Michael Fainzilber

List of Publications by Year
in descending order

111 papers	8,109 citations	43973 48 h-index	51492 86 g-index
118 all docs	118 docs citations	118 times ranked	7131 citing authors

#	Article	IF	Citations
1	Functional receptor for GDNF encoded by the c-ret proto-oncogene. Nature, 1996, 381, 785-789.	13.7	785
2	Vimentin-Dependent Spatial Translocation of an Activated MAP Kinase in Injured Nerve. Neuron, 2005, 45, 715-726.	3.8	483
3	Axoplasmic Importins Enable Retrograde Injury Signaling in Lesioned Nerve. Neuron, 2003, 40, 1095-1104.	3.8	459
4	A Systems-Level Analysis of the Peripheral Nerve Intrinsic Axonal Growth Program. Neuron, 2016, 89, 956-970.	3.8	314
5	Axonal transcription factors signal retrogradely in lesioned peripheral nerve. EMBO Journal, 2012, 31, 1350-1363.	3.5	241
6	Reactive oxygen species regulate axonal regeneration through the release of exosomal NADPH oxidase 2 complexes into injured axons. Nature Cell Biology, 2018, 20, 307-319.	4.6	233
7	Axonâ€“soma communication in neuronal injury. Nature Reviews Neuroscience, 2014, 15, 32-42.	4.9	230
8	Locally translated mTOR controls axonal local translation in nerve injury. Science, 2018, 359, 1416-1421.	6.0	220
9	Localized Regulation of Axonal RanGTPase Controls Retrograde Injury Signaling in Peripheral Nerve. Neuron, 2008, 59, 241-252.	3.8	211
10	Mechanisms for Evolving Hypervariability: The Case of Conopeptides. Molecular Biology and Evolution, 2001, 18, 120-131.	3.5	210
11	Ceramide Signaling Downstream of the p75 Neurotrophin Receptor Mediates the Effects of Nerve Growth Factor on Outgrowth of Cultured Hippocampal Neurons. Journal of Neuroscience, 1999, 19, 8199-8206.	1.7	184
12	Ligand-Induced Internalization of the p75 Neurotrophin Receptor: A Slow Route to the Signaling Endosome. Journal of Neuroscience, 2003, 23, 3209-3220.	1.7	180
13	Subcellular Knockout of Importin Î²1 Perturbs Axonal Retrograde Signaling. Neuron, 2012, 75, 294-305.	3.8	180
14	Retrograde signaling in injured nerve ? the axon reaction revisited. Journal of Neurochemistry, 2006, 99, 13-19.	2.1	160
15	Signaling to Transcription Networks in the Neuronal Retrograde Injury Response. Science Signaling, 2010, 3, ra53.	1.6	159
16	Vimentin Binding to Phosphorylated Erk Sterically Hinders Enzymatic Dephosphorylation of the Kinase. Journal of Molecular Biology, 2006, 364, 938-944.	2.0	141
17	New Mollusk-Specific .alpha.-Conotoxins Block Aplysia Neuronal Acetylcholine Receptors. Biochemistry, 1994, 33, 9523-9529.	1.2	127
18	O-Sulfonation of Serine and Threonine. Molecular and Cellular Proteomics, 2004, 3, 429-440.	2.5	122

