

Fabio Benfenati

List of Publications by Year in descending order

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223
papers

13,941
citations

20759

60
h-index

26548

107
g-index

234
all docs

234
docs citations

234
times ranked

15218
citing authors

#	ARTICLE	IF	CITATIONS
1	Tetanus and botulinum-B neurotoxins block neurotransmitter release by proteolytic cleavage of synaptobrevin. <i>Nature</i> , 1992, 359, 832-835.	13.7	1,750
2	Safety Assessment of Graphene-Based Materials: Focus on Human Health and the Environment. <i>ACS Nano</i> , 2018, 12, 10582-10620.	7.3	438
3	Botulinum neurotoxins serotypes A and E cleave SNAP-25 at distinct COOH-terminal peptide bonds. <i>FEBS Letters</i> , 1993, 335, 99-103.	1.3	401
4	Classification Framework for Graphene-Based Materials. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7714-7718.	7.2	369
5	Synaptic vesicle-associated Ca ²⁺ /calmodulin-dependent protein kinase II is a binding protein for synapsin I. <i>Nature</i> , 1992, 359, 417-420.	13.7	299
6	The Synapsins. <i>Annual Review of Cell Biology</i> , 1990, 6, 433-460.	26.0	279
7	A polymer optoelectronic interface restores light sensitivity in blind rat retinas. <i>Nature Photonics</i> , 2013, 7, 400-406.	15.6	267
8	A hybrid bioorganic interface for neuronal photoactivation. <i>Nature Communications</i> , 2011, 2, 166.	5.8	246
9	Synapsin I Is an Oligomannose-Carrying Glycoprotein, Acts As an Oligomannose-Binding Lectin, and Promotes Neurite Outgrowth and Neuronal Survival When Released via Glia-Derived Exosomes. <i>Journal of Neuroscience</i> , 2011, 31, 7275-7290.	1.7	244
10	A fully organic retinal prosthesis restores vision in a rat model of degenerative blindness. <i>Nature Materials</i> , 2017, 16, 681-689.	13.3	232
11	SYN1 loss-of-function mutations in autism and partial epilepsy cause impaired synaptic function. <i>Human Molecular Genetics</i> , 2011, 20, 2297-2307.	1.4	204
12	Direct Conversion of Fibroblasts into Functional Astrocytes by Defined Transcription Factors. <i>Stem Cell Reports</i> , 2015, 4, 25-36.	2.3	194
13	Interaction of free and synaptic vesicle-bound synapsin I with F-actin. <i>Neuron</i> , 1992, 8, 377-386.	3.8	167
14	Modulation by cholecystokinins of ³ H- α -spiperidol binding in rat striatum: evidence for increased affinity and reduction in the number of binding sites. <i>Acta Physiologica Scandinavica</i> , 1981, 113, 567-569.	2.3	158
15	Synaptic recruitment of gephyrin regulates surface GABA _A receptor dynamics for the expression of inhibitory LTP. <i>Nature Communications</i> , 2014, 5, 3921.	5.8	158
16	Rapid Conversion of Fibroblasts into Functional Forebrain GABAergic Interneurons by Direct Genetic Reprogramming. <i>Cell Stem Cell</i> , 2015, 17, 719-734.	5.2	152
17	Neurotensin in vitro markedly reduces the affinity in subcortical limbic ³ H- α -propylnorapomorphine binding sites*. <i>Acta Physiologica Scandinavica</i> , 1983, 119, 459-461.	2.3	149
18	Lack of Synapsin I Reduces the Readily Releasable Pool of Synaptic Vesicles at Central Inhibitory Synapses. <i>Journal of Neuroscience</i> , 2007, 27, 13520-13531.	1.7	149

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19	Photothermal cellular stimulation in functional bio-polymer interfaces. <i>Scientific Reports</i> , 2015, 5, 8911.	1.6	143
20	Lithium rescues synaptic plasticity and memory in Down syndrome mice. <i>Journal of Clinical Investigation</i> , 2013, 123, 348-361.	3.9	136
21	Protein Kinase A-Mediated Synapsin I Phosphorylation Is a Central Modulator of Ca ²⁺ -Dependent Synaptic Activity. <i>Journal of Neuroscience</i> , 2006, 26, 11670-11681.	1.7	135
22	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. <i>Molecular Therapy</i> , 2020, 28, 235-253.	3.7	135
23	Structural Domains Involved in the Regulation of Transmitter Release by Synapsins. <i>Journal of Neuroscience</i> , 2005, 25, 2658-2669.	1.7	134
24	TBC1D24, an ARF6-Interacting Protein, Is Mutated in Familial Infantile Myoclonic Epilepsy. <i>American Journal of Human Genetics</i> , 2010, 87, 365-370.	2.6	134
25	Subretinally injected semiconducting polymer nanoparticles rescue vision in a rat model of retinal dystrophy. <i>Nature Nanotechnology</i> , 2020, 15, 698-708.	15.6	129
26	Graphene Oxide Nanosheets Disrupt Lipid Composition, Ca ²⁺ Homeostasis, and Synaptic Transmission in Primary Cortical Neurons. <i>ACS Nano</i> , 2016, 10, 7154-7171.	7.3	124
27	Autism-related behavioral abnormalities in synapsin knockout mice. <i>Behavioural Brain Research</i> , 2013, 251, 65-74.	1.2	123
28	PRRT2 Is a Key Component of the Ca ²⁺ -Dependent Neurotransmitter Release Machinery. <i>Cell Reports</i> , 2016, 15, 117-131.	2.9	121
29	Synapsin Controls Both Reserve and Releasable Synaptic Vesicle Pools during Neuronal Activity and Short-Term Plasticity in <i>Aplysia</i> . <i>Journal of Neuroscience</i> , 2001, 21, 4195-4206.	1.7	120
30	Strategies to maximize the performance of a STED microscope. <i>Optics Express</i> , 2012, 20, 7362.	1.7	113
31	Novel Compound Heterozygous Mutations in <i>TBC1<sup>1</sup>D<sup>24</sup></i> Cause Familial Malignant Migrating Partial Seizures of Infancy. <i>Human Mutation</i> , 2013, 34, 869-872.	1.1	110
32	Opposite Changes in Glutamatergic and GABAergic Transmission Underlie the Diffuse Hyperexcitability of Synapsin ⁰ Deficient Cortical Networks. <i>Cerebral Cortex</i> , 2009, 19, 1422-1439.	1.6	106
33	Synaptophysin I Controls the Targeting of VAMP2/Synaptobrevin II to Synaptic Vesicles. <i>Molecular Biology of the Cell</i> , 2003, 14, 4909-4919.	0.9	104
34	The role of synapsins in neuronal development. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 1383-1396.	2.4	104
35	Synapsin-I- and synapsin-II-null mice display an increased age-dependent cognitive impairment. <i>Journal of Cell Science</i> , 2008, 121, 3042-3051.	1.2	102
36	MAPK/Erk-dependent phosphorylation of synapsin mediates formation of functional synapses and short-term homosynaptic plasticity. <i>Journal of Cell Science</i> , 2010, 123, 881-893.	1.2	101

