

Fabio Benfenati

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2707833/fabio-benfenati-publications-by-citations.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

216
papers

10,696
citations

55
h-index

97
g-index

234
ext. papers

12,565
ext. citations

8.5
avg, IF

5.96
L-index

#	Paper	IF	Citations
216	Tetanus and botulinum-B neurotoxins block neurotransmitter release by proteolytic cleavage of synaptobrevin. <i>Nature</i> , 1992 , 359, 832-5	50.4	1518
215	Botulinum neurotoxins serotypes A and E cleave SNAP-25 at distinct COOH-terminal peptide bonds. <i>FEBS Letters</i> , 1993 , 335, 99-103	3.8	350
214	Safety Assessment of Graphene-Based Materials: Focus on Human Health and the Environment. <i>ACS Nano</i> , 2018 , 12, 10582-10620	16.7	292
213	Classification framework for graphene-based materials. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 7714-8	16.4	287
212	Synaptic vesicle-associated Ca ²⁺ /calmodulin-dependent protein kinase II is a binding protein for synapsin I. <i>Nature</i> , 1992 , 359, 417-20	50.4	265
211	The synapsins. <i>Annual Review of Cell Biology</i> , 1990 , 6, 433-60		251
210	A polymer optoelectronic interface restores light sensitivity in blind rat retinas. <i>Nature Photonics</i> , 2013 , 7, 400-406	33.9	210
209	A hybrid bioorganic interface for neuronal photoactivation. <i>Nature Communications</i> , 2011 , 2, 166	17.4	196
208	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, 7275-90	6.6	177
207	SYN1 loss-of-function mutations in autism and partial epilepsy cause impaired synaptic function. <i>Human Molecular Genetics</i> , 2011 , 20, 2297-307	5.6	162
206	A fully organic retinal prosthesis restores vision in a rat model of degenerative blindness. <i>Nature Materials</i> , 2017 , 16, 681-689	27	158
205	Modulation by cholecystokinins of 3H-spiroperidol binding in rat striatum: evidence for increased affinity and reduction in the number of binding sites. <i>Acta Physiologica Scandinavica</i> , 1981 , 113, 567-9		154
204	Interaction of free and synaptic vesicle-bound synapsin I with F-actin. <i>Neuron</i> , 1992 , 8, 377-86	13.9	145
203	Gangliosides increase the survival of lesioned nigral dopamine neurons and favour the recovery of dopaminergic synaptic function in striatum of rats by collateral sprouting. <i>Acta Physiologica Scandinavica</i> , 1983 , 119, 347-63		138
202	Direct conversion of fibroblasts into functional astrocytes by defined transcription factors. <i>Stem Cell Reports</i> , 2015 , 4, 25-36	8	137
201	Lack of synapsin I reduces the readily releasable pool of synaptic vesicles at central inhibitory synapses. <i>Journal of Neuroscience</i> , 2007 , 27, 13520-31	6.6	129
200	TBC1D24, an ARF6-interacting protein, is mutated in familial infantile myoclonic epilepsy. <i>American Journal of Human Genetics</i> , 2010 , 87, 365-70	11	117