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19	Ran on tracks â€" cytoplasmic roles for a nuclear regulator. Journal of Cell Science, 2009, 122, 587-593.	1.2	121
20	Axonal G3BP1 stress granule protein limits axonal mRNA translation and nerve regeneration. Nature Communications, 2018, 9, 3358.	5.8	114
21	Nerve Growth Factor-induced p75-mediated Death of Cultured Hippocampal Neurons Is Age-dependent and Transduced through Ceramide Generated by Neutral Sphingomyelinase. Journal of Biological Chemistry, 2002, 277, 9812-9818.	1.6	113
22	Compartmentalized Signaling in Neurons: From Cell Biology to Neuroscience. Neuron, 2017, 96, 667-679.	3.8	107
23	Neurotrophin-7: a novel member of the neurotrophin family from the zebrafish. FEBS Letters, 1998, 424, 285-290.	1.3	105
24	Distinct structural elements in GDNF mediate binding to GFRalpha 1 and activation of the GFRalpha 1-c-Ret receptor complex. EMBO Journal, 1999, 18, 5901-5910.	3.5	103
25	Subcellular Communication Through RNA Transport and Localized Protein Synthesis. Traffic, 2010, 11, 1498-1505.	1.3	99
26	Ribosomes in axons â€" scrounging from the neighbors?. Trends in Cell Biology, 2009, 19, 236-243.	3.6	93
27	Mollusc-specific toxins from the venom of Conus textile neovicarius. FEBS Journal, 1991, 202, 589-595.	0.2	88
28	Identification of tyrosine sulfation inConuspennaceus conotoxins Î±-PnIA and Î±-PnIB: further investigation of labile sulfo- and phosphopeptides by electrospray, matrix-assisted laser desorption/ionization (MALDI) and atmospheric pressure MALDI mass spectrometry. , 1999, 34, 447-454.		85
29	The p75 Neurotrophin Receptor Interacts with Multiple MAGE Proteins. Journal of Biological Chemistry, 2002, 277, 49101-49104.	1.6	84
30	Retrograde signaling in axonal regeneration. Experimental Neurology, 2010, 223, 5-10.	2.0	84
31	Multiâ€tasking by the p75 neurotrophin receptor: sortilin things out?. EMBO Reports, 2004, 5, 867-871.	2.0	82
32	CRNF, a Molluscan Neurotrophic Factor That Interacts with the p75 Neurotrophin Receptor. Science, 1996, 274, 1540-1543.	6.0	76
33	Early evolutionary origin of the neurotrophin receptor family. EMBO Journal, 1998, 17, 2534-2542.	3.5	74
34	New Sodium Channel-Blocking Conotoxins Also Affect Calcium Currents in Lymnaea Neurons. Biochemistry, 1995, 34, 5364-5371.	1.2	71
35	Rabies Virus Glycoprotein (RVG) Is a Trimeric Ligand for the N-terminal Cysteine-rich Domain of the Mammalian p75 Neurotrophin Receptor. Journal of Biological Chemistry, 2002, 277, 37655-37662.	1.6	70
36	Macromolecular transport in synapse to nucleus communication. Trends in Neurosciences, 2015, 38, 108-116.	4.2	69

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37	Nucleolin-Mediated RNA Localization Regulates Neuron Growth and Cycling Cell Size. Cell Reports, 2016, 16, 1664-1676.	2.9	64
38	Evolving better brains: a need for neurotrophins?. Trends in Neurosciences, 2001, 24, 79-85.	4.2	62
39	CCM2 Mediates Death Signaling by the TrkA Receptor Tyrosine Kinase. Neuron, 2009, 63, 585-591.	3.8	58
40	Alteration of Sodium Currents by New Peptide Toxins From the Venom of a MolluscivorousConusSnail. European Journal of Neuroscience, 1993, 5, 56-64.	1.2	57
41	Mass spectrometricâ€based revision of the structure of a cysteineâ€rich peptide toxin with Î³â€carboxyglutamic acid, TxVIIA, from the sea snail, <i>Conus textile</i>. Protein Science, 1996, 5, 524-530.	3.1	55
42	A Motor-Driven Mechanism for Cell-Length Sensing. Cell Reports, 2012, 1, 608-616.	2.9	55
43	Differential Proteomics Reveals Multiple Components in Retrogradely Transported Axoplasm After Nerve Injury. Molecular and Cellular Proteomics, 2004, 3, 510-520.	2.5	54
44	Axonal Transport Proteomics Reveals Mobilization of Translation Machinery to the Lesion Site in Injured Sciatic Nerve. Molecular and Cellular Proteomics, 2010, 9, 976-987.	2.5	54
45	WISâ€neuromath enables versatile high throughput analyses of neuronal processes. Developmental Neurobiology, 2013, 73, 247-256.	1.5	54
46	From snails to sciatic nerve: Retrograde injury signaling from axon to soma in lesioned neurons. Journal of Neurobiology, 2004, 58, 287-294.	3.7	53
47	Growth control mechanisms in neuronal regeneration. FEBS Letters, 2015, 589, 1669-1677.	1.3	53
48	A New Conotoxin Affecting Sodium Current Inactivation Interacts with the Î´-Conotoxin Receptor Site. Journal of Biological Chemistry, 1995, 270, 1123-1129.	1.6	52
49	A Novel Hydrophobic Ï‰-Conotoxin Blocks Molluscan Dihydropyridine-Sensitive Calcium Channels. Biochemistry, 1996, 35, 8748-8752.	1.2	50
50	Î³-Conotoxin-PnVIIA, A Î³-Carboxyglutamate-Containing Peptide Agonist of Neuronal Pacemaker Cation Currentsâ€. Biochemistry, 1998, 37, 1470-1477.	1.2	49
51	Position-specific codon conservation in hypervariable gene families. Trends in Genetics, 2000, 16, 57-59.	2.9	49
52	Local translation in neuronal processesâ€"<i>in vivo</i> tests of a â€œheretical hypothesisâ€. Developmental Neurobiology, 2014, 74, 210-217.	1.5	45
53	Importin Î±3 regulates chronic pain pathways in peripheral sensory neurons. Science, 2020, 369, 842-846.	6.0	45
54	Nuclear transport factors in neuronal function. Seminars in Cell and Developmental Biology, 2009, 20, 600-606.	2.3	44