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37	Î±-synuclein and synapsin III cooperatively regulate synaptic function in dopamine neurons. <i>Journal of Cell Science</i> , 2015, 128, 2231-2243.	1.2	99
38	PRRT2 controls neuronal excitability by negatively modulating Na ⁺ channel 1.2/1.6 activity. <i>Brain</i> , 2018, 141, 1000-1016.	3.7	99
39	TAAR1 Modulates Cortical Glutamate NMDA Receptor Function. <i>Neuropsychopharmacology</i> , 2015, 40, 2217-2227.	2.8	98
40	Interfacing Graphene-Based Materials With Neural Cells. <i>Frontiers in Systems Neuroscience</i> , 2018, 12, 12.	1.2	98
41	Interleukin-6 inhibits neurotransmitter release and the spread of excitation in the rat cerebral cortex. <i>European Journal of Neuroscience</i> , 2000, 12, 1241-1252.	1.2	96
42	Phosphorylation of VAMP/Synaptobrevin in Synaptic Vesicles by Endogenous Protein Kinases. <i>Journal of Neurochemistry</i> , 1995, 65, 1712-1720.	2.1	90
43	REST/NRSF-mediated intrinsic homeostasis protects neuronal networks from hyperexcitability. <i>EMBO Journal</i> , 2013, 32, 2994-3007.	3.5	89
44	Synapsin II desynchronizes neurotransmitter release at inhibitory synapses by interacting with presynaptic calcium channels. <i>Nature Communications</i> , 2013, 4, 1512.	5.8	87
45	Using the Atomic Force Microscope to Study the Interaction between Two Solid Supported Lipid Bilayers and the Influence of Synapsin I. <i>Biophysical Journal</i> , 2004, 87, 2446-2455.	0.2	86
46	Light-evoked hyperpolarization and silencing of neurons by conjugated polymers. <i>Scientific Reports</i> , 2016, 6, 22718.	1.6	84
47	Nanostructured Superhydrophobic Substrates Trigger the Development of 3D Neuronal Networks. <i>Small</i> , 2013, 9, 402-412.	5.2	83
48	TBC1D24 regulates neuronal migration and maturation through modulation of the ARF6-dependent pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2337-2342.	3.3	80
49	SYN2 is an autism predisposing gene: loss-of-function mutations alter synaptic vesicle cycling and axon outgrowth. <i>Human Molecular Genetics</i> , 2014, 23, 90-103.	1.4	80
50	Phosphorylation of Synapsin I by cAMP-Dependent Protein Kinase Controls Synaptic Vesicle Dynamics in Developing Neurons. <i>Journal of Neuroscience</i> , 2005, 25, 7299-7308.	1.7	77
51	Characterization of a Polymer-Based, Fully Organic Prosthesis for Implantation into the Subretinal Space of the Rat. <i>Advanced Healthcare Materials</i> , 2016, 5, 2271-2282.	3.9	75
52	The PRRT2 knockout mouse recapitulates the neurological diseases associated with PRRT2 mutations. <i>Neurobiology of Disease</i> , 2017, 99, 66-83.	2.1	72
53	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000096.	3.3	72
54	Neuronal firing modulation by a membrane-targeted photoswitch. <i>Nature Nanotechnology</i> , 2020, 15, 296-306.	15.6	71

