R Mark Wightman

List of Publications by Citations

186 papers	21,537 citations	82 h-index	144 g-index
190 ext. papers	23,358 ext. citations	7.8 avg, IF	6.81 L-index

#	Paper	IF	Citations
186	Hyperlocomotion and indifference to cocaine and amphetamine in mice lacking the dopamine transporter. *Nature*, **1996**, 379, 606-12	50.4	1985
185	Subsecond dopamine release promotes cocaine seeking. *Nature*, **2003**, 422, 614-8	50.4	904
184	Dopamine operates as a subsecond modulator of food seeking. *Journal of Neuroscience*, **2004**, 24, 1265-76	6.6	559
183	Monitoring rapid chemical communication in the brain. *Chemical Reviews*, **2008**, 108, 2554-84	68.1	488
182	Microvoltammetric electrodes. *Analytical Chemistry*, **1981**, 53, 1125A-1134A	7.8	475
181	Associative learning mediates dynamic shifts in dopamine signaling in the nucleus accumbens. *Nature Neuroscience*, **2007**, 10, 1020-8	25.5	472
180	Real-time chemical responses in the nucleus accumbens differentiate rewarding and aversive stimuli. *Nature Neuroscience*, **2008**, 11, 1376-7	25.5	460
179	Detecting subsecond dopamine release with fast-scan cyclic voltammetry in vivo. *Clinical Chemistry*, **2003**, 49, 1763-73	5.5	422
178	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, 8821-31	6.6	380
177	Extinction of cocaine self-administration reveals functionally and temporally distinct dopaminergic signals in the nucleus accumbens. *Neuron*, **2005**, 46, 661-9	13.9	371
176	Detection of dopamine dynamics in the brain. *Analytical Chemistry*, **1988**, 60, 769A-779A	7.8	370
175	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, 10023-8	11.5	363
174	Detection technologies. Probing cellular chemistry in biological systems with microelectrodes. *Science*, **2006**, 311, 1570-4	33.3	345
173	Dissociation of dopamine release in the nucleus accumbens from intracranial self-stimulation. *Nature*, **1999**, 398, 67-9	50.4	301
172	Phasic dopamine release evoked by abused substances requires cannabinoid receptor activation. *Journal of Neuroscience*, **2007**, 27, 791-5	6.6	286
171	Overoxidation of carbon-fiber microelectrodes enhances dopamine adsorption and increases sensitivity. *Analyst, The*, **2003**, 128, 1413-9	5	284
170	Resolving neurotransmitters detected by fast-scan cyclic voltammetry. *Analytical Chemistry*, **2004**, 76, 5697-704	7.8	282

169	Cannabinoids enhance subsecond dopamine release in the nucleus accumbens of awake rats. *Journal of Neuroscience*, **2004**, 24, 4393-400	6.6	266
168	Subsecond adsorption and desorption of dopamine at carbon-fiber microelectrodes. *Analytical Chemistry*, **2000**, 72, 5994-6002	7.8	263
167	Microelectrodes for the measurement of catecholamines in biological systems. *Analytical Chemistry* , **1996**, 68, 3180-6	7.8	256
166	Quantitative evaluation of 5-hydroxytryptamine (serotonin) neuronal release and uptake: an investigation of extrasynaptic transmission. *Journal of Neuroscience*, **1998**, 18, 4854-60	6.6	244
165	Fast-scan voltammetry of biogenic amines. *Analytical Chemistry*, **1988**, 60, 1268-72	7.8	234
164	Frequency of dopamine concentration transients increases in dorsal and ventral striatum of male rats during introduction of conspecifics. *Journal of Neuroscience*, **2002**, 22, 10477-86	6.6	222
163	Overoxidized polypyrrole-coated carbon fiber microelectrodes for dopamine measurements with fast-scan cyclic voltammetry. *Analytical Chemistry*, **1996**, 68, 2084-9	7.8	215
162	Loss of autoreceptor functions in mice lacking the dopamine transporter. *Nature Neuroscience*, **1999**, 2, 649-55	25.5	211
161	Transient changes in mesolimbic dopamine and their association with ŦrewardŦ *Journal of Neurochemistry*, **2002**, 82, 721-35	6	209
160	Real-time decoding of dopamine concentration changes in the caudate-putamen during tonic and phasic firing. *Journal of Neurochemistry*, **2003**, 87, 1284-95	6	201
