B Jill Venton

List of Publications by Citations

118 papers	6,815 citations	44 h-index	81 g-index
133 ext. papers	7,876 ext. citations	6 avg, IF	6.53 L-index

#	Paper	IF	Citations
118	Review: Carbon nanotube based electrochemical sensors for biomolecules. *Analytica Chimica Acta*, **2010**, 662, 105-27	6.6	786
117	Detecting subsecond dopamine release with fast-scan cyclic voltammetry in vivo. *Clinical Chemistry*, **2003**, 49, 1763-73	5.5	422
116	Recent trends in carbon nanomaterial-based electrochemical sensors for biomolecules: A review. *Analytica Chimica Acta*, **2015**, 887, 17-37	6.6	341
115	Psychoanalytical Electrochemistry: Dopamine and Behavior. *Analytical Chemistry*, **2003**, 75, 414 A-421 A	7.8	322
114	Subsecond adsorption and desorption of dopamine at carbon-fiber microelectrodes. *Analytical Chemistry*, **2000**, 72, 5994-6002	7.8	263
113	In vivo measurements of neurotransmitters by microdialysis sampling. *Analytical Chemistry*, **2006**, 78, 1391-9	7.8	229
112	Carbon nanotube-modified microelectrodes for simultaneous detection of dopamine and serotonin in vivo. *Analyst, The*, **2007**, 132, 876-84	5	226
111	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
110	Cocaine increases dopamine release by mobilization of a synapsin-dependent reserve pool. *Journal of Neuroscience*, **2006**, 26, 3206-9	6.6	181
109	Subsecond detection of physiological adenosine concentrations using fast-scan cyclic voltammetry. *Analytical Chemistry*, **2007**, 79, 744-50	7.8	156
108	Carbon-fiber microelectrodes for in vivo applications. *Analyst, The*, **2009**, 134, 18-24	5	145
107	Response times of carbon fiber microelectrodes to dynamic changes in catecholamine concentration. *Analytical Chemistry*, **2002**, 74, 539-46	7.8	137
106	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
105	Sub-second changes in accumbal dopamine during sexual behavior in male rats. *NeuroReport*, **2001**, 12, 2549-52	1.7	117
104	Carbon Nanotubes Grown on Metal Microelectrodes for the Detection of Dopamine. *Analytical Chemistry*, **2016**, 88, 645-52	7.8	90
103	A role for presynaptic mechanisms in the actions of nomifensine and haloperidol. *Neuroscience*, **2003**, 118, 819-29	3.9	88
102	Analytical Techniques in Neuroscience: Recent Advances in Imaging, Separation, and Electrochemical Methods. *Analytical Chemistry*, **2017**, 89, 314-341	7.8	81