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55	Accelerated Structural Maturation Induced by Synapsin I at Developing Neuromuscular Synapses of <i>Xenopus laevis</i> . <i>European Journal of Neuroscience</i> , 1995, 7, 261-270.	1.2	70
56	The evolution of artificial light actuators in living systems: from planar to nanostructured interfaces. <i>Chemical Society Reviews</i> , 2018, 47, 4757-4780.	18.7	70
57	De novo mutations of the ATP6V1A gene cause developmental encephalopathy with epilepsy. <i>Brain</i> , 2018, 141, 1703-1718.	3.7	69
58	PRRT2: from Paroxysmal Disorders to Regulation of Synaptic Function. <i>Trends in Neurosciences</i> , 2016, 39, 668-679.	4.2	68
59	Synaptic and Extrasynaptic Origin of the Excitation/Inhibition Imbalance in the Hippocampus of Synapsin I/III/IV Knockout Mice. <i>Cerebral Cortex</i> , 2013, 23, 581-593.	1.6	65
60	Phosphorylation of Synapsin I by Cyclin-Dependent Kinase-5 Sets the Ratio between the Resting and Recycling Pools of Synaptic Vesicles at Hippocampal Synapses. <i>Journal of Neuroscience</i> , 2014, 34, 7266-7280.	1.7	65
61	2 Synapsin I, an actin-binding protein regulating synaptic vesicle traffic in the nerve terminal. <i>Advances in Second Messenger and Phosphoprotein Research</i> , 1994, 29, 31-45.	4.5	62
62	Identification of synapsin I peptides that insert into lipid membranes. <i>Biochemical Journal</i> , 2001, 354, 57-66.	1.7	61
63	Epileptogenic Q555X SYN1 mutant triggers imbalances in release dynamics and short-term plasticity. <i>Human Molecular Genetics</i> , 2013, 22, 2186-2199.	1.4	61
64	Binding of Protein Kinase Inhibitors to Synapsin I Inferred from Pair-Wise Binding Site Similarity Measurements. <i>PLoS ONE</i> , 2010, 5, e12214.	1.1	60
65	A Novel Topology of Proline-rich Transmembrane Protein 2 (PRRT2). <i>Journal of Biological Chemistry</i> , 2016, 291, 6111-6123.	1.6	59
66	Kinetic analysis of the phosphorylation-dependent interactions of synapsin I with rat brain synaptic vesicles. <i>Journal of Physiology</i> , 1997, 504, 501-515.	1.3	58
67	Fluorescence Resonance Energy Transfer Detection of Synaptophysin I and Vesicle-associated Membrane Protein 2 Interactions during Exocytosis from Single Live Synapses. <i>Molecular Biology of the Cell</i> , 2002, 13, 2706-2717.	0.9	58
68	Synapsin Is a Novel Rab3 Effector Protein on Small Synaptic Vesicles. <i>Journal of Biological Chemistry</i> , 2004, 279, 43769-43779.	1.6	56
69	Site-Specific Synapsin I Phosphorylation Participates in the Expression of Post-Tetanic Potentiation and Its Enhancement by BDNF. <i>Journal of Neuroscience</i> , 2012, 32, 5868-5879.	1.7	56
70	ERK activation in axonal varicosities modulates presynaptic plasticity in the CA3 region of the hippocampus through synapsin I. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 9872-9877.	3.3	55
71	Kidins220/ARMS as a functional mediator of multiple receptor signalling pathways. <i>Journal of Cell Science</i> , 2012, 125, 1845-54.	1.2	55
72	Tyrosine phosphorylation of synapsin I by Src regulates synaptic-vesicle trafficking. <i>Journal of Cell Science</i> , 2010, 123, 2256-2265.	1.2	54

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73	Involvement of Synaptic Genes in the Pathogenesis of Autism Spectrum Disorders: The Case of Synapsins. <i>Frontiers in Pediatrics</i> , 2014, 2, 94.	0.9	54
74	Identification of a developmentally regulated pathway of membrane retrieval in neuronal growth cones. <i>Journal of Cell Science</i> , 2008, 121, 3757-3769.	1.2	53
75	Specificity Protein 1 (Sp1)-dependent Activation of the Synapsin I Gene (SYN1) Is Modulated by RE1-silencing Transcription Factor (REST) and 5â€²-Cytosine-Phosphoguanine (CpG) Methylation. <i>Journal of Biological Chemistry</i> , 2013, 288, 3227-3239.	1.6	53
76	Synapsin III deficiency hampers $\hat{\pm}$ -synuclein aggregation, striatal synaptic damage and nigral cell loss in an AAV-based mouse model of Parkinsonâ€™s disease. <i>Acta Neuropathologica</i> , 2018, 136, 621-639.	3.9	53
77	Specificity of the Binding of Synapsin I to Src Homology 3 Domains. <i>Journal of Biological Chemistry</i> , 2000, 275, 29857-29867.	1.6	52
78	Synapsin Is a Novel Rab3 Effector Protein on Small Synaptic Vesicles. <i>Journal of Biological Chemistry</i> , 2004, 279, 43760-43768.	1.6	52
79	Synapsins: From synapse to network hyperexcitability and epilepsy. <i>Seminars in Cell and Developmental Biology</i> , 2011, 22, 408-415.	2.3	52
80	Synapsins Contribute to the Dynamic Spatial Organization of Synaptic Vesicles in an Activity-Dependent Manner. <i>Journal of Neuroscience</i> , 2012, 32, 12214-12227.	1.7	52
81	Nanoparticles: A Challenging Vehicle for Neural Stimulation. <i>Frontiers in Neuroscience</i> , 2016, 10, 105.	1.4	52
82	Xâ€¢linked focal epilepsy with reflex bathing seizures: Characterization of a distinct epileptic syndrome. <i>Epilepsia</i> , 2015, 56, 1098-1108.	2.6	48
83	Regulation of neural gene transcription by optogenetic inhibition of the RE1-silencing transcription factor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E91-100.	3.3	48
84	Intersectin associates with synapsin and regulates its nanoscale localization and function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12057-12062.	3.3	47
85	Graphene Oxide Upregulates the Homeostatic Functions of Primary Astrocytes and Modulates Astrocyte-to-Neuron Communication. <i>Nano Letters</i> , 2018, 18, 5827-5838.	4.5	47
86	Selective lowering of synapsins induced by oligomeric $\hat{\pm}$ -synuclein exacerbates memory deficits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E4648-E4657.	3.3	45
87	Roadmap on semiconductorâ€¢cell biointerfaces. <i>Physical Biology</i> , 2018, 15, 031002.	0.8	45
88	B-50/GAP-43 Binds to Actin Filaments Without Affecting Actin Polymerization and Filament Organization. <i>Journal of Neurochemistry</i> , 1993, 61, 1530-1533.	2.1	43
89	Phosphorylation of synapsin domain A is required for post-tetanic potentiation. <i>Journal of Cell Science</i> , 2007, 120, 3228-3237.	1.2	43
90	The Knockout of Synapsin II in Mice Impairs Social Behavior and Functional Connectivity Generating an ASD-like Phenotype. <i>Cerebral Cortex</i> , 2017, 27, 5014-5023.	1.6	43