199	Synaptic recruitment of gephyrin regulates surface GABAA receptor dynamics for the expression of inhibitory LTP. <i>Nature Communications</i> , 2014 , 5, 3921	17.4	115
198	Lithium rescues synaptic plasticity and memory in Down syndrome mice. <i>Journal of Clinical Investigation</i> , 2013 , 123, 348-61	15.9	112
197	Rapid Conversion of Fibroblasts into Functional Forebrain GABAergic Interneurons by Direct Genetic Reprogramming. <i>Cell Stem Cell</i> , 2015 , 17, 719-734	18	111
196	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, 4195-206	6.6	111
195	Protein kinase A-mediated synapsin I phosphorylation is a central modulator of Ca ²⁺ -dependent synaptic activity. <i>Journal of Neuroscience</i> , 2006 , 26, 11670-81	6.6	109
194	Structural domains involved in the regulation of transmitter release by synapsins. <i>Journal of Neuroscience</i> , 2005 , 25, 2658-69	6.6	109
193	Photothermal cellular stimulation in functional bio-polymer interfaces. <i>Scientific Reports</i> , 2015 , 5, 8911	4.9	105
192	Novel compound heterozygous mutations in TBC1D24 cause familial malignant migrating partial seizures of infancy. <i>Human Mutation</i> , 2013 , 34, 869-72	4.7	99
191	Autism-related behavioral abnormalities in synapsin knockout mice. <i>Behavioural Brain Research</i> , 2013 , 251, 65-74	3.4	97
190	Opposite changes in glutamatergic and GABAergic transmission underlie the diffuse hyperexcitability of synapsin I-deficient cortical networks. <i>Cerebral Cortex</i> , 2009 , 19, 1422-39	5.1	93
189	Synaptophysin I controls the targeting of VAMP2/synaptobrevin II to synaptic vesicles. <i>Molecular Biology of the Cell</i> , 2003 , 14, 4909-19	3.5	93
188	Graphene Oxide Nanosheets Disrupt Lipid Composition, Ca(2+) Homeostasis, and Synaptic Transmission in Primary Cortical Neurons. <i>ACS Nano</i> , 2016 , 10, 7154-71	16.7	93
187	Strategies to maximize the performance of a STED microscope. <i>Optics Express</i> , 2012 , 20, 7362-74	3.3	88
186	The role of synapsins in neuronal development. <i>Cellular and Molecular Life Sciences</i> , 2010 , 67, 1383-96	10.3	82
185	Synapsin-I- and synapsin-II-null mice display an increased age-dependent cognitive impairment. <i>Journal of Cell Science</i> , 2008 , 121, 3042-51	5.3	82
184	Interleukin-6 inhibits neurotransmitter release and the spread of excitation in the rat cerebral cortex. <i>European Journal of Neuroscience</i> , 2000 , 12, 1241-52	3.5	82
183	PRRT2 Is a Key Component of the Ca(2+)-Dependent Neurotransmitter Release Machinery. <i>Cell Reports</i> , 2016 , 15, 117-131	10.6	82
182	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, 2446-55	2.9	80

181	Nanostructured superhydrophobic substrates trigger the development of 3D neuronal networks. <i>Small</i> , 2013 , 9, 402-12	11	77
180	MAPK/Erk-dependent phosphorylation of synapsin mediates formation of functional synapses and short-term homosynaptic plasticity. <i>Journal of Cell Science</i> , 2010 , 123, 881-93	5.3	77
179	βsynuclein and synapsin III cooperatively regulate synaptic function in dopamine neurons. <i>Journal of Cell Science</i> , 2015 , 128, 2231-43	5.3	75
178	Phosphorylation of VAMP/synaptobrevin in synaptic vesicles by endogenous protein kinases. <i>Journal of Neurochemistry</i> , 1995 , 65, 1712-20	6	75
177	TAAR1 Modulates Cortical Glutamate NMDA Receptor Function. <i>Neuropsychopharmacology</i> , 2015 , 40, 2217-27	8.7	74
176	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. <i>Molecular Therapy</i> , 2020 , 28, 235-253	11.7	74
175	Phosphorylation of synapsin I by cAMP-dependent protein kinase controls synaptic vesicle dynamics in developing neurons. <i>Journal of Neuroscience</i> , 2005 , 25, 7299-308	6.6	72
174	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, 2337-42	11.5	69
173	Synapsin II desynchronizes neurotransmitter release at inhibitory synapses by interacting with presynaptic calcium channels. <i>Nature Communications</i> , 2013 , 4, 1512	17.4	69
172	REST/NRSF-mediated intrinsic homeostasis protects neuronal networks from hyperexcitability. <i>EMBO Journal</i> , 2013 , 32, 2994-3007	13	66
171	Accelerated structural maturation induced by synapsin I at developing neuromuscular synapses of <i>Xenopus laevis</i> . <i>European Journal of Neuroscience</i> , 1995 , 7, 261-70	3.5	65
170	PRRT2 controls neuronal excitability by negatively modulating Na ⁺ channel 1.2/1.6 activity. <i>Brain</i> , 2018 , 141, 1000-1016	11.2	64
169	Light-evoked hyperpolarization and silencing of neurons by conjugated polymers. <i>Scientific Reports</i> , 2016 , 6, 22718	4.9	61
168	Interfacing Graphene-Based Materials With Neural Cells. <i>Frontiers in Systems Neuroscience</i> , 2018 , 12, 12	3.5	61
167	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	5.6	61
166	Synaptic and extrasynaptic origin of the excitation/inhibition imbalance in the hippocampus of synapsin I/II/III knockout mice. <i>Cerebral Cortex</i> , 2013 , 23, 581-93	5.1	58
165	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, 2706-17	3.5	57
164	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		56

