Jeffrey E Dick

List of Publications by Year
in descending order

63	2,851	159358	174990
papers	citations	30 h-index	52 g-index

66	66	66	2002
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrosynthesis of high-entropy metallic glass nanoparticles for designer, multi-functional electrocatalysis. Nature Communications, 2019, 10, 2650.	5.8	286
2	Characterizing Emulsions by Observation of Single Droplet Collisionsâ€"Attoliter Electrochemical Reactors. Journal of the American Chemical Society, 2014, 136, 4849-4852.	6.6	186
3	Observation of Single-Protein and DNA Macromolecule Collisions on Ultramicroelectrodes. Journal of the American Chemical Society, 2015, 137, 8376-8379.	6.6	164
4	Electrochemical detection of a single cytomegalovirus at an ultramicroelectrode and its antibody anchoring. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5303-5308.	3.3	137
5	Simultaneous Detection of Single Attoliter Droplet Collisions by Electrochemical and Electrogenerated Chemiluminescent Responses. Angewandte Chemie - International Edition, 2014, 53, 11859-11862.	7.2	120
6	Electrochemical Detection of Single Phospholipid Vesicle Collisions at a Pt Ultramicroelectrode. Langmuir, 2015, 31, 11734-11739.	1.6	116
7	Electrodeposition of Isolated Platinum Atoms and Clusters on Bismuthâ€"Characterization and Electrocatalysis. Journal of the American Chemical Society, 2017, 139, 17677-17682.	6.6	106
8	Electrogenerated Chemiluminescence of Common Organic Luminophores in Water Using an Emulsion System. Journal of the American Chemical Society, 2014, 136, 13546-13549.	6.6	101
9	Enzymatically enhanced collisions on ultramicroelectrodes for specific and rapid detection of individual viruses. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6403-6408.	3.3	86
10	Advanced Electrochemistry of Individual Metal Clusters Electrodeposited Atom by Atom to Nanometer by Nanometer. Accounts of Chemical Research, 2016, 49, 2587-2595.	7.6	75
11	Probing Ion Transfer across Liquidâ€"Liquid Interfaces by Monitoring Collisions of Single Femtoliter Oil Droplets on Ultramicroelectrodes. Analytical Chemistry, 2016, 88, 7754-7761.	3.2	74
12	Analyzing Benzene and Cyclohexane Emulsion Droplet Collisions on Ultramicroelectrodes. Analytical Chemistry, 2015, 87, 11013-11021.	3.2	65
13	High-Speed Multipass Coulter Counter with Ultrahigh Resolution. ACS Nano, 2015, 9, 12274-12282.	7.3	59
14	Recognizing Single Collisions of PtCl₆^{2â€“} at Femtomolar Concentrations on Ultramicroelectrodes by Nucleating Electrocatalytic Clusters. Journal of the American Chemical Society, 2015, 137, 13752-13755.	6.6	55
15	Quantifying Interferent Effects on Molecularly Imprinted Polymer Sensors for Per- and Polyfluoroalkyl Substances (PFAS). Analytical Chemistry, 2020, 92, 10597-10605.	3.2	54
16	A Universal Platform for the Electrodeposition of Ligand-Free Metal Nanoparticles from a Water-in-Oil Emulsion System. ACS Applied Nano Materials, 2018, 1, 5702-5711.	2.4	52
17	Reviewâ€"Electrochemistry's Potential to Reach the Ultimate Sensitivity in Measurement Science. Journal of the Electrochemical Society, 2020, 167, 037505.	1.3	52
18	Electrochemical detection of single cancer and healthy cell collisions on a microelectrode. Chemical Communications, 2016, 52, 10906-10909.	2.2	51