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91	Arf6 regulates the cycling and the readily releasable pool of synaptic vesicles at hippocampal synapse. <i>ELife</i> , 2016, 5, .	2.8	43
92	Use of SU8 as a stable and biocompatible adhesion layer for gold bioelectrodes. <i>Scientific Reports</i> , 2018, 8, 5560.	1.6	42
93	Asynchronous GABA Release Is a Key Determinant of Tonic Inhibition and Controls Neuronal Excitability: A Study in the Synapsin II ^{+/+} Mouse. <i>Cerebral Cortex</i> , 2015, 25, 3356-3368.	1.6	41
94	Molecular Dynamics Simulations of Ion Selectivity in a Claudin-15 Paracellular Channel. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10783-10792.	1.2	41
95	A refined model of claudin-15 tight junction paracellular architecture by molecular dynamics simulations. <i>PLoS ONE</i> , 2017, 12, e0184190.	1.1	41
96	Shedding Light on Living Cells. <i>Advanced Materials</i> , 2015, 27, 7662-7669.	11.1	40
97	Bio-inspired hybrid microelectrodes: a hybrid solution to improve long-term performance of chronic intracortical implants. <i>Frontiers in Neuroengineering</i> , 2014, 7, 7.	4.8	39
98	Phosphorylation-dependent Effects of Synapsin IIa on Actin Polymerization and Network Formation. <i>European Journal of Neuroscience</i> , 1997, 9, 2712-2722.	1.2	38
99	Synapsin I Senses Membrane Curvature by an Amphipathic Lipid Packing Sensor Motif. <i>Journal of Neuroscience</i> , 2011, 31, 18149-18154.	1.7	38
100	Synapsin Phosphorylation by Src Tyrosine Kinase Enhances Src Activity in Synaptic Vesicles. <i>Journal of Biological Chemistry</i> , 2007, 282, 15754-15767.	1.6	37
101	The synapsins: Multitask modulators of neuronal development. <i>Seminars in Cell and Developmental Biology</i> , 2011, 22, 378-386.	2.3	37
102	A novel SYN1 missense mutation in non-syndromic X-linked intellectual disability affects synaptic vesicle life cycle, clustering and mobility. <i>Human Molecular Genetics</i> , 2017, 26, 4699-4714.	1.4	37
103	An Increase in Membrane Cholesterol by Graphene Oxide Disrupts Calcium Homeostasis in Primary Astrocytes. <i>Small</i> , 2019, 15, e1900147.	5.2	37
104	The synapsin domain E accelerates the exocytotic cycle of synaptic vesicles in cerebellar Purkinje cells. <i>Journal of Cell Science</i> , 2006, 119, 4257-4268.	1.2	36
105	The epilepsy-associated protein TBC1D24 is required for normal development, survival and vesicle trafficking in mammalian neurons. <i>Human Molecular Genetics</i> , 2019, 28, 584-597.	1.4	35
106	Identification of synapsin I peptides that insert into lipid membranes. <i>Biochemical Journal</i> , 2001, 354, 57.	1.7	34
107	Deoxyglucose enhances tonic inhibition through the neurosteroid-mediated activation of extrasynaptic GABA _A receptors. <i>Epilepsia</i> , 2016, 57, 1987-2000.	2.6	34
108	Constitutive Inactivation of the PRRT2 Gene Alters Short-Term Synaptic Plasticity and Promotes Network Hyperexcitability in Hippocampal Neurons. <i>Cerebral Cortex</i> , 2019, 29, 2010-2033.	1.6	33

