Andrew G Ewing

List of Publications by Year
in descending order

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212 papers	10,025 citations	28190 55 h-index	48187 88 g-index
231 all docs	231 docs citations	231 times ranked	5641 citing authors

#	Article	IF	Citations
1	Capillary zone electrophoresis with electrochemical detection. Analytical Chemistry, 1987, 59, 1762-1766.	3.2	417
2	Mass Spectrometric Imaging of Highly Curved Membranes During Tetrahymena Mating. Science, 2004, 305, 71-73.	6.0	319
3	Quantitative Measurement of Transmitters in Individual Vesicles in the Cytoplasm of Single Cells with Nanotip Electrodes. Angewandte Chemie - International Edition, 2015, 54, 11978-11982.	7.2	264
4	Atomic and Molecular Imaging at the Single-Cell Level with TOF-SIMS. Analytical Chemistry, 1997, 69, 2225-2231.	3.2	244
5	Measuring synaptic vesicles using cellular electrochemistry and nanoscale molecular imaging. Nature Reviews Chemistry, 2017, 1, .	13.8	204
6	VMAT-Mediated Changes in Quantal Size and Vesicular Volume. Journal of Neuroscience, 2000, 20, 5276-5282.	1.7	188
7	Amperometric Monitoring of Stimulated Catecholamine Release from Rat Pheochromocytoma (PC12) Cells at the Zeptomole Level. Analytical Chemistry, 1994, 66, 3031-3035.	3.2	180
8	Characterizing the Catecholamine Content of Single Mammalian Vesicles by Collisionâ€“Adsorption Events at an Electrode. Journal of the American Chemical Society, 2015, 137, 4344-4346.	6.6	178
9	Chemical Analysis of Single Cells. Analytical Chemistry, 2011, 83, 4369-4392.	3.2	172
10	Voltammetric and Pharmacological Characterization of Dopamine Release from Single Exocytotic Events at Rat Pheochromocytoma (PC12) Cells. Analytical Chemistry, 1998, 70, 3123-3130.	3.2	170
11	Characterization of submicron-sized carbon electrodes insulated with a phenol-allylphenol copolymer. Analytical Chemistry, 1992, 64, 1368-1373.	3.2	165
12	Chemical Analysis of Single Cells. Analytical Chemistry, 2013, 85, 522-542.	3.2	162
13	Improved method for end-column amperometric detection for capillary electrophoresis. Analytical Chemistry, 1993, 65, 577-581.	3.2	161
14	Effects of buffer composition on electroosmotic flow in capillary electrophoresis. Journal of Separation Science, 1990, 2, 176-180.	1.0	149
15	Estimation of Free Dopamine in the Cytoplasm of the Giant Dopamine Cell of Planorbis corneus by Voltammetry and Capillary Electrophoresis. Journal of Neurochemistry, 1990, 54, 633-638.	2.1	141
16	Only a Fraction of Quantal Content is Released During Exocytosis as Revealed by Electrochemical Cytometry of Secretory Vesicles. ACS Chemical Neuroscience, 2010, 1, 234-245.	1.7	138
17	Retention of ionic and non-ionic catechols in capillary zone electrophoresis with micellar solutions. Journal of Chromatography A, 1988, 441, 299-309.	1.8	129
18	Quantitative Chemical Measurements of Vesicular Transmitters with Electrochemical Cytometry. Accounts of Chemical Research, 2016, 49, 2347-2354.	7.6	126

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19	Spatially and Temporally Resolved Single-Cell Exocytosis Utilizing Individually Addressable Carbon Microelectrode Arrays. Analytical Chemistry, 2008, 80, 1394-1400.	3.2	125
20	Vesicular Quantal Size Measured by Amperometry at Chromaffin, Mast, Pheochromocytoma, and Pancreatic Î²â€Cells. Journal of Neurochemistry, 1996, 66, 1914-1923.	2.1	123
21	Analysis of Single Cells with Capillary Electrophoresis Electrospray Ionization Fourier Transform Ion Cycloton Resonance Mass Spectrometry. , 1996, 10, 919-922.		122
22	Artificial cells: Unique insights into exocytosis using liposomes and lipid nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 400-404.	3.3	122
23	Electrochemical Analysis in Picoliter Microvials. Analytical Chemistry, 1997, 69, 259-263.	3.2	117
24	Carbon-ring electrodes with 1-.mu.m tip diameter. Analytical Chemistry, 1986, 58, 1782-1786.	3.2	105
25	Single-Cell Lipidomics: Characterizing and Imaging Lipids on the Surface of Individual Aplysia californica Neurons with Cluster Secondary Ion Mass Spectrometry. Analytical Chemistry, 2013, 85, 2231-2238.	3.2	103
26	Single-cell imaging mass spectrometry. Current Opinion in Chemical Biology, 2013, 17, 854-859.	2.8	101
27	Secondary Ion MS Imaging To Relatively Quantify Cholesterol in the Membranes of Individual Cells from Differentially Treated Populations. Analytical Chemistry, 2007, 79, 3554-3560.	3.2	99
