

# Johna Leddy

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1615936/publications.pdf>

Version: 2024-02-01

70  
papers

1,219  
citations

623574

14  
h-index

395590

33  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1290  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cyclic Voltammetry as a Probe of Selective Ion Transport within Layered, Electrode-Supported Ion-Exchange Membrane Materials. <i>Journal of the Electrochemical Society</i> , 2022, 169, 026520.	1.3	6
2	(Keynote, Digital Presentation) An Electrochemical Potential Perspective on Exchange Current Density and Work Function for Hydrogen Evolution Reaction (HER). <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2048-2048.	0.0	0
3	(Invited, Digital Presentation) Tafel Analysis Algorithm: Objective Identification of the Linear Region. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1879-1879.	0.0	0
4	Correlation of Exchange Current Density $j_0$ and the Standard Potential of the Metal Electrodes $E^0_M$ : A Different View of the Hydrogen Evolution Reaction (HER). <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1864-1864.	0.0	0
5	Analysis of Iron (III) Perchlorate at Magnetically Modified Electrodes. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 2018-2018.	0.0	0
6	(General Student Poster Session Winner - 1st Place) An Algorithm for Fitting Tafel Data and Determining Kinetic Parameters. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 2019-2019.	0.0	0
7	(General Student Poster Session Winner - 3rd Place) Designing and Implementing a Tailored Alternative Data Analysis Algorithm (TADAA) to Evaluate Quasireversible Heterogeneous Electron Transfer Measurements By Square Wave Voltammetry. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 2021-2021.	0.0	0
8	A Model for Sonochemistry in a Thin Layer Sonochemical Cell: What Constructive Interference Yields. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 2020-2020.	0.0	0
9	Convenient Syntheses of Trivalent Uranium Halide Starting Materials without Uranium Metal. <i>Inorganic Chemistry</i> , 2021, 60, 7593-7601.	1.9	16
10	To Configure Thin Layer Sonoelectrochemical Experiments. <i>Journal of the Electrochemical Society</i> , 2021, 168, 066524.	1.3	2
11	“Hooked” on Electrochemistry Education. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1509-1509.	0.0	0
12	Evolution of Tools in Undergraduate Electrochemistry Education - The Power of the Spreadsheet. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1504-1504.	0.0	0
13	Window gasketing for self humidified H <sub>2</sub>   O <sub>2</sub> and H <sub>2</sub>   air polymer electrolyte membrane fuel cells fed dry gases. <i>Journal of Electroanalytical Chemistry</i> , 2020, 875, 114695.	1.9	0
14	Impacts of hydrogen bonding interactions with $\text{Np}(\text{VO})_2\text{Cl}_4$ complexes: vibrational spectroscopy, redox behavior, and computational analysis. <i>Dalton Transactions</i> , 2020, 49, 6854-6866.	1.6	12
15	Correlation of Exchange Current Density $j_0$ and the Standard Potential of the Metal Electrodes $E^0_M$ for the Hydrogen Evolution Reaction (HER). <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 2604-2604.	0.0	0
16	Phosphorus-Rich Metal Phosphides: Direct and Tin Flux-Assisted Synthesis and Evaluation as Hydrogen Evolution Electrocatalysts. <i>Inorganic Chemistry</i> , 2019, 58, 5013-5024.	1.9	38
17	(Invited) Sonoelectrochemistry - A Sketch of Thin Layer Advantages. <i>ECS Transactions</i> , 2019, 92, 65-73.	0.3	0
18	Thin Layer Sonoelectrochemistry: Electrocatalysis in Oxygen Reduction Reaction (ORR) and Methanol Electrolysis. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0