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109	Clinical translation of nanoparticles for neural stimulation. <i>Nature Reviews Materials</i> , 2021, 6, 1-4.	23.3	33
110	Effects of phosphorylation and neuronal activity on the control of synapse formation by synapsin I. <i>Journal of Cell Science</i> , 2011, 124, 3643-3653.	1.2	32
111	Octopus arm regeneration: Role of acetylcholinesterase during morphological modification. <i>Journal of Experimental Marine Biology and Ecology</i> , 2013, 447, 93-99.	0.7	32
112	Long-term optical stimulation of channelrhodopsin-expressing neurons to study network plasticity. <i>Frontiers in Molecular Neuroscience</i> , 2013, 6, 22.	1.4	32
113	Anti-synapsin monoclonal antibodies: epitope mapping and inhibitory effects on phosphorylation and Grb2 binding. <i>Molecular Brain Research</i> , 1997, 52, 1-16.	2.5	31
114	Influence of GABA _A Receptor Monoliganded States on GABAergic Responses. <i>Journal of Neuroscience</i> , 2011, 31, 1752-1761.	1.7	31
115	New technologies for developing second generation retinal prostheses. <i>Lab Animal</i> , 2018, 47, 71-75.	0.2	31
116	Neurite-Enriched MicroRNA-218 Stimulates Translation of the GluA2 Subunit and Increases Excitatory Synaptic Strength. <i>Molecular Neurobiology</i> , 2019, 56, 5701-5714.	1.9	31
117	A hybrid P3HT-Graphene interface for efficient photostimulation of neurons. <i>Carbon</i> , 2020, 162, 308-317.	5.4	31
118	The highly conserved synapsin domain E mediates synapsin dimerization and phospholipid vesicle clustering. <i>Biochemical Journal</i> , 2010, 426, 55-64.	1.7	29
119	Presynaptic NMDA receptors: dynamics and distribution in developing axons <i>in vitro</i> and <i>in vivo</i> . <i>Journal of Cell Science</i> , 2015, 128, 768-80.	1.2	29
120	Nonsense-Mediated mRNA Decay and Loss-of-Function of the Protein Underlie the X-Linked Epilepsy Associated with the W356A Mutation in Synapsin I. <i>PLoS ONE</i> , 2013, 8, e67724.	1.1	29
121	Pavlovian Conditioning of Larval <i>Drosophila</i> : An Illustrated, Multilingual, Hands-On Manual for Odor-Taste Associative Learning in Maggots. <i>Frontiers in Behavioral Neuroscience</i> , 2017, 11, 45.	1.0	28
122	Membrane Environment Enables Ultrafast Isomerization of Amphiphilic Azobenzene. <i>Advanced Science</i> , 2020, 7, 1903241.	5.6	28
123	Functional Role of ATP Binding to Synapsin I In Synaptic Vesicle Trafficking and Release Dynamics. <i>Journal of Neuroscience</i> , 2014, 34, 14752-14768.	1.7	27
124	Delivery of Brain-Derived Neurotrophic Factor by 3D Biocompatible Polymeric Scaffolds for Neural Tissue Engineering and Neuronal Regeneration. <i>Molecular Neurobiology</i> , 2018, 55, 8788-8798.	1.9	27
125	S100A1 codistributes with synapsin I in discrete brain areas and inhibits the F-actin-bundling activity of synapsin I. <i>Journal of Neurochemistry</i> , 2004, 89, 1260-1270.	2.1	25
126	Influence of Synapsin I on Synaptic Vesicles: An Analysis by Force-Volume Mode of the Atomic Force Microscope and Dynamic Light Scattering. <i>Biophysical Journal</i> , 2007, 93, 1051-1060.	0.2	25

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127	The synapsin gene family in basal chordates: evolutionary perspectives in metazoans. <i>BMC Evolutionary Biology</i> , 2010, 10, 32.	3.2	25
128	Identification and Expression of Acetylcholinesterase in Octopus vulgaris Arm Development and Regeneration: a Conserved Role for ACHE?. <i>Molecular Neurobiology</i> , 2015, 52, 45-56.	1.9	25
129	Synapsins Are Downstream Players of the BDNF-Mediated Axonal Growth. <i>Molecular Neurobiology</i> , 2017, 54, 484-494.	1.9	25
130	Leucineâ€rich repeat kinase 2 phosphorylation on synapsin I regulates glutamate release at preâ€synaptic sites. <i>Journal of Neurochemistry</i> , 2019, 150, 264-281.	2.1	25
131	Autoantibodies to synapsin I sequester synapsin I and alter synaptic function. <i>Cell Death and Disease</i> , 2019, 10, 864.	2.7	24
132	Obligatory role of endoplasmic reticulum in brain FDG uptake. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2019, 46, 1184-1196.	3.3	24
133	Genotype-phenotype correlations in patients with de novo <i>KCNQ2</i> pathogenic variants. <i>Neurology: Genetics</i> , 2020, 6, e528.	0.9	24
134	Cell adhesion molecule L1 contributes to neuronal excitability regulating the function of voltage-gated sodium channels. <i>Journal of Cell Science</i> , 2016, 129, 1878-91.	1.2	23
135	Biallelic DMXL2 mutations impair autophagy and cause Ohtahara syndrome with progressive course. <i>Brain</i> , 2019, 142, 3876-3891.	3.7	23
136	TBC1D24 regulates axonal outgrowth and membrane trafficking at the growth cone in rodent and human neurons. <i>Cell Death and Differentiation</i> , 2019, 26, 2464-2478.	5.0	23
137	Dentate gyrus network dysfunctions precede the symptomatic phase in a genetic mouse model of seizures. <i>Frontiers in Cellular Neuroscience</i> , 2013, 7, 138.	1.8	22
138	Synapsin III Acts Downstream of Semaphorin 3A/CDK5 Signaling to Regulate Radial Migration and Orientation of Pyramidal Neurons In Vivo. <i>Cell Reports</i> , 2015, 11, 234-248.	2.9	22
139	Exocytosis regulates trafficking of GABA and glycine heterotransporters in spinal cord glutamatergic synapses: a mechanism for the excessive heterotransporter-induced release of glutamate in experimental amyotrophic lateral sclerosis. <i>Neurobiology of Disease</i> , 2015, 74, 314-324.	2.1	22
140	Emerging Role of the Autophagy/Lysosomal Degradative Pathway in Neurodevelopmental Disorders With Epilepsy. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 39.	1.8	22
141	Acute knockdown of Depdc5 leads to synaptic defects in mTOR-related epileptogenesis. <i>Neurobiology of Disease</i> , 2020, 139, 104822.	2.1	22
142	An updated reappraisal of synapsins: structure, function and role in neurological and psychiatric disorders. <i>Neuroscience and Biobehavioral Reviews</i> , 2021, 130, 33-60.	2.9	22
143	Phosphorylation by PKA and Cdk5 Mediates the Early Effects of Synapsin III in Neuronal Morphological Maturation. <i>Journal of Neuroscience</i> , 2015, 35, 13148-13159.	1.7	21
144	Optogenetic Modulation of Intracellular Signalling and Transcription: Focus on Neuronal Plasticity. <i>Journal of Experimental Neuroscience</i> , 2017, 11, 117906951770335.	2.3	21

