B Jill Venton

List of Publications by Year
in descending order

128 papers	8,822 citations	44069 48 h-index	45317 90 g-index
133 all docs	133 docs citations	133 times ranked	7163 citing authors

#	Article	IF	Citations
1	Review: Carbon nanotube based electrochemical sensors for biomolecules. Analytica Chimica Acta, 2010, 662, 105-127.	5.4	890
2	Detecting Subsecond Dopamine Release with Fast-Scan Cyclic Voltammetry in Vivo. Clinical Chemistry, 2003, 49, 1763-1773.	3.2	499
3	Recent trends in carbon nanomaterial-based electrochemical sensors for biomolecules: A review. Analytica Chimica Acta, 2015, 887, 17-37.	5.4	441
4	Psychoanalytical Electrochemistry: Dopamine and Behavior. Analytical Chemistry, 2003, 75, 414 A-421 A.	6.5	366
5	Subsecond Adsorption and Desorption of Dopamine at Carbon-Fiber Microelectrodes. Analytical Chemistry, 2000, 72, 5994-6002.	6.5	311
6	Carbon nanotube-modified microelectrodes for simultaneous detection of dopamine and serotonin in vivo. Analyst, The, 2007, 132, 876.	3.5	274
7	In Vivo Measurements of Neurotransmitters by Microdialysis Sampling. Analytical Chemistry, 2006, 78, 1391-1399.	6.5	251
8	Real-time decoding of dopamine concentration changes in the caudate-putamen during tonic and phasic firing. Journal of Neurochemistry, 2003, 87, 1284-1295.	3.9	232
9	Cocaine Increases Dopamine Release by Mobilization of a Synapsin-Dependent Reserve Pool. Journal of Neuroscience, 2006, 26, 3206-3209.	3.6	213
10	Carbon-fiber microelectrodes for in vivo applications. Analyst, The, 2009, 134, 18-24.	3.5	190
11	Subsecond Detection of Physiological Adenosine Concentrations Using Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 2007, 79, 744-750.	6.5	184
12	Fundamentals of fast-scan cyclic voltammetry for dopamine detection. Analyst, The, 2020, 145, 1158-1168.	3.5	184
13	Response Times of Carbon Fiber Microelectrodes to Dynamic Changes in Catecholamine Concentration. Analytical Chemistry, 2002, 74, 539-546.	6.5	160
14	A genetically encoded sensor for measuring serotonin dynamics. Nature Neuroscience, 2021, 24, 746-752.	14.8	148
15	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.	3.9	142
16	Sub-second changes in accumbal dopamine during sexual behavior in male rats. NeuroReport, 2001, 12, 2549-2552.	1.2	133
17	Recent advances in fast-scan cyclic voltammetry. Analyst, The, 2020, 145, 1087-1102.	3.5	124
18	Carbon Nanotubes Grown on Metal Microelectrodes for the Detection of Dopamine. Analytical Chemistry, 2016, 88, 645-652.	6.5	113