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19	SweepStat: A Build-It-Yourself, Two-Electrode Potentiostat for Macroelectrode and Ultramicroelectrode Studies. Journal of Chemical Education, 2020, 97, 265-270.	1.1	51
20	Electrochemical Sensing of Perfluorooctanesulfonate (PFOS) Using Ambient Oxygen in River Water. ACS Sensors, 2020, 5, 3591-3598.	4.0	51
21	Direct Electrochemical Observation of Single Platinum Cluster Electrocatalysis on Ultramicroelectrodes. Analytical Chemistry, 2018, 90, 7804-7808.	3.2	50
22	An Alkaline Flow Battery Based on the Coordination Chemistry of Iron and Cobalt. Journal of the Electrochemical Society, 2015, 162, A378-A383.	1.3	46
23	Î¼-MIP: Molecularly Imprinted Polymer-Modified Microelectrodes for the Ultrasensitive Quantification of GenX (HFPO-DA) in River Water. Environmental Science and Technology Letters, 2020, 7, 489-495.	3.9	45
24	Visualizing Phase Boundaries with Electrogenerated Chemiluminescence. Journal of Physical Chemistry Letters, 2020, 11, 4803-4808.	2.1	45
25	Millisecond Coulometry via Zeptoliter Droplet Collisions on an Ultramicroelectrode. Electroanalysis, 2016, 28, 2320-2326.	1.5	41
26	Fine-Tuning Porosity and Time-Resolved Observation of the Nucleation and Growth of Single Platinum Nanoparticles. ACS Nano, 2019, 13, 4572-4581.	7.3	38
27	Electrochemical sensors for the detection of fentanyl and its analogs: Foundations and recent advances. TrAC - Trends in Analytical Chemistry, 2020, 132, 116037.	5.8	36
28	Toward the Digital Electrochemical Recognition of Cobalt, Iridium, Nickel, and Iron Ion Collisions by Catalytic Amplification. Journal of the American Chemical Society, 2016, 138, 8446-8452.	6.6	35
29	Electrochemical quantification of accelerated FADGDH rates in aqueous nanodroplets. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	34
30	Cathodically Dissolved Platinum Resulting from the O₂ and H₂O₂ Reduction Reactions on Platinum Ultramicroelectrodes. Analytical Chemistry, 2017, 89, 3087-3092.	3.2	33
31	Enzyme Kinetics via Open Circuit Potentiometry. Analytical Chemistry, 2020, 92, 2266-2273.	3.2	31
32	One-step electrodeposition of ligand-free PdPt alloy nanoparticles from water droplets: Controlling size, coverage, and elemental stoichiometry. Electrochemistry Communications, 2019, 98, 1-5.	2.3	27
33	Voltammetric Analysis of Redox Reactions and Ion Transfer in Water Microdroplets. Langmuir, 2020, 36, 8231-8239.	1.6	26
34	Advanced Characterization Techniques for Evaluating Porosity, Nanopore Tortuosity, and Electrical Connectivity at the Single-Nanoparticle Level. ACS Applied Nano Materials, 2019, 2, 819-830.	2.4	25
35	Nanoelectrochemical quantification of single-cell metabolism. Analytical and Bioanalytical Chemistry, 2021, 413, 17-24.	1.9	22
36	Quantifying Growth Kinetics of Single Nanoparticles in Sub-Femtoliter Reactors. Journal of Physical Chemistry C, 2020, 124, 14380-14389.	1.5	21