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145	Neuroinflammation induces synaptic scaling through IL-1 ^β -mediated activation of the transcriptional repressor REST/NRSF. <i>Cell Death and Disease</i> , 2021, 12, 180.	2.7	21
146	Intrathecal immunoglobulin A and G antibodies to synapsin in a patient with limbic encephalitis. <i>Neurology: Neuroimmunology and NeuroInflammation</i> , 2015, 2, e169.	3.1	19
147	Spike-Related Electrophysiological Identification of Cultured Hippocampal Excitatory and Inhibitory Neurons. <i>Molecular Neurobiology</i> , 2019, 56, 6276-6292.	1.9	19
148	Alpha-synuclein/synapsin III pathological interplay boosts the motor response to methylphenidate. <i>Neurobiology of Disease</i> , 2020, 138, 104789.	2.1	19
149	Neuronal hyperactivity causes Na ⁺ /H ⁺ exchanger-induced extracellular acidification at active synapses. <i>Journal of Cell Science</i> , 2017, 130, 1435-1449.	1.2	18
150	Synapsin I and Synapsin II regulate neurogenesis in the dentate gyrus of adult mice. <i>Oncotarget</i> , 2018, 9, 18760-18774.	0.8	18
151	Sub-millisecond Control of Neuronal Firing by Organic Light-Emitting Diodes. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 278.	2.0	18
152	Kainate Induces Mobilization of Synaptic Vesicles at the Growth Cone through the Activation of Protein Kinase A. <i>Cerebral Cortex</i> , 2013, 23, 531-541.	1.6	17
153	REST/NRSF deficiency impairs autophagy and leads to cellular senescence in neurons. <i>Aging Cell</i> , 2021, 20, e13471.	3.0	17
154	Photochemistry of Organic Retinal Prostheses. <i>Annual Review of Physical Chemistry</i> , 2019, 70, 99-121.	4.8	16
155	Role of pericytes in blood-brain barrier preservation during ischemia through tunneling nanotubes. <i>Cell Death and Disease</i> , 2022, 13, .	2.7	16
156	Studies of neurotensin-dopamine receptor interactions in striatal membranes of the male rat. The influence of 6-hydroxydopamine-induced dopamine receptor supersensitivity. <i>Acta Physiologica Scandinavica</i> , 1986, 126, 147-149.	2.3	15
157	Synapsin-antibodies in psychiatric and neurological disorders: Prevalence and clinical findings. <i>Brain, Behavior, and Immunity</i> , 2017, 66, 125-134.	2.0	15
158	Biocompatibility of a Magnetic Tunnel Junction Sensor Array for the Detection of Neuronal Signals in Culture. <i>Frontiers in Neuroscience</i> , 2018, 12, 909.	1.4	15
159	Kidins220/ARMS controls astrocyte calcium signaling and neuron-astrocyte communication. <i>Cell Death and Differentiation</i> , 2020, 27, 1505-1519.	5.0	15
160	Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity. <i>Advanced Functional Materials</i> , 2021, 31, 2005300.	7.8	15
161	Increased responsiveness at the cerebellar input stage in the PRRT2 knockout model of paroxysmal kinesigenic dyskinesia. <i>Neurobiology of Disease</i> , 2021, 152, 105275.	2.1	15
162	PRRT2 modulates presynaptic Ca ²⁺ influx by interacting with P/Q-type channels. <i>Cell Reports</i> , 2021, 35, 109248.	2.9	15

