Vann Bennett

List of Publications by Year
in descending order

131 papers	17,227 citations	15001 68 h-index	16186 128 g-index
142 all docs	142 docs citations	142 times ranked	11329 citing authors

#	Article	IF	Citations
1	Ankyrin-B mutation causes type 4 long-QT cardiac arrhythmia and sudden cardiac death. Nature, 2003, 421, 634-639.	13.7	926
2	Spectrin and Ankyrin-Based Pathways: Metazoan Inventions for Integrating Cells Into Tissues. Physiological Reviews, 2001, 81, 1353-1392.	13.1	846
3	Analysis of cDNA for human erythrocyte ankyrin indicates a repeated structure with homology to tissue-differentiation and cell-cycle control proteins. Nature, 1990, 344, 36-42.	13.7	545
4	AnkyrinG Is Required for Clustering of Voltage-gated Na Channels at Axon Initial Segments and for Normal Action Potential Firing. Journal of Cell Biology, 1998, 143, 1295-1304.	2.3	517
5	A Common Ankyrin-G-Based Mechanism Retains KCNQ and NaV Channels at Electrically Active Domains of the Axon. Journal of Neuroscience, 2006, 26, 2599-2613.	1.7	514
6	The Spectrin-Based Membrane Skeleton and Micron-Scale Organization of the Plasma Membrane. Annual Review of Cell Biology, 1993, 9, 27-66.	26.0	449
7	Ankyrin. Journal of Biological Chemistry, 1995, 270, 2352-2359.	1.6	442
8	The membrane attachment protein for spectrin is associated with band 3 in human erythrocyte membranes. Nature, 1979, 280, 468-473.	13.7	424
9	Ankyrin and spectrin associate with voltage-dependent sodium channels in brain. Nature, 1988, 333, 177-180.	13.7	424
10	Ankyrin-G coordinates assembly of the spectrin-based membrane skeleton, voltage-gated sodium channels, and L1 CAMs at Purkinje neuron initial segments. Journal of Cell Biology, 2001, 155, 739-746.	2.3	405
11	Nanospring behaviour of ankyrin repeats. Nature, 2006, 440, 246-249.	13.7	354
12	Nav1.5 E1053K mutation causing Brugada syndrome blocks binding to ankyrin-G and expression of Nav1.5 on the surface of cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17533-17538.	3.3	349
13	Brain spectrin, a membrane-associated protein related in structure and function to erythrocyte spectrin. Nature, 1982, 299, 126-131.	13.7	347
14	Ankyrin-Based Subcellular Gradient of Neurofascin, an Immunoglobulin Family Protein, Directs GABAergic Innervation at Purkinje Axon Initial Segment. Cell, 2004, 119, 257-272.	13.5	338
15	A cardiac arrhythmia syndrome caused by loss of ankyrin-B function. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9137-9142.	3.3	301
16	Phosphorylation of Adducin by Rho-Kinase Plays a Crucial Role in Cell Motility. Journal of Cell Biology, 1999, 145, 347-361.	2.3	278
17	Modulation of spectrinâ€"actin assembly by erythrocyte adducin. Nature, 1987, 328, 359-362.	13.7	252
18	The ANK repeat: a ubiquitous motif involved in macromolecular recognition. Trends in Cell Biology, 1992, 2, 127-129.	3.6	252

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19	Spectrin-Based Membrane Skeleton: A Multipotential Adaptor Between Plasma Membrane and Cytoplasm. Physiological Reviews, 1991, 71, 330-330.	13.1	243
20	Tyrosine Phosphorylation at a Site Highly Conserved in the L1 Family of Cell Adhesion Molecules Abolishes Ankyrin Binding and Increases Lateral Mobility of Neurofascin. Journal of Cell Biology, 1997, 137, 703-714.	2.3	231
21	[25] Proteins involved in membraneâ€"cytoskeleton association in human erythrocytes: Spectrin, ankyrin, and band 3. Methods in Enzymology, 1983, 96, 313-324.	0.4	228
