R Mark Wightman

List of Publications by Year
in descending order

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188 papers	25,085 citations	4641 85 h-index	7136 153 g-index
190 all docs	190 docs citations	190 times ranked	13519 citing authors

#	Article	IF	Citations
1	Hyperlocomotion and indifference to cocaine and amphetamine in mice lacking the dopamine transporter. Nature, 1996, 379, 606-612.	13.7	2,267
2	Subsecond dopamine release promotes cocaine seeking. Nature, 2003, 422, 614-618.	13.7	1,020
3	Dopamine Operates as a Subsecond Modulator of Food Seeking. Journal of Neuroscience, 2004, 24, 1265-1271.	1.7	635
4	Monitoring Rapid Chemical Communication in the Brain. Chemical Reviews, 2008, 108, 2554-2584.	23.0	590
5	Associative learning mediates dynamic shifts in dopamine signaling in the nucleus accumbens. Nature Neuroscience, 2007, 10, 1020-1028.	7.1	570
6	Real-time chemical responses in the nucleus accumbens differentiate rewarding and aversive stimuli. Nature Neuroscience, 2008, 11, 1376-1377.	7.1	538
7	Microvoltammetric electrodes. Analytical Chemistry, 1981, 53, 1125A-1134A.	3.2	503
8	Detecting Subsecond Dopamine Release with Fast-Scan Cyclic Voltammetry in Vivo. Clinical Chemistry, 2003, 49, 1763-1773.	1.5	499
9	Detection of dopamine dynamics in the brain. Analytical Chemistry, 1988, 60, 769A-779A.	3.2	484
10	Preferential Enhancement of Dopamine Transmission within the Nucleus Accumbens Shell by Cocaine Is Attributable to a Direct Increase in Phasic Dopamine Release Events. Journal of Neuroscience, 2008, 28, 8821-8831.	1.7	450
11	Real-time measurement of dopamine fluctuations after cocaine in the brain of behaving rats. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10023-10028.	3.3	427
12	Extinction of Cocaine Self-Administration Reveals Functionally and Temporally Distinct Dopaminergic Signals in the Nucleus Accumbens. Neuron, 2005, 46, 661-669.	3.8	427
13	Probing Cellular Chemistry in Biological Systems with Microelectrodes. Science, 2006, 311, 1570-1574.	6.0	392
14	Overoxidation of carbon-fiber microelectrodes enhances dopamine adsorption and increases sensitivityElectronic supplementary information (ESI) available: National Instruments Data Acquisition System. See http://www.rsc.org/suppdata/an/b3/b307024g/. Analyst, The, 2003, 128, 1413.	1.7	335
15	Phasic Dopamine Release Evoked by Abused Substances Requires Cannabinoid Receptor Activation. Journal of Neuroscience, 2007, 27, 791-795.	1.7	334
16	Dissociation of dopamine release in the nucleus accumbens from intracranial self-stimulation. Nature, 1999, 398, 67-69.	13.7	332
17	Resolving Neurotransmitters Detected by Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 2004, 76, 5697-5704.	3.2	316
18	Subsecond Adsorption and Desorption of Dopamine at Carbon-Fiber Microelectrodes. Analytical Chemistry, 2000, 72, 5994-6002.	3.2	311

#	Article	IF	Citations
19	Cannabinoids Enhance Subsecond Dopamine Release in the Nucleus Accumbens of Awake Rats. Journal of Neuroscience, 2004, 24, 4393-4400.	1.7	303
20	Microelectrodes for the Measurement of Catecholamines in Biological Systems. Analytical Chemistry, 1996, 68, 3180-3186.	3.2	283
21	Fast-scan voltammetry of biogenic amines. Analytical Chemistry, 1988, 60, 1268-1272.	3.2	282
22	Quantitative Evaluation of 5-Hydroxytryptamine (Serotonin) Neuronal Release and Uptake: An Investigation of Extrasynaptic Transmission. Journal of Neuroscience, 1998, 18, 4854-4860.	1.7	278
23	Frequency of Dopamine Concentration Transients Increases in Dorsal and Ventral Striatum of Male Rats during Introduction of Conspecifics. Journal of Neuroscience, 2002, 22, 10477-10486.	1.7	258
24	Fast-scan cyclic voltammetry of 5-hydroxytryptamine. Analytical Chemistry, 1995, 67, 1115-1120.	3.2	253
25	Overoxidized Polypyrrole-Coated Carbon Fiber Microelectrodes for Dopamine Measurements with Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 1996, 68, 2084-2089.	3.2	245
26	Electrochemical Analysis of Neurotransmitters. Annual Review of Analytical Chemistry, 2015, 8, 239-261.	2.8	238
27	Transient changes in mesolimbic dopamine and their association with â€˜rewardâ€™. Journal of Neurochemistry, 2002, 82, 721-735.	2.1	236
28	Loss of autoreceptor functions in mice lacking the dopamine transporter. Nature Neuroscience, 1999, 2, 649-655.	7.1	235
29	Real-time decoding of dopamine concentration changes in the caudate-putamen during tonic and phasic firing. Journal of Neurochemistry, 2003, 87, 1284-1295.	2.1	232
30	Cocaine Increases Dopamine Release by Mobilization of a Synapsin-Dependent Reserve Pool. Journal of Neuroscience, 2006, 26, 3206-3209.	1.7	213
31	Rapid Dopamine Signaling in the Nucleus Accumbens during Contingent and Noncontingent Cocaine Administration. Neuropsychopharmacology, 2005, 30, 853-863.	2.8	203
32	Synaptic Overflow of Dopamine in the Nucleus Accumbens Arises from Neuronal Activity in the Ventral Tegmental Area. Journal of Neuroscience, 2009, 29, 1735-1742.	1.7	201
33	Carbon Microelectrodes with a Renewable Surface. Analytical Chemistry, 2010, 82, 2020-2028.	3.2	194
34	Coordinated Accumbal Dopamine Release and Neural Activity Drive Goal-Directed Behavior. Neuron, 2007, 54, 237-244.	3.8	184
35	Methods to Improve Electrochemical Reversibility at Carbon Electrodes. Journal of the Electrochemical Society, 1984, 131, 1578-1583.	1.3	171
36	Increased amphetamine-induced hyperactivity and reward in mice overexpressing the dopamine transporter. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4405-4410.	3.3	170

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37	Hitchhikerâ€™s Guide to Voltammetry: Acute and Chronic Electrodes for in Vivo Fast-Scan Cyclic Voltammetry. ACS Chemical Neuroscience, 2017, 8, 221-234.	1.7	167
38	Realâ€Time Measurement of Electrically Evoked Extracellular Dopamine in the Striatum of Freely Moving Rats. Journal of Neurochemistry, 1997, 68, 152-161.	2.1	164
39	Comparison of Dopamine Uptake in the Basolateral Amygdaloid Nucleus, Caudateâ€Putamen, and Nucleus Accumbens of the Rat. Journal of Neurochemistry, 1995, 64, 2581-2589.	2.1	163
40	Background subtraction for rapid scan voltammetry. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 209, 77-90.	0.3	160
41	Response Times of Carbon Fiber Microelectrodes to Dynamic Changes in Catecholamine Concentration. Analytical Chemistry, 2002, 74, 539-546.	3.2	160
42	Differential Dopamine Release Dynamics in the Nucleus Accumbens Core and Shell Reveal Complementary Signals for Error Prediction and Incentive Motivation. Journal of Neuroscience, 2015, 35, 11572-11582.	1.7	160
43	Dopamine release is heterogeneous within microenvironments of the rat nucleus accumbens. European Journal of Neuroscience, 2007, 26, 2046-2054.	1.2	155
44	Dynamic Gain Control of Dopamine Delivery in Freely Moving Animals. Journal of Neuroscience, 2004, 24, 1754-1759.	1.7	154
45	SPATIO-TEMPORAL RESOLUTION OF EXOCYTOSIS FROM INDIVIDUAL CELLS. Annual Review of Biophysics and Biomolecular Structure, 1998, 27, 77-103.	18.3	153
46	Higher Sensitivity Dopamine Measurements with Faster-Scan Cyclic Voltammetry. Analytical Chemistry, 2011, 83, 3563-3571.	3.2	153
47	Multivariate concentration determination using principal component regression with residual analysis. TrAC - Trends in Analytical Chemistry, 2009, 28, 1127-1136.	5.8	152
48	Spatiotemporal description of the diffusion layer with a microelectrode probe. Analytical Chemistry, 1987, 59, 2005-2010.	3.2	151
49	Dynamic Observation of Dopamine Autoreceptor Effects in Rat Striatal Slices. Journal of Neurochemistry, 1992, 59, 449-455.	2.1	151
50	Analysis of diffusional broadening of vesicular packets of catecholamines released from biological cells during exocytosis. Analytical Chemistry, 1992, 64, 3077-3083.	3.2	148
51	Monitoring the Stimulated Release of Dopamine with In Vivo Voltammetry. I: Characterization of the Response Observed in the Caudate Nucleus of the Rat. Journal of Neurochemistry, 1984, 43, 560-569.	2.1	143
52	Correlation of local changes in extracellular oxygen and pH that accompany dopaminergic terminal activity in the rat caudate-putamen. Journal of Neurochemistry, 2003, 84, 373-381.	2.1	142
53	Evoked Extracellular Dopamine In Vivo in the Medial Prefrontal Cortex. Journal of Neurochemistry, 1993, 61, 637-647.	2.1	139
54	Phasic Nucleus Accumbens Dopamine Release Encodes Effort- and Delay-Related Costs. Biological Psychiatry, 2010, 68, 306-309.	0.7	136

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55	Etched carbon-fiber electrodes as amperometric detectors of catecholamine secretion from isolated biological cells. Analytical Chemistry, 1991, 63, 1589-1594.	3.2	135
56	Sub-second changes in accumbal dopamine during sexual behavior in male rats. NeuroReport, 2001, 12, 2549-2552.	0.6	133
57	Real-Time Amperometric Measurements of Zeptomole Quantities of Dopamine Released from Neurons. Analytical Chemistry, 2000, 72, 489-496.	3.2	128
58	Simultaneous dopamine and single-unit recordings reveal accumbens GABAergic responses: Implications for intracranial self-stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 19150-19155.	3.3	124
59	Differentiation of Dopamine Overflow and Uptake Processes in the Extracellular Fluid of the Rat Caudate Nucleus with Fast-Scan In Vivo Voltammetry. Journal of Neurochemistry, 1988, 51, 1060-1069.	2.1	123
60	Vesicular Quantal Size Measured by Amperometry at Chromaffin, Mast, Pheochromocytoma, and Pancreatic Î²â€Cells. Journal of Neurochemistry, 1996, 66, 1914-1923.	2.1	123
61	Dopamine Detection with Fast-Scan Cyclic Voltammetry Used with Analog Background Subtraction. Analytical Chemistry, 2008, 80, 4040-4048.	3.2	121
62	Dopamine Neuronal Transport Kinetics and Effects of Amphetamine. Journal of Neurochemistry, 2002, 73, 2406-2414.	2.1	120
63	In vivo comparison of norepinephrine and dopamine release in rat brain by simultaneous measurements with fastâ€scan cyclic voltammetry. Journal of Neurochemistry, 2011, 119, 932-944.	2.1	120
64	Dynamic changes in accumbens dopamine correlate with learning during intracranial self-stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11957-11962.	3.3	119
