Jeffrey E Dick

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4568653/publications.pdf

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63 papers

2,851 citations

30 h-index 52 g-index

66 all docs

66 docs citations

66 times ranked 2002 citing authors

#	Article	IF	CITATIONS
1	Aerosol Electroanalysis by PILSNER: Particle-into-Liquid Sampling for Nanoliter Electrochemical Reactions. ACS Measurement Science Au, 2022, 2, 106-112.	1.9	9
2	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
3	Enabling practical nanoparticle electrodeposition from aqueous nanodroplets. Nanoscale, 2022, 14, 2750-2757.	2.8	7
4	Versatile potentiometric metabolite sensing without dioxygen interference. Biosensors and Bioelectronics, 2022, 201, 113888.	5. 3	6
5	Enhancing Scanning Electrochemical Microscopy's Potential to Probe Dynamic Co-Culture Systems via Hyperspectral Assisted-Imaging. Analyst, The, 2022, , .	1.7	3
6	Preferential Electroreduction at the Oil Water Conductor Interface. Journal of Physical Chemistry Letters, 2022, 13, 3338-3341.	2.1	8
7	Detecting Methamphetamine in Aerosols by Electroanalysis in a Soap Bubble Wall. Analytical Chemistry, 2022, 94, 6311-6317.	3.2	10
8	Electrodeposition in aqueous nanoreactors. Current Opinion in Electrochemistry, 2021, 25, 100637.	2.5	10
9	Revealing Dynamic Rotation of Single Graphene Nanoplatelets on Electrified Microinterfaces. ACS Nano, 2021, 15, 1250-1258.	7.3	20
10	Nanoelectrochemical quantification of single-cell metabolism. Analytical and Bioanalytical Chemistry, 2021, 413, 17-24.	1.9	22
11	Correlated Optical–Electrochemical Measurements Reveal Bidirectional Current Steps for Graphene Nanoplatelet Collisions at Ultramicroelectrodes. Analytical Chemistry, 2021, 93, 2898-2906.	3.2	15
12	Towards deployable electrochemical sensors for per- and polyfluoroalkyl substances (PFAS). Chemical Communications, 2021, 57, 8121-8130.	2.2	16
13	Mapping Solvent Entrapment in Multiphase Systems by Electrogenerated Chemiluminescence. Langmuir, 2021, 37, 2907-2912.	1.6	18
14	Oxidase-loaded hydrogels for versatile potentiometric metabolite sensing. Biosensors and Bioelectronics, 2021, 178, 112997.	5. 3	19
15	A Generalized Potentiostat Adaptor for Multiplexed Electroanalysis. Analytical Chemistry, 2021, 93, 7381-7387.	3.2	13
16	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
17	Leakless, Bipolar Reference Electrodes: Fabrication, Performance, and Miniaturization. Analytical Chemistry, 2021, 93, 10065-10074.	3.2	21
18	Recent advances in potentiometric biosensing. Current Opinion in Electrochemistry, 2021, 28, 100735.	2.5	21

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19	The Role of Oxygen in the Voltaic Pile. Journal of Chemical Education, 2021, 98, 2927-2936.	1.1	7
20	Anodic coulometry of zero-valent iron nanoparticles. Journal of Electroanalytical Chemistry, 2021, 896, 115331.	1.9	3
21	Electrodeposition of ligand-free copper nanoparticles from aqueous nanodroplets. Journal of Materials Chemistry A, 2021, 9, 20048-20057.	5.2	13
22	Single enzyme electroanalysis. Analyst, The, 2021, 146, 3413-3421.	1.7	14
23	The oxidation of ferrocene in sessile toluene macro- and microdroplets: An opto-electrochemical study. Journal of Electroanalytical Chemistry, 2021, , 115922.	1.9	3
24	Enzyme Kinetics via Open Circuit Potentiometry. Analytical Chemistry, 2020, 92, 2266-2273.	3.2	31
25	Review—Electrochemistry's Potential to Reach the Ultimate Sensitivity in Measurement Science. Journal of the Electrochemical Society, 2020, 167, 037505.	1.3	52
26	SweepStat: A Build-It-Yourself, Two-Electrode Potentiostat for Macroelectrode and Ultramicroelectrode Studies. Journal of Chemical Education, 2020, 97, 265-270.	1.1	51
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	Ultrasensitive Electrochemistry by Radical Annihilation Amplification in a Solid–Liquid Microgap. Analytical Chemistry, 2020, 92, 16260-16266.	3.2	6
29	Electrochemical Sensing of Perfluorooctanesulfonate (PFOS) Using Ambient Oxygen in River Water. ACS Sensors, 2020, 5, 3591-3598.	4.0	51
30	Detection of individual conducting graphene nanoplatelet by electro-catalytic depression. Electrochimica Acta, 2020, 355, 136805.	2.6	6
31	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
32	Quantifying Growth Kinetics of Single Nanoparticles in Sub-Femtoliter Reactors. Journal of Physical Chemistry C, 2020, 124, 14380-14389.	1.5	21
33	Voltammetric Analysis of Redox Reactions and Ion Transfer in Water Microdroplets. Langmuir, 2020, 36, 8231-8239.	1.6	26
34	Quantifying Interferent Effects on Molecularly Imprinted Polymer Sensors for Per- and Polyfluoroalkyl Substances (PFAS). Analytical Chemistry, 2020, 92, 10597-10605.	3.2	54
35	Visualizing Phase Boundaries with Electrogenerated Chemiluminescence. Journal of Physical Chemistry Letters, 2020, 11, 4803-4808.	2.1	45
36	Electrochemical Characterization of Nicotinamide Riboside. ChemElectroChem, 2019, 6, 5264-5272.	1.7	0