163	Subretinally injected semiconducting polymer nanoparticles rescue vision in a rat model of retinal dystrophy. <i>Nature Nanotechnology</i> , 2020 , 15, 698-708	28.7	55
162	Epileptogenic Q555X SYN1 mutant triggers imbalances in release dynamics and short-term plasticity. <i>Human Molecular Genetics</i> , 2013 , 22, 2186-99	5.6	55
161	Characterization of a Polymer-Based, Fully Organic Prosthesis for Implantation into the Subretinal Space of the Rat. <i>Advanced Healthcare Materials</i> , 2016 , 5, 2271-82	10.1	54
160	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, 7266-80	6.6	52
159	Binding of protein kinase inhibitors to synapsin I inferred from pair-wise binding site similarity measurements. <i>PLoS ONE</i> , 2010 , 5, e12214	3.7	51
158	Synapsin is a novel Rab3 effector protein on small synaptic vesicles. II. Functional effects of the Rab3A-synapsin I interaction. <i>Journal of Biological Chemistry</i> , 2004 , 279, 43769-79	5.4	51
157	Kinetic analysis of the phosphorylation-dependent interactions of synapsin I with rat brain synaptic vesicles. <i>Journal of Physiology</i> , 1997 , 504 (Pt 3), 501-15	3.9	50
156	PRRT2: from Paroxysmal Disorders to Regulation of Synaptic Function. <i>Trends in Neurosciences</i> , 2016 , 39, 668-679	13.3	49
155	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, 5868-79	6.6	48
154	The evolution of artificial light actuators in living systems: from planar to nanostructured interfaces. <i>Chemical Society Reviews</i> , 2018 , 47, 4757-4780	58.5	47
153	Synapsins contribute to the dynamic spatial organization of synaptic vesicles in an activity-dependent manner. <i>Journal of Neuroscience</i> , 2012 , 32, 12214-27	6.6	46
152	Tyrosine phosphorylation of synapsin I by Src regulates synaptic-vesicle trafficking. <i>Journal of Cell Science</i> , 2010 , 123, 2256-65	5.3	46
151	Identification of a developmentally regulated pathway of membrane retrieval in neuronal growth cones. <i>Journal of Cell Science</i> , 2008 , 121, 3757-69	5.3	46
150	Identification of synapsin I peptides that insert into lipid membranes. <i>Biochemical Journal</i> , 2001 , 354, 57-66	3.8	46
149	Kidins220/ARMS as a functional mediator of multiple receptor signalling pathways. <i>Journal of Cell Science</i> , 2012 , 125, 1845-54	5.3	45
148	Synapsin is a novel Rab3 effector protein on small synaptic vesicles. I. Identification and characterization of the synapsin I-Rab3 interactions in vitro and in intact nerve terminals. <i>Journal of Biological Chemistry</i> , 2004 , 279, 43760-8	5.4	45
147	The PRRT2 knockout mouse recapitulates the neurological diseases associated with PRRT2 mutations. <i>Neurobiology of Disease</i> , 2017 , 99, 66-83	7.5	44
146	De novo mutations of the ATP6V1A gene cause developmental encephalopathy with epilepsy. <i>Brain</i> , 2018 , 141, 1703-1718	11.2	44