#	ARTICLE	IF	CITATIONS
163	Kidins220/ARMS Is a Novel Modulator of Short-Term Synaptic Plasticity in Hippocampal GABAergic Neurons. <i>PLoS ONE</i> , 2012, 7, e35785.	1.1	14
164	APACHE Is an AP2-Interacting Protein Involved in Synaptic Vesicle Trafficking and Neuronal Development. <i>Cell Reports</i> , 2017, 21, 3596-3611.	2.9	14
165	Effect of starvation on brain glucose metabolism and 18F-2-fluoro-2-deoxyglucose uptake: an experimental in-vivo and ex-vivo study. <i>EJNMMI Research</i> , 2018, 8, 44.	1.1	14
166	Behavioral Assessment of Vision in Pigs. <i>Journal of the American Association for Laboratory Animal Science</i> , 2018, 57, 350-356.	0.6	14
167	Presynaptic L-Type Ca ²⁺ Channels Increase Glutamate Release Probability and Excitatory Strength in the Hippocampus during Chronic Neuroinflammation. <i>Journal of Neuroscience</i> , 2020, 40, 6825-6841.	1.7	14
168	Clinical spectrum and genotype-phenotype correlations in PRRT2 Italian patients. <i>European Journal of Paediatric Neurology</i> , 2020, 28, 193-197.	0.7	14
169	Functional Interaction between the Scaffold Protein Kidins220/ARMS and Neuronal Voltage-Gated Na ⁺ Channels. <i>Journal of Biological Chemistry</i> , 2015, 290, 18045-18055.	1.6	13
170	Fine Tuning of Synaptic Plasticity and Filtering by GABA Released from Hippocampal Autaptic Granule Cells. <i>Cerebral Cortex</i> , 2016, 26, 1149-1167.	1.6	13
171	An interaction between PRRT2 and Na ⁺ /K ⁺ ATPase contributes to the control of neuronal excitability. <i>Cell Death and Disease</i> , 2021, 12, 292.	2.7	13
172	Expanding the Nude SCID/CID Phenotype Associated with FOXN1 Homozygous, Compound Heterozygous, or Heterozygous Mutations. <i>Journal of Clinical Immunology</i> , 2021, 41, 756-768.	2.0	13
173	PRRT2, a network stability gene. <i>Oncotarget</i> , 2017, 8, 55770-55771.	0.8	13
174	Small-Animal 18F-FDG PET for Research on <i>Octopus vulgaris</i> : Applications and Future Directions in Invertebrate Neuroscience and Tissue Regeneration. <i>Journal of Nuclear Medicine</i> , 2018, 59, 1302-1307.	2.8	12
175	Hydrogenated Graphene Improves Neuronal Network Maturation and Excitatory Transmission. <i>Advanced Biology</i> , 2021, 5, e2000177.	1.4	12
176	Progress of Induced Pluripotent Stem Cell Technologies to Understand Genetic Epilepsy. <i>International Journal of Molecular Sciences</i> , 2020, 21, 482.	1.8	11
177	Clinical and Genetic Features in Patients With Reflex Bathing Epilepsy. <i>Neurology</i> , 2021, 97, e577-e586.	1.5	11
178	The lipid composition of few layers graphene and graphene oxide biomolecular corona. <i>Carbon</i> , 2021, 185, 591-598.	5.4	11
179	Phenotypic and genetic spectrum of ATP6V1A encephalopathy: a disorder of lysosomal homeostasis. <i>Brain</i> , 2022, 145, 2687-2703.	3.7	11
180	Biocompatibility of a Conjugated Polymer Retinal Prosthesis in the Domestic Pig. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 579141.	2.0	10

#	ARTICLE	IF	CITATIONS
181	Conopeptide-Functionalized Nanoparticles Selectively Antagonize Extrasynaptic <i>N</i> -Methyl-D-aspartate Receptors and Protect Hippocampal Neurons from Excitotoxicity <i>In Vitro</i> . <i>ACS Nano</i> , 2020, 14, 6866-6877.	7.3	10
182	Mild Inactivation of RE-1 Silencing Transcription Factor (REST) Reduces Susceptibility to Kainic Acid-Induced Seizures. <i>Frontiers in Cellular Neuroscience</i> , 2019, 13, 580.	1.8	10
183	The physics of plasma membrane photostimulation. <i>APL Materials</i> , 2021, 9, 030901.	2.2	10
184	A developmental stage- and Kidins220-dependent switch in astrocyte responsiveness to brain-derived neurotrophic factor. <i>Journal of Cell Science</i> , 2021, 134, .	1.2	10
185	Isobaric Labeling Proteomics Allows a High-Throughput Investigation of Protein Corona Orientation. <i>Analytical Chemistry</i> , 2021, 93, 784-791.	3.2	10
186	Computational Assessment of Different Structural Models for Claudin-5 Complexes in Blood-Brain Barrier Tight Junctions. <i>ACS Chemical Neuroscience</i> , 2022, 13, 2140-2153.	1.7	10
187	Molecular Machines Determining the Fate of Endocytosed Synaptic Vesicles in Nerve Terminals. <i>Frontiers in Synaptic Neuroscience</i> , 2016, 8, 10.	1.3	9
188	Computational study of ion permeation through claudin-4 paracellular channels. <i>Annals of the New York Academy of Sciences</i> , 2022, 1516, 162-174.	1.8	9
189	Synapsins' Molecular function, development and disease. <i>Seminars in Cell and Developmental Biology</i> , 2011, 22, 377.	2.3	8
190	Dysfunction of the serotonergic system in the brain of synapsin triple knockout mice is associated with behavioral abnormalities resembling synapsin-related human pathologies. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2021, 105, 110135.	2.5	8
191	The enhancement of activity rescues the establishment of <i>Mecp2</i> null neuronal phenotypes. <i>EMBO Molecular Medicine</i> , 2021, 13, e12433.	3.3	8
192	Graphene Nanoplatelets Render Poly(3-Hydroxybutyrate) a Suitable Scaffold to Promote Neuronal Network Development. <i>Frontiers in Neuroscience</i> , 2021, 15, 731198.	1.4	8
193	The Transcription Factors EBF1 and EBF2 Are Positive Regulators of Myelination in Schwann Cells. <i>Molecular Neurobiology</i> , 2017, 54, 8117-8127.	1.9	7
194	Altered Intracellular Calcium Homeostasis Underlying Enhanced Glutamatergic Transmission in Striatal-Enriched Tyrosine Phosphatase (STEP) Knockout Mice. <i>Molecular Neurobiology</i> , 2018, 55, 8084-8102.	1.9	7
195	Synapsin I Controls Synaptic Maturation of Long-Range Projections in the Lateral Amygdala in a Targeted Selective Fashion. <i>Frontiers in Cellular Neuroscience</i> , 2019, 13, 220.	1.8	7
196	Neuronal Cultures and Nanomaterials. <i>Advances in Neurobiology</i> , 2019, 22, 51-79.	1.3	7
197	Proline-rich transmembrane protein 2 (PRRT2) regulates the actin cytoskeleton during synaptogenesis. <i>Cell Death and Disease</i> , 2020, 11, 856.	2.7	7
198	REST/NRSF drives homeostatic plasticity of inhibitory synapses in a target-dependent fashion. <i>ELife</i> , 2021, 10, .	2.8	7