159	Fast-scan cyclic voltammetry of 5-hydroxytryptamine. *Analytical Chemistry*, **1995**, 67, 1115-20	7.8	201
158	Electrochemical Analysis of Neurotransmitters. *Annual Review of Analytical Chemistry*, **2015**, 8, 239-61	12.5	188
157	Synaptic overflow of dopamine in the nucleus accumbens arises from neuronal activity in the ventral tegmental area. *Journal of Neuroscience*, **2009**, 29, 1735-42	6.6	184
156	Rapid dopamine signaling in the nucleus accumbens during contingent and noncontingent cocaine administration. *Neuropsychopharmacology*, **2005**, 30, 853-63	8.7	183
155	Cocaine increases dopamine release by mobilization of a synapsin-dependent reserve pool. *Journal of Neuroscience*, **2006**, 26, 3206-9	6.6	181
154	Carbon microelectrodes with a renewable surface. *Analytical Chemistry*, **2010**, 82, 2020-8	7.8	166
153	Coordinated accumbal dopamine release and neural activity drive goal-directed behavior. *Neuron*, **2007**, 54, 237-44	13.9	165
152	Dopamine release is heterogeneous within microenvironments of the rat nucleus accumbens. *European Journal of Neuroscience*, **2007**, 26, 2046-54	3.5	147

151	Comparison of dopamine uptake in the basolateral amygdaloid nucleus, caudate-putamen, and nucleus accumbens of the rat. *Journal of Neurochemistry*, **1995**, 64, 2581-9	6	146
150	Real-time measurement of electrically evoked extracellular dopamine in the striatum of freely moving rats. *Journal of Neurochemistry*, **1997**, 68, 152-61	6	142
149	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, 4405-10	11.5	139
148	Spatio-temporal resolution of exocytosis from individual cells. *Annual Review of Biophysics and Biomolecular Structure*, **1998**, 27, 77-103		139
147	Methods to Improve Electrochemical Reversibility at Carbon Electrodes. *Journal of the Electrochemical Society*, **1984**, 131, 1578-1583	3.9	138
146	Response times of carbon fiber microelectrodes to dynamic changes in catecholamine concentration. *Analytical Chemistry*, **2002**, 74, 539-46	7.8	137
145	Dynamic gain control of dopamine delivery in freely moving animals. *Journal of Neuroscience*, **2004**, 24, 1754-9	6.6	134
144	Analysis of diffusional broadening of vesicular packets of catecholamines released from biological cells during exocytosis. *Analytical Chemistry*, **1992**, 64, 3077-83	7.8	130
143	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, 560-9	6	128
142	Higher sensitivity dopamine measurements with faster-scan cyclic voltammetry. *Analytical Chemistry*, **2011**, 83, 3563-71	7.8	126
141	Multivariate concentration determination using principal component regression with residual analysis. *TrAC - Trends in Analytical Chemistry*, **2009**, 28, 1127-1136	14.6	124
140	Evoked extracellular dopamine in vivo in the medial prefrontal cortex. *Journal of Neurochemistry*, **1993**, 61, 637-47	6	124
139	Dynamic observation of dopamine autoreceptor effects in rat striatal slices. *Journal of Neurochemistry*, **1992**, 59, 449-55	6	124
138	Correlation of local changes in extracellular oxygen and pH that accompany dopaminergic terminal activity in the rat caudate-putamen. *Journal of Neurochemistry*, **2003**, 84, 373-81	6	122
137	Phasic nucleus accumbens dopamine release encodes effort- and delay-related costs. *Biological Psychiatry*, **2010**, 68, 306-9	7.9	121
136	Spatiotemporal description of the diffusion layer with a microelectrode probe. *Analytical Chemistry*, **1987**, 59, 2005-2010	7.8	120
135	Background subtraction for rapid scan voltammetry. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1986**, 209, 77-90		119
134	Sub-second changes in accumbal dopamine during sexual behavior in male rats. *NeuroReport*, **2001**, 12, 2549-52	1.7	117

133	Real-time amperometric measurements of zeptomole quantities of dopamine released from neurons. *Analytical Chemistry*, **2000**, 72, 489-96	7.8	113