145	Synapsins: from synapse to network hyperexcitability and epilepsy. <i>Seminars in Cell and Developmental Biology</i> , 2011 , 22, 408-15	7.5	43
144	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, 9872-7	11.5	43
143	B-50/GAP-43 binds to actin filaments without affecting actin polymerization and filament organization. <i>Journal of Neurochemistry</i> , 1993 , 61, 1530-3	6	43
142	Involvement of synaptic genes in the pathogenesis of autism spectrum disorders: the case of synapsins. <i>Frontiers in Pediatrics</i> , 2014 , 2, 94	3.4	42
141	Specificity of the binding of synapsin I to Src homology 3 domains. <i>Journal of Biological Chemistry</i> , 2000 , 275, 29857-67	5.4	41
140	A Novel Topology of Proline-rich Transmembrane Protein 2 (PRRT2): HINTS FOR AN INTRACELLULAR FUNCTION AT THE SYNAPSE. <i>Journal of Biological Chemistry</i> , 2016 , 291, 6111-23	5.4	40
139	Phosphorylation of synapsin domain A is required for post-tetanic potentiation. <i>Journal of Cell Science</i> , 2007 , 120, 3228-37	5.3	39
138	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	11.5	38
137	Neuronal firing modulation by a membrane-targeted photoswitch. <i>Nature Nanotechnology</i> , 2020 , 15, 296-306	28.7	38
136	Graphene Oxide Upregulates the Homeostatic Functions of Primary Astrocytes and Modulates Astrocyte-to-Neuron Communication. <i>Nano Letters</i> , 2018 , 18, 5827-5838	11.5	37
135	Specificity protein 1 (Sp1)-dependent activation of the synapsin I gene (SYN1) is modulated by RE1-silencing transcription factor (REST) and 5Rcytosine-phosphoguanine (CpG) methylation. <i>Journal of Biological Chemistry</i> , 2013 , 288, 3227-39	5.4	37
134	Phosphorylation-dependent effects of synapsin IIa on actin polymerization and network formation. <i>European Journal of Neuroscience</i> , 1997 , 9, 2712-22	3.5	36
133	Bio-inspired hybrid microelectrodes: a hybrid solution to improve long-term performance of chronic intracortical implants. <i>Frontiers in Neuroengineering</i> , 2014 , 7, 7		35
132	Selective lowering of synapsins induced by oligomeric β synuclein exacerbates memory deficits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E4648-E4657	11.5	34
131	X-linked focal epilepsy with reflex bathing seizures: Characterization of a distinct epileptic syndrome. <i>Epilepsia</i> , 2015 , 56, 1098-108	6.4	34
130	Synapsin phosphorylation by SRC tyrosine kinase enhances SRC activity in synaptic vesicles. <i>Journal of Biological Chemistry</i> , 2007 , 282, 15754-67	5.4	34
129	Roadmap on semiconductor-cell biointerfaces. <i>Physical Biology</i> , 2018 , 15, 031002	3	34
128	Synapsin III deficiency hampers β synuclein aggregation, striatal synaptic damage and nigral cell loss in an AAV-based mouse model of Parkinson's disease. <i>Acta Neuropathologica</i> , 2018 , 136, 621-639	14.3	33

127	The synapsin domain E accelerates the exocytotic cycle of synaptic vesicles in cerebellar Purkinje cells. <i>Journal of Cell Science</i> , 2006 , 119, 4257-68	5.3	33
126	Nanoparticles: A Challenging Vehicle for Neural Stimulation. <i>Frontiers in Neuroscience</i> , 2016 , 10, 105	5.1	33
125	The synapsins: multitask modulators of neuronal development. <i>Seminars in Cell and Developmental Biology</i> , 2011 , 22, 378-86	7.5	32
124	Anti-synapsin monoclonal antibodies: epitope mapping and inhibitory effects on phosphorylation and Grb2 binding. <i>Molecular Brain Research</i> , 1997 , 52, 1-16		31
123	Identification of synapsin I peptides that insert into lipid membranes. <i>Biochemical Journal</i> , 2001 , 354, 57-66	3.8	30
122	Arf6 regulates the cycling and the readily releasable pool of synaptic vesicles at hippocampal synapse. <i>ELife</i> , 2016 , 5,	8.9	30
121	Shedding Light on Living Cells. <i>Advanced Materials</i> , 2015 , 27, 7662-9	24	29
120	Long-term optical stimulation of channelrhodopsin-expressing neurons to study network plasticity. <i>Frontiers in Molecular Neuroscience</i> , 2013 , 6, 22	6.1	29
119	Synapsin I senses membrane curvature by an amphipathic lipid packing sensor motif. <i>Journal of Neuroscience</i> , 2011 , 31, 18149-54	6.6	29
118	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	5.1	28
117	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2000096	6	27
116	Octopus arm regeneration: Role of acetylcholinesterase during morphological modification. <i>Journal of Experimental Marine Biology and Ecology</i> , 2013 , 447, 93-99	2.1	27
115	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, 3356-68	5.1	27
114	The highly conserved synapsin domain E mediates synapsin dimerization and phospholipid vesicle clustering. <i>Biochemical Journal</i> , 2010 , 426, 55-64	3.8	27
113	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	5.6	26
112	2-Deoxy-d-glucose enhances tonic inhibition through the neurosteroid-mediated activation of extrasynaptic GABA receptors. <i>Epilepsia</i> , 2016 , 57, 1987-2000	6.4	25
111	Effects of phosphorylation and neuronal activity on the control of synapse formation by synapsin I. <i>Journal of Cell Science</i> , 2011 , 124, 3643-53	5.3	25
110	An Increase in Membrane Cholesterol by Graphene Oxide Disrupts Calcium Homeostasis in Primary Astrocytes. <i>Small</i> , 2019 , 15, e1900147	11	24