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37	Leakless, Bipolar Reference Electrodes: Fabrication, Performance, and Miniaturization. Analytical Chemistry, 2021, 93, 10065-10074.	3.2	21
38	Recent advances in potentiometric biosensing. Current Opinion in Electrochemistry, 2021, 28, 100735.	2.5	21
39	Revealing Dynamic Rotation of Single Graphene Nanoplatelets on Electrified Microinterfaces. ACS Nano, 2021, 15, 1250-1258.	7.3	20
40	Electrochemistry, Electrogenerated Chemiluminescence, and Electropolymerization of Oligothienyl-BODIPY Derivatives. Electrochimica Acta, 2015, 178, 234-239.	2.6	19
41	Oxidase-loaded hydrogels for versatile potentiometric metabolite sensing. Biosensors and Bioelectronics, 2021, 178, 112997.	5.3	19
42	Mapping Solvent Entrapment in Multiphase Systems by Electrogenerated Chemiluminescence. Langmuir, 2021, 37, 2907-2912.	1.6	18
43	Ultrasensitive Electroanalysis: Femtomolar Determination of Lead, Cobalt, and Nickel. Analytical Chemistry, 2018, 90, 1142-1146.	3.2	16
44	Direct Measurement of Water Permeation in Submerged Alkyl Thiol Self-Assembled Monolayers on Gold Surfaces Revealed by Neutron Reflectometry. Langmuir, 2019, 35, 5647-5662.	1.6	16
45	Towards deployable electrochemical sensors for per- and polyfluoroalkyl substances (PFAS). Chemical Communications, 2021, 57, 8121-8130.	2.2	16
46	Correlated Opticalâ€“Electrochemical Measurements Reveal Bidirectional Current Steps for Graphene Nanoplatelet Collisions at Ultramicroelectrodes. Analytical Chemistry, 2021, 93, 2898-2906.	3.2	15
47	Single enzyme electroanalysis. Analyst, The, 2021, 146, 3413-3421.	1.7	14
48	A Generalized Potentiostat Adaptor for Multiplexed Electroanalysis. Analytical Chemistry, 2021, 93, 7381-7387.	3.2	13
49	Electrodeposition of ligand-free copper nanoparticles from aqueous nanodroplets. Journal of Materials Chemistry A, 2021, 9, 20048-20057.	5.2	13
50	Electrodeposition in aqueous nanoreactors. Current Opinion in Electrochemistry, 2021, 25, 100637.	2.5	10
51	Detecting Methamphetamine in Aerosols by Electroanalysis in a Soap Bubble Wall. Analytical Chemistry, 2022, 94, 6311-6317.	3.2	10
52	Aerosol Electroanalysis by PILSNER: Particle-into-Liquid Sampling for Nanoliter Electrochemical Reactions. ACS Measurement Science Au, 2022, 2, 106-112.	1.9	9
53	Preferential Electroreduction at the Oil|Water|Conductor Interface. Journal of Physical Chemistry Letters, 2022, 13, 3338-3341.	2.1	8
54	The Role of Oxygen in the Voltaic Pile. Journal of Chemical Education, 2021, 98, 2927-2936.	1.1	7

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55	Transient potentiometry based d-serine sensor using engineered d-amino acid oxidase showing quasi-direct electron transfer property. Biosensors and Bioelectronics, 2022, 200, 113927.	5.3	7
56	Enabling practical nanoparticle electrodeposition from aqueous nanodroplets. Nanoscale, 2022, 14, 2750-2757.	2.8	7
57	Ultrasensitive Electrochemistry by Radical Annihilation Amplification in a Solidâ€“Liquid Microgap. Analytical Chemistry, 2020, 92, 16260-16266.	3.2	6
58	Detection of individual conducting graphene nanoplatelet by electro-catalytic depression. Electrochimica Acta, 2020, 355, 136805.	2.6	6
59	Versatile potentiometric metabolite sensing without dioxygen interference. Biosensors and Bioelectronics, 2022, 201, 113888.	5.3	6
60	Anodic coulometry of zero-valent iron nanoparticles. Journal of Electroanalytical Chemistry, 2021, 896, 115331.	1.9	3
61	The oxidation of ferrocene in sessile toluene macro- and microdroplets: An opto-electrochemical study. Journal of Electroanalytical Chemistry, 2021, , 115922.	1.9	3
62	Enhancing Scanning Electrochemical Microscopyâ€™s Potential to Probe Dynamic Co-Culture Systems via Hyperspectral Assisted-Imaging. Analyst, The, 2022, , .	1.7	3
63	Electrochemical Characterization of Nicotinamide Riboside. ChemElectroChem, 2019, 6, 5264-5272.	1.7	0