132	Etched carbon-fiber electrodes as amperometric detectors of catecholamine secretion from isolated biological cells. *Analytical Chemistry*, **1991**, 63, 1589-94	7.8	113
131	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, 19150-5	11.5	112
130	Dopamine detection with fast-scan cyclic voltammetry used with analog background subtraction. *Analytical Chemistry*, **2008**, 80, 4040-8	7.8	109
129	Sources contributing to the average extracellular concentration of dopamine in the nucleus accumbens. *Journal of Neurochemistry*, **2012**, 121, 252-62	6	108
128	Dopamine neuronal transport kinetics and effects of amphetamine. *Journal of Neurochemistry*, **1999**, 73, 2406-14	6	108
127	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, 1060-9	6	107
126	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, 11572-82	6.6	106
125	Vesicular quantal size measured by amperometry at chromaffin, mast, pheochromocytoma, and pancreatic beta-cells. *Journal of Neurochemistry*, **1996**, 66, 1914-23	6	105
124	HitchhikerЂs Guide to Voltammetry: Acute and Chronic Electrodes for in Vivo Fast-Scan Cyclic Voltammetry. *ACS Chemical Neuroscience*, **2017**, 8, 221-234	5.7	104
123	Phasic nucleus accumbens dopamine encodes risk-based decision-making behavior. *Biological Psychiatry*, **2012**, 71, 199-205	7.9	102
122	Neural encoding of cocaine-seeking behavior is coincident with phasic dopamine release in the accumbens core and shell. *European Journal of Neuroscience*, **2009**, 30, 1117-27	3.5	102
121	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, 11957-62	11.5	100
120	Solid State Electrochemically Generated Luminescence Based on Serial Frozen Concentration Gradients of RuIII/II and RuII/I Couples in a Molten Ruthenium 2,2Ђ-Bipyridine Complex. *Journal of the American Chemical Society*, **1997**, 119, 3987-3993	16.4	98
119	Electrochemical Dopamine Detection: Comparing Gold and Carbon Fiber Microelectrodes using Background Subtracted Fast Scan Cyclic Voltammetry. *Journal of Electroanalytical Chemistry*, **2008**, 614, 113-120	4.1	98
118	Characterization of local pH changes in brain using fast-scan cyclic voltammetry with carbon microelectrodes. *Analytical Chemistry*, **2010**, 82, 9892-900	7.8	96
117	In vivo comparison of norepinephrine and dopamine release in rat brain by simultaneous measurements with fast-scan cyclic voltammetry. *Journal of Neurochemistry*, **2011**, 119, 932-44	6	95
116	Regional specificity in the real-time development of phasic dopamine transmission patterns during acquisition of a cue-cocaine association in rats. *European Journal of Neuroscience*, **2009**, 30, 1889-99	3.5	95

115	Catecholamine release and uptake in the mouse prefrontal cortex. *Journal of Neurochemistry*, **2001**, 79, 130-42	6	95
114	Cocaine cues drive opposing context-dependent shifts in reward processing and emotional state. *Biological Psychiatry*, **2011**, 69, 1067-74	7.9	94
113	Functional and anatomical evidence for different dopamine dynamics in the core and shell of the nucleus accumbens in slices of rat brain. *Synapse*, **1996**, 23, 224-31	2.4	94
112	Secretion of catecholamines from individual adrenal medullary chromaffin cells. *Journal of Neurochemistry*, **1991**, 56, 1855-63	6	94
111	Simultaneous electrochemical measurements of oxygen and dopamine in vivo. *Analytical Chemistry*, **1991**, 63, 24-8	7.8	94
110	Color images for fast-scan CV measurements in biological systems. *Analytical Chemistry*, **1998**, 70, 586A-592A	7.8	93
109	Effect of pH and surface functionalities on the cyclic voltammetric responses of carbon-fiber microelectrodes. *Analytical Chemistry*, **1999**, 71, 2782-9	7.8	93
108	Direct observation of epinephrine and norepinephrine cosecretion from individual adrenal medullary chromaffin cells. *Journal of the American Chemical Society*, **1992**, 114, 2815-2821	16.4	88