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19	Analytical Techniques in Neuroscience: Recent Advances in Imaging, Separation, and Electrochemical Methods. Analytical Chemistry, 2017, 89, 314-341.	6.5	109
20	Synapsins Differentially Control Dopamine and Serotonin Release. Journal of Neuroscience, 2010, 30, 9762-9770.	3.6	100
21	A role for presynaptic mechanisms in the actions of nomifensine and haloperidol. Neuroscience, 2003, 118, 819-829.	2.3	99
22	Functional groups modulate the sensitivity and electron transfer kinetics of neurochemicals at carbon nanotube modified microelectrodes. Analyst, The, 2011, 136, 3557.	3.5	99
23	3Dâ€Printed Carbon Electrodes for Neurotransmitter Detection. Angewandte Chemie - International Edition, 2018, 57, 14255-14259.	13.8	94
24	Rapid, Sensitive Detection of Neurotransmitters at Microelectrodes Modified with Self-assembled SWCNT Forests. Analytical Chemistry, 2012, 84, 7816-7822.	6.5	93
25	Carbon Nanopipette Electrodes for Dopamine Detection in <i>Drosophila</i>. Analytical Chemistry, 2015, 87, 3849-3855.	6.5	92
26	High Temporal Resolution Measurements of Dopamine with Carbon Nanotube Yarn Microelectrodes. Analytical Chemistry, 2014, 86, 5721-5727.	6.5	91
27	Flame Etching Enhances the Sensitivity of Carbon-Fiber Microelectrodes. Analytical Chemistry, 2008, 80, 3708-3715.	6.5	85
28	Neurochemistry and electroanalytical probes. Current Opinion in Chemical Biology, 2002, 6, 696-703.	6.1	78
29	Development of a novel micro biosensor for in vivo monitoring of glutamate release in the brain. Biosensors and Bioelectronics, 2019, 130, 103-109.	10.1	78
30	Polyethylenimine Carbon Nanotube Fiber Electrodes for Enhanced Detection of Neurotransmitters. Analytical Chemistry, 2014, 86, 8568-8575.	6.5	77
31	Transient adenosine efflux in the rat caudateâ€“putamen. Journal of Neurochemistry, 2008, 105, 1253-1263.	3.9	75
32	Evaluation of carbon nanotube fiber microelectrodes for neurotransmitter detection: Correlation of electrochemical performance and surface properties. Analytica Chimica Acta, 2017, 965, 1-8.	5.4	75
33	Quantitative evaluation of serotonin release and clearance in Drosophila. Journal of Neuroscience Methods, 2009, 179, 300-308.	2.5	74
34	Fast-scan Cyclic Voltammetry for the Characterization of Rapid Adenosine Release. Computational and Structural Biotechnology Journal, 2015, 13, 47-54.	4.1	74
35	Laser Treated Carbon Nanotube Yarn Microelectrodes for Rapid and Sensitive Detection of Dopamine in Vivo. ACS Sensors, 2016, 1, 508-515.	7.8	74
36	Nafionâ€“CNT coated carbon-fiber microelectrodes for enhanced detection of adenosine. Analyst, The, 2012, 137, 3045.	3.5	72

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37	Cavity Carbon-Nanopipette Electrodes for Dopamine Detection. Analytical Chemistry, 2019, 91, 4618-4624.	6.5	72
38	Review: new insights into optimizing chemical and 3D surface structures of carbon electrodes for neurotransmitter detection. Analytical Methods, 2019, 11, 247-261.	2.7	68
39	Sawhorse Waveform Voltammetry for Selective Detection of Adenosine, ATP, and Hydrogen Peroxide. Analytical Chemistry, 2014, 86, 7486-7493.	6.5	67
40	Characterization of Spontaneous, Transient Adenosine Release in the Caudate-Putamen and Prefrontal Cortex. PLoS ONE, 2014, 9, e87165.	2.5	64
41	Nanodiamond Coating Improves the Sensitivity and Antifouling Properties of Carbon Fiber Microelectrodes. ACS Sensors, 2019, 4, 2403-2411.	7.8	62
42	Detection of Endogenous Dopamine Changes in <i>Drosophila melanogaster</i> Using Fast-Scan Cyclic Voltammetry. Analytical Chemistry, 2009, 81, 9306-9313.	6.5	60
43	Electrochemistry at the Synapse. Annual Review of Analytical Chemistry, 2019, 12, 297-321.	5.4	60
44	Electrochemical Properties of Different Carbonâ€Fiber Microelectrodes Using Fastâ€Scan Cyclic Voltammetry. Electroanalysis, 2008, 20, 2422-2428.	2.9	57
45	Carbon nanospikes grown on metal wires as microelectrode sensors for dopamine. Analyst, The, 2015, 140, 7283-7292.	3.5	56
46	O₂ Plasma Etching and Antistatic Gun Surface Modifications for CNT Yarn Microelectrode Improve Sensitivity and Antifouling Properties. Analytical Chemistry, 2017, 89, 5605-5611.	6.5	56
47	Fast-scan cyclic voltammetry for the detection of tyramine and octopamine. Analytical and Bioanalytical Chemistry, 2009, 394, 329-336.	3.7	54
48	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.	2.7	54
49	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, 14664-14669.	3.6	51
50	Adenosine transiently modulates stimulated dopamine release in the caudateâ€"putamen via A1 receptors. Journal of Neurochemistry, 2015, 132, 51-60.	3.9	49
51	Carbon Nanohornâ€modified Carbon Fiber Microelectrodes for Dopamine Detection. Electroanalysis, 2018, 30, 1073-1081.	2.9	49
52	Adenosine Release Evoked by Short Electrical Stimulations in Striatal Brain Slices Is Primarily Activity Dependent. ACS Chemical Neuroscience, 2010, 1, 775-787.	3.5	48
53	Mechanism of Histamine Oxidation and Electropolymerization at Carbon Electrodes. Analytical Chemistry, 2019, 91, 8366-8373.	6.5	48
54	Analysis of Biogenic Amines in a Single <i>Drosophila</i> Larva Brain by Capillary Electrophoresis with Fast-Scan Cyclic Voltammetry Detection. Analytical Chemistry, 2011, 83, 2258-2264.	6.5	47