22	Ankyrin-B Coordinates the Na/K ATPase, Na/Ca Exchanger, and InsP3 Receptor in a Cardiac T-Tubule/SR Microdomain. PLoS Biology, 2005, 3, e423.	2.6	221
23	Hereditary spherocytosis associated with deletion of human erythrocyte ankyrin gene on chromosome 8. Nature, 1990, 345, 736-739.	13.7	206
24	Synapsin I is a spectrin-binding protein immunologically related to erythrocyte protein 4.1. Nature, 1985, 315, 410-413.	13.7	203
25	Morphogenesis of the Node of Ranvier: Co-Clusters of Ankyrin and Ankyrin-Binding Integral Proteins Define Early Developmental Intermediates. Journal of Neuroscience, 1997, 17, 7025-7036.	1.7	201
26	Adducin Is an In Vivo Substrate for Protein Kinase C: Phosphorylation in the MARCKS-related Domain Inhibits Activity in Promoting Spectrinâ€"Actin Complexes and Occurs in Many Cells, Including Dendritic Spines of Neurons. Journal of Cell Biology, 1998, 142, 485-497.	2.3	201
27	Partial deficiency of erythrocyte spectrin in hereditary spherocytosis. Nature, 1985, 314, 380-383.	13.7	196
28	Regulation of the Association of Adducin with Actin Filaments by Rho-associated Kinase (Rho-kinase) and Myosin Phosphatase. Journal of Biological Chemistry, 1998, 273, 5542-5548.	1.6	186
29	A New Function for Adducin. Journal of Biological Chemistry, 1996, 271, 7986-7991.	1.6	174
30	Nervous System Defects of AnkyrinB (âˆ'/âˆ') Mice Suggest Functional Overlap between the Cell Adhesion Molecule L1 and 440-kD AnkyrinB in Premyelinated Axons. Journal of Cell Biology, 1998, 143, 1305-1315.	2.3	171
31	Membrane Domains Based on Ankyrin and Spectrin Associated with Cell-Cell Interactions. Cold Spring Harbor Perspectives in Biology, 2009, 1, a003012-a003012.	2.3	167
32	AnkyrinG is required to maintain axo-dendritic polarity in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17564-17569.	3.3	161
33	Organizing the fluid membrane bilayer: diseases linked to spectrin and ankyrin. Trends in Molecular Medicine, 2008, 14, 28-36.	3.5	156
34	Adducin: a Physical Model with Implications for Function in Assembly of Spectrin-Actin Complexes. Journal of Biological Chemistry, 1995, 270, 18990-18996.	1.6	150
35	Ankyrins and cellular targeting of diverse membrane proteins to physiological sites. Current Opinion in Cell Biology, 2001, 13, 61-67.	2.6	149
36	Giant ankyrin-G: A critical innovation in vertebrate evolution of fast and integrated neuronal signaling. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 957-964.	3.3	148

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37	Synapsin I is a microtubule-bundling protein. Nature, 1986, 319, 145-147.	13.7	145
38	The Molecular Basis for Membrane - Cytoskeleton Association in Human Erythrocytes. Journal of Cellular Biochemistry, 1982, 18, 49-65.	1.2	144
39	Adducin Regulation. Journal of Biological Chemistry, 1996, 271, 25157-25166.	1.6	144
40	An Ankyrin-Based Mechanism for Functional Organization of Dystrophin and Dystroglycan. Cell, 2008, 135, 1189-1200.	13.5	142
41	Spectrin- and Ankyrin-Based Membrane Domains and the Evolution of Vertebrates. Current Topics in Membranes, 2013, 72, 1-37.	0.5	137
42	Kv3.1b Is a Novel Component of CNS Nodes. Journal of Neuroscience, 2003, 23, 4509-4518.	1.7	136
43	Immunoreactive forms of human erythrocyte ankyrin are present in diverse cells and tissues. Nature, 1979, 281, 597-599.	13.7	131
44	Ankyrin-G Is a Molecular Partner of E-cadherin in Epithelial Cells and Early Embryos. Journal of Biological Chemistry, 2007, 282, 26552-26561.	1.6	127