107	Monitoring the stimulated release of dopamine with in vivo voltammetry. II: Clearance of released dopamine from extracellular fluid. *Journal of Neurochemistry*, **1984**, 43, 570-7	6	87
106	Dopamine Adsorption at Surface Modified Carbon-Fiber Electrodes. *Langmuir*, **2001**, 17, 7032-7039	4	85
105	Basolateral amygdala modulates terminal dopamine release in the nucleus accumbens and conditioned responding. *Biological Psychiatry*, **2010**, 67, 737-44	7.9	83
104	Functional microcircuitry in the accumbens underlying drug addiction: insights from real-time signaling during behavior. *Current Opinion in Neurobiology*, **2004**, 14, 763-8	7.6	81
103	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, 2121-33	3.5	80
102	Fluorinated xerogel-derived microelectrodes for amperometric nitric oxide sensing. *Analytical Chemistry*, **2008**, 80, 6850-9	7.8	80
101	Disparity between tonic and phasic ethanol-induced dopamine increases in the nucleus accumbens of rats. *Alcoholism: Clinical and Experimental Research*, **2009**, 33, 1187-96	3.7	77
100	Simultaneous decoupled detection of dopamine and oxygen using pyrolyzed carbon microarrays and fast-scan cyclic voltammetry. *Analytical Chemistry*, **2009**, 81, 6258-65	7.8	76
99	Release and uptake rates of 5-hydroxytryptamine in the dorsal raphe and substantia nigra reticulata of the rat brain. *Journal of Neurochemistry*, **1998**, 70, 1077-87	6	76
98	Dopaminergic neurons: simultaneous measurements of dopamine release and single-unit activity during stimulation of the medial forebrain bundle. *Brain Research*, **1987**, 418, 122-8	3.7	76

97	Dispersion in flow injection analysis measured with microvoltammetric electrodes. *Analytical Chemistry*, **1986**, 58, 986-988	7.8	76
96	Synapsins differentially control dopamine and serotonin release. *Journal of Neuroscience*, **2010**, 30, 9762-70	6.9	74
95	Real-time measurements of phasic changes in extracellular dopamine concentration in freely moving rats by fast-scan cyclic voltammetry. *Methods in Molecular Medicine*, **2003**, 79, 443-64		71
94	Heterogeneity of stimulated dopamine overflow within rat striatum as observed with in vivo voltammetry. *Brain Research*, **1989**, 487, 311-20	3.7	71
93	Dynamics of rapid dopamine release in the nucleus accumbens during goal-directed behaviors for cocaine versus natural rewards. *Neuropharmacology*, **2014**, 86, 319-28	5.5	70
92	Improving data acquisition for fast-scan cyclic voltammetry. *Analytical Chemistry*, **1999**, 71, 3941-7	7.8	70
91	Neurochemistry and electroanalytical probes. *Current Opinion in Chemical Biology*, **2002**, 6, 696-703	9.7	69
90	Catecholamines in the bed nucleus of the stria terminalis reciprocally respond to reward and aversion. *Biological Psychiatry*, **2012**, 71, 327-34	7.9	68
89	Microfabricated FSCV-compatible microelectrode array for real-time monitoring of heterogeneous dopamine release. *Analyst, The*, **2010**, 135, 1556-63	5	68
88	Effects of external osmotic pressure on vesicular secretion from bovine adrenal medullary cells. *Journal of Biological Chemistry*, **1997**, 272, 8325-31	5.4	67
87	Amine weak bases disrupt vesicular storage and promote exocytosis in chromaffin cells. *Journal of Neurochemistry*, **1999**, 73, 2397-405	6	67
86	Simultaneous monitoring of dopamine concentration at spatially different brain locations in vivo. *Biosensors and Bioelectronics*, **2010**, 25, 1179-85	11.8	66
85	Detection of dopamine overflow and diffusion with voltammetry in slices of rat brain. *Brain Research*, **1987**, 423, 79-87	3.7	66
84	Effects of D-2 antagonists on frequency-dependent stimulated dopamine overflow in nucleus accumbens and caudate-putamen. *Journal of Neurochemistry*, **1989**, 53, 898-906	6	63
83	Dopamine Ts Effects on Corticostriatal Synapses during Reward-Based Behaviors. *Neuron*, **2018**, 97, 494-510	13.9	60
82	Assessing principal component regression prediction of neurochemicals detected with fast-scan cyclic voltammetry. *ACS Chemical Neuroscience*, **2011**, 2, 514-525	5.7	60
81	Flexible software platform for fast-scan cyclic voltammetry data acquisition and analysis. *Analytical Chemistry*, **2013**, 85, 10344-53	7.8	59
80	Distinct pharmacological regulation of evoked dopamine efflux in the amygdala and striatum of the rat in vivo. *Synapse*, **1995**, 20, 269-79	2.4	57

79	Phasic dopamine signals: from subjective reward value to formal economic utility. *Current Opinion in Behavioral Sciences*, **2015**, 5, 147-154	4	56
78	Nomifensine amplifies subsecond dopamine signals in the ventral striatum of freely-moving rats. *Journal of Neurochemistry*, **2004**, 90, 894-903	6	54
77	Terminal effects of ethanol on dopamine dynamics in rat nucleus accumbens: an in vitro voltammetric study. *Synapse*, **2001**, 42, 77-9	2.4	53
76	Extracellular ionic composition alters kinetics of vesicular release of catecholamines and quantal size during exocytosis at adrenal medullary cells. *Journal of Neurochemistry*, **1994**, 63, 1739-47	6	52
75	Rapid dopamine signaling differentially modulates distinct microcircuits within the nucleus accumbens during sucrose-directed behavior. *Journal of Neuroscience*, **2011**, 31, 13860-9	6.6	50
74	Simultaneous detection of catecholamine exocytosis and Ca2+ release from single bovine chromaffin cells using a dual microsensor. *Analytical Chemistry*, **1998**, 70, 1677-81	7.8	50
73	Cross-hemispheric dopamine projections have functional significance. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 6985-90	11.5	48
72	Differential dopamine release dynamics in the nucleus accumbens core and shell track distinct aspects of goal-directed behavior for sucrose. *Neuropharmacology*, **2012**, 62, 2050-6	5.5	48
71	Chronically Implanted, Nafion-Coated Ag/AgCl Reference Electrodes for Neurochemical Applications. *ACS Chemical Neuroscience*, **2011**, 2, 658-666	5.7	48
70	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	3	47
69	Instrumentation for fast-scan cyclic voltammetry combined with electrophysiology for behavioral experiments in freely moving animals. *Review of Scientific Instruments*, **2011**, 82, 074302	1.7	45
68	Paradoxical modulation of short-term facilitation of dopamine release by dopamine autoreceptors. *Journal of Neurochemistry*, **2007**, 102, 1115-24	6	44
67	Temporal separation of vesicle release from vesicle fusion during exocytosis. *Journal of Biological Chemistry*, **2002**, 277, 29101-7	5.4	43
66	Gamma-aminobutyric acid stimulates the release of endogenous ascorbic acid from rat striatal tissue. *Journal of Neurochemistry*, **1984**, 42, 412-9	6	43
65	Electrochemiluminescence at Band Array Electrodes. *Journal of the Electrochemical Society*, **1992**, 139, 70-74	3.9	42
64	Sensitization of rapid dopamine signaling in the nucleus accumbens core and shell after repeated cocaine in rats. *Journal of Neurophysiology*, **2010**, 104, 922-31	3.2	41
63	Imaging Microelectrodes with High-Frequency Electrogenerated Chemiluminescence. *Journal of Physical Chemistry B*, **1998**, 102, 9991-9996	3.4	40
62	In vivo voltammetry monitoring of electrically evoked extracellular norepinephrine in subregions of the bed nucleus of the stria terminalis. *Journal of Neurophysiology*, **2012**, 107, 1731-7	3.2	39

61	Construction of Training Sets for Valid Calibration of in Vivo Cyclic Voltammetric Data by Principal Component Analysis. *Analytical Chemistry*, **2015**, 87, 11484-91	7.8	38
60	Monitoring extracellular pH, oxygen, and dopamine during reward delivery in the striatum of primates. *Frontiers in Behavioral Neuroscience*, **2012**, 6, 36	3.5	38
59	Monitoring serotonin signaling on a subsecond time scale. *Frontiers in Integrative Neuroscience*, **2013**, 7, 44	3.2	38
58	Pathway-specific dopaminergic deficits in a mouse model of Angelman syndrome. *Journal of Clinical Investigation*, **2012**, 122, 4544-54	15.9	38
57	Cue-Evoked Dopamine Release Rapidly Modulates D2 Neurons in the Nucleus Accumbens During Motivated Behavior. *Journal of Neuroscience*, **2016**, 36, 6011-21	6.6	37
56	Acute ethanol decreases dopamine transporter velocity in rat striatum: in vivo and in vitro electrochemical measurements. *Alcoholism: Clinical and Experimental Research*, **2005**, 29, 746-55	3.7	37
55	Adrenaline Release by Chromaffin Cells: Constrained Swelling of the Vesicle Matrix Leads to Full Fusion At the ENS, this work has been supported in part by the CNRS (UMR 8640, Ultimatech and the program "Physique et Chimie du Vivant"), by the ENS, and by the French Ministry of Research and Education (MENESR). At the UNC, this work was supported by the NIH. *Angewandte Chemie* -	16.4	37
54	Noradrenergic synaptic function in the bed nucleus of the stria terminalis varies in animal models of anxiety and addiction. *Neuropsychopharmacology*, **2013**, 38, 1665-73	8.7	36
53	Pharmacologically induced, subsecond dopamine transients in the caudate-putamen of the anesthetized rat. *Synapse*, **2007**, 61, 37-9	2.4	36
52	Controlled iontophoresis coupled with fast-scan cyclic voltammetry/electrophysiology in awake, freely moving animals. *ACS Chemical Neuroscience*, **2013**, 4, 761-71	5.7	35
51	Rank estimation and the multivariate analysis of in vivo fast-scan cyclic voltammetric data. *Analytical Chemistry*, **2010**, 82, 5541-51	7.8	35
50	Removal of Differential Capacitive Interferences in Fast-Scan Cyclic Voltammetry. *Analytical Chemistry*, **2017**, 89, 6166-6174	7.8	33
49	Microelectrodes for studying neurobiology. *Current Opinion in Chemical Biology*, **2008**, 12, 491-6	9.7	33
48	Release and uptake of catecholamines in the bed nucleus of the stria terminalis measured in the mouse brain slice. *Synapse*, **2002**, 44, 188-97	2.4	33
47	Electroosmotic flow and its contribution to iontophoretic delivery. *Analytical Chemistry*, **2008**, 80, 8635-41	7.8	32
46	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	3.7	32
45	Norepinephrine and dopamine transmission in 2 limbic regions differentially respond to acute noxious stimulation. *Pain*, **2015**, 156, 318-327	8	30
44	Correlation of real-time catecholamine release and cytosolic Ca2+ at single bovine chromaffin cells. *Journal of Biological Chemistry*, **1995**, 270, 5353-9	5.4	30

43	Vesicular Ca(2+) -induced secretion promoted by intracellular pH-gradient disruption. *Biophysical Chemistry*, **2006**, 123, 20-4	3.5	29
42	Opposing catecholamine changes in the bed nucleus of the stria terminalis during intracranial self-stimulation and its extinction. *Biological Psychiatry*, **2013**, 74, 69-76	7.9	28
41	Conical tungsten tips as substrates for the preparation of ultramicroelectrodes. *Langmuir*, **2006**, 22, 10348-53		27
40	Failure of Standard Training Sets in the Analysis of Fast-Scan Cyclic Voltammetry Data. *ACS Chemical Neuroscience*, **2016**, 7, 349-59	5.7	26
39	Real-time monitoring of chemical transmission in slices of the murine adrenal gland. *Endocrinology*, **2010**, 151, 1773-83	4.8	26
38	Regional Differences in Dopamine Release, Uptake, and Diffusion Measured by Fast-Scan Cyclic Voltammetry **1995**, 179-220		26
37	Quantal corelease of histamine and 5-hydroxytryptamine from mast cells and the effects of prior incubation. *Biochemistry*, **1998**, 37, 1046-52	3.2	25
36	Probing presynaptic regulation of extracellular dopamine with iontophoresis. *ACS Chemical Neuroscience*, **2010**, 1, 627-638	5.7	24
35	In vivo measurement of somatodendritic release of dopamine in the ventral tegmental area. *Synapse*, **2009**, 63, 951-60	2.4	24
