Catalysis, 2022, 2, 657-659. | 6.1 | 0 |