28	Continuous Separations with Microfabricated Electrophoresisâ^'Electrochemical Array Detection. Journal of the American Chemical Society, 1996, 118, 8932-8936.	6.6	94
29	Nano Secondary Ion Mass Spectrometry Imaging of Dopamine Distribution Across Nanometer Vesicles. ACS Nano, 2017, 11, 3446-3455.	7.3	91
30	The evidence for open and closed exocytosis as the primary release mechanism. Quarterly Reviews of Biophysics, 2016, 49, e12.	2.4	88
31	Quantitative and Statistical Analysis of the Shape of Amperometric Spikes Recorded from Two Populations of Cells. Journal of Neurochemistry, 2000, 74, 1086-1097.	2.1	86
32	Moving-Wall-Driven Flows in Nanofluidic Systems. Langmuir, 2002, 18, 4186-4190.	1.6	86
33	Phospholipid mediated plasticity in exocytosis observed in PC12 cells. Brain Research, 2007, 1151, 46-54.	1.1	83
34	Imaging Mass Spectrometry in Neuroscience. ACS Chemical Neuroscience, 2013, 4, 666-679.	1.7	83
35	Chemical Analysis of Single Cells. Analytical Chemistry, 2019, 91, 588-621.	3.2	82
36	Carbon-Ring Microelectrode Arrays for Electrochemical Imaging of Single Cell Exocytosis: Fabrication and Characterization. Analytical Chemistry, 2012, 84, 2949-2954.	3.2	81

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37	Chemical Analysis of Single Cells and Exocytosis. Critical Reviews in Neurobiology, 1997, 11, 59-90.	3.3	81
38	Individually Addressable Thin-Film Ultramicroelectrode Array for Spatial Measurements of Single Vesicle Release. Analytical Chemistry, 2013, 85, 5600-5608.	3.2	80
39	Sphingomyelin/Phosphatidylcholine and Cholesterol Interactions Studied by Imaging Mass Spectrometry. Journal of the American Chemical Society, 2007, 129, 15730-15731.	6.6	77
40	Mass spectrometry imaging of mating Tetrahymena show that changes in cell morphology regulate lipid domain formation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2751-2756.	3.3	77
41	Combined Amperometry and Electrochemical Cytometry Reveal Differential Effects of Cocaine and Methylphenidate on Exocytosis and the Fraction of Chemical Release. Angewandte Chemie - International Edition, 2019, 58, 4238-4242.	7.2	76
42	The real catecholamine content of secretory vesicles in the CNS revealed by electrochemical cytometry. Scientific Reports, 2013, 3, 1447.	1.6	75
43	Zinc Regulates Chemicalâ€Transmitter Storage in Nanometer Vesicles and Exocytosis Dynamics as Measured by Amperometry. Angewandte Chemie - International Edition, 2017, 56, 4970-4975.	7.2	74
44	MS/MS Methodology To Improve Subcellular Mapping of Cholesterol Using TOF-SIMS. Analytical Chemistry, 2008, 80, 8662-8667.	3.2	73
45	Static time-of-flight secondary ion mass spectrometry imaging of freeze-fractured, frozen-hydrated biological membranes. , 1998, 12, 1232-1235.		72
46	Characterization of Electrochemical Responses in Picoliter Volumes. Analytical Chemistry, 1998, 70, 1119-1125.	3.2	70
47	Measurement of the Dynamics of Exocytosis and Vesicle Retrieval at Cell Populations Using a Quartz Crystal Microbalance. Analytical Chemistry, 2001, 73, 5805-5811.	3.2	70
48	Actin Controls the Vesicular Fraction of Dopamine Released During Extended Kiss and Run Exocytosis. ACS Chemical Biology, 2014, 9, 812-820.	1.6	68
49	Hybrid Capillary-Microfluidic Device for the Separation, Lysis, and Electrochemical Detection of Vesicles. Analytical Chemistry, 2009, 81, 2294-2302.	3.2	67
50	In Vivo Electrochemical Measurements of Exogenously Applied Dopamine in Drosophila melanogaster. Analytical Chemistry, 2009, 81, 1848-1854.	3.2	67
51	Amperometric post spike feet reveal most exocytosis is via extended kiss-and-run fusion. Scientific Reports, 2012, 2, 907.	1.6	67
52	Temporal Resolution in Electrochemical Imaging on Single PC12 Cells Using Amperometry and Voltammetry at Microelectrode Arrays. Analytical Chemistry, 2011, 83, 571-577.	3.2	64
53	Development and Characterization of a Voltammetric Carbon-Fiber Microelectrode pH Sensor. Langmuir, 2010, 26, 10386-10391.	1.6	63
54	On the mechanism of electrochemical vesicle cytometry: chromaffin cell vesicles and liposomes. Faraday Discussions, 2016, 193, 65-79.	1.6	62

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55	Subcellular Mass Spectrometry Imaging and Absolute Quantitative Analysis across Organelles. ACS Nano, 2020, 14, 4316-4325.	7.3	60
56	Nanopore Opening at Flat and Nanotip Conical Electrodes during Vesicle Impact Electrochemical Cytometry. ACS Nano, 2018, 12, 3010-3019.	7.3	59