101	Rapid, sensitive detection of neurotransmitters at microelectrodes modified with self-assembled SWCNT forests. *Analytical Chemistry*, **2012**, 84, 7816-22	7.8	81
100	Functional groups modulate the sensitivity and electron transfer kinetics of neurochemicals at carbon nanotube modified microelectrodes. *Analyst, The*, **2011**, 136, 3557-65	5	77
99	Flame etching enhances the sensitivity of carbon-fiber microelectrodes. *Analytical Chemistry*, **2008**, 80, 3708-15	7.8	77
98	Carbon nanopipette electrodes for dopamine detection in Drosophila. *Analytical Chemistry*, **2015**, 87, 3849-55	7.8	76
97	Fundamentals of fast-scan cyclic voltammetry for dopamine detection. *Analyst, The*, **2020**, 145, 1158-1168	5	75
96	Synapsins differentially control dopamine and serotonin release. *Journal of Neuroscience*, **2010**, 30, 9762-70	6.6	74
95	Transient adenosine efflux in the rat caudate-putamen. *Journal of Neurochemistry*, **2008**, 105, 1253-63	6	70
94	Neurochemistry and electroanalytical probes. *Current Opinion in Chemical Biology*, **2002**, 6, 696-703	9.7	69
93	High temporal resolution measurements of dopamine with carbon nanotube yarn microelectrodes. *Analytical Chemistry*, **2014**, 86, 5721-7	7.8	68
92	3D-Printed Carbon Electrodes for Neurotransmitter Detection. *Angewandte Chemie - International Edition*, **2018**, 57, 14255-14259	16.4	62
91	Quantitative evaluation of serotonin release and clearance in Drosophila. *Journal of Neuroscience Methods*, **2009**, 179, 300-8	3	60
90	Nafion-CNT coated carbon-fiber microelectrodes for enhanced detection of adenosine. *Analyst, The* , **2012**, 137, 3045-51	5	59
89	Polyethylenimine carbon nanotube fiber electrodes for enhanced detection of neurotransmitters. *Analytical Chemistry*, **2014**, 86, 8568-75	7.8	57
88	Sawhorse waveform voltammetry for selective detection of adenosine, ATP, and hydrogen peroxide. *Analytical Chemistry*, **2014**, 86, 7486-93	7.8	56
87	Laser Treated Carbon Nanotube Yarn Microelectrodes for Rapid and Sensitive Detection of Dopamine. *ACS Sensors*, **2016**, 1, 508-515	9.2	56
86	Characterization of spontaneous, transient adenosine release in the caudate-putamen and prefrontal cortex. *PLoS ONE*, **2014**, 9, e87165	3.7	54
85	Recent advances in fast-scan cyclic voltammetry. *Analyst, The*, **2020**, 145, 1087-1102	5	54
84	Fast-scan Cyclic Voltammetry for the Characterization of Rapid Adenosine Release. *Computational and Structural Biotechnology Journal*, **2015**, 13, 47-54	6.8	53

83	Evaluation of carbon nanotube fiber microelectrodes for neurotransmitter detection: Correlation of electrochemical performance and surface properties. *Analytica Chimica Acta*, **2017**, 965, 1-8	6.6	52
82	Detection of endogenous dopamine changes in Drosophila melanogaster using fast-scan cyclic voltammetry. *Analytical Chemistry*, **2009**, 81, 9306-13	7.8	50
81	Review: New insights into optimizing chemical and 3D surface structures of carbon electrodes for neurotransmitter detection. *Analytical Methods*, **2019**, 11, 247-261	3.2	48
80	Electrochemical Properties of Different Carbon-Fiber Microelectrodes Using Fast-Scan Cyclic Voltammetry. *Electroanalysis*, **2008**, 20, 2422-2428	3	48
79	Carbon nanospikes grown on metal wires as microelectrode sensors for dopamine. *Analyst, The*, **2015**, 140, 7283-92	5	46
78	Quantitation of dopamine, serotonin and adenosine content in a tissue punch from a brain slice using capillary electrophoresis with fast-scan cyclic voltammetry detection. *Analytical Methods*, **2013**, 5, 2704-2711	3.2	46
77	Fast-scan cyclic voltammetry for the detection of tyramine and octopamine. *Analytical and Bioanalytical Chemistry*, **2009**, 394, 329-36	4.4	46
76	Analysis of biogenic amines in a single Drosophila larva brain by capillary electrophoresis with fast-scan cyclic voltammetry detection. *Analytical Chemistry*, **2011**, 83, 2258-64	7.8	44
75	Fast scan cyclic voltammetry as a novel method for detection of real-time gonadotropin-releasing hormone release in mouse brain slices. *Journal of Neuroscience*, **2012**, 32, 14664-9	6.6	44
74	Development of a novel micro biosensor for in vivo monitoring of glutamate release in the brain. *Biosensors and Bioelectronics*, **2019**, 130, 103-109	11.8	42
73	O Plasma Etching and Antistatic Gun Surface Modifications for CNT Yarn Microelectrode Improve Sensitivity and Antifouling Properties. *Analytical Chemistry*, **2017**, 89, 5605-5611	7.8	41
72	Adenosine Release Evoked by Short Electrical Stimulations in Striatal Brain Slices is Primarily Activity Dependent. *ACS Chemical Neuroscience*, **2010**, 1, 775-787	5.7	41
71	Adenosine transiently modulates stimulated dopamine release in the caudate-putamen via A1 receptors. *Journal of Neurochemistry*, **2015**, 132, 51-60	6	39
70	Nanodiamond Coating Improves the Sensitivity and Antifouling Properties of Carbon Fiber Microelectrodes. *ACS Sensors*, **2019**, 4, 2403-2411	9.2	39
69	Cavity Carbon-Nanopipette Electrodes for Dopamine Detection. *Analytical Chemistry*, **2019**, 91, 4618-4624	7.8	39
68	Pharmacologically induced, subsecond dopamine transients in the caudate-putamen of the anesthetized rat. *Synapse*, **2007**, 61, 37-9	2.4	36
67	Transient changes in nucleus accumbens amino acid concentrations correlate with individual responsivity to the predator fox odor 2,5-dihydro-2,4,5-trimethylthiazoline. *Journal of Neurochemistry*, **2006**, 96, 236-46	6	35
66	Carbon Nanohorn-Modified Carbon Fiber Microelectrodes for Dopamine Detection. *Electroanalysis*, **2018**, 30, 1073-1081	3	33

