

# Cameron Bentley

## List of Publications by Year in descending order

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62  
papers

2,892  
citations

159358

30  
h-index

174990

52  
g-index

66  
all docs

66  
docs citations

66  
times ranked

2513  
citing authors

#	ARTICLE	IF	CITATIONS
1	Correlative operando microscopy of oxygen evolution electrocatalysts. <i>Nature</i> , 2021, 593, 67-73.	13.7	321
2	Nanoscale Surface Structureâ€™Activity in Electrochemistry and Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 2179-2193.	6.6	183
3	Electrochemical maps and movies of the hydrogen evolution reaction on natural crystals of molybdenite (MoS <sub>2</sub> ): basal vs. edge plane activity. <i>Chemical Science</i> , 2017, 8, 6583-6593.	3.7	159
4	Nanoscale Structure Dynamics within Electrocatalytic Materials. <i>Journal of the American Chemical Society</i> , 2017, 139, 16813-16821.	6.6	141
5	Nanoscale Electrochemical Mapping. <i>Analytical Chemistry</i> , 2019, 91, 84-108.	3.2	131
6	Scanning electrochemical cell microscopy: New perspectives on electrode processes in action. <i>Current Opinion in Electrochemistry</i> , 2017, 6, 23-30.	2.5	110
7	Local Surface Structure and Composition Control the Hydrogen Evolution Reaction on Iron Nickel Sulfides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4093-4097.	7.2	104
8	Voltammetric Determination of the Iodide/Iodine Formal Potential and Triiodide Stability Constant in Conventional and Ionic Liquid Media. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22392-22403.	1.5	102
9	Correlative Electrochemical Microscopy of Li <sup>+</sup> ion (De)intercalation at a Series of Individual LiMn <sub>2</sub> O <sub>4</sub> Particles. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4606-4611.	7.2	86
10	Electrochemical Reduction of Carbon Dioxide in a Monoethanolamine Capture Medium. <i>ChemSusChem</i> , 2017, 10, 4109-4118.	3.6	75
11	Mobility and Poisoning of Mass-Selected Platinum Nanoclusters during the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2018, 8, 6775-6790.	5.5	74
12	Simultaneous Topography and Reaction Flux Mapping at and around Electrocatalytic Nanoparticles. <i>ACS Nano</i> , 2017, 11, 9525-9535.	7.3	71
13	Stability and Placement of Ag/AgCl Quasi-Reference Counter Electrodes in Confined Electrochemical Cells. <i>Analytical Chemistry</i> , 2018, 90, 7700-7707.	3.2	70
14	Scanning electrochemical cell microscopy: A versatile method for highly localised corrosion related measurements on metal surfaces. <i>Electrochimica Acta</i> , 2019, 298, 80-88.	2.6	58
15	Scanning Electrochemical Cell Microscopy (SECCM) Chronopotentiometry: Development and Applications in Electroanalysis and Electrocatalysis. <i>Analytical Chemistry</i> , 2019, 91, 9229-9237.	3.2	55
16	Time-Resolved Detection of Surface Oxide Formation at Individual Gold Nanoparticles: Role in Electrocatalysis and New Approach for Sizing by Electrochemical Impacts. <i>Journal of the American Chemical Society</i> , 2016, 138, 12755-12758.	6.6	54
17	Nanoscale Active Sites for the Hydrogen Evolution Reaction on Low Carbon Steel. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24146-24155.	1.5	54
18	Nanoscale electrochemical movies and synchronous topographical mapping of electrocatalytic materials. <i>Faraday Discussions</i> , 2018, 210, 365-379.	1.6	50