57	Proton Transfer in Time-of-Flight Secondary Ion Mass Spectrometry Studies of Frozen-Hydrated Dipalmitoylphosphatidylcholine. Analytical Chemistry, 2003, 75, 4087-4094.	3.2	57
58	Using Singleâ€Cell Amperometry To Reveal How Cisplatin Treatment Modulates the Release of Catecholamine Transmitters during Exocytosis. Angewandte Chemie - International Edition, 2016, 55, 9041-9044.	7.2	57
59	Critical review of recent developments in fluorescence detection for capillary electrophoresis. Electrophoresis, 1997, 18, 2279-2290.	1.3	55
60	Using in Vivo Electrochemistry To Study the Physiological Effects of Cocaine and Other Stimulants on the Drosophila melanogaster Dopamine Transporter. ACS Chemical Neuroscience, 2010, 1, 74-83.	1.7	51
61	Amperometric Measurements at Cells Support a Role for Dynamin in the Dilation of the Fusion Pore during Exocytosis. ChemPhysChem, 2013, 14, 2295-2301.	1.0	51
62	Simultaneous Quantification of Vesicle Size and Catecholamine Content by Resistive Pulses in Nanopores and Vesicle Impact Electrochemical Cytometry. Journal of the American Chemical Society, 2020, 142, 4093-4097.	6.6	50
63	Quantitative measurements of released amines from individual exocytosis events. Molecular Neurobiology, 1997, 15, 1-16.	1.9	49
64	Spatial Resolution of Single-Cell Exocytosis by Microwell-Based Individually Addressable Thin Film Ultramicroelectrode Arrays. Analytical Chemistry, 2014, 86, 4515-4520.	3.2	47
65	On-Tissue Chemical Derivatization of Catecholamines Using 4-(N-Methyl)pyridinium Boronic Acid for ToF-SIMS and LDI-ToF Mass Spectrometry Imaging. Analytical Chemistry, 2018, 90, 13580-13590.	3.2	47
66	Plasticity in exocytosis revealed through the effects of repetitive stimuli affect the content of nanometer vesicles and the fraction of transmitter released. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21409-21415.	3.3	47
67	Injection of Fluorescently Labeled Analytes into Microfabricated Chips Using Optically Gated Electrophoresis. Analytical Chemistry, 2000, 72, 4598-4602.	3.2	44
68	Electrochemical Measurements of Optogenetically Stimulated Quantal Amine Release from Single Nerve Cell Varicosities in Drosophila Larvae. Angewandte Chemie - International Edition, 2015, 54, 13609-13612.	7.2	44
69	Intact lipid imaging of mouse brain samples: MALDI, nanoparticle-laser desorption ionization, and 40ÂkeV argon cluster secondary ion mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 6857-6868.	1.9	44
70	Mechanistic Aspects of Vesicle Opening during Analysis with Vesicle Impact Electrochemical Cytometry. Analytical Chemistry, 2017, 89, 9416-9423.	3.2	44
71	Relative Quantification of Phospholipid Accumulation in the PC12 Cell Plasma Membrane Following Phospholipid Incubation Using TOF-SIMS Imaging. Analytical Chemistry, 2011, 83, 5337-5343.	3.2	43
72	Vesicle impact electrochemical cytometry compared to amperometric exocytosis measurements. Current Opinion in Electrochemistry, 2017, 5, 85-91.	2.5	43

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73	Intracellular Electrochemical Nanomeasurements Reveal that Exocytosis of Molecules at Living Neurons is Subquantal and Complex. Angewandte Chemie - International Edition, 2020, 59, 6711-6714.	7.2	43
74	MS/MS analysis and imaging of lipids across Drosophila brain using secondary ion mass spectrometry. Analytical and Bioanalytical Chemistry, 2017, 409, 3923-3932.	1.9	42
75	Laser Desorption Ionization Mass Spectrometry Imaging of Drosophila Brain Using Matrix Sublimation versus Modification with Nanoparticles. Analytical Chemistry, 2016, 88, 1734-1741.	3.2	41
76	Micellar Electrokinetic Capillary Chromatography- Electrochemical Detection for Analysis of Biogenic Amines inDrosophilamelanogaster. Analytical Chemistry, 2003, 75, 3972-3978.	3.2	40
77	Chemical Analysis of Single Cells and Organelles. Analytical Chemistry, 2021, 93, 41-71.	3.2	40
78	Correlating Molecule Count and Release Kinetics with Vesicular Size Using Open Carbon Nanopipettes. Journal of the American Chemical Society, 2020, 142, 16910-16914.	6.6	39
79	Nanoelectrochemical analysis inside a single living cell. Current Opinion in Electrochemistry, 2020, 22, 94-101.	2.5	39
80	Evaluating the Diffusion Coefficient of Dopamine at the Cell Surface During Amperometric Detection: Disk vs Ring Microelectrodes. Analytical Chemistry, 2013, 85, 6421-6428.	3.2	38