45	Structural Requirements for Association of Neurofascin with Ankyrin. Journal of Biological Chemistry, 1998, 273, 30785-30794.	1.6	120
46	Ankyrin-G and Î²2-Spectrin Collaborate in Biogenesis of Lateral Membrane of Human Bronchial Epithelial Cells. Journal of Biological Chemistry, 2007, 282, 2029-2037.	1.6	118
47	Ankyrin-B Is Required for Intracellular Sorting of Structurally Diverse Ca2+ Homeostasis Proteins. Journal of Cell Biology, 1999, 147, 995-1008.	2.3	117
48	Restriction of 480/270-kD Ankyrinâ€‰G to Axon Proximal Segments Requires Multiple Ankyrinâ€‰G-specific Domains. Journal of Cell Biology, 1998, 142, 1571-1581.	2.3	115
49	LAD-1, the Caenorhabditis elegans L1CAM homologue, participates in embryonic and gonadal morphogenesis and is a substrate for fibroblast growth factor receptor pathway-dependent phosphotyrosine-based signaling. Journal of Cell Biology, 2001, 154, 841-856.	2.3	115
50	Ankyrin-G Coordinates Intercalated Disc Signaling Platform to Regulate Cardiac Excitability In Vivo. Circulation Research, 2014, 115, 929-938.	2.0	114
51	Ank3-Dependent SVZ Niche Assembly Is Required for the Continued Production of New Neurons. Neuron, 2011, 71, 61-75.	3.8	112
52	Developing nodes of Ranvier are defined by ankyrin-G clustering and are independent of paranodal axoglial adhesion. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2303-2308.	3.3	107
53	The Ankyrin-B C-terminal Domain Determines Activity of Ankyrin-B/G Chimeras in Rescue of Abnormal Inositol 1,4,5-Trisphosphate and Ryanodine Receptor Distribution in Ankyrin-B (âˆ’/âˆ’) Neonatal Cardiomyocytes. Journal of Biological Chemistry, 2002, 277, 10599-10607.	1.6	105
54	Abnormal Cardiac Na ⁺ Channel Properties and QT Heart Rate Adaptation in Neonatal Ankyrin _B Knockout Mice. Circulation Research, 2000, 86, 441-447.	2.0	104

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55	The ANK Repeats of Erythrocyte Ankyrin Form Two Distinct but Cooperative Binding Sites for the Erythrocyte Anion Exchanger. Journal of Biological Chemistry, 1995, 270, 22050-22057.	1.6	101
56	Adducin Preferentially Recruits Spectrin to the Fast Growing Ends of Actin Filaments in a Complex Requiring the MARCKS-related Domain and a Newly Defined Oligomerization Domain. Journal of Biological Chemistry, 1998, 273, 19329-19338.	1.6	101
57	Caenorhabditis elegans Î²-G Spectrin Is Dispensable for Establishment of Epithelial Polarity, but Essential for Muscular and Neuronal Function. Journal of Cell Biology, 2000, 149, 915-930.	2.3	98
58	Physiological roles of axonal ankyrins in survival of premyelinated axons and localization of voltage-gated sodium channels. , 1999, 28, 303-318.		95
59	A hierarchy of ankyrin-spectrin complexes clusters sodium channels at nodes of Ranvier. Nature Neuroscience, 2014, 17, 1664-1672.	7.1	94
60	L1-dependent neuritogenesis involves ankyrinB that mediates L1-CAM coupling with retrograde actin flow. Journal of Cell Biology, 2003, 163, 1077-1088.	2.3	91
61	An Adaptable Spectrin/Ankyrin-Based Mechanism for Long-Range Organization of Plasma Membranes in Vertebrate Tissues. Current Topics in Membranes, 2016, 77, 143-184.	0.5	86
62	Lateral Membrane Biogenesis in Human Bronchial Epithelial Cells Requires 190-kDa Ankyrin-G. Journal of Biological Chemistry, 2004, 279, 16706-16714.	1.6	85
63	Î±-Adducin dissociates from F-actin and spectrin during platelet activation. Journal of Cell Biology, 2003, 161, 557-570.	2.3	84
64	Ankyrin-B Targets Î²2-Spectrin to an Intracellular Compartment in Neonatal Cardiomyocytes. Journal of Biological Chemistry, 2004, 279, 40185-40193.	1.6	84
65	A PIK3C3â€"Ankyrin-Bâ€"Dynactin pathway promotes axonal growth and multiorganelle transport. Journal of Cell Biology, 2014, 207, 735-752.	2.3	84
66	Structural basis of diverse membrane target recognitions by ankyrins. ELife, 2014, 3, .	2.8	84
67	Mechanism for Binding Site Diversity on Ankyrin:. Journal of Biological Chemistry, 1995, 270, 31298-31302.	1.6	82
68	Glial ankyrins facilitate paranodal axoglial junction assembly. Nature Neuroscience, 2014, 17, 1673-1681.	7.1	82
69	Inositol 1,4,5-Trisphosphate Receptor Localization and Stability in Neonatal Cardiomyocytes Requires Interaction with Ankyrin-B. Journal of Biological Chemistry, 2004, 279, 12980-12987.	1.6	78
70	<i>ANK2</i> autism mutation targeting giant ankyrin-B promotes axon branching and ectopic connectivity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15262-15271.	3.3	78
71	A New Activity of Doublecortin in Recognition of the Phospho-FIGQY Tyrosine in the Cytoplasmic Domain of Neurofascin. Journal of Neuroscience, 2002, 22, 7948-7958.	1.7	76
72	Giant ankyrin-G stabilizes somatodendritic GABAergic synapses through opposing endocytosis of GABA _A receptors. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1214-1219.	3.3	72

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73	[7] Purification of brain analogs of red blood cell membrane skeletal proteins: Ankyrin, protein 4.1 (synapsin), spectrin, and spectrin subunits. Methods in Enzymology, 1986, 134, 55-69.	0.4	70
74	Ankyrin-G Promotes Cyclic Nucleotideâ€"Gated Channel Transport to Rod Photoreceptor Sensory Cilia. Science, 2009, 323, 1614-1617.	6.0	70
75	Ankyrins. Journal of Cell Science, 2002, 115, 1565-1566.	1.2	69
76	Association of spectrin with its membrane attachment site restricts lateral mobility of human erythrocyte integral membrane proteins. Journal of Supramolecular Structure, 1978, 8, 215-221.	2.3	68
77	Ankyrin-G palmitoylation and Î²II-spectrin binding to phosphoinositide lipids drive lateral membrane assembly. Journal of Cell Biology, 2014, 206, 273-288.	2.3	67
78	Cysteine 70 of Ankyrin-G Is S-Palmitoylated and Is Required for Function of Ankyrin-G in Membrane Domain Assembly. Journal of Biological Chemistry, 2012, 287, 43995-44005.	1.6	65
79	Ankyrin-based cardiac arrhythmias: a new class of channelopathies due to loss of cellular targeting. Current Opinion in Cardiology, 2005, 20, 189-193.	0.8	63
80	Ankyrin-B Interactions with Spectrin and Dynactin-4 Are Required for Dystrophin-based Protection of Skeletal Muscle from Exercise Injury. Journal of Biological Chemistry, 2011, 286, 7370-7378.	1.6	63
81	Localization and Structure of the Ankyrin-binding Site on Î²2-Spectrin. Journal of Biological Chemistry, 2009, 284, 6982-6987.	1.6	59
82	Ankyrins. Journal of Cell Science, 2002, 115, 1565-6.	1.2	59
83	Mechanism of action ofVibrio cholerae enterotoxin. Journal of Membrane Biology, 1975, 22, 1-28.	1.0	57
84	Identification of the Spectrin Subunit and Domains Required for Formation of Spectrin/Adducin/Actin Complexes. Journal of Biological Chemistry, 1996, 271, 15695-15702.	1.6	57
85	Identification of O-Linked N-Acetylglucosamine Modification of AnkyrinG Isoforms Targeted to Nodes of Ranvier. Journal of Biological Chemistry, 1996, 271, 31391-31398.	1.6	57
86	A Requirement for Ankyrin Binding to Clathrin during Coated Pit Budding. Journal of Biological Chemistry, 1999, 274, 35908-35913.	1.6	57