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55	Integration of Retrograde Axonal and Nuclear Transport Mechanisms in Neurons: Implications for Therapeutics. Neuroscientist, 2004, 10, 404-408.	2.6	37
56	A new cysteine framework in sodium channel blocking conotoxins. Biochemistry, 1995, 34, 8649-8656.	1.2	35
57	Axoplasm isolation from peripheral nerve. Developmental Neurobiology, 2010, 70, 126-133.	1.5	34
58	From Synapse to Nucleus and Back Again--Communication over Distance within Neurons. Journal of Neuroscience, 2011, 31, 16045-16048.	1.7	34
59	The Prodomain of a Secreted Hydrophobic Mini-protein Facilitates Its Export from the Endoplasmic Reticulum by Hitchhiking on Sorting Receptors. Journal of Biological Chemistry, 2003, 278, 26311-26314.	1.6	33
60	Cell length sensing for neuronal growth control. Trends in Cell Biology, 2013, 23, 305-310.	3.6	33
61	Can Molecular Motors Drive Distance Measurements in Injured Neurons?. PLoS Computational Biology, 2009, 5, e1000477.	1.5	32
62	hnRNPs Interacting with mRNA Localization Motifs Define AxoNAl RNA Regulons. Molecular and Cellular Proteomics, 2018, 17, 2091-2106.	2.5	32
63	Synthesis, Bioactivity, and Cloning of the L-Type Calcium Channel Blocker Ï‰-Conotoxin TxVIIâ€. Biochemistry, 1999, 38, 12876-12884.	1.2	30
64	Three-dimensional Solution Structure of the Sodium Channel Agonist/Antagonist Î´-Conotoxin TxVIA. Journal of Biological Chemistry, 2002, 277, 36387-36391.	1.6	30
65	Axonal <scp>PPAR</scp>Î³ promotes neuronal regeneration after injury. Developmental Neurobiology, 2016, 76, 688-701.	1.5	30
66	Translating regeneration: Local protein synthesis in the neuronal injury response. Neuroscience Research, 2019, 139, 26-36.	1.0	29
67	Novel Ï‰-Conotoxins Block Dihydropyridine-Insensitive High Voltage-Activated Calcium Channels in Molluscan Neurons. Journal of Neurochemistry, 2002, 67, 2155-2163.	2.1	28
68	Neurotrophic activities of trk receptors conserved over 600 million years of evolution. Journal of Neurobiology, 2004, 60, 12-20.	3.7	28
69	Translatome Regulation in Neuronal Injury and Axon Regrowth. ENeuro, 2018, 5, ENEURO.0276-17.2018.	0.9	26
70	On the death Trk. Developmental Neurobiology, 2010, 70, 298-303.	1.5	25
71	Importin Î±5 Regulates Anxiety through MeCP2 and Sphingosine Kinase 1. Cell Reports, 2018, 25, 3169-3179.e7.	2.9	25
72	Tracking in the Wldsâ€”The Hunting of the SIRT and the Luring of the Draper. Neuron, 2006, 50, 819-821.	3.8	24