81	Lithographic Microfabrication of a 16-Electrode Array on a Probe Tip for High Spatial Resolution Electrochemical Localization of Exocytosis. Analytical Chemistry, 2016, 88, 2080-2087.	3.2	38
82	Microcolumn Separation of Amine Metabolites in the Fruit Fly. Analytical Chemistry, 2005, 77, 5349-5355.	3.2	37
83	Spatial Lipidomics Reveals Region and Long Chain Base Specific Accumulations of Monosialogangliosides in Amyloid Plaques in Familial Alzheimerâ€™s Disease Mice (5xFAD) Brain. ACS Chemical Neuroscience, 2020, 11, 14-24.	1.7	37
84	Electrogenerated chemiluminescence detection for capillary electrophoresis. Journal of Separation Science, 1994, 6, 97-106.	1.0	36
85	Lipid Structural Effects of Oral Administration of Methylphenidate in Drosophila Brain by Secondary Ion Mass Spectrometry Imaging. Analytical Chemistry, 2015, 87, 4063-4071.	3.2	36
86	Electrochemical Quantification of Neurotransmitters in Single Live Cell Vesicles Shows Exocytosis is Predominantly Partial. ChemBioChem, 2021, 22, 807-813.	1.3	36
87	Time of Flight Mass Spectrometry Imaging of Samples Fractured In Situ with a Spring-Loaded Trap System. Analytical Chemistry, 2010, 82, 6652-6659.	3.2	35
88	Copper wire amperometric detector for capillary electrophoresis. Journal of Separation Science, 1991, 3, 141-145.	1.0	34
89	Evaluation of science advice during the COVID-19 pandemic in Sweden. Humanities and Social Sciences Communications, 2022, 9, .	1.3	34
90	Highlights of 20Âyears of electrochemical measurements of exocytosis at cells and artificial cells. Journal of Solid State Electrochemistry, 2011, 15, 1437-1450.	1.2	33

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91	On-Column and Post-Column Derivatization for Capillary Electrophoresis with Laser-Induced Fluorescence for the Analysis of Single Cells. Journal of Liquid Chromatography and Related Technologies, 1995, 18, 3557-3576.	0.9	32
92	Extracellular ATP Regulates the Vesicular Pore Opening in Chromaffin Cells and Increases the Fraction Released During Individual Exocytosis Events. ACS Chemical Neuroscience, 2019, 10, 2459-2466.	1.7	32
93	Electrophoresis in Nanometer Inner Diameter Capillaries with Electrochemical Detection. Analytical Chemistry, 2001, 73, 3687-3690.	3.2	31
94	Spatial neuroproteomics using imaging mass spectrometry. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 718-731.	1.1	31
95	Spatial Elucidation of Spinal Cord Lipid- and Metabolite- Regulations in Amyotrophic Lateral Sclerosis. Scientific Reports, 2014, 4, 5266.	1.6	31
96	Mass Spectrometry Imaging Shows Cocaine and Methylphenidate Have Opposite Effects on Major Lipids in Drosophila Brain. ACS Chemical Neuroscience, 2018, 9, 1462-1468.	1.7	31
97	Combined Amperometry and Electrochemical Cytometry Reveal Differential Effects of Cocaine and Methylphenidate on Exocytosis and the Fraction of Chemical Release. Angewandte Chemie, 2019, 131, 4282-4286.	1.6	31
98	Intracellular injection of phospholipids directly alters exocytosis and the fraction of chemical release in chromaffin cells as measured by nano-electrochemistry. Chemical Science, 2020, 11, 11869-11876.	3.7	31
99	Comparison of Disk and Nanotip Electrodes for Measurement of Single-Cell Amperometry during Exocytotic Release. Analytical Chemistry, 2020, 92, 10268-10273.	3.2	31
100	Post-column derivatization in narrow-bore capillaries for the analysis of amino acids and proteins by capillary electrophoresis with fluorescence detection. Journal of Separation Science, 1994, 6, 373-384.	1.0	30
101	Ultrathin Slab Gel Separations of DNA Using a Single Capillary Sample Introduction System. Analytical Chemistry, 1997, 69, 2292-2298.	3.2	30
102	The Latency of Exocytosis Varies with the Mechanism of Stimulated Release in PC12 Cells. Journal of Neurochemistry, 1996, 66, 651-657.	2.1	30
103	Time-of-Flight Secondary Ion Mass Spectrometry Based Molecular Histology of Human Spinal Cord Tissue and Motor Neurons. Analytical Chemistry, 2013, 85, 8741-8748.	3.2	30
104	Nanoscale Amperometry Reveals that Only a Fraction of Vesicular Serotonin Content is Released During Exocytosis from Beta Cells. Angewandte Chemie - International Edition, 2021, 60, 7593-7596.	7.2	30
105	Two modes of exocytosis in an artificial cell. Scientific Reports, 2014, 4, 3847.	1.6	29
106	Mass Spectrometry Imaging Suggests That Cisplatin Affects Exocytotic Release by Alteration of Cell Membrane Lipids. Analytical Chemistry, 2018, 90, 8509-8516.	3.2	29