65	The mechanism of electrically stimulated adenosine release varies by brain region. *Purinergic Signalling*, **2013**, 9, 167-74	3.8	33
64	Mechanical stimulation evokes rapid increases in extracellular adenosine concentration in the prefrontal cortex. *Journal of Neurochemistry*, **2014**, 130, 50-60	6	33
63	Dynamic amino acid increases in the basolateral amygdala during acquisition and expression of conditioned fear. *European Journal of Neuroscience*, **2006**, 23, 3391-8	3.5	33
62	Correlation of transient adenosine release and oxygen changes in the caudate-putamen. *Journal of Neurochemistry*, **2017**, 140, 13-23	6	32
61	Fast-Scan Cyclic Voltammetry (FSCV) Detection of Endogenous Octopamine in Drosophila melanogaster Ventral Nerve Cord. *ACS Chemical Neuroscience*, **2016**, 7, 1112-9	5.7	32
60	Both synthesis and reuptake are critical for replenishing the releasable serotonin pool in Drosophila. *Journal of Neurochemistry*, **2010**, 113, 188-99	6	32
59	Comparison of Nafion- and overoxidized polypyrrole-carbon nanotube electrodes for neurotransmitter detection. *Analytical Methods*, **2011**, 3, 2379	3.2	31
58	Analysis of neurotransmitter tissue content of Drosophila melanogaster in different life stages. *ACS Chemical Neuroscience*, **2015**, 6, 117-23	5.7	30
57	Communication-Carbon Nanotube Fiber Microelectrodes for High Temporal Measurements of Dopamine. *Journal of the Electrochemical Society*, **2018**, 165, G3071-G3073	3.9	30
56	Optogenetic control of serotonin and dopamine release in Drosophila larvae. *ACS Chemical Neuroscience*, **2014**, 5, 666-73	5.7	30
55	Early changes in transient adenosine during cerebral ischemia and reperfusion injury. *PLoS ONE*, **2018**, 13, e0196932	3.7	30
54	Epoxy insulated carbon fiber and carbon nanotube fiber microelectrodes. *Sensors and Actuators B: Chemical*, **2013**, 182, 652-658	8.5	29
53	Electrochemistry at the Synapse. *Annual Review of Analytical Chemistry*, **2019**, 12, 297-321	12.5	29
52	A genetically encoded sensor for measuring serotonin dynamics. *Nature Neuroscience*, **2021**, 24, 746-752	25.5	29
51	A1 receptors self-regulate adenosine release in the striatum: evidence of autoreceptor characteristics. *Neuroscience*, **2010**, 171, 1006-15	3.9	28
50	Mechanism of Histamine Oxidation and Electropolymerization at Carbon Electrodes. *Analytical Chemistry*, **2019**, 91, 8366-8373	7.8	27
49	Clearance of rapid adenosine release is regulated by nucleoside transporters and metabolism. *Pharmacology Research and Perspectives*, **2015**, 3, e00189	3.1	25
48	Automated Algorithm for Detection of Transient Adenosine Release. *ACS Chemical Neuroscience*, **2017**, 8, 386-393	5.7	24

47	Drosophila Dopamine2-like receptors function as autoreceptors. *ACS Chemical Neuroscience*, **2011**, 2, 723-729	5.7	23
46	Carbon nanospikes have better electrochemical properties than carbon nanotubes due to greater surface roughness and defect sites. *Carbon*, **2019**, 155, 250-257	10.4	22
45	Drosophila as a Model System for Neurotransmitter Measurements. *ACS Chemical Neuroscience*, **2018**, 9, 1872-1883	5.7	21
44	Kinetics of the dopamine transporter in Drosophila larva. *ACS Chemical Neuroscience*, **2013**, 4, 832-7	5.7	20
43	Microelectrode Sensing of Adenosine/Adenosine-5?-triphosphate with Fast-Scan Cyclic Voltammetry. *Electroanalysis*, **2010**, 22, 1167-1174	3	20
42	Regional Variations of Spontaneous, Transient Adenosine Release in Brain Slices. *ACS Chemical Neuroscience*, **2018**, 9, 505-513	5.7	20
41	Quantification of Histamine and Carcinine in Drosophila melanogaster Tissues. *ACS Chemical Neuroscience*, **2016**, 7, 407-14	5.7	19
40	Electrochemical Measurements of Acetylcholine-Stimulated Dopamine Release in Adult Drosophila melanogaster Brains. *Analytical Chemistry*, **2018**, 90, 10318-10325	7.8	18
39	3D-Printed Carbon Nanoelectrodes for In Vivo Neurotransmitter Sensing. *Nano Letters*, **2020**, 20, 6831-6836	11.5	18
38	Comparison of dopamine kinetics in the larval Drosophila ventral nerve cord and protocerebrum with improved optogenetic stimulation. *Journal of Neurochemistry*, **2015**, 135, 695-704	6	16
37	Structural Similarity Image Analysis for Detection of Adenosine and Dopamine in Fast-Scan Cyclic Voltammetry Color Plots. *Analytical Chemistry*, **2020**, 92, 10485-10494	7.8	15
36	Rapid determination of adenosine deaminase kinetics using fast-scan cyclic voltammetry. *Physical Chemistry Chemical Physics*, **2010**, 12, 10027-32	3.6	15
35	Improving serotonin fast-scan cyclic voltammetry detection: new waveforms to reduce electrode fouling. *Analyst, The*, **2020**, 145, 7437-7446	5	15
34	Nicotinic acetylcholine receptor (nAChR) mediated dopamine release in larval Drosophila melanogaster. *Neurochemistry International*, **2018**, 114, 33-41	4.4	13
33	Complex sex and estrous cycle differences in spontaneous transient adenosine. *Journal of Neurochemistry*, **2020**, 153, 216-229	6	12
32	Characterization of dopamine releasable and reserve pools in Drosophila larvae using ATP/P2X2 -mediated stimulation. *Journal of Neurochemistry*, **2015**, 134, 445-54	6	12
31	Transient Adenosine Release Is Modulated by NMDA and GABA Receptors. *ACS Chemical Neuroscience*, **2017**, 8, 376-385	5.7	10
30	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