#	ARTICLE	IF	CITATIONS
199	Protein Phosphorylation in Rat Pineal Gland and Its Regulation in Supersensitive and Sub-sensitive States. <i>Journal of Neurochemistry</i> , 1987, 48, 1069-1076.	2.1	6
200	Epitope specificity of anti-synapsin autoantibodies: Differential targeting of synapsin I domains. <i>PLoS ONE</i> , 2018, 13, e0208636.	1.1	6
201	Synapsins are expressed at neuronal and non-neuronal locations in <i>Octopus vulgaris</i> . <i>Scientific Reports</i> , 2019, 9, 15430.	1.6	6
202	Structural Mechanism of I_{Kd} -Currents in a Mutated Kv7.2 Voltage Sensor Domain from Molecular Dynamics Simulations. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 1354-1367.	2.5	6
203	Impaired GABAB-mediated presynaptic inhibition increases excitatory strength and alters short-term plasticity in synapsin knockout mice. <i>Oncotarget</i> , 2017, 8, 90061-90076.	0.8	6
204	Investigation of the stability and biocompatibility of commonly used electrode materials in organic neuro-optoelectronics. , 2015, , .		5
205	¹ H NMR Spectroscopy Characterization of Porcine Vitreous Humor in Physiological and Photoreceptor Degeneration Conditions. , 2019, 60, 741.		5
206	The porcine iodoacetic acid model of retinal degeneration: Morpho-functional characterization of the visual system. <i>Experimental Eye Research</i> , 2020, 193, 107979.	1.2	5
207	Reply to: Questions about the role of P3HT nanoparticles in retinal stimulation. <i>Nature Nanotechnology</i> , 2021, 16, 1333-1336.	15.6	5
208	Engineering REST-Specific Synthetic PUF Proteins to Control Neuronal Gene Expression: A Combined Experimental and Computational Study. <i>ACS Synthetic Biology</i> , 2020, 9, 2039-2054.	1.9	4
209	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. <i>Advanced Intelligent Systems</i> , 2020, 2, 2080071.	3.3	4
210	Synapsin III in brain development. <i>Oncotarget</i> , 2016, 7, 15288-15289.	0.8	3
211	3D Cell Cultures: Nanostructured Superhydrophobic Substrates Trigger the Development of 3D Neuronal Networks (Small 3/2013). <i>Small</i> , 2013, 9, 334-334.	5.2	2
212	Controlling cell functions by light. , 2015, , .		2
213	Electrochemically Synthesized Poly(3-hexylthiophene) Nanowires as Photosensitive Neuronal Interfaces. <i>Materials</i> , 2021, 14, 4761.	1.3	2
214	Synapsins and Synaptic Vesicle Storage. , 2015, , 295-326.		2
215	An Emerging Role of PRRT2 in Regulating Growth Cone Morphology. <i>Cells</i> , 2021, 10, 2666.	1.8	2
216	Kidins220/ARMS modulates brain morphology and anxiety-like traits in adult mice. <i>Cell Death Discovery</i> , 2022, 8, 58.	2.0	1

#	ARTICLE	IF	CITATIONS
217	Magnetic Tunnel Junction Based Chip to Detect the Magnetic Field of Neuronal Signals: A Platform for In Vitro Studies. Proceedings (mdpi), 2017, 1, .	0.2	0
218	Modulation of neuronal firing: what role can nanotechnology play?. Nanomedicine, 2020, 15, 2895-2900.	1.7	0
219	Stability Studies of New Caged bis 2'-deoxy-2'-oxyl-5'-phosphoriboside Derivatives and Their Potential Use as Cellular pH Probes. Photochemistry and Photobiology, 2021, 97, 343-352.	1.3	0
220	Giving names to the actors of synaptic transmission: The long journey from synaptic vesicles to neural plasticity. Advances in Pharmacology, 2021, 90, 19-37.	1.2	0
221	Neuronal Networks: Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity (Adv. Funct. Mater. 11/2021). Advanced Functional Materials, 2021, 31, 2170075.	7.8	0
222	Reply to Comment on Conopeptide-Functionalized Nanoparticles Selectively Antagonize Extrasynaptic N-Methyl-d-aspartate Receptors and Protect Hippocampal Neurons from Excitotoxicity In Vitro. ACS Nano, 2021, 15, 15409-15417.	7.3	0
223	Complexity and Computation at the Synapse: Multilayer Architecture and Role of Diffusion in Shaping Synaptic Activity and Computation. , 2014, , 269-298.		0