107	Amperometric Measurements and Dynamic Models Reveal a Mechanism for How Zinc Alters Neurotransmitter Release. Angewandte Chemie - International Edition, 2020, 59, 3083-3087.	7.2	29
108	Capillary electrophoresis with NDA derivatization and electrochemical detection for the analysis of cellular amino acids. Journal of Separation Science, 1998, 10, 185-192.	1.0	28

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109	DNA separations in microfabricated devices with automated capillary sample introduction. Electrophoresis, 2001, 22, 363-370.	1.3	28
110	Analysis of Biogenic Amine Variability among Individual Fly Heads with Micellar Electrokinetic Capillary Chromatographyâ^'Electrochemical Detection. Analytical Chemistry, 2005, 77, 6902-6908.	3.2	28
111	Analytical approaches to investigate transmitter content and release from single secretory vesicles. Analytical and Bioanalytical Chemistry, 2010, 397, 3269-3279.	1.9	28
112	Development of an Organic Lateral Resolution Test Device for Imaging Mass Spectrometry. Analytical Chemistry, 2014, 86, 9473-9480.	3.2	28
113	Highlights of selected recent electrochemical measurements in living systems. Electrochimica Acta, 2012, 84, 84-95.	2.6	27
114	Single Cell Amperometry Reveals Glycocalyx Hinders the Release of Neurotransmitters During Exocytosis. Analytical Chemistry, 2013, 85, 4822-4828.	3.2	25
115	Capillary Electrophoresisâ€“Mass Spectrometry-Based Detection of Drugs and Neurotransmitters in Drosophila Brain. Analytical Chemistry, 2013, 85, 8448-8454.	3.2	25
116	Using Singleâ€Cell Amperometry To Reveal How Cisplatin Treatment Modulates the Release of Catecholamine Transmitters during Exocytosis. Angewandte Chemie, 2016, 128, 9187-9190.	1.6	25
117	High performance fourier transform ion cyclotron resonance mass spectrometric detection for capillary electrophoresis. Journal of High Resolution Chromatography, 1996, 19, 617-621.	2.0	24
118	Continuous separations in microfabricated channels for monitoring ultrasmall biological environments. Nature Medicine, 1997, 3, 97-99.	15.2	24
119	Biogenic Amines in Microdissected Brain Regions of Drosophila melanogaster Measured with Micellar Electrokinetic Capillary Chromatographyâ€”Electrochemical Detection. Analytical Chemistry, 2010, 82, 7729-7735.	3.2	24
120	Oral Administration of Methylphenidate Blocks the Effect of Cocaine on Uptake at the Drosophila Dopamine Transporter. ACS Chemical Neuroscience, 2013, 4, 566-574.	1.7	24
121	ToFâ€SIMS imaging of lipids and lipid related compounds in Drosophila brain. Surface and Interface Analysis, 2014, 46, 123-126.	0.8	24
122	Zinc Regulates Chemicalâ€Transmitter Storage in Nanometer Vesicles and Exocytosis Dynamics as Measured by Amperometry. Angewandte Chemie, 2017, 129, 5052-5057.	1.6	24
123	Single cell amperometry reveals curcuminoids modulate the release of neurotransmitters during exocytosis from PC12 cells. Journal of Electroanalytical Chemistry, 2016, 781, 30-35.	1.9	23
124	Excited Fluorophores Enhance the Opening of Vesicles at Electrode Surfaces in Vesicle Electrochemical Cytometry. Angewandte Chemie - International Edition, 2016, 55, 15081-15085.	7.2	23
125	Analytical Techniques: Shedding Light upon Nanometer-Sized Secretory Vesicles. Trends in Chemistry, 2019, 1, 440-451.	4.4	23
126	Nanoâ€analysis Reveals High Fraction of Serotonin Release during Exocytosis from a Gut Epithelium Model Cell. Angewandte Chemie - International Edition, 2021, 60, 23552-23556.	7.2	23

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127	An in situ fracture device to image lipids in single cells using ToFâ€SIMS. Surface and Interface Analysis, 2011, 43, 257-260.	0.8	22
128	Ultrasonic-Aided Fabrication of Nanostructured Au-Ring Microelectrodes for Monitoring Transmitters Released from Single Cells. Analytical Chemistry, 2017, 89, 8683-8688.	3.2	22
129	Using Single-Cell Amperometry and Intracellular Vesicle Impact Electrochemical Cytometry To Shed Light on the Biphasic Effects of Lidocaine on Exocytosis. ACS Chemical Neuroscience, 2018, 9, 2941-2947.	1.7	22
130	Vesicular Transmitter Content in Chromaffin Cells Can Be Regulated via Extracellular ATP. ACS Chemical Neuroscience, 2019, 10, 4735-4740.	1.7	22
131	Simultaneous detection of vesicular content and exocytotic release with two electrodes in and at a single cell. Chemical Science, 2021, 12, 7393-7400.	3.7	22