87	Isoform Specificity of Ankyrin-B. Journal of Biological Chemistry, 2006, 281, 5741-5749.	1.6	56
88	FIGQY phosphorylation defines discrete populations of L1 cell adhesion molecules at sites of cell-cell contact and in migrating neurons. Journal of Cell Science, 2001, 114, 3823-3835.	1.2	56
89	From anemia to cerebellar dysfunction. A review of the ankyrin gene family. FEBS Journal, 1993, 211, 1-6.	0.2	55
90	Palmitoylation of Neurofascin at a Site in the Membraneâ€Spanning Domain Highly Conserved Among the L1 Family of Cell Adhesion Molecules. Journal of Neurochemistry, 1998, 70, 1839-1849.	2.1	55

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91	Fast and Forceful Refolding of Stretched Î±-Helical Solenoid Proteins. Biophysical Journal, 2010, 98, 3086-3092.	0.2	49
92	E-cadherin Polarity Is Determined by a Multifunction Motif Mediating Lateral Membrane Retention through Ankyrin-G and Apical-lateral Transcytosis through Clathrin. Journal of Biological Chemistry, 2013, 288, 14018-14031.	1.6	49
93	Î²II-spectrin promotes mouse brain connectivity through stabilizing axonal plasma membranes and enabling axonal organelle transport. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15686-15695.	3.3	48
94	The Ammonium Transporter RhBG. Journal of Biological Chemistry, 2005, 280, 8221-8228.	1.6	46
95	Isoform Specificity among Ankyrins. Journal of Biological Chemistry, 2004, 279, 25798-25804.	1.6	44
96	Cholinergic Augmentation of Insulin Release Requires Ankyrin-B. Science Signaling, 2010, 3, ra19.	1.6	41
97	Î±-Actinin is a potent regulator of G protein-coupled receptor kinase activity and substrate specificity in vitro. FEBS Letters, 2000, 473, 280-284.	1.3	39
98	Ankyrin-B Syndrome: Enhanced Cardiac Function Balanced by Risk of Cardiac Death and Premature Senescence. PLoS ONE, 2007, 2, e1051.	1.1	38
99	Ankyrin-B is required for coordinated expression of beta-2-spectrin, the Na/K-ATPase and the Na/Ca exchanger in the inner segment of rod photoreceptors. Experimental Eye Research, 2009, 88, 57-64.	1.2	37
100	Ankyrin-G Regulates Inactivation Gating of the Neuronal Sodium Channel, Nav1.6. Journal of Neurophysiology, 2006, 96, 1347-1357.	0.9	36
101	Full Reconstruction of a Vectorial Protein Folding Pathway by Atomic Force Microscopy and Molecular Dynamics Simulations*. Journal of Biological Chemistry, 2010, 285, 38167-38172.	1.6	36
102	Dynamic spectrin/ankyrin-G microdomains promote lateral membrane assembly by opposing endocytosis. Science Advances, 2015, 1, e1500301.	4.7	36
103	Neurodevelopmental mutation of giant ankyrin-G disrupts a core mechanism for axon initial segment assembly. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19717-19726.	3.3	33
104	Mechanism of activation of adenylate cyclase byVibrio cholerae enterotoxin. Journal of Membrane Biology, 1975, 24, 107-129.	1.0	31
105	Irreversible stimulation of adenylate cyclase activity of fat cell membranes by phosphoramidate and phosphonate analogs of GTP. Journal of Membrane Biology, 1975, 23, 249-278.	1.0	30
106	A Single Divergent Exon Inhibits Ankyrin-B Association with the Plasma Membrane. Journal of Biological Chemistry, 2013, 288, 14769-14779.	1.6	27
107	Ankyrin-B is a PI3P effector that promotes polarized Î±5Î²1-integrin recycling via recruiting RabGAP1L to early endosomes. ELife, 2016, 5, .	2.8	27
108	Ankyrin and synapsin: Spectrin-binding proteins associated with brain membranes. Journal of Cellular Biochemistry, 1985, 29, 157-169.	1.2	26