#	ARTICLE	IF	CITATIONS
19	Electrochemical Tutorials on Diffusion: Models and Demonstrations with Physical Therapy Putty. ECS Meeting Abstracts, 2019, , .	0.0	0
20	A Spectroelectrochemical Sweat Sensor for Improved Management of Diabetes Mellitus. ECS Meeting Abstracts, 2019, , .	0.0	0
21	(Invited) Thin Layer Sonoelectrochemistry: Impacts on Slow Electron Transfer Kinetics without Visible Cavitation. ECS Meeting Abstracts, 2019, , .	0.0	0
22	(Invited) 13 Vitamins on a Potential Axis. ECS Meeting Abstracts, 2019, , .	0.0	0
23	Student Deployed Compu-Graphical Methods for Electrochemistry Education. ECS Meeting Abstracts, 2019, , .	0.0	0
24	(Invited) An Electrochemical Perspective on Electrophysiological Measurements. ECS Meeting Abstracts, 2019, MA2019-02, 2420-2420.	0.0	0
25	Critical Review "Electrochemical Properties of 13 Vitamins: A Critical Review and Assessment. Journal of the Electrochemical Society, 2018, 165, G18-G49.	1.3	56
26	Diffusion and selectivity of water confined within metal-organic nanotubes.. Journal of Materials Chemistry A, 2018, 6, 1531-1539.	5.2	10
27	(Invited) Magneto-electrocatalysis of Oxygen Reduction Reaction (ORR) By Lanthanide Triflates in Acetonitrile. ECS Meeting Abstracts, 2018, , .	0.0	0
28	Design of Magneto-electrocatalysts for the Hydrogen Evolution Reaction. ECS Meeting Abstracts, 2018, , .	0.0	0
29	(Invited) Lanthanide Magneto-electrocatalysis: Studying Electrocatalytic Effects of Various Lanthanide Triflates As Related to Their Magnetic Properties. ECS Meeting Abstracts, 2018, , .	0.0	0
30	Evidence of a Magnetic Effect on the Electron Transfer of the Hydrogen Evolution Reaction (HER). ECS Meeting Abstracts, 2018, , .	0.0	0
31	Limitations in Estimation of E1/2 from Cyclic Voltammetric Data. ECS Meeting Abstracts, 2018, , .	0.0	0
32	From the President: Of Gradients, Conflicts, Electronics, and Access. Electrochemical Society Interface, 2017, 26, 3-3.	0.3	0
33	(Invited) Evidence for Magnetic Effects on Electron Transfer. ECS Meeting Abstracts, 2017, , .	0.0	0
34	Modeling Standing Waves in a Thin Layer Sonoelectrochemical System. ECS Meeting Abstracts, 2017, , .	0.0	0
35	From the President: "There's no place like home." Electrochemical Society Interface, 2017, 26, 7-7.	0.3	0
36	Invited: Ammonia Generation at Algae Modified Electrodes: Some Mechanistic Considerations Drawn from Redox Potentials. ECS Meeting Abstracts, 2017, , .	0.0	0

#	ARTICLE	IF	CITATIONS
37	(Invited) An Activity Model for Swelling of Nafion® in Varied Solvents. ECS Meeting Abstracts, 2017, , .	0.0	0
38	(Invited) Fick's II Law and Deploying Spatially Varying Diffusion Coefficients on Electrodes. ECS Meeting Abstracts, 2017, , .	0.0	0
39	Film Permeation by Rotating Disk Voltammetry at Electrodes Modified with Electrochemically Inert Layers and Heterogeneous Composites. Journal of the Electrochemical Society, 2016, 163, H3173-H3181.	1.3	6
40	Electron Hopping of Tris (2,2<sup>â€²</sup>-bipyridyl) Transition Metal Complexes M(bpy)<sup>2/3</sup><sub>3</sub>in Nafion. Journal of the Electrochemical Society, 2016, 163, H588-H597.	1.3	7
41	Nafion: A Thermodynamic Sketch. ECS Meeting Abstracts, 2016, , .	0.0	0
42	A Systematic Study of M(bpy)<sup>â, f, z</sup>+ Complexes in Nafion: Concentration, Activity, and Electron Hopping. ECS Meeting Abstracts, 2016, , .	0.0	0
43	Thin Layer Sonoelectrochemistry in Aqueous and Non-Aqueous Systems. ECS Meeting Abstracts, 2016, , .	0.0	0
44	Lanthanide Voltammetry: Electrocatalysis and Electrochemistry in Acetonitrile. ECS Meeting Abstracts, 2016, , .	0.0	0
45	Modeling Standing Waves in a Thin Layer Sonoelectrochemical System. ECS Meeting Abstracts, 2016, , .	0.0	0
46	Modification of Nafion Membranes: Tailoring Properties for Function. ACS Symposium Series, 2015, , 99-133.	0.5	8
47	Cyclic Voltammetric Diagnostics for Inert, Uniform Density Films. Journal of the Electrochemical Society, 2013, 160, H285-H293.	1.3	12
48	Enhanced alcohol electrocatalysis with the introduction of magnetic composites into nickel electrocatalysts. Chemical Communications, 2012, 48, 11972.	2.2	10
49	Magnetically Modified Dye Sensitized Solar Cells. ECS Transactions, 2011, 41, 83-91.	0.3	4
50	Impact of Freezing on Nafion: Protection Using Acid Electrolyte. ECS Transactions, 2006, 1, 375-381.	0.3	1
51	Magnet Incorporated Carbon Electrodes: Methods for Construction and Demonstration of Increased Electrochemical Flux. Electroanalysis, 2005, 17, 1487-1494.	1.5	9
52	Running on Empty: Fuel Cells to the Rescue?. Electrochemical Society Interface, 2005, 14, 21-23.	0.3	6
53	Density of Nafion Exchanged with Transition Metal Complexes and Tetramethyl Ammonium, Ferrous, and Hydrogen Ions: A Commercial and Recast Films. Analytical Chemistry, 2002, 74, 4794-4799.	3.2	48
54	Dynamic Electrochemistry: A Methodology and Application. Analytical Chemistry, 2000, 72, 4497-4520.	3.2	27

#	ARTICLE	IF	CITATIONS
55	Ion Exchange Capacity of Nafion and Nafion Composites. Langmuir, 2000, 16, 2866-2871.	1.6	66
56	Architecture on Electrodes – Modeling Meets Materials. Electrochemical Society Interface, 2000, 9, 41-44.	0.3	1
57	The Physical Electrochemistry Division. Electrochemical Society Interface, 2000, 9, 21-54.	0.3	0
58	Characterizing Flux through Micro- and Nanostructured Composites. Langmuir, 1999, 15, 710-716.	1.6	12
59	Enzymatically prepared poly(hydroquinone) as a mediator for amperometric glucose sensors. Polymer, 1998, 39, 123-127.	1.8	45
60	Experimental Studies of Diffusion on Fractal Surfaces. Journal of Physical Chemistry B, 1998, 102, 10013-10019.	1.2	13
61	Dynamic Electrochemistry: Methodology and Application. Analytical Chemistry, 1998, 70, 519-590.	3.2	69
62	Density and Solubility of Nafion: Recast, Annealed, and Commercial Films. Analytical Chemistry, 1996, 68, 3793-3796.	3.2	150
63	A Model To Determine Local, Microscopic Flux Profiles within Composites from the Measured, Macroscopic Flux: Application to Poly(4-vinylpyridine) Composites. The Journal of Physical Chemistry, 1996, 100, 14762-14768.	2.9	2
64	Models for mediated reactions at film modified electrodes: controlled electrode potential. Analytica Chimica Acta, 1995, 307, 227-244.	2.6	22
65	Surface Diffusion in Microstructured, Ion-Exchange Matrixes: Nafion/Neutron Track-Etched Polycarbonate Membrane Composites. The Journal of Physical Chemistry, 1995, 99, 6064-6073.	2.9	28
66	Cyclic Voltammetric Responses for Inlaid Microdisks with Shields of Thickness Comparable to the Electrode Radius: A Simulation of Reversible Electrode Kinetics. Analytical Chemistry, 1995, 67, 1259-1270.	3.2	43
67	Direct Determination of the Transfer Coefficient from Cyclic Voltammetry: Isopoints as Diagnostics. Analytical Chemistry, 1995, 67, 1661-1668.	3.2	23
68	Dependence of rate constants of heterogeneous electron transfer reactions on viscosity. Journal of the American Chemical Society, 1985, 107, 3719-3721.	6.6	127
69	Polymer films on electrodes. 8. Investigation of charge-transport mechanisms in Nafion polymer modified electrodes. Journal of the American Chemical Society, 1982, 104, 4811-4817.	6.6	338
70	Communication – Voltammetry of Lanthanide (III) Triflates Accessible in Acetonitrile at Nafion Modified Electrodes. Journal of the Electrochemical Society, 0, , .	1.3	0