132	Neuronal Networks on Nanocellulose Scaffolds. Tissue Engineering - Part C: Methods, 2015, 21, 1162-1170.	1.1	21
133	DMSO Chemically Alters Cell Membranes to Slow Exocytosis and Increase the Fraction of Partial Transmitter Released. ChemBioChem, 2017, 18, 1898-1902.	1.3	21
134	Counteranions in the Stimulation Solution Alter the Dynamics of Exocytosis Consistent with the Hofmeister Series. Journal of the American Chemical Society, 2020, 142, 12591-12595.	6.6	20
135	Electrochemical Probes for Detection and Analysis of Exocytosis and Vesicles. ChemPhysChem, 2010, 11, 2756-2763.	1.0	19
136	An investigation on the mechanism of sublimed DHB matrix on molecular ion yields in SIMS imaging of brain tissue. Analytical and Bioanalytical Chemistry, 2016, 408, 3071-3081.	1.9	19
137	Electrochemical Measurements Reveal Reactive Oxygen Species in Stress Granules**. Angewandte Chemie - International Edition, 2021, 60, 15302-15306.	7.2	19
138	Anionic Species Regulate Chemical Storage in Nanometer Vesicles and Amperometrically Detected Exocytotic Dynamics. Journal of the American Chemical Society, 2022, 144, 4310-4314.	6.6	19
139	Characterization of continuous electrophoretic separations in narrow channels coupled to small bore capillaries. Journal of Separation Science, 1994, 6, 483-494.	1.0	18
140	Altered Lipid Composition of Secretory Cells Following Exposure to Zinc Can Be Correlated to Changes in Exocytosis. Chemistry - A European Journal, 2019, 25, 5406-5411.	1.7	18
141	Striatal Dopamine Transporter Function Is Facilitated by Converging Biology of Î±-Synuclein and Cholesterol. Frontiers in Cellular Neuroscience, 2021, 15, 658244.	1.8	18
142	Food-induced changes of lipids in rat neuronal tissue visualized by ToF-SIMS imaging. Scientific Reports, 2016, 6, 32797.	1.6	17
143	Anticancer Drug Tamoxifen Affects Catecholamine Transmitter Release and Storage from Single Cells. ACS Chemical Neuroscience, 2019, 10, 2060-2069.	1.7	17
144	Intracellular Electrochemical Nanomeasurements Reveal that Exocytosis of Molecules at Living Neurons is Subquantal and Complex. Angewandte Chemie, 2020, 132, 6777-6780.	1.6	17

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145	Dopamine Release Dynamics in the Tuberoinfundibular Dopamine System. Journal of Neuroscience, 2019, 39, 4009-4022.	1.7	16
146	Quantifying Intracellular Single Vesicular Catecholamine Concentration with Open Carbon Nanopipettes to Unveil the Effect of Lâ€ÐOPA on Vesicular Structure. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
147	Steady-State Electrochemical Determination of Lipidic Nanotube Diameter Utilizing an Artificial Cell Model. Analytical Chemistry, 2010, 82, 1020-1026.	3.2	14
148	Electrochemical quantification of transmitter concentration in single nanoscale vesicles isolated from PC12 cells. Faraday Discussions, 2018, 210, 353-364.	1.6	14
149	Voltammetric Detection of Dopamine Release in the Rat Corpus Striatum. Annals of the New York Academy of Sciences, 1986, 473, 92-105.	1.8	13
150	Multimodal Imaging of Chemically Fixed Cells in Preparation for NanoSIMS. Analytical Chemistry, 2016, 88, 8841-8848.	3.2	13
151	Direct Measurement of Total Vesicular Catecholamine Content with Electrochemical Microwell Arrays. Analytical Chemistry, 2020, 92, 11325-11331.	3.2	13
152	Potentiometric pH Nanosensor for Intracellular Measurements: Real-Time and Continuous Assessment of Local Gradients. Analytical Chemistry, 2021, 93, 15744-15751.	3.2	13
153	Capillary sample introduction of polymerase chain reaction (PCR) products separated in ultrathin slab gels. Electrophoresis, 1998, 19, 71-75.	1.3	12
154	Characterization of lateral dispersion in microfabricated electrophoresis-electrochemical array detection. Journal of Separation Science, 1998, 10, 357-364.	1.0	12
155	Relative quantification of deuterated omega-3 and -6 fatty acids and their lipid turnover in PC12 cell membranes using TOF-SIMS. Journal of Lipid Research, 2018, 59, 2098-2107.	2.0	11
156	Amperometric Measurements and Dynamic Models Reveal a Mechanism for How Zinc Alters Neurotransmitter Release. Angewandte Chemie, 2020, 132, 3107-3111.	1.6	11
157	Nanoscale Amperometry Reveals that Only a Fraction of Vesicular Serotonin Content is Released During Exocytosis from Beta Cells. Angewandte Chemie, 2021, 133, 7671-7674.	1.6	11