109	Use of SU8 as a stable and biocompatible adhesion layer for gold bioelectrodes. <i>Scientific Reports</i> , 2018 , 8, 5560	4.9	24
108	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	11.5	24
107	Influence of GABAAR monoliganded states on GABAergic responses. <i>Journal of Neuroscience</i> , 2011 , 31, 1752-61	6.6	24
106	Presynaptic NMDA receptors - dynamics and distribution in developing axons in vitro and in vivo. <i>Journal of Cell Science</i> , 2015 , 128, 768-80	5.3	23
105	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, 1260-70	6	23
104	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	5.6	23
103	Neurite-Enriched MicroRNA-218 Stimulates Translation of the GluA2 Subunit and Increases Excitatory Synaptic Strength. <i>Molecular Neurobiology</i> , 2019 , 56, 5701-5714	6.2	22
102	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	6.2	21
101	New technologies for developing second generation retinal prostheses. <i>Lab Animal</i> , 2018 , 47, 71-75	0.4	21
100	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	6.2	21
99	The synapsin gene family in basal chordates: evolutionary perspectives in metazoans. <i>BMC Evolutionary Biology</i> , 2010 , 10, 32	3	21
98	Nonsense-mediated mRNA decay and loss-of-function of the protein underlie the X-linked epilepsy associated with the W356I mutation in synapsin I. <i>PLoS ONE</i> , 2013 , 8, e67724	3.7	21
97	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, 1051-60	2.9	20
96	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	5.1	19
95	Optogenetic Modulation of Intracellular Signalling and Transcription: Focus on Neuronal Plasticity. <i>Journal of Experimental Neuroscience</i> , 2017 , 11, 1179069517703354	3.6	18
94	Functional role of ATP binding to synapsin I in synaptic vesicle trafficking and release dynamics. <i>Journal of Neuroscience</i> , 2014 , 34, 14752-68	6.6	18
93	Synapsins Are Downstream Players of the BDNF-Mediated Axonal Growth. <i>Molecular Neurobiology</i> , 2017 , 54, 484-494	6.2	17
92	A hybrid P3HT-Graphene interface for efficient photostimulation of neurons. <i>Carbon</i> , 2020 , 162, 308-317	10.4	17