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19	Nanoscale electrochemical visualization of grain-dependent anodic iron dissolution from low carbon steel. <i>Electrochimica Acta</i> , 2020, 332, 135267.	2.6	48
20	Nanoscale Visualization and Multiscale Electrochemical Analysis of Conductive Polymer Electrodes. <i>ACS Nano</i> , 2019, 13, 13271-13284.	7.3	47
21	Nanoscale Scanning Electrochemical Cell Microscopy and Correlative Surface Structural Analysis to Map Anodic and Cathodic Reactions on Polycrystalline Zn in Acid Media. <i>Journal of the Electrochemical Society</i> , 2020, 167, 041507.	1.3	47
22	Nanoscale Variations in the Electrocatalytic Activity of Layered Transition-Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2020, 124, 789-798.	1.5	46
23	Mass-Transport and Heterogeneous Electron-Transfer Kinetics Associated with the Ferrocene/Ferrocenium Process in Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16516-16525.	1.5	44
24	Applications of Convolution Voltammetry in Electroanalytical Chemistry. <i>Analytical Chemistry</i> , 2014, 86, 2073-2081.	3.2	42
25	High-Throughput Correlative Electrochemistryâ€“Microscopy at a Transmission Electron Microscopy Grid Electrode. <i>Analytical Chemistry</i> , 2019, 91, 14854-14859.	3.2	41
26	Electrochemical Reduction of CO <sub>2</sub> at Metal Electrodes in a Distillable Ionic Liquid. <i>ChemSusChem</i> , 2016, 9, 1271-1278.	3.6	37
27	Nanoscale Electrocatalysis of Hydrazine Electro-Oxidation at Blistered Graphite Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 30458-30466.	4.0	34
28	Metal support effects in electrocatalysis at hexagonal boron nitride. <i>Chemical Communications</i> , 2019, 55, 628-631.	2.2	34
29	Electrode Reaction and Mass-Transport Mechanisms Associated with the Iodide/Triiodide Couple in the Ionic Liquid 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)imide. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22439-22449.	1.5	33
30	Electrochemistry of Iodide, Iodine, and Iodine Monochloride in Chloride Containing Nonhaloaluminate Ionic Liquids. <i>Analytical Chemistry</i> , 2016, 88, 1915-1921.	3.2	32
31	Surface microstructural controls on electrochemical hydrogen absorption at polycrystalline palladium. <i>Journal of Electroanalytical Chemistry</i> , 2020, 872, 114047.	1.9	30
32	Nanoscale electrochemistry in a copper/aqueous/oil three-phase system: surface structureâ€“activity-corrosion potential relationships. <i>Chemical Science</i> , 2021, 12, 3055-3069.	3.7	30
33	Scanning Electrochemical Cell Microscopy (SECCM) in Aprotic Solvents: Practical Considerations and Applications. <i>Analytical Chemistry</i> , 2020, 92, 11673-11680.	3.2	29
34	Correlating the Local Electrocatalytic Activity of Amorphous Molybdenum Sulfide Thin Films with Microscopic Composition, Structure, and Porosity. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 44307-44316.	4.0	27
35	Correlative Electrochemical Microscopy of Li <sup>+</sup> (De)intercalation at a Series of Individual LiMn <sub>2</sub> O <sub>4</sub> Particles. <i>Angewandte Chemie</i> , 2019, 131, 4654-4659.	1.6	26
36	Advanced Spatiotemporal Voltammetric Techniques for Kinetic Analysis and Active Site Determination in the Electrochemical Reduction of CO <sub>2</sub> . <i>Accounts of Chemical Research</i> , 2022, 55, 241-251.	7.6	26

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37	Concentration and electrode material dependence of the voltammetric response of iodide on platinum, glassy carbon and boron-doped diamond in the room temperature ionic liquid 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide. <i>Electrochimica Acta</i> , 2013, 109, 554-561.	2.6	24
38	Mass Transport Studies and Hydrogen Evolution at a Platinum Electrode Using Bis(trifluoromethanesulfonyl)imide as the Proton Source in Ionic Liquids and Conventional Solvents. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29663-29673.	1.5	24
39	Electrochemical Proton Reduction and Equilibrium Acidity ( $pK_a$ ) in Aprotic Ionic Liquids: Protonated Amines and Sulfonamide Acids. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21828-21839.	1.5	23
40	High-Resolution Ion-Flux Imaging of Proton Transport through Graphene   Nafion Membranes. <i>ACS Nano</i> , 2022, 16, 5233-5245.	7.3	23
41	Advantages Available in the Application of the Semi-Integral Electroanalysis Technique for the Determination of Diffusion Coefficients in the Highly Viscous Ionic Liquid 1-Methyl-3-Octylimidazolium Hexafluorophosphate. <i>Analytical Chemistry</i> , 2013, 85, 2239-2245.	3.2	22
42	Electrochemical Reduction of $CO_2$ with an Oxide-Derived Lead Nano-Coralline Electrode in Dimcarb. <i>ChemElectroChem</i> , 2017, 4, 1402-1410.	1.7	22
43	Scanning electrochemical cell microscopy for the study of (nano)particle electrochemistry: From the subparticle to ensemble level. <i>Electrochemical Science Advances</i> , 2022, 2, e2100081.	1.2	22
44	Unexpected Complexity in the Electro-Oxidation of Iodide on Gold in the Ionic Liquid 1-Ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide. <i>Analytical Chemistry</i> , 2013, 85, 11319-11325.	3.2	21
45	Dual-Frequency Alternating Current Designer Waveform for Reliable Voltammetric Determination of Electrode Kinetics Approaching the Reversible Limit. <i>Analytical Chemistry</i> , 2016, 88, 2367-2374.	3.2	21
46	Impact of $sp^2$ Carbon Edge Effects on the Electron-Transfer Kinetics of the Ferrocene/Ferrocenium Process at a Boron-Doped Diamond Electrode in an Ionic Liquid. <i>Journal of Physical Chemistry C</i> , 2019, 123, 17397-17406.	1.5	19
47	Electrochemical Impedance Measurements in Scanning Ion Conductance Microscopy. <i>Analytical Chemistry</i> , 2020, 92, 12509-12517.	3.2	18
48	Electrochemical Proton Reduction and Equilibrium Acidity ( $pK_a$ ) in Aprotic Ionic Liquids: Phenols, Carboxylic Acids, and Sulfonic Acids. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21840-21851.	1.5	16
49	Electrode Material Dependence of the Electron Transfer Kinetics Associated with the $[SVW11O40]^{3+}/4^{+}$ (V/V) and $[SVW11O40]^{4+}/5^{+}$ (W/V) Processes in Dimethylformamide. <i>Electrochimica Acta</i> , 2016, 201, 45-56.	2.6	15
50	Electrochemistry of single nanoparticles: general discussion. <i>Faraday Discussions</i> , 2016, 193, 387-413.	1.6	13
51	Scanning electrochemical cell microscopy: High-resolution structure-property studies of mono- and polycrystalline electrode materials. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 101006.	2.5	11
52	Die lokale Oberflächenstruktur und -zusammensetzung bestimmt die Wasserstoffentwicklung an Eisen-Nickelsulfiden. <i>Angewandte Chemie</i> , 2018, 130, 4157-4161.	1.6	10
53	Influence of 1-butyl-3-methylimidazolium on the electron transfer kinetics associated with the $[SVW 11 O 40]^{3+}/4^{+}$ (V/V) and $[SVW 11 O 40]^{4+}/5^{+}$ (W/V) processes in dimethylformamide. <i>Journal of Electroanalytical Chemistry</i> , 2016, 779, 67-74.	1.9	8
54	Voltammetric Perspectives on the Acidity Scale and $H^+/H_2$ Process in Ionic Liquid Media. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 397-419.	2.8	8

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55	Highlights from the Faraday Discussion on Single Entity Electrochemistry, York, UK, August–September 2016. <i>Chemical Communications</i> , 2016, 52, 13934-13940.	2.2	7
56	Electrolyte cation dependence of the electron transfer kinetics associated with the [SWW11O4O]3- (V/V) and [SWW11O4O]4- (W/V) processes in propylene carbonate. <i>Journal of Electroanalytical Chemistry</i> , 2018, 819, 193-201.	1.9	6
57	Dynamics of nanointerfaces: general discussion. <i>Faraday Discussions</i> , 2018, 210, 451-479.	1.6	4
58	TiO <sub>2</sub> nanocrystal rods on titanium microwires: growth, vacuum annealing, and photoelectrochemical oxygen evolution. <i>New Journal of Chemistry</i> , 2022, 46, 8385-8392.	1.4	2
59	Electroanalytical Applications of Semiintegral and Convolution Voltammetry in Room-Temperature Ionic Liquids. , 2015, , 143-167.		1
60	Processes at nanoelectrodes: general discussion. <i>Faraday Discussions</i> , 2018, 210, 235-265.	1.6	1
61	Voltammetry of Adhered Microparticles in Contact with Ionic Liquids: Principles and Applications. , 2015, , 405-433.		0
62	Energy conversion at nanointerfaces: general discussion. <i>Faraday Discussions</i> , 2018, 210, 333-351.	1.6	0