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55	3D-Printed Carbon Nanoelectrodes for In Vivo Neurotransmitter Sensing. Nano Letters, 2020, 20, 6831-6836.	9.1	45
56	Carbon nanospikes have better electrochemical properties than carbon nanotubes due to greater surface roughness and defect sites. Carbon, 2019, 155, 250-257.	10.3	44
57	Mechanical stimulation evokes rapid increases in extracellular adenosine concentration in the prefrontal cortex. Journal of Neurochemistry, 2014, 130, 50-60.	3.9	43
58	Early changes in transient adenosine during cerebral ischemia and reperfusion injury. PLoS ONE, 2018, 13, e0196932.	2.5	43
59	Fast-Scan Cyclic Voltammetry (FSCV) Detection of Endogenous Octopamine inDrosophila melanogasterVentral Nerve Cord. ACS Chemical Neuroscience, 2016, 7, 1112-1119.	3.5	41
60	Improving serotonin fast-scan cyclic voltammetry detection: new waveforms to reduce electrode fouling. Analyst, The, 2020, 145, 7437-7446.	3.5	41
61	Optogenetic Control of Serotonin and Dopamine Release in <i>Drosophila</i> Larvae. ACS Chemical Neuroscience, 2014, 5, 666-673.	3.5	40
62	Pharmacologically induced, subsecond dopamine transients in the caudateâ€"putamen of the anesthetized rat. Synapse, 2007, 61, 37-39.	1.2	38
63	Drosophila as a Model System for Neurotransmitter Measurements. ACS Chemical Neuroscience, 2018, 9, 1872-1883.	3.5	38
64	Both synthesis and reuptake are critical for replenishing the releasable serotonin pool in <i>Drosophila</i>. Journal of Neurochemistry, 2010, 113, 188-199.	3.9	37
65	Comparison of Nafion- and overoxidized polypyrrole-carbon nanotube electrodes for neurotransmitter detection. Analytical Methods, 2011, 3, 2379.	2.7	37
66	The mechanism of electrically stimulated adenosine release varies by brain region. Purinergic Signalling, 2013, 9, 167-174.	2.2	37
67	Strategies for enhancing remote student engagement through active learning. Analytical and Bioanalytical Chemistry, 2021, 413, 1507-1512.	3.7	36
68	Dynamic amino acid increases in the basolateral amygdala during acquisition and expression of conditioned fear. European Journal of Neuroscience, 2006, 23, 3391-3398.	2.6	35
69	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, 236-246.	3.9	35
70	Analysis of Neurotransmitter Tissue Content of <i>Drosophila melanogaster</i> in Different Life Stages. ACS Chemical Neuroscience, 2015, 6, 117-123.	3.5	35
71	Correlation of transient adenosine release and oxygen changes in the caudateâ€putamen. Journal of Neurochemistry, 2017, 140, 13-23.	3.9	34
72	Communicationâ€"Carbon Nanotube Fiber Microelectrodes for High Temporal Measurements of Dopamine. Journal of the Electrochemical Society, 2018, 165, G3071-G3073.	2.9	34