34	The association of vesicular contents and its effects on release. *Annals of the New York Academy of Sciences*, **2002**, 971, 620-6	6.5	23
33	Microfabricated Collector-Generator Electrode Sensor for Measuring Absolute pH and Oxygen Concentrations. *Analytical Chemistry*, **2015**, 87, 10556-64	7.8	22
32	An implantable multimodal sensor for oxygen, neurotransmitters, and electrophysiology during spreading depolarization in the deep brain. *Analyst, The*, **2017**, 142, 2912-2920	5	22
31	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, 449-53	6	20
30	Neuropeptide Release is Impaired in a Mouse Model of Fragile X Mental Retardation Syndrome. *ACS Chemical Neuroscience*, **2010**, 1, 306-314	5.7	19
29	Synapsin II negatively regulates catecholamine release. *Brain Cell Biology*, **2006**, 35, 125-36		19
28	Dopamine Dynamics during Continuous Intracranial Self-Stimulation: Effect of Waveform on Fast-Scan Cyclic Voltammetry Data. *ACS Chemical Neuroscience*, **2016**, 7, 1508-1518	5.7	18
27	Reciprocal Catecholamine Changes during Opiate Exposure and Withdrawal. *Neuropsychopharmacology*, **2017**, 42, 671-681	8.7	17
26	Stress and Drug Dependence Differentially Modulate Norepinephrine Signaling in Animals with Varied HPA Axis Function. *Neuropsychopharmacology*, **2015**, 40, 1752-61	8.7	17

25	Measurement of Basal Neurotransmitter Levels Using Convolution-Based Nonfaradaic Current Removal. *Analytical Chemistry*, **2018**, 90, 7181-7189	7.8	17
24	Facilitation of serotonin signaling by SSRIs is attenuated by social isolation. *Neuropsychopharmacology*, **2014**, 39, 2928-37	8.7	16
23	Medullary norepinephrine neurons modulate local oxygen concentrations in the bed nucleus of the stria terminalis. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34, 1128-37	7.3	16
22	Instrument design for pulse voltammetry with microvoltammetric electrodes. *Review of Scientific Instruments*, **1981**, 52, 454-458	1.7	15
21	Characterization of solute distribution following iontophoresis from a micropipet. *Analytical Chemistry*, **2014**, 86, 9909-16	7.8	14
20	Contrasting Regulation of Catecholamine Neurotransmission in the Behaving Brain: Pharmacological Insights from an Electrochemical Perspective. *Pharmacological Reviews*, **2017**, 69, 12-32	22.5	12
19	One month of cocaine abstinence potentiates rapid dopamine signaling in the nucleus accumbens core. *Neuropharmacology*, **2016**, 111, 223-230	5.5	12
18	Multivariate Curve Resolution for Signal Isolation from Fast-Scan Cyclic Voltammetric Data. *Analytical Chemistry*, **2017**, 89, 10547-10555	7.8	11
17	Real-time decoding of dopamine concentration changes in the caudate-putamen during tonic and phasic firing. *Journal of Neurochemistry*, **2004**, 89, 526-526	6	10
16	Development of dopamine neurotransmission and uptake inhibition in the caudate nucleus as measured by fast-cyclic voltammetry. *Synapse*, **1996**, 24, 305-7	2.4	10
15	Enzyme-Modified Tetrathiafulvalene Tetracyanoquinodimethane Microelectrodes: Direct Amperometric Detection of Acetylcholine and Choline. *Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics*, **1988**, 160, 269-279		10
14	How intravesicular composition affects exocytosis. *Pflugers Archiv European Journal of Physiology*, **2018**, 470, 135-141	4.6	9
13	Facilitation of quantal release induced by a D1-like receptor on bovine chromaffin cells. *Biochemistry*, **2007**, 46, 3881-7	3.2	9
12	Comparison of Spreading Depolarizations in the Motor Cortex and Nucleus Accumbens: Similar Patterns of Oxygen Responses and the Role of Dopamine. *ACS Chemical Neuroscience*, **2017**, 8, 2512-2521	5.7	8
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9	Cyclic Voltammetric Measurements of Neurotransmitters. *Electrochemical Society Interface*, **2017**, 26, 53-57	3.6	6
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