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109	Chromosomal Localization of the AnkyrinG Gene (ANK3/Ank3) to Human 10q21 and Mouse 10. Genomics, 1995, 27, 189-191.	1.3	26
110	Nanomechanics of Streptavidin Hubs for Molecular Materials. Advanced Materials, 2011, 23, 5684-5688.	11.1	26
111	Evolution in Action: Giant Ankyrins Awake. Developmental Cell, 2015, 33, 1-2.	3.1	25
112	Ankyrin-B directs membrane tethering of periaxin and is required for maintenance of lens fiber cell hexagonal shape and mechanics. American Journal of Physiology - Cell Physiology, 2016, 310, C115-C126.	2.1	21
113	Cell-autonomous adiposity through increased cell surface GLUT4 due to ankyrin-B deficiency. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12743-12748.	3.3	21
114	Ankyrin-B metabolic syndrome combines age-dependent adiposity with pancreatic Î² cell insufficiency. Journal of Clinical Investigation, 2015, 125, 3087-3102.	3.9	21
115	Mechanical Anisotropy of Ankyrin Repeats. Biophysical Journal, 2012, 102, 1118-1126.	0.2	20
116	Ankyrin-B structurally defines terminal microdomains of peripheral somatosensory axons. Brain Structure and Function, 2013, 218, 1005-1016.	1.2	16
117	Irreversible activation of adenylate cyclase of toad erythrocyte plasma membrane by 5â€²-guanylylimidodiphosphate. Journal of Membrane Biology, 1976, 27, 207-232.	1.0	14
118	Human erythrocyte spectrin: Phosphorylation in intact cells and purification of the 32P-labeled protein in a non-aggregated state. Life Sciences, 1977, 21, 433-440.	2.0	14
119	Immunofluorescence localization of an adducin-like protein in the chromosomes of mouse oocytes. Developmental Biology, 1991, 146, 301-311.	0.9	14
120	Proteolytic domains of the epidermal growth factor receptor of human placenta. Journal of Supramolecular Structure and Cellular Biochemistry, 1981, 15, 15-27.	1.4	13
121	Assignment of the Human Î²-Adducin Gene (ADD2) to 2p13-p14 by in Situ Hybridization. Genomics, 1995, 28, 610-612.	1.3	12
122	Mutation of Conserved Histidines Alters Tertiary Structure and Nanomechanics of Consensus Ankyrin Repeats. Journal of Biological Chemistry, 2012, 287, 19115-19121.	1.6	10
123	Ankyrin-G Inhibits Endocytosis of Cadherin Dimers. Journal of Biological Chemistry, 2016, 291, 691-704.	1.6	10
124	Common human ANK2 variant confers in vivo arrhythmia phenotypes. Heart Rhythm, 2016, 13, 1932-1940.	0.3	9
125	Being there: cellular targeting of voltage-gated sodium channels in the heart. Journal of Cell Biology, 2008, 180, 13-15.	2.3	6
126	Ankyrin-based Patterning of Membrane Microdomains: New Insights Into a Novel Class of Cardiovascular Diseases. Journal of Cardiovascular Pharmacology, 2009, 54, 106-115.	0.8	6

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127	Chapter 7 Axonal Ankyrins and Ankyrin-Binding Proteins: Potential Participants in Lateral Membrane Domains and Transcellular Connections at the Node of Ranvier. Current Topics in Membranes, 1996, 43, 129-145.	0.5	5
128	Ankyrin-G regulated epithelial phenotype is required for mouse lens morphogenesis and growth. Developmental Biology, 2019, 446, 119-131.	0.9	4
129	Chapter 5 Ankyrins: A Family of Proteins that Link Diverse Membrane Proteins to the Spectrin Skeleton. Current Topics in Membranes, 1991, 38, 65-77.	0.5	3
130	Use of Primary Cultured Hippocampal Neurons to Study the Assembly of Axon Initial Segments. Journal of Visualized Experiments, 2021, , .	0.2	1
131	Cell differentiation. Current Opinion in Cell Biology, 2008, 20, 607-608.	2.6	0