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73	<i>Drosophila</i> Dopamine2-like Receptors Function as Autoreceptors. ACS Chemical Neuroscience, 2011, 2, 723-729.	3.5	33
74	Epoxy insulated carbon fiber and carbon nanotube fiber microelectrodes. Sensors and Actuators B: Chemical, 2013, 182, 652-658.	7.8	31
75	Clearance of rapid adenosine release is regulated by nucleoside transporters and metabolism. Pharmacology Research and Perspectives, 2015, 3, e00189.	2.4	31
76	Regional Variations of Spontaneous, Transient Adenosine Release in Brain Slices. ACS Chemical Neuroscience, 2018, 9, 505-513.	3.5	31
77	Influence of Geometry on Thin Layer and Diffusion Processes at Carbon Electrodes. Langmuir, 2021, 37, 2667-2676.	3.5	31
78	A1 receptors self-regulate adenosine release in the striatum: evidence of autoreceptor characteristics. Neuroscience, 2010, 171, 1006-1015.	2.3	30
79	Quantification of Histamine and Carcinine in <i>Drosophila melanogaster</i> Tissues. ACS Chemical Neuroscience, 2016, 7, 407-414.	3.5	26
80	Electrochemical Measurements of Acetylcholine-Stimulated Dopamine Release in Adult <i>Drosophila melanogaster</i> Brains. Analytical Chemistry, 2018, 90, 10318-10325.	6.5	26
81	Automated Algorithm for Detection of Transient Adenosine Release. ACS Chemical Neuroscience, 2017, 8, 386-393.	3.5	25
82	Kinetics of the Dopamine Transporter in Drosophila Larva. ACS Chemical Neuroscience, 2013, 4, 832-837.	3.5	24
83	Nicotinic acetylcholine receptor (nAChR) mediated dopamine release in larval Drosophila melanogaster. Neurochemistry International, 2018, 114, 33-41.	3.8	24
84	Microelectrode Sensing of Adenosine/Adenosineâ€5â€²â€triphosphate with Fastâ€Scan Cyclic Voltammetry. Electroanalysis, 2010, 22, 1167-1174.	2.9	21
85	Comparison of dopamine kinetics in the larval <i>Drosophila</i> ventral nerve cord and protocerebrum with improved optogenetic stimulation. Journal of Neurochemistry, 2015, 135, 695-704.	3.9	21
86	Complex sex and estrous cycle differences in spontaneous transient adenosine. Journal of Neurochemistry, 2020, 153, 216-229.	3.9	21
87	Structural Similarity Image Analysis for Detection of Adenosine and Dopamine in Fast-Scan Cyclic Voltammetry Color Plots. Analytical Chemistry, 2020, 92, 10485-10494.	6.5	20
88	Thin layer cell behavior of CNT yarn and cavity carbon nanopipette electrodes: Effect on catecholamine detection. Electrochimica Acta, 2020, 361, 137032.	5.2	18
89	Voltammetry. , 2020, , 27-50.		18
90	Characterization of dopamine releasable and reserve pools in <i>Drosophila</i> larvae using <scp>ATP</scp>/P2X₂â€mediated stimulation. Journal of Neurochemistry, 2015, 134, 445-454.	3.9	17

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91	Caffeine Modulates Spontaneous Adenosine and Oxygen Changes during Ischemia and Reperfusion. ACS Chemical Neuroscience, 2019, 10, 1941-1949.	3.5	16
92	Rapid determination of adenosine deaminase kinetics using fast-scan cyclic voltammetry. Physical Chemistry Chemical Physics, 2010, 12, 10027.	2.8	15
93	Comparison of spontaneous and mechanically-stimulated adenosine release in mice. Neurochemistry International, 2019, 124, 46-50.	3.8	15
94	Optimization of graphene oxide-modified carbon-fiber microelectrode for dopamine detection. Analytical Methods, 2020, 12, 2893-2902.	2.7	14
95	3Dâ€Printed Carbon Electrodes for Neurotransmitter Detection. Angewandte Chemie, 2018, 130, 14451-14455.	2.0	13
96	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.	3.5	13
97	Electrochemical treatment in KOH renews and activates carbon fiber microelectrode surfaces. Analytical and Bioanalytical Chemistry, 2021, 413, 6737-6746.	3.7	13
98	Carbon microelectrodes with customized shapes for neurotransmitter detection: A review. Analytica Chimica Acta, 2022, 1223, 340165.	5.4	13
99	Transient Adenosine Release Is Modulated by NMDA and GABA_B Receptors. ACS Chemical Neuroscience, 2017, 8, 376-385.	3.5	12
100	Real-Time Measurement of Stimulated Dopamine Release in Compartments of the Adult <i>Drosophila melanogaster</i> Mushroom Body. Analytical Chemistry, 2020, 92, 14398-14407.	6.5	12
101	Novel carbon-fiber microelectrode batch fabrication using a 3D-printed mold and polyimide resin. Analyst, The, 2016, 141, 5256-5260.	3.5	11
102	Real-time decoding of dopamine concentration changes in the caudate?putamen during tonic and phasic firing. Journal of Neurochemistry, 2004, 89, 526-526.	3.9	10
103	(Invited) Carbon Nanotube-Based Microelectrodes for Enhanced Neurochemical Detection. ECS Transactions, 2017, 80, 1497-1509.	0.5	10
104	Dietary yeast influences ethanol sedation in Drosophila via serotonergic neuron function. Addiction Biology, 2020, 25, e12779.	2.6	8
105	Different Electrochemical Behavior of Cationic Dopamine from Anionic Ascorbic Acid and DOPAC at CNT Yarn Microelectrodes. Journal of the Electrochemical Society, 2022, 169, 026506.	2.9	8
106	A₁ and A_{2A} Receptors Modulate Spontaneous Adenosine but Not Mechanically Stimulated Adenosine in the Caudate. ACS Chemical Neuroscience, 2020, 11, 3377-3385.	3.5	7
107	Carbon nanospike coated nanoelectrodes for measurements of neurotransmitters. Faraday Discussions, 2021, 233, 303-314.	3.2	7
108	Spontaneous, transient adenosine release is not enhanced in the CA1 region of hippocampus during severe ischemia models. Journal of Neurochemistry, 2021, 159, 887-900.	3.9	6

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109	Spontaneous Adenosine and Dopamine Cotransmission in the Caudate-Putamen Is Regulated by Adenosine Receptors. ACS Chemical Neuroscience, 2021, 12, 4371-4379.	3.5	6
110	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	17.4	6
111	High performance, low cost carbon nanotube yarn based 3D printed electrodes compatible with a conventional screen printed electrode system. , 2017, 2017, 100-105.		5
112	Introduction to electrochemistry for health applications. Analytical Methods, 2019, 11, 2736-2737.	2.7	5
113	Addition reaction and characterization of chlorotris(triphenylphosphine)iridium(I) on silicon(111) surfaces. Applied Surface Science, 2009, 255, 8533-8538.	6.1	4
114	Atomistic Simulations of Dopamine Diffusion Dynamics on a Pristine Graphene Surface**. ChemPhysChem, 2022, 23, .	2.1	4
115	Pannexin1 channels regulate mechanically stimulated but not spontaneous adenosine release. Analytical and Bioanalytical Chemistry, 2022, 414, 3781-3789.	3.7	4
116	<scp>SSRI</scp> antidepressants differentially modulate serotonin reuptake and release in <i>Drosophila</i>. Journal of Neurochemistry, 2022, 162, 404-416.	3.9	4
117	PEDOT: Nafion Coated Microelectrode Biosensor for in Vivo Monitoring of Glutamate Release in Brain. Procedia Technology, 2017, 27, 229.	1.1	3
118	Expanding University Student Outreach: Professional Development Workshops for Teachers Led by Graduate Students. Journal of Chemical Education, 2018, 95, 1954-1959.	2.3	3
119	Ring Finger Protein 11 (RNF11) Modulates Dopamine Release in Drosophila. Neuroscience, 2021, 452, 37-48.	2.3	3
120	Dual-Channel Electrochemical Measurements Reveal Rapid Adenosine is Localized in Brain Slices. ACS Chemical Neuroscience, 2022, , .	3.5	3
121	Comparison of Polyethylenimine/CNT Fiber, Chlorosulfonic Acid/CNT Fiber, and CNT Yarn Microelectrodes for Neurotransmitter Detection. Procedia Technology, 2017, 27, 72-73.	1.1	1
122	Measurement of natural variation of neurotransmitter tissue content in red harvester ant brains among different colonies. Analytical and Bioanalytical Chemistry, 2020, 412, 6167-6175.	3.7	1
123	ELECTROCHEMICAL DETECTION OF ADENOSINE IN VIVO. , 2015, , 79-111.		0
124	Virtual Issue Highlighting Selected Women Analytical Chemists. Analytical Chemistry, 2018, 90, 1433-1433.	6.5	0
125	(Invited) New Methods to Fabricate Electrodes for Neurotransmitter Measurements. ECS Meeting Abstracts, 2017, , .	0.0	0
126	(Invited) Tunable CNT Fiber and Yarn Microelectrodes for Measurements of Different Neurochemicals. ECS Meeting Abstracts, 2017, , .	0.0	0

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127	(Invited)ÂNew Carbon Electrodes for Neurochemistry. ECS Meeting Abstracts, 2019, MA2019-02, 2419-2419.	0.0	0
128	Structure and Dynamics of Adsorbed Dopamine on Solvated Carbon Nanotubes and in a CNT Groove. Molecules, 2022, 27, 3768.	3.8	0