91	Cell adhesion molecule L1 contributes to neuronal excitability regulating the function of voltage-gated Na ⁺ channels. <i>Journal of Cell Science</i> , 2016 , 129, 1878-91	5.3	17
90	A refined model of claudin-15 tight junction paracellular architecture by molecular dynamics simulations. <i>PLoS ONE</i> , 2017 , 12, e0184190	3.7	17
89	Molecular Dynamics Simulations of Ion Selectivity in a Claudin-15 Paracellular Channel. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 10783-10792	3.4	17
88	Phosphorylation by PKA and Cdk5 Mediates the Early Effects of Synapsin III in Neuronal Morphological Maturation. <i>Journal of Neuroscience</i> , 2015 , 35, 13148-59	6.6	15
87	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, 234-48	10.6	14
86	Membrane Environment Enables Ultrafast Isomerization of Amphiphilic Azobenzene. <i>Advanced Science</i> , 2020 , 7, 1903241	13.6	14
85	Pavlovian Conditioning of Larval : An Illustrated, Multilingual, Hands-On Manual for Odor-Taste Associative Learning in Maggots. <i>Frontiers in Behavioral Neuroscience</i> , 2017 , 11, 45	3.5	14
84	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, 314-24	7.5	13
83	Kainate induces mobilization of synaptic vesicles at the growth cone through the activation of protein kinase A. <i>Cerebral Cortex</i> , 2013 , 23, 531-41	5.1	13
82	Dentate gyrus network dysfunctions precede the symptomatic phase in a genetic mouse model of seizures. <i>Frontiers in Cellular Neuroscience</i> , 2013 , 7, 138	6.1	13
81	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, 147-9		13
80	Sub-millisecond Control of Neuronal Firing by Organic Light-Emitting Diodes. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019 , 7, 278	5.8	13
79	Obligatory role of endoplasmic reticulum in brain FDG uptake. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2019 , 46, 1184-1196	8.8	13
78	Spike-Related Electrophysiological Identification of Cultured Hippocampal Excitatory and Inhibitory Neurons. <i>Molecular Neurobiology</i> , 2019 , 56, 6276-6292	6.2	12
77	Acute knockdown of Depdc5 leads to synaptic defects in mTOR-related epileptogenesis. <i>Neurobiology of Disease</i> , 2020 , 139, 104822	7.5	12
76	Intrathecal immunoglobulin A and G antibodies to synapsin in a patient with limbic encephalitis. <i>Neurology: Neuroimmunology and NeuroInflammation</i> , 2015 , 2, e169	9.1	12
75	Leucine-rich repeat kinase 2 phosphorylation on synapsin I regulates glutamate release at pre-synaptic sites. <i>Journal of Neurochemistry</i> , 2019 , 150, 264-281	6	11
74	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	12.7	11

73	Functional Interaction between the Scaffold Protein Kidins220/ARMS and Neuronal Voltage-Gated Na ⁺ Channels. <i>Journal of Biological Chemistry</i> , 2015 , 290, 18045-18055	5.4	11
72	Fine Tuning of Synaptic Plasticity and Filtering by GABA Released from Hippocampal Autaptic Granule Cells. <i>Cerebral Cortex</i> , 2016 , 26, 1149-67	5.1	11
71	Biallelic DMXL2 mutations impair autophagy and cause Ohtahara syndrome with progressive course. <i>Brain</i> , 2019 , 142, 3876-3891	11.2	11
70	Kidins220/ARMS is a novel modulator of short-term synaptic plasticity in hippocampal GABAergic neurons. <i>PLoS ONE</i> , 2012 , 7, e35785	3.7	11
69	Biocompatibility of a Magnetic Tunnel Junction Sensor Array for the Detection of Neuronal Signals in Culture. <i>Frontiers in Neuroscience</i> , 2018 , 12, 909	5.1	11
68	Neuronal hyperactivity causes Na/H exchanger-induced extracellular acidification at active synapses. <i>Journal of Cell Science</i> , 2017 , 130, 1435-1449	5.3	10
67	Photochemistry of Organic Retinal Prostheses. <i>Annual Review of Physical Chemistry</i> , 2019 , 70, 99-121	15.7	10
66	Clinical spectrum and genotype-phenotype correlations in PRRT2 Italian patients. <i>European Journal of Paediatric Neurology</i> , 2020 , 28, 193-197	3.8	10
65	Emerging Role of the Autophagy/Lysosomal Degradative Pathway in Neurodevelopmental Disorders With Epilepsy. <i>Frontiers in Cellular Neuroscience</i> , 2020 , 14, 39	6.1	9
64	Small-Animal F-FDG PET for Research on : Applications and Future Directions in Invertebrate Neuroscience and Tissue Regeneration. <i>Journal of Nuclear Medicine</i> , 2018 , 59, 1302-1307	8.9	9
63	Genotype-phenotype correlations in patients with de novo pathogenic variants. <i>Neurology: Genetics</i> , 2020 , 6, e528	3.8	9
62	Kidins220/ARMS controls astrocyte calcium signaling and neuron-astrocyte communication. <i>Cell Death and Differentiation</i> , 2020 , 27, 1505-1519	12.7	9
61	Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity. <i>Advanced Functional Materials</i> , 2021 , 31, 2005300	15.6	9
60	Effect of starvation on brain glucose metabolism and F-2-fluoro-2-deoxyglucose uptake: an experimental in-vivo and ex-vivo study. <i>EJNMMI Research</i> , 2018 , 8, 44	3.6	9
59	Autoantibodies to synapsin I sequester synapsin I and alter synaptic function. <i>Cell Death and Disease</i> , 2019 , 10, 864	9.8	8
58	Molecular Machines Determining the Fate of Endocytosed Synaptic Vesicles in Nerve Terminals. <i>Frontiers in Synaptic Neuroscience</i> , 2016 , 8, 10	3.5	8
57	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	9.8	8
56	Synapsin I and Synapsin II regulate neurogenesis in the dentate gyrus of adult mice. <i>Oncotarget</i> , 2018 , 9, 18760-18774	3.3	8

55	Conopeptide-Functionalized Nanoparticles Selectively Antagonize Extrasynaptic -Methyl-d-aspartate Receptors and Protect Hippocampal Neurons from Excitotoxicity. <i>ACS Nano</i> , 2020 , 14, 6866-6877	16.7	7
54	APACHE Is an AP2-Interacting Protein Involved in Synaptic Vesicle Trafficking and Neuronal Development. <i>Cell Reports</i> , 2017 , 21, 3596-3611	10.6	7
53	Progress of Induced Pluripotent Stem Cell Technologies to Understand Genetic Epilepsy. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	6
52	Altered Intracellular Calcium Homeostasis Underlying Enhanced Glutamatergic Transmission in Striatal-Enriched Tyrosine Phosphatase (STEP) Knockout Mice. <i>Molecular Neurobiology</i> , 2018 , 55, 8084-8102	6.2	6
51	Synapsin-antibodies in psychiatric and neurological disorders: Prevalence and clinical findings. <i>Brain, Behavior, and Immunity</i> , 2017 , 66, 125-134	16.6	6
50	Rahmenbedingungen für die Klassifizierung graphenbasierter Materialien. <i>Angewandte Chemie</i> , 2014 , 126, 7846-7850	3.6	6
49	Protein phosphorylation in rat pineal gland and its regulation in supersensitive and subsensitive states. <i>Journal of Neurochemistry</i> , 1987 , 48, 1069-76	6	6
48	Isobaric Labeling Proteomics Allows a High-Throughput Investigation of Protein Corona Orientation. <i>Analytical Chemistry</i> , 2021 , 93, 784-791	7.8	6
47	Behavioral Assessment of Vision in Pigs. <i>Journal of the American Association for Laboratory Animal Science</i> , 2018 , 57, 350-356	1.3	6
46	An updated reappraisal of synapsins: structure, function and role in neurological and psychiatric disorders. <i>Neuroscience and Biobehavioral Reviews</i> , 2021 , 130, 33-60	9	6
45	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	6.1	5
44	Alpha-synuclein/synapsin III pathological interplay boosts the motor response to methylphenidate. <i>Neurobiology of Disease</i> , 2020 , 138, 104789	7.5	5
43	Increased responsiveness at the cerebellar input stage in the PRRT2 knockout model of paroxysmal kinesigenic dyskinesia. <i>Neurobiology of Disease</i> , 2021 , 152, 105275	7.5	5
42	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	5.5	5
41	Neuronal Cultures and Nanomaterials. <i>Advances in Neurobiology</i> , 2019 , 22, 51-79	2.1	4
40	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	6.1	4
39	The Transcription Factors EBF1 and EBF2 Are Positive Regulators of Myelination in Schwann Cells. <i>Molecular Neurobiology</i> , 2017 , 54, 8117-8127	6.2	4
38	Investigation of the stability and biocompatibility of commonly used electrode materials in organic neuro-optoelectronics 2015 ,		4

37	Impaired GABA-mediated presynaptic inhibition increases excitatory strength and alters short-term plasticity in synapsin knockout mice. <i>Oncotarget</i> , 2017 , 8, 90061-90076	3.3	4
36	Biocompatibility of a Conjugated Polymer Retinal Prosthesis in the Domestic Pig. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 579141	5.8	4
35	Presynaptic L-Type Ca Channels Increase Glutamate Release Probability and Excitatory Strength in the Hippocampus during Chronic Neuroinflammation. <i>Journal of Neuroscience</i> , 2020 , 40, 6825-6841	6.6	4
34	Hydrogenated Graphene Improves Neuronal Network Maturation and Excitatory Transmission. <i>Advanced Biology</i> , 2021 , 5, e2000177		4
33	Epitope specificity of anti-synapsin autoantