

Janine Mauzeroll

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Scanning Electrochemical Microscopy: A Comprehensive Review of Experimental Parameters from 1989 to 2015. <i>Chemical Reviews</i> , 2016, 116, 13234-13278.	23.0	333
2	Scanning electrochemical microscopy of menadione-glutathione conjugate export from yeast cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 7862-7867.	3.3	94
3	Scanning Electrochemical Microscopy. 48. Hg/Pt Hemispherical Ultramicroelectrodes: Fabrication and Characterization. <i>Analytical Chemistry</i> , 2003, 75, 3880-3889.	3.2	93
4	Menadione metabolism to thiodione in hepatoblastoma by scanning electrochemical microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 17582-17587.	3.3	91
5	Assessment of multidrug resistance on cell coculture patterns using scanning electrochemical microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 9249-9254.	3.3	76
6	Biological Scanning Electrochemical Microscopy and Its Application to Live Cell Studies. <i>Analytical Chemistry</i> , 2011, 83, 1485-1492.	3.2	75
7	In Situ Formation of Diazonium Salts from Nitro Precursors for Scanning Electrochemical Microscopy Patterning of Surfaces. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4006-4008.	7.2	72
8	Fabrication of Carbon, Gold, Platinum, Silver, and Mercury Ultramicroelectrodes with Controlled Geometry. <i>Analytical Chemistry</i> , 2015, 87, 2565-2569.	3.2	70
9	Fabrication and Characterization of Laser Pulled Platinum Microelectrodes with Controlled Geometry. <i>Analytical Chemistry</i> , 2011, 83, 2378-2382.	3.2	65
10	Ferrocene-Modified Phospholipid: An Innovative Precursor for Redox-Triggered Drug Delivery Vesicles Selective to Cancer Cells. <i>Langmuir</i> , 2016, 32, 4169-4178.	1.6	63
11	Oxygen Plasma Treatment of Polystyrene and Zeonor: Substrates for Adhesion of Patterned Cells. <i>Langmuir</i> , 2009, 25, 7169-7176.	1.6	56
12	Local flux of hydrogen from magnesium alloy corrosion investigated by scanning electrochemical microscopy. <i>Journal of Electroanalytical Chemistry</i> , 2014, 720-721, 121-127.	1.9	53
13	The Application of Scanning Electrochemical Microscopy to Corrosion Research. <i>Corrosion</i> , 2017, 73, 759-780.	0.5	53
14	Influence of Edge Effects on Local Corrosion Rate of Magnesium Alloy/Mild Steel Galvanic Couple. <i>Analytical Chemistry</i> , 2012, 84, 9899-9906.	3.2	50
15	Nanoscale Measurements of Lithium-Ion Battery Materials using Scanning Probe Techniques. <i>ChemElectroChem</i> , 2017, 4, 6-19.	1.7	49
16	Scanning Electrochemical Microscopy. 55. Fabrication and Characterization of Micropipet Probes. <i>Analytical Chemistry</i> , 2005, 77, 5182-5188.	3.2	47
17	Assessing multidrug resistance protein 1-mediated function in cancer cell multidrug resistance by scanning electrochemical microscopy and flow cytometry. <i>Bioelectrochemistry</i> , 2011, 82, 29-37.	2.4	43
18	Cyclometalated Iridium(III) Imidazole Phenanthroline Complexes as Luminescent and Electrochemiluminescent G-Quadruplex DNA Binders. <i>Inorganic Chemistry</i> , 2015, 54, 6958-6967.	1.9	42

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19	Detection of Tl(I) Transport through a Gramicidin ⁺ -Dioleoylphosphatidylcholine Monolayer Using the Substrate Generation ⁺ -Tip Collection Mode of Scanning Electrochemical Microscopy. <i>Langmuir</i> , 2002, 18, 9453-9461.	1.6	39
20	Detection of Hydrogen Peroxide Produced during the Oxygen Reduction Reaction at Self-Assembled Thiol ⁺ -Porphyrin Monolayers on Gold using SECM and Nanoelectrodes. <i>Langmuir</i> , 2010, 26, 13000-13006.	1.6	39
21	Measurement on isolated lithium iron phosphate particles reveals heterogeneity in material properties distribution. <i>Journal of Power Sources</i> , 2016, 325, 682-689.	4.0	37
22	Synthesis of Redox Active Ferrocene-Modified Phospholipids by Transphosphatidylation Reaction and Chronoamperometry Study of the Corresponding Redox Sensitive Liposome. <i>Journal of the American Chemical Society</i> , 2010, 132, 15120-15123.	6.6	35
23	Corrosion of One-Step Superhydrophobic Stainless-Steel Thermal Spray Coatings. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 1523-1532.	4.0	33
24	Development of Nano-Disc electrodes for Application as Shear Force Sensitive Electrochemical Probes. <i>Electrochimica Acta</i> , 2014, 136, 121-129.	2.6	32
25	Surface Analytical Methods Applied to Magnesium Corrosion. <i>Analytical Chemistry</i> , 2015, 87, 7499-7509.	3.2	32
26	Disk-Shaped Amperometric Enzymatic Biosensor for in Vivo Detection of α -serine. <i>Analytical Chemistry</i> , 2014, 86, 3501-3507.	3.2	31
27	In-situ Mg ²⁺ release monitored during magnesium alloy corrosion. <i>Journal of Electroanalytical Chemistry</i> , 2015, 736, 61-68.	1.9	31
28	High-Speed Scanning Electrochemical Microscopy Method for Substrate Kinetic Determination: Application to Live Cell Imaging in Human Cancer. <i>Analytical Chemistry</i> , 2015, 87, 8102-8106.	3.2	30
29	Combined Spectroelectrochemical and Simulated Insights into the Electrogenerated Chemiluminescence Coreactant Mechanism. <i>Analytical Chemistry</i> , 2018, 90, 7377-7382.	3.2	30
30	Review ⁺ Microelectrodes: An Overview of Probe Development and Bioelectrochemistry Applications from 2013 to 2018. <i>Journal of the Electrochemical Society</i> , 2019, 166, G25-G38.	1.3	30
31	Oil-Immersed Scanning Micropipette Contact Method Enabling Long-term Corrosion Mapping. <i>Analytical Chemistry</i> , 2020, 92, 12415-12422.	3.2	30
32	Polymers with intrinsic microporosity (PIMs) for targeted CO ₂ reduction to ethylene. <i>Chemosphere</i> , 2020, 248, 125993.	4.2	30
33	Patterning of Surfaces by Oxidation of Amine ⁺ -Containing Compounds Using Scanning Electrochemical Microscopy. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 7395-7397.	7.2	29
34	Local Hydrogen Fluxes Correlated to Microstructural Features of a Corroding Sand Cast AM50 Magnesium Alloy. <i>Journal of the Electrochemical Society</i> , 2014, 161, C557-C564.	1.3	29
35	Localised corrosion: general discussion. <i>Faraday Discussions</i> , 2015, 180, 381-414.	1.6	29
36	The role of titanium in the initiation of localized corrosion of stainless steel 444. <i>Npj Materials Degradation</i> , 2018, 2, .	2.6	27

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37	Carbon surface derivatization by electrochemical reduction of a diazonium salt in situ produced from the nitro precursor. <i>Journal of Electroanalytical Chemistry</i> , 2011, 661, 13-19.	1.9	26
38	High-Speed Scanning Electrochemical Microscopy Method for Substrate Kinetic Determination: Method and Theory. <i>Analytical Chemistry</i> , 2015, 87, 8096-8101.	3.2	26
39	Development of a Phase-Controlled Constant-Distance Scanning Electrochemical Microscope. <i>Analytical Chemistry</i> , 2009, 81, 3654-3659.	3.2	25
40	Localized Corrosion Behavior of AZ31B Magnesium Alloy with an Electrodeposited Poly(3,4-Ethylenedioxythiophene) Coating. <i>Journal of the Electrochemical Society</i> , 2015, 162, C536-C544.	1.3	25
41	Micropipette Contact Method to Investigate High-Energy Cathode Materials by using an Ionic Liquid. <i>ChemElectroChem</i> , 2019, 6, 195-201.	1.7	25
42	Electrogenerated Chemiluminescence of Iridium-Containing ROMP Block Copolymer and Self-Assembled Micelles. <i>Langmuir</i> , 2013, 29, 12866-12873.	1.6	24
43	Recent Advances in Bio-Templated Metallic Nanomaterial Synthesis and Electrocatalytic Applications. <i>ChemSusChem</i> , 2021, 14, 758-791.	3.6	24
44	Pourbaix Diagrams as a Simple Route to First Principles Corrosion Simulation. <i>Journal of the Electrochemical Society</i> , 2019, 166, C3186-C3192.	1.3	22
45	Using macro and micro electrochemical methods to understand the corrosion behavior of stainless steel thermal spray coatings. <i>Npj Materials Degradation</i> , 2019, 3, .	2.6	21
46	Forced convection during scanning electrochemical microscopy imaging over living cells: Effect of topographies and kinetics on the microelectrode current. <i>Electrochimica Acta</i> , 2013, 110, 42-48.	2.6	20
47	Localized Detection of Serine by using an Enzymatic Amperometric Biosensor and Scanning Electrochemical Microscopy. <i>ChemElectroChem</i> , 2017, 4, 920-926.	1.7	20
48	Forced Convection during Feedback Approach Curve Measurements in Scanning Electrochemical Microscopy: Maximal Displacement Velocity with a Microdisk. <i>Analytical Chemistry</i> , 2012, 84, 3531-3537.	3.2	19
49	Demystifying Mathematical Modeling of Electrochemical Systems. <i>Journal of Chemical Education</i> , 2019, 96, 2217-2224.	1.1	19
50	Effective Mass Transport Properties in Lithium Battery Electrodes. <i>ACS Applied Energy Materials</i> , 2020, 3, 440-446.	2.5	19
51	Determination of the Relationship between Expression and Functional Activity of Multidrug Resistance-Associated Protein 1 using Scanning Electrochemical Microscopy. <i>Analytical Chemistry</i> , 2017, 89, 8988-8994.	3.2	17
52	Ag ⁺ Interference from Ag/AgCl Wire Quasi-Reference Counter Electrode Inducing Corrosion Potential Shift in an Oil-Immersed Scanning Micropipette Contact Method Measurement. <i>Analytical Chemistry</i> , 2021, 93, 9657-9662.	3.2	17
53	Reducing the corrosion rate of magnesium alloys using ethylene glycol for advanced electrochemical imaging. <i>Corrosion Science</i> , 2015, 93, 70-79.	3.0	16
54	Enhancement of the Enzymatic Biosensor Response through Targeted Electrode Surface Roughness. <i>Journal of the Electrochemical Society</i> , 2018, 165, G3074-G3079.	1.3	16

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55	Efficient Measurement of the Influence of Chemical Composition on Corrosion: Analysis of an Mg-Al Diffusion Couple Using Scanning Micropipette Contact Method. <i>Journal of the Electrochemical Society</i> , 2019, 166, C624-C630.	1.3	16
56	Scanning Electrochemical Microscopy of the Photosynthetic Reaction Center of <i>Rhodobactersphaeroides</i> in Different Environmental Systems. <i>Analytical Chemistry</i> , 2006, 78, 5046-5051.	3.2	15
57	Development of a Model for Experimental Data Treatment of Diffusion and Activation Limited Polarization Curves for Magnesium and Steel Alloys. <i>Journal of the Electrochemical Society</i> , 2017, 164, E3576-E3582.	1.3	15
58	Anodic Stripping Voltammetry at Nanoelectrodes: Trapping of Mn ²⁺ by Crown Ethers. <i>Electrochimica Acta</i> , 2015, 162, 169-175.	2.6	13
59	Evaluating the Use of Edge Detection in Extracting Feature Size from Scanning Electrochemical Microscopy Images. <i>Analytical Chemistry</i> , 2019, 91, 3944-3950.	3.2	13
60	Corrosion Product Formation Monitored Using the Feedback Mode of Scanning Electrochemical Microscopy with Carbon Microelectrodes. <i>Journal of the Electrochemical Society</i> , 2015, 162, C677-C683.	1.3	12
61	Probing Passivating Porous Films by Scanning Electrochemical Microscopy. <i>Journal of the Electrochemical Society</i> , 2016, 163, H3066-H3071.	1.3	12
62	Cuvette-Based Electrogenerated Chemiluminescence Detection System for the Assessment of Polymerizable Ruthenium Luminophores. <i>ChemElectroChem</i> , 2017, 4, 1736-1743.	1.7	12
63	Identifying Nanoscale Pinhole Defects in Nitroaryl Layers with Scanning Electrochemical Cell Microscopy. <i>ChemElectroChem</i> , 2019, 6, 5439-5445.	1.7	12
64	Biosynthesized silver nanorings as a highly efficient and selective electrocatalysts for CO ₂ reduction. <i>Nanoscale</i> , 2019, 11, 18595-18603.	2.8	12
65	Effect of Substrate Permeability on Scanning Ion Conductance Microscopy: Uncertainty in Tip-Substrate Separation and Determination of Ionic Conductivity. <i>Analytical Chemistry</i> , 2019, 91, 15718-15725.	3.2	12
66	Super-resolution Scanning Electrochemical Microscopy. <i>Analytical Chemistry</i> , 2020, 92, 3958-3963.	3.2	12
67	Scanning Electrochemical Microscopy. , 2007, , 471-540.		11
68	Determination of the local corrosion rate of magnesium alloys using a shear force mounted scanning microcapillary method. <i>Faraday Discussions</i> , 2015, 180, 331-345.	1.6	11
69	Operando Tracking of Solution-Phase Concentration Profiles in Li-Ion Battery Positive Electrodes Using X-ray Fluorescence. <i>Analytical Chemistry</i> , 2020, 92, 10908-10912.	3.2	11
70	Platinum and gold inlaid disks 5 ¼m diameter. , 2007, , 189-197.		10
71	The Structural and Electrochemical Effects of N-Heterocyclic Carbene Monolayers on Magnesium. <i>Journal of the Electrochemical Society</i> , 2018, 165, G139-G145.	1.3	10
72	Wear resistant solid lubricating coatings via compression molding and thermal spraying technologies. <i>Surface and Coatings Technology</i> , 2021, 426, 127790.	2.2	10

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73	Potentiodynamic polarization curves of AA7075 at high scan rates interpreted using the high field model. <i>Npj Materials Degradation</i> , 2022, 6, .	2.6	10
74	Scanning Electrochemical Microscopy Approach Curves for Ring Microelectrodes in Pure Negative and Positive Feedback Mode. <i>Journal of the Electrochemical Society</i> , 2010, 157, F77.	1.3	9
75	Redox-Triggered Disassembly of Nanosized Liposomes Containing Ferrocene-Appended Amphiphiles. <i>Langmuir</i> , 2019, 35, 5608-5616.	1.6	9
76	Enhancing Electrochemical Biosensor Selectivity with Engineered α -Amino Acid Oxidase Enzymes for α -Serine and α -Alanine Quantification. <i>ACS Applied Bio Materials</i> , 2021, 4, 5598-5604.	2.3	9
77	Laser-pulled ultramicroelectrodes. , 2007, , 199-211.		8
78	Altered Spatial Resolution of Scanning Electrochemical Microscopy Induced by Multifunctional Dual-Barrel Microelectrodes. <i>Analytical Chemistry</i> , 2018, 90, 6796-6803.	3.2	8
79	Editors' Choice A Miniaturized Enzymatic Biosensor for Detection of Sensory-Evoked D-serine Release in the Brain. <i>Journal of the Electrochemical Society</i> , 2021, 168, 025502.	1.3	8
80	Modulation of Charge Transport Across Double-Stranded DNA by the Site-Specific Incorporation of Copper Bis-Phenanthroline Complexes. <i>Langmuir</i> , 2015, 31, 1850-1854.	1.6	7
81	Corrosion scales and passive films: general discussion. <i>Faraday Discussions</i> , 2015, 180, 205-232.	1.6	7
82	Charge Storage in Graphene Oxide: Impact of the Cation on Ion Permeability and Interfacial Capacitance. <i>Analytical Chemistry</i> , 2020, 92, 10300-10307.	3.2	7
83	Nanometals templated by tobacco mosaic virus coat protein with enhanced catalytic activity. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120540.	10.8	7
84	In-situ dynamic reaction of Ag NPs: Strategy for the construction of a sensitive electrochemical chiral sensor. <i>Sensors and Actuators B: Chemical</i> , 2020, 319, 128315.	4.0	7
85	NGenE 2021: Electrochemistry Is Everywhere. <i>ACS Energy Letters</i> , 2022, 7, 368-374.	8.8	6
86	Modular Flow-Through Platform for Spectroelectrochemical Analysis. <i>Analytical Chemistry</i> , 2017, 89, 5246-5253.	3.2	5
87	The Best of Both Worlds: Combining Ultramicroelectrode and Flow Cell Technologies. <i>Journal of the Electrochemical Society</i> , 2018, 165, H10-H15.	1.3	5
88	Simultaneous Electrochemical and Emission Monitoring of Electrogenenerated Chemiluminescence through Instrument Hyphenation. <i>Analytical Chemistry</i> , 2019, 91, 2312-2318.	3.2	5
89	Manufacturing and Tribological Behavior of Self-Lubricating Duplex Composites: Graphite-Reinforced Polymer Composites and Polymer-Infiltrated Metal Networks. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 103-115.	1.2	4
90	Quantitative measurements of free and immobilized RgDAAO Michaelis-Menten constant using an electrochemical assay reveal the impact of covalent cross-linking on substrate specificity. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 6793-6802.	1.9	4

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91	Tunable Assembly of Protein Enables Fabrication of Platinum Nanostructures with Different Catalytic Activity. ACS Applied Materials & Interfaces, 2021, 13, 52588-52597.	4.0	4
92	Formation, stability, and pH sensitivity of free-floating, giant unilamellar vesicles using palmitic acid-cholesterol mixtures. Soft Matter, 2014, 10, 6451.	1.2	3
93	Boosting CO2 Reduction: Creating an Efficient Path for Gas Transport. Joule, 2020, 4, 712-714.	11.7	3
94	Unfolding the Hidden Reactions in Galvanic Cells. Electrocatalysis, 2018, 9, 531-538.	1.5	2
95	Electrochemical Behavior, Microstructure, and Surface Chemistry of Thermal-Sprayed Stainless-Steel Coatings. Coatings, 2019, 9, 835.	1.2	2
96	Flux: Software for Analysing SECM Data. Journal of the Electrochemical Society, 2019, 166, H861-H865.	1.3	2
97	Determining the effect of dissolved CO2 on solution phase Li+ diffusion in common Li-ion battery electrolytes. Electrochemistry Communications, 2021, 125, 106979.	2.3	2
98	Structural dependence of effective mass transport properties in lithium battery electrodes. Journal of Power Sources, 2021, 504, 230069.	4.0	2
99	EDTA-Gradient Loading of Doxorubicin into Ferrocene-Containing Liposomes: Effect of Lipid Composition and Visualization of Triggered Release by Cryo-TEM. Langmuir, 2021, 37, 11222-11232.	1.6	2
100	Synthesis of Metal Complex Modified Phospholipids by Phospholipase D-Catalyzed Transphosphatidylation. ECS Transactions, 2009, 19, 1-10.	0.3	1
101	Solid/fluid interface: general discussion. Faraday Discussions, 2015, 180, 81-96.	1.6	1
102	Bottom-Up Characterization and Self-Assembly of Electrogenerated Chemiluminescence Active Ruthenium Nanospheres. ChemElectroChem, 2019, 6, 3499-3506.	1.7	1
103	Scanning Electrochemical Microscopy Applied to Cancer Related Studies. Biological and Medical Physics Series, 2013, , 331-362.	0.3	1
104	High-Throughput Strategy for Glycine Oxidase Biosensor Development Reveals Glycine Release from Cultured Cells. Analytical Chemistry, 2021, , .	3.2	1
105	Formation of Oxidation- and Acid-Sensitive Assemblies from Sterols and a Quaternary Ammonium Ferrocene Derivative: Quatsome- and Onion-like Vesicles and Extended Nanoribbons. Langmuir, 2022, 38, 4396-4406.	1.6	1
106	Hg microhemispherical electrodes. , 2007, , 235-243.		0
107	Scanning Electrochemical Microscopy Approach Curves Numerically Simulated for Ring Microelectrodes in Pure Negative and Positive Feedback Mode. ECS Transactions, 2009, 19, 11-24.	0.3	0
108	Fabrication of Hg/Pt Hemispherical Nanoelectrodes for Localized Quantitative Detection of Manganese 2+ Produced at Battery Material. ECS Meeting Abstracts, 2013, , .	0.0	0

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109	Prefaceâ€”JES Focus Issue on the Brain and Electrochemistry Honoring R. Mark Wightman and Christian Amatore. Journal of the Electrochemical Society, 2018, 165, Y13-Y13.	1.3	0
110	Microcontact Printing Patterning of an HOPG Surface by an Inverse Electron Demand Dielsâ€”Alder Reaction. Chemistry - A European Journal, 2018, 24, 8904-8909.	1.7	0
111	4. Redox-Responsive Self-Assembled Amphiphilic Materials: Review and Application to Biological Systems. , 2019, , 113-142.		0
112	Portable and sustainable activated carbon-based device for electro-assisted water purification. Environmental Science: Water Research and Technology, 2021, 7, 622-629.	1.2	0
113	Detection of Glutathione Conjugate Export from Yeast Cells. Electrochemical Society Interface, 2003, 12, 61-62.	0.3	0
114	Designing Amino Acid Detecting Electrochemical Biosensors for Health Research Applications. ECS Meeting Abstracts, 2020, MA2020-01, 2536-2536.	0.0	0
115	Prefaceâ€”JES Focus Issue on Organic and Inorganic Molecular Electrochemistry. Journal of the Electrochemical Society, 2020, 167, 150001.	1.3	0
116	Electrogenerated chemiluminescence (ECL). , 2020, , 285-314.		0
117	Enhanced Ethylene Selectivity during CO ₂ Reduction Using Polymers with Intrinsic Microporosity at Copper Gas Diffusion Electrodes. ECS Meeting Abstracts, 2020, MA2020-02, 3255-3255.	0.0	0
118	Square Wave Anodic Stripping Voltammetry for Localized Detection of Mn ²⁺ in Li-Ion Battery Environments. Journal of the Electrochemical Society, 0, , .	1.3	0