158	Visualization of Partial Exocytotic Content Release and Chemical Transport into Nanovesicles in Cells. ACS Nano, 2022, 16, 4831-4842.	7.3	11
159	Singleâ€Vesicle Electrochemistry Following Repetitive Stimulation Reveals a Mechanism for Plasticity Changes with Iron Deficiency. Angewandte Chemie - International Edition, 2022, 61, .	7.2	11
160	Voltammetry of adenosine after electrochemical treatment of carbon-fiber electrodes. Electroanalysis, 1994, 6, 746-751.	1.5	10
161	Chemical measurements in Drosophila. TrAC - Trends in Analytical Chemistry, 2009, 28, 1223-1234.	5.8	10
162	Mass spectrometry imaging as a novel approach to measure hippocampal zinc. Journal of Analytical Atomic Spectrometry, 2019, 34, 1581-1587.	1.6	10

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163	Mass Spectrometric Imaging of Plasma Membrane Lipid Alteration Correlated with Amperometrically Measured Activity-Dependent Plasticity in Exocytosis. International Journal of Molecular Sciences, 2020, 21, 9519.	1.8	10
164	Estradiol Inhibits Depolarization-Evoked Exocytosis in PC12 Cells via N-Type Voltage-Gated Calcium Channels. Cellular and Molecular Neurobiology, 2010, 30, 1235-1242.	1.7	9
165	On the Action of General Anesthetics on Cellular Function: Barbiturate Alters the Exocytosis of Catecholamines in a Model Cell System. ChemPhysChem, 2018, 19, 1173-1179.	1.0	9
166	Mass Spectrometry Imaging Shows Modafinil, A Student Study Drug, Changes the Lipid Composition of the Fly Brain. Angewandte Chemie - International Edition, 2021, 60, 17378-17382.	7.2	9
167	Quantifying Intracellular Single Vesicular Catecholamine Concentration with Open Carbon Nanopipettes to Unveil the Effect of Lâ€ÐOPA on Vesicular Structure. Angewandte Chemie, 2022, 134, e202113406.	1.6	9
168	Localization and Absolute Quantification of Dopamine in Discrete Intravesicular Compartments Using NanoSIMS Imaging. International Journal of Molecular Sciences, 2022, 23, 160.	1.8	9
169	Dynamic Visualization and Quantification of Single Vesicle Opening and Content by Coupling Vesicle Impact Electrochemical Cytometry with Confocal Microscopy. ACS Measurement Science Au, 2021, 1, 131-138.	1.9	8
170	Simultaneous Counting of Molecules in the Halo and Denseâ€Core of Nanovesicles by Regulating Dynamics of Vesicle Opening. Angewandte Chemie - International Edition, 2022, 61, .	7.2	8
171	Dysfunction of vesicular storage in young-onset Parkinson's patient-derived dopaminergic neurons and organoids revealed by single cell electrochemical cytometry. Chemical Science, 2022, 13, 6217-6223.	3.7	8
172	Characterization of the effects of varying the pH and monomer concentrations of poly(oxyphenylene) insulating films on carbon fiber electrodes. Electroanalysis, 1997, 9, 755-758.	1.5	7
173	Gold and silver nanoparticleâ€assisted laser desorption ionization mass spectrometry compatible with secondary ion mass spectrometry for lipid analysis. Surface and Interface Analysis, 2014, 46, 379-382.	0.8	7
174	Interplay between Cocaine, Drug Removal, and Methylphenidate Reversal on Phospholipid Alterations in Drosophila Brain Determined by Imaging Mass Spectrometry. ACS Chemical Neuroscience, 2020, 11, 806-813.	1.7	7
175	Multiple Separations in Microfabricated Channels: From Biological Microenvironments to DNA. Biomedical Microdevices, 1998, 1, 27-37.	1.4	6
176	Pituitary Adenylate Cyclase Activating Polypeptide Modulates Catecholamine Storage and Exocytosis in PC12 Cells. PLoS ONE, 2014, 9, e91132.	1.1	6
177	Excited Fluorophores Enhance the Opening of Vesicles at Electrode Surfaces in Vesicle Electrochemical Cytometry. Angewandte Chemie, 2016, 128, 15305-15309.	1.6	6
178	Electrochemical Investigation of the Interaction between Catecholamines and ATP. Analytical Chemistry, 2018, 90, 1601-1607.	3.2	6
179	Nanoâ€analysis Reveals High Fraction of Serotonin Release during Exocytosis from a Gut Epithelium Model Cell. Angewandte Chemie, 2021, 133, 23744-23748.	1.6	6
180	Continuous electrophoretic separations in narrow channels with postchannel derivatization and laser-induced fluorescence detection. Journal of Separation Science, 2000, 12, 279-284.	1.0	5

#	Article	IF	Citations
181	Benefits of NaCl addition for timeâ€ofâ€flight secondary ion mass spectrometry analysis including the discrimination of diacylglyceride and triacylglyceride ions. Rapid Communications in Mass Spectrometry, 2018, 32, 1473-1480.	0.7	5
182	Vesicular release dynamics are altered by the interaction between the chemical cargo and vesicle membrane lipids. Chemical Science, 2021, 12, 10273-10278.	3.7	5
183	Concentration of stimulant regulates initial exocytotic molecular plasticity at single cells. Chemical Science, 2022, 13, 1815-1822.	3.7	5
184	Electrochemical oxidation of 5-hydroxytryptamine and 5-hydroxyindoleacetic acid by integrated pulse linear scan voltammetry at ultrasmall gold ring electrodes. Electroanalysis, 1992, 4, 865-869.	1.5	4
185	Characterization of electrophoretic sample transfer from a capillary to an ultrathin slab gel. Journal of Separation Science, 1998, 10, 519-527.	1.0	4
186	Using imaging ToFâ€SIMS data to determine the cell wall thickness of fibers in wood. Surface and Interface Analysis, 2014, 46, 225-228.	0.8	4
187	From single cells to single molecules: general discussion. Faraday Discussions, 2016, 193, 141-170.	1.6	4
188	Zinc Deficiency Leads to Lipid Changes in Drosophila Brain Similar to Cognitiveâ€Impairing Drugs: An Imaging Mass Spectrometry Study. ChemBioChem, 2020, 21, 2755-2758.	1.3	4
189	Electrochemical Measurements Reveal Reactive Oxygen Species in Stress Granules**. Angewandte Chemie, 2021, 133, 15430-15434.	1.6	4
190	Pore-Opening Dynamics of Single Nanometer Biovesicles at an Electrified Interface. ACS Nano, 2022, 16, 9852-9858.	7.3	4
191	The effect of anodic surface treatment on the oxidation of catechols at ultrasmall carbon ring electrodes. Electroanalysis, 1991, 3, 899-907.	1.5	3
192	Analysis of liposome model systems by timeâ€ofâ€flight secondary ion mass spectrometry. Surface and Interface Analysis, 2014, 46, 74-78.	0.8	3
193	Mass spectrometric profiling of lipids in intestinal tissue from rats fed cereals processed for medical conditions. Biointerphases, 2016, 11, 02A310.	0.6	3
194	Vesicle Impact Electrochemical Cytometry to Determine Carbon Nanotube-Induced Fusion of Intracellular Vesicles. Analytical Chemistry, 2021, 93, 13161-13168.	3.2	3
195	Simultaneous Counting of Molecules in the Halo and Denseâ€Core of Nanovesicles by Regulating Dynamics of Vesicle Opening. Angewandte Chemie, 0, , .	1.6	3
196	Separations of DNA fragments with a coated 25-?m capillary coupled to a 25-?m high open channel. Journal of Separation Science, 1999, 11, 567-575.	1.0	2
197	DNA SEPARATIONS FROM NANOVIALS. Journal of Liquid Chromatography and Related Technologies, 2000, 23, 15-24.	0.5	2
198	Electrochemistry in and of the Fly Brain. Electroanalysis, 2018, 30, 999-1010.	1.5	2

#	Article	IF	Citations
199	COVID-19â€"a very visible pandemic. Lancet, The, 2020, 396, e18.	6.3	2
200	Combined electrochemistry and mass spectrometry imaging to interrogate the mechanism of action of modafinil, a cognition-enhancing drug, at the cellular and sub-cellular level. QRB Discovery, 2021, 2, .	0.6	2
201	Electrochemical and Mass Spectrometric Measurement of Enhanced Intravesicular Catecholamine Content and Exocytotic Frequency at Subanaesthetic Ketamine Doses. Analysis & Sensing, 0, , .	1.1	2
202	A multimodal electrochemical approach to measure the effect of zinc on vesicular content and exocytosis in a single cell model of ischemia. QRB Discovery, 2021, 2, .	0.6	2
203	Intracellular Absolute Quantification of Oligonucleotide Therapeutics by NanoSIMS. Analytical Chemistry, 2022, 94, 10549-10556.	3.2	2
204	Rustum Roy. Nature, 1993, 364, 276-276.	13.7	0
205	RÃ¼cktitelbild: Using Single-Cell Amperometry To Reveal How Cisplatin Treatment Modulates the Release of Catecholamine Transmitters during Exocytosis (Angew. Chem. 31/2016). Angewandte Chemie, 2016, 128, 9244-9244.	1.6	0
206	Titelbild: Zinc Regulates Chemicalâ€Transmitter Storage in Nanometer Vesicles and Exocytosis Dynamics as Measured by Amperometry (Angew. Chem. 18/2017). Angewandte Chemie, 2017, 129, 4973-4973.	1.6	0
207	Frontiers in Neurochemistry. ChemPhysChem, 2018, 19, 1121-1122.	1.0	0
208	Mass Spectrometry Imaging Shows Modafinil, A Student Study Drug, Changes the Lipid Composition of the Fly Brain. Angewandte Chemie, 2021, 133, 17518-17522.	1.6	0
209	Electrochemistry at and in single cells. , 2020, , 125-160.		0
210	Singleâ€Vesicle Electrochemistry Following Repetitive Stimulation Reveals a Mechanism for Plasticity Changes with Iron Deficiency. Angewandte Chemie, 0, , .	1.6	0
211	Electrochemistry Inside and Outside Single Nerve Cells. , 0, , 215-234.		0
212	Probing Exocytosis at Single Cells Using Electrochemistry. , 0, , 159-174.		0