29	Caffeine Modulates Spontaneous Adenosine and Oxygen Changes during Ischemia and Reperfusion. *ACS Chemical Neuroscience*, **2019**, 10, 1941-1949	5.7	10
28	3D-Printed Carbon Electrodes for Neurotransmitter Detection. *Angewandte Chemie*, **2018**, 130, 14451-14455	3.6	10
27	Dietary yeast influences ethanol sedation in Drosophila via serotonergic neuron function. *Addiction Biology*, **2020**, 25, e12779	4.6	8
26	CD73 or CD39 Deletion Reveals Different Mechanisms of Formation for Spontaneous and Mechanically Stimulated Adenosine and Sex Specific Compensations in ATP Degradation. *ACS Chemical Neuroscience*, **2020**, 11, 919-928	5.7	7
25	Novel carbon-fiber microelectrode batch fabrication using a 3D-printed mold and polyimide resin. *Analyst, The*, **2016**, 141, 5256-5260	5	7
24	Comparison of spontaneous and mechanically-stimulated adenosine release in mice. *Neurochemistry International*, **2019**, 124, 46-50	4.4	7
23	Carbon Nanotube-Based Microelectrodes for Enhanced Neurochemical Detection. *ECS Transactions*, **2017**, 80, 1497-1509	1	6
22	Thin layer cell behavior of CNT yarn and cavity carbon nanopipette electrodes: Effect on catecholamine detection. *Electrochimica Acta*, **2020**, 361, 137032-137032	6.7	6
21	Influence of Geometry on Thin Layer and Diffusion Processes at Carbon Electrodes. *Langmuir*, **2021**, 37, 2667-2676	4	6
20	Optimization of graphene oxide-modified carbon-fiber microelectrode for dopamine detection. *Analytical Methods*, **2020**, 12, 2893-2902	3.2	5
19	Dopaminergic learning and arousal circuits mediate opposing effects on alcohol consumption in Drosophila		5
18	Addition reaction and characterization of chlorotris(triphenylphosphine)iridium(I) on silicon(1 1 1) surfaces. *Applied Surface Science*, **2009**, 255, 8533-8538	6.7	4
17	Voltammetry **2020**, 27-50		4
16	PEDOT: Nafion Coated Microelectrode Biosensor for in Vivo Monitoring of Glutamate Release in Brain. *Procedia Technology*, **2017**, 27, 229		3
15	A and A Receptors Modulate Spontaneous Adenosine but Not Mechanically Stimulated Adenosine in the Caudate. *ACS Chemical Neuroscience*, **2020**, 11, 3377-3385	5.7	3
14	Ring Finger Protein 11 (RNF11) Modulates Dopamine Release in Drosophila. *Neuroscience*, **2021**, 452, 37-48	3.9	3
13	NGenE 2021: Electrochemistry Is Everywhere. *ACS Energy Letters*, **2022**, 7, 368-374	20.1	3
12	Expanding University Student Outreach: Professional Development Workshops for Teachers Led by Graduate Students. *Journal of Chemical Education*, **2018**, 95, 1954-1959	2.4	2

11	High Performance, Low Cost Carbon Nanotube Yarn based 3D Printed Electrodes Compatible with a Conventional Screen Printed Electrode System **2017**, 2017, 100-105		2
10	Real-Time Measurement of Stimulated Dopamine Release in Compartments of the Adult Mushroom Body. *Analytical Chemistry*, **2020**, 92, 14398-14407	7.8	2
9	Electrochemical treatment in KOH renews and activates carbon fiber microelectrode surfaces. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 6737-6746	4.4	2
8	Spontaneous Adenosine and Dopamine Cotransmission in the Caudate-Putamen Is Regulated by Adenosine Receptors. *ACS Chemical Neuroscience*, **2021**, 12, 4371-4379	5.7	1
7	Measurement of natural variation of neurotransmitter tissue content in red harvester ant brains among different colonies. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 6167-6175	4.4	1
6	Carbon Nanomaterials for Neuroanalytical Chemistry **2017**, 55-83		0
5	Spontaneous, transient adenosine release is not enhanced in the CA1 region of hippocampus during severe ischemia models. *Journal of Neurochemistry*, **2021**, 159, 887-900	6	0
4	Pannexin1 channels regulate mechanically stimulated but not spontaneous adenosine release.. *Analytical and Bioanalytical Chemistry*, **2022**, 1	4.4	0
3	Virtual Issue Highlighting Selected Women Analytical Chemists. *Analytical Chemistry*, **2018**, 90, 1433	7.8	
2	ELECTROCHEMICAL DETECTION OF ADENOSINE IN VIVO **2015**, 79-111		
1	Neurotransmission: Measuring Chemical Events1		