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73	Behavioral and Other Phenotypes in a Cytoplasmic Dynein Light Intermediate Chain 1 Mutant Mouse. Journal of Neuroscience, 2011, 31, 5483-5494.	1.7	23
74	The glycine arginineâ€rich domain of the RNAâ€binding protein nucleolin regulates its subcellular localization. EMBO Journal, 2021, 40, e107158.	3.5	23
75	A Ca2+-Dependent Switch Activates Axonal Casein Kinase 2Î± Translation and Drives G3BP1 Granule Disassembly for Axon Regeneration. Current Biology, 2020, 30, 4882-4895.e6.	1.8	22
76	A lyso-platelet activating factor phospholipase C, originally suggested to be a neutral-sphingomyelinase, is located in the endoplasmic reticulum. FEBS Letters, 2000, 469, 44-46.	1.3	21
77	STK25 Protein Mediates TrkA and CCM2 Protein-dependent Death in Pediatric Tumor Cells of Neural Origin. Journal of Biological Chemistry, 2012, 287, 29285-29289.	1.6	21
78	Interactions of Î´-Conotoxins with Alkaloid Neurotoxins Reveal Differences Between the Silent and Effective Binding Sites on Voltage-Sensitive Sodium Channels. Journal of Neurochemistry, 2002, 67, 2451-2460.	2.1	16
79	A new bioassay reveals mollusc-specific toxicity in molluscivorous Conus venoms. Toxicon, 1992, 30, 465-469.	0.8	15
80	DYNLRB1 is essential for dynein mediated transport and neuronal survival. Neurobiology of Disease, 2020, 140, 104816.	2.1	15
81	Î²-sitosterol reduces anxiety and synergizes with established anxiolytic drugs in mice. Cell Reports Medicine, 2021, 2, 100281.	3.3	13
82	A human neuron injury model for molecular studies of axonal regeneration. Experimental Neurology, 2010, 223, 119-127.	2.0	12
83	Building Complex Brains â€" Missing Pieces in an Evolutionary Puzzle. Brain, Behavior and Evolution, 2006, 68, 191-195.	0.9	11
84	Retrograde Injury Signaling in Lesioned Axons. Results and Problems in Cell Differentiation, 2009, 48, 206-236.	0.2	11
85	Omics approaches for subcellular translation studies. Molecular Omics, 2018, 14, 380-388.	1.4	11
86	COLORcation : A new application to phenotype exploratory behavior models of anxiety in mice. Journal of Neuroscience Methods, 2016, 270, 9-16.	1.3	10
87	Functional Consequences of Necdin Nucleocytoplasmic Localization. PLoS ONE, 2012, 7, e33786.	1.1	10
88	Genetic Models Meet Trophic Mechanisms. Neuron, 2002, 33, 673-675.	3.8	9
89	Isolation and analyses of axonal ribonucleoprotein complexes. Methods in Cell Biology, 2016, 131, 467-486.	0.5	9
90	Cell size sensingâ€"a one-dimensional solution for a three-dimensional problem?. BMC Biology, 2019, 17, 36.	1.7	9

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91	Marine warning via peptide toxin. Nature, 1994, 369, 192-193.	13.7	8
92	Electrophysiological Characterization of a Novel Conotoxin That Blocks Molluscan Sodium Channels. European Journal of Neuroscience, 1995, 7, 815-818.	1.2	7
93	Alternative energy for neuronal motors. Nature, 2013, 495, 178-179.	13.7	7
94	A Genome Wide Screening Approach for Membrane-targeted Proteins. Molecular and Cellular Proteomics, 2005, 4, 328-333.	2.5	4
95	Axoplasm Isolation from Rat Sciatic Nerve. Journal of Visualized Experiments, 2010, , .	0.2	4
96	Neuroproteomics: How Many Angels can be Identified in an Extract from the Head of a Pin?. Molecular and Cellular Proteomics, 2016, 15, 341-343.	2.5	4
97	The use of mouse models to probe cytoplasmic dynein function. , 2018, , 234-261.		4
98	Identification of tyrosine sulfation in Conus pennaceus conotoxins Î±-PnIA and Î±-PnIB: further investigation of labile sulfo- and phosphopeptides by electrospray, matrix-assisted laser desorption/ionization (MALDI) and atmospheric pressure MALDI mass spectrometry Dedicated to the memory of Professor Dr Wilhelm J. Richter.. Journal of Mass Spectrometry, 1999, 34, 447.	0.7	4
99	When zip codes are in short supply. EMBO Journal, 2011, 30, 4520-4522.	3.5	2
100	Molluscivorous Conus Toxins as Probes for Voltage and Ligand Gated Ion Channels in Molluscs. Animal Biology, 1993, 44, 486-494.	0.4	1
101	â€¦ using peer review as a guide to quality. Nature, 1999, 401, 111-111.	13.7	1
102	Working hard for the money. Nature, 2004, 427, 485-485.	13.7	1
103	European grants: a lifeline in poorly funded countries. Nature, 2008, 455, 285-285.	13.7	1
104	Advantage of knowing nature's secrets. Nature, 1997, 386, 431-431.	13.7	0
105	Don't punish scientists for government actions. Nature, 2002, 417, 15-15.	13.7	0
106	Introduction: Translating developmentâ€"From bench to bedside with molecular neurobiology. Developmental Neurobiology, 2007, 67, 1129-1132.	1.5	0
107	Activists: arson risks killing innocent people. Nature, 2007, 448, 22-22.	13.7	0
108	Proteomic Approaches to Axon Injuryâ€" Postgenomic Approaches to a Posttranscriptional Process. , 0, , 153-166.		0

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109	AXONAL RESPONSES TO INJURY. , 2008, , 41-57.		0
110	Hidden Figures: A Non-translated RNA Regulates Axonal Neurotrophin Signaling. Neuron, 2019, 102, 507-509.	3.8	0
111	Metamorphoses of a Conotoxin. Advances in Experimental Medicine and Biology, 1996, 391, 387-401.	0.8	0