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37	Electrosynthesis of high-entropy metallic glass nanoparticles for designer, multi-functional electrocatalysis. Nature Communications, 2019, 10, 2650.	5.8	286
38	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
39	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
40	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
41	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
42	Ultrasensitive Electroanalysis: Femtomolar Determination of Lead, Cobalt, and Nickel. Analytical Chemistry, 2018, 90, 1142-1146.	3.2	16
43	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
44	Direct Electrochemical Observation of Single Platinum Cluster Electrocatalysis on Ultramicroelectrodes. Analytical Chemistry, 2018, 90, 7804-7808.	3.2	50
45	Cathodically Dissolved Platinum Resulting from the O ₂ and H ₂ O ₂ Reduction Reactions on Platinum Ultramicroelectrodes. Analytical Chemistry, 2017, 89, 3087-3092.	3.2	33
46	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
47	Millisecond Coulometry via Zeptoliter Droplet Collisions on an Ultramicroelectrode. Electroanalysis, 2016, 28, 2320-2326.	1.5	41
48	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
49	Electrochemical detection of single cancer and healthy cell collisions on a microelectrode. Chemical Communications, 2016, 52, 10906-10909.	2.2	51
50	Probing Ion Transfer across Liquid–Liquid Interfaces by Monitoring Collisions of Single Femtoliter Oil Droplets on Ultramicroelectrodes. Analytical Chemistry, 2016, 88, 7754-7761.	3.2	74
51	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
52	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
53	High-Speed Multipass Coulter Counter with Ultrahigh Resolution. ACS Nano, 2015, 9, 12274-12282.	7.3	59
54	Electrochemistry, Electrogenerated Chemiluminescence, and Electropolymerization of Oligothienyl-BODIPY Derivatives. Electrochimica Acta, 2015, 178, 234-239.	2.6	19

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55	Observation of Single-Protein and DNA Macromolecule Collisions on Ultramicroelectrodes. Journal of the American Chemical Society, 2015, 137, 8376-8379.	6.6	164
56	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
57	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
58	Recognizing Single Collisions of PtCl ₆ ^{2â€"} at Femtomolar Concentrations on Ultramicroelectrodes by Nucleating Electrocatalytic Clusters. Journal of the American Chemical Society, 2015, 137, 13752-13755.	6.6	55
59	Electrochemical Detection of Single Phospholipid Vesicle Collisions at a Pt Ultramicroelectrode. Langmuir, 2015, 31, 11734-11739.	1.6	116
60	Analyzing Benzene and Cyclohexane Emulsion Droplet Collisions on Ultramicroelectrodes. Analytical Chemistry, 2015, 87, 11013-11021.	3.2	65
61	Simultaneous Detection of Single Attoliter Droplet Collisions by Electrochemical and Electrogenerated Chemiluminescent Responses. Angewandte Chemie - International Edition, 2014, 53, 11859-11862.	7.2	120
62	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
63	Characterizing Emulsions by Observation of Single Droplet Collisions—Attoliter Electrochemical Reactors. Journal of the American Chemical Society, 2014, 136, 4849-4852.	6.6	186