65	Phasic Nucleus Accumbens Dopamine Encodes Risk-Based Decision-Making Behavior. Biological Psychiatry, 2012, 71, 199-205.	0.7	116
66	Sources contributing to the average extracellular concentration of dopamine in the nucleus accumbens. Journal of Neurochemistry, 2012, 121, 252-262.	2.1	115
67	Direct observation of epinephrine and norepinephrine cosecretion from individual adrenal medullary chromaffin cells. Journal of the American Chemical Society, 1992, 114, 2815-2821.	6.6	112
68	Simultaneous electrochemical measurements of oxygen and dopamine in vivo. Analytical Chemistry, 1991, 63, 24-28.	3.2	111
69	Secretion of Catecholamines from Individual Adrenal Medullary Chromaffin Cells. Journal of Neurochemistry, 1991, 56, 1855-1863.	2.1	111
70	Neural encoding of cocaineâ€seeking behavior is coincident with phasic dopamine release in the accumbens core and shell. European Journal of Neuroscience, 2009, 30, 1117-1127.	1.2	111
71	Electrochemical dopamine detection: Comparing gold and carbon fiber microelectrodes using background subtracted fast scan cyclic voltammetry. Journal of Electroanalytical Chemistry, 2008, 614, 113-120.	1.9	109
72	Solid State Electrochemically Generated Luminescence Based on Serial Frozen Concentration Gradients of RuIII/IIand RuII/ICouples in a Molten Ruthenium 2,2â€˜-Bipyridine Complex. Journal of the American Chemical Society, 1997, 119, 3987-3993.	6.6	108

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73	Effect of pH and Surface Functionalities on the Cyclic Voltammetric Responses of Carbon-Fiber Microelectrodes. Analytical Chemistry, 1999, 71, 2782-2789.	3.2	108
74	Regional specificity in the realâ€time development of phasic dopamine transmission patterns during acquisition of a cueâ€“cocaine association in rats. European Journal of Neuroscience, 2009, 30, 1889-1899.	1.2	108
75	Characterization of Local pH Changes in Brain Using Fast-Scan Cyclic Voltammetry with Carbon Microelectrodes. Analytical Chemistry, 2010, 82, 9892-9900.	3.2	107
76	Functional and anatomical evidence for different dopamine dynamics in the core and shell of the nucleus accumbens in slices of rat brain. , 1996, 23, 224-231.		104
77	Catecholamine release and uptake in the mouse prefrontal cortex. Journal of Neurochemistry, 2008, 79, 130-142.	2.1	104
78	Cocaine Cues Drive Opposing Context-Dependent Shifts in Reward Processing and Emotional State. Biological Psychiatry, 2011, 69, 1067-1074.	0.7	104
79	Dopamineâ€™s Effects on Corticostriatal Synapses during Reward-Based Behaviors. Neuron, 2018, 97, 494-510.	3.8	102
80	Dopamine Adsorption at Surface Modified Carbon-Fiber Electrodes. Langmuir, 2001, 17, 7032-7039.	1.6	100
81	Synapsins Differentially Control Dopamine and Serotonin Release. Journal of Neuroscience, 2010, 30, 9762-9770.	1.7	100
82	Peer Reviewed: Color Images for Fast-Scan CV Measurements in Biological Systems. Analytical Chemistry, 1998, 70, 586A-592A.	3.2	99
83	Basolateral Amygdala Modulates Terminal Dopamine Release in the Nucleus Accumbens and Conditioned Responding. Biological Psychiatry, 2010, 67, 737-744.	0.7	99
84	Monitoring the Stimulated Release of Dopamine with In Vivo Voltammetry. II: Clearance of Released Dopamine from Extracellular Fluid. Journal of Neurochemistry, 1984, 43, 570-577.	2.1	95
85	Release and Uptake Rates of 5â€Hydroxytryptamine in the Dorsal Raphe and Substantia Nigra Reticulata of the Rat Brain. Journal of Neurochemistry, 1998, 70, 1077-1087.	2.1	95
86	Dispersion in flow injection analysis measured with microvoltammetric electrodes. Analytical Chemistry, 1986, 58, 986-988.	3.2	93
87	In vivo voltammetric monitoring of norepinephrine release in the rat ventral bed nucleus of the stria terminalis and anteroventral thalamic nucleus. European Journal of Neuroscience, 2009, 30, 2121-2133.	1.2	93
88	Functional microcircuitry in the accumbens underlying drug addiction: insights from real-time signaling during behavior. Current Opinion in Neurobiology, 2004, 14, 763-768.	2.0	91
89	Fluorinated Xerogel-Derived Microelectrodes for Amperometric Nitric Oxide Sensing. Analytical Chemistry, 2008, 80, 6850-6859.	3.2	91
90	Disparity Between Tonic and Phasic Ethanolâ€Induced Dopamine Increases in the Nucleus Accumbens of Rats. Alcoholism: Clinical and Experimental Research, 2009, 33, 1187-1196.	1.4	85

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91	Heterogeneity of stimulated dopamine overflow within rat striatum as observed with in vivo voltammetry. Brain Research, 1989, 487, 311-320.	1.1	81
92	Real-Time Measurements of Phasic Changes in Extracellular Dopamine Concentration in Freely Moving Rats by Fast-Scan Cyclic Voltammetry. , 2003, 79, 443-464.		81
93	Simultaneous Decoupled Detection of Dopamine and Oxygen Using Pyrolyzed Carbon Microarrays and Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 2009, 81, 6258-6265.	3.2	81
94	Dopaminergic neurons: simultaneous measurements of dopamine release and single-unit activity during stimulation of the medial forebrain bundle. Brain Research, 1987, 418, 122-128.	1.1	80
95	Simultaneous monitoring of dopamine concentration at spatially different brain locations in vivo. Biosensors and Bioelectronics, 2010, 25, 1179-1185.	5.3	80
96	Catecholamines in the Bed Nucleus of the Stria Terminalis Reciprocally Respond to Reward and Aversion. Biological Psychiatry, 2012, 71, 327-334.	0.7	80
97	Dynamics of rapid dopamine release in the nucleus accumbens during goal-directed behaviors for cocaine versus natural rewards. Neuropharmacology, 2014, 86, 319-328.	2.0	80
98	Neurochemistry and electroanalytical probes. Current Opinion in Chemical Biology, 2002, 6, 696-703.	2.8	78
99	Improving Data Acquisition for Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 1999, 71, 3941-3947.	3.2	76
100	Effects of External Osmotic Pressure on Vesicular Secretion from Bovine Adrenal Medullary Cells. Journal of Biological Chemistry, 1997, 272, 8325-8331.	1.6	75
101	Microfabricated FSCV-compatible microelectrode array for real-time monitoring of heterogeneous dopamine release. Analyst, The, 2010, 135, 1556.	1.7	75
102	Flexible Software Platform for Fast-Scan Cyclic Voltammetry Data Acquisition and Analysis. Analytical Chemistry, 2013, 85, 10344-10353.	3.2	75
103	Detection of dopamine overflow and diffusion with voltammetry in slices of rat brain. Brain Research, 1987, 423, 79-87.	1.1	71
104	Amine Weak Bases Disrupt Vesicular Storage and Promote Exocytosis in Chromaffin Cells. Journal of Neurochemistry, 2004, 73, 2397-2405.	2.1	71
105	Assessing Principal Component Regression Prediction of Neurochemicals Detected with Fast-Scan Cyclic Voltammetry. ACS Chemical Neuroscience, 2011, 2, 514-525.	1.7	71
106	Phasic dopamine signals: from subjective reward value to formal economic utility. Current Opinion in Behavioral Sciences, 2015, 5, 147-154.	2.0	69
107	Effects of D-2 Antagonists on Frequency-Dependent Stimulated Dopamine Overflow in Nucleus Accumbens and Caudate-Putamen. Journal of Neurochemistry, 1989, 53, 898-906.	2.1	67
108	Distinct pharmacological regulation of evoked dopamine efflux in the amygdala and striatum of the rat in vivo. Synapse, 1995, 20, 269-279.	0.6	63

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109	Interference by pH and Ca2+ ions during measurements of catecholamine release in slices of rat amygdala with fast-scan cyclic voltammetry. Journal of Neuroscience Methods, 1994, 52, 1-10.	1.3	59
110	Terminal effects of ethanol on dopamine dynamics in rat nucleus accumbens: An in vitro voltammetric study. Synapse, 2001, 42, 77-79.	0.6	59
111	Extracellular Ionic Composition Alters Kinetics of Vesicular Release of Catecholamines and Quantal Size During Exocytosis at Adrenal Medullary Cells. Journal of Neurochemistry, 1994, 63, 1739-1747.	2.1	59
112	Nomifensine amplifies subsecond dopamine signals in the ventral striatum of freely-moving rats. Journal of Neurochemistry, 2004, 90, 894-903.	2.1	57
113	Chronically Implanted, Nafion-Coated Ag/AgCl Reference Electrodes for Neurochemical Applications. ACS Chemical Neuroscience, 2011, 2, 658-666.	1.7	57
114	Rapid Dopamine Signaling Differentially Modulates Distinct Microcircuits within the Nucleus Accumbens during Sucrose-Directed Behavior. Journal of Neuroscience, 2011, 31, 13860-13869.	1.7	56
115	Differential dopamine release dynamics in the nucleus accumbens core and shell track distinct aspects of goal-directed behavior for sucrose. Neuropharmacology, 2012, 62, 2050-2056.	2.0	55
116	Cross-hemispheric dopamine projections have functional significance. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6985-6990.	3.3	55
117	Simultaneous Detection of Catecholamine Exocytosis and Ca2+Release from Single Bovine Chromaffin Cells Using a Dual Microsensor. Analytical Chemistry, 1998, 70, 1677-1681.	3.2	54
118	Instrumentation for fast-scan cyclic voltammetry combined with electrophysiology for behavioral experiments in freely moving animals. Review of Scientific Instruments, 2011, 82, 074302.	0.6	54
119	Noradrenergic Synaptic Function in the Bed Nucleus of the Stria Terminalis Varies in Animal Models of Anxiety and Addiction. Neuropsychopharmacology, 2013, 38, 1665-1673.	2.8	52
120	Cue-Evoked Dopamine Release Rapidly Modulates D2 Neurons in the Nucleus Accumbens During Motivated Behavior. Journal of Neuroscience, 2016, 36, 6011-6021.	1.7	52
121	Temporal Separation of Vesicle Release from Vesicle Fusion during Exocytosis. Journal of Biological Chemistry, 2002, 277, 29101-29107.	1.6	50
122	Paradoxical modulation of short-term facilitation of dopamine release by dopamine autoreceptors. Journal of Neurochemistry, 2007, 102, 1115-1124.	2.1	49
123	Monitoring serotonin signaling on a subsecond time scale. Frontiers in Integrative Neuroscience, 2013, 7, 44.	1.0	49
124	Construction of Training Sets for Valid Calibration of in Vivo Cyclic Voltammetric Data by Principal Component Analysis. Analytical Chemistry, 2015, 87, 11484-11491.	3.2	49
125	Sensitization of Rapid Dopamine Signaling in the Nucleus Accumbens Core and Shell After Repeated Cocaine in Rats. Journal of Neurophysiology, 2010, 104, 922-931.	0.9	48
126	Removal of Differential Capacitive Interferences in Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 2017, 89, 6166-6174.	3.2	48

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127	?-Aminobutyric Acid Stimulates the Release of Endogenous Ascorbic Acid from Rat Striatal Tissue. Journal of Neurochemistry, 1984, 42, 412-419.	2.1	45
128	Pathway-specific dopaminergic deficits in a mouse model of Angelman syndrome. Journal of Clinical Investigation, 2012, 122, 4544-4554.	3.9	45
129	Electrochemiluminescence at Band Array Electrodes. Journal of the Electrochemical Society, 1992, 139, 70-74.	1.3	44
130	Acute Ethanol Decreases Dopamine Transporter Velocity in Rat Striatum: In Vivo and In Vitro Electrochemical Measurements. Alcoholism: Clinical and Experimental Research, 2005, 29, 746-755.	1.4	44
131	Microelectrodes for studying neurobiology. Current Opinion in Chemical Biology, 2008, 12, 491-496.	2.8	44
132	Imaging Microelectrodes with High-Frequency Electrogenerated Chemiluminescence. Journal of Physical Chemistry B, 1998, 102, 9991-9996.	1.2	43
133	In vivo voltammetry monitoring of electrically evoked extracellular norepinephrine in subregions of the bed nucleus of the stria terminalis. Journal of Neurophysiology, 2012, 107, 1731-1737.	0.9	42
134	Controlled Iontophoresis Coupled with Fast-Scan Cyclic Voltammetry/Electrophysiology in Awake, Freely Moving Animals. ACS Chemical Neuroscience, 2013, 4, 761-771.	1.7	42
135	Adrenaline Release by Chromaffin Cells: Constrained Swelling of the Vesicle Matrix Leads to Full Fusion. Angewandte Chemie - International Edition, 2000, 39, 1952-1955.	7.2	41
136	Monitoring extracellular pH, oxygen, and dopamine during reward delivery in the striatum of primates. Frontiers in Behavioral Neuroscience, 2012, 6, 36.	1.0	41
137	Opposing Catecholamine Changes in the Bed Nucleus of the Stria Terminalis During Intracranial Self-Stimulation and Its Extinction. Biological Psychiatry, 2013, 74, 69-76.	0.7	40
138	Pharmacologically induced, subsecond dopamine transients in the caudateâ€“putamen of the anesthetized rat. Synapse, 2007, 61, 37-39.	0.6	38
139	Rank Estimation and the Multivariate Analysis of in Vivo Fast-Scan Cyclic Voltammetric Data. Analytical Chemistry, 2010, 82, 5541-5551.	3.2	38
140	Electroosmotic Flow and Its Contribution to Iontophoretic Delivery. Analytical Chemistry, 2008, 80, 8635-8641.	3.2	37
141	Regional Differences in Dopamine Release, Uptake, and Diffusion Measured by Fast-Scan Cyclic Voltammetry. , 1995, , 179-220.		36
142	Release and uptake of catecholamines in the bed nucleus of the stria terminalis measured in the mouse brain slice. Synapse, 2002, 44, 188-197.	0.6	36
143	Real-Time Monitoring of Chemical Transmission in Slices of the Murine Adrenal Gland. Endocrinology, 2010, 151, 1773-1783.	1.4	36
144	Norepinephrine and dopamine transmission in 2 limbic regions differentially respond to acute noxious stimulation. Pain, 2015, 156, 318-327.	2.0	35

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145	Presynaptic dopaminergic function is largely unaltered in mesolimbic and mesostriatal terminals of adult rats that were prenatally exposed to cocaine. Brain Research, 2003, 961, 63-72.	1.1	33
146	Vesicular Ca2+-induced secretion promoted by intracellular pH-gradient disruption. Biophysical Chemistry, 2006, 123, 20-24.	1.5	32
147	Correlation of Real-time Catecholamine Release and Cytosolic Ca2+ at Single Bovine Chromaffin Cells. Journal of Biological Chemistry, 1995, 270, 5353-5359.	1.6	31
148	Quantal Corelease of Histamine and 5-Hydroxytryptamine from Mast Cells and the Effects of Prior Incubation. Biochemistry, 1998, 37, 1046-1052.	1.2	31
149	Failure of Standard Training Sets in the Analysis of Fast-Scan Cyclic Voltammetry Data. ACS Chemical Neuroscience, 2016, 7, 349-359.	1.7	31
150	Conical Tungsten Tips as Substrates for the Preparation of Ultramicroelectrodes. Langmuir, 2006, 22, 10348-10353.	1.6	30
151	Reciprocal Catecholamine Changes during Opiate Exposure and Withdrawal. Neuropsychopharmacology, 2017, 42, 671-681.	2.8	29
152	In vivo measurement of somatodendritic release of dopamine in the ventral tegmental area. Synapse, 2009, 63, 951-960.	0.6	28
153	Probing Presynaptic Regulation of Extracellular Dopamine with Iontophoresis. ACS Chemical Neuroscience, 2010, 1, 627-638.	1.7	28
154	Stress and Drug Dependence Differentially Modulate Norepinephrine Signaling in Animals with Varied HPA Axis Function. Neuropsychopharmacology, 2015, 40, 1752-1761.	2.8	27
155	Measurement of Basal Neurotransmitter Levels Using Convolution-Based Nonfaradaic Current Removal. Analytical Chemistry, 2018, 90, 7181-7189.	3.2	27
156	Real-Time Monitoring of Electrically Stimulated Norepinephrine Release in Rat Thalamus: II. Modeling of Release and Reuptake Characteristics of Stimulated Norepinephrine Overflow. Journal of Neurochemistry, 1993, 60, 449-453.	2.1	24
157	An implantable multimodal sensor for oxygen, neurotransmitters, and electrophysiology during spreading depolarization in the deep brain. Analyst, The, 2017, 142, 2912-2920.	1.7	24
158	The Association of Vesicular Contents and Its Effects on Release. Annals of the New York Academy of Sciences, 2002, 971, 620-626.	1.8	23
159	Facilitation of Serotonin Signaling by SSRIs is Attenuated by Social Isolation. Neuropsychopharmacology, 2014, 39, 2928-2937.	2.8	23
160	Microfabricated Collector-Generator Electrode Sensor for Measuring Absolute pH and Oxygen Concentrations. Analytical Chemistry, 2015, 87, 10556-10564.	3.2	23
161	Dopamine Dynamics during Continuous Intracranial Self-Stimulation: Effect of Waveform on Fast-Scan Cyclic Voltammetry Data. ACS Chemical Neuroscience, 2016, 7, 1508-1518.	1.7	23
162	Contrasting Regulation of Catecholamine Neurotransmission in the Behaving Brain: Pharmacological Insights from an Electrochemical Perspective. Pharmacological Reviews, 2017, 69, 12-32.	7.1	22

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163	Enzyme-Modified Tetrathiafulvalene Tetracyanoquinodimethane Microelectrodes: Direct Amperometric Detection of Acetylcholine and Choline. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1988, 160, 269-279.	0.3	21
164	Synapsin II negatively regulates catecholamine release. Brain Cell Biology, 2007, 35, 125-136.	3.5	21
165	Medullary Norepinephrine Neurons Modulate Local Oxygen Concentrations in the Bed Nucleus of the Stria Terminalis. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1128-1137.	2.4	20
166	Instrument design for pulse voltammetry with microvoltammetric electrodes. Review of Scientific Instruments, 1981, 52, 454-458.	0.6	19
167	Neuropeptide Release Is Impaired in a Mouse Model of Fragile X Mental Retardation Syndrome. ACS Chemical Neuroscience, 2010, 1, 306-314.	1.7	19
168	Characterization of Solute Distribution Following Iontophoresis from a Micropipet. Analytical Chemistry, 2014, 86, 9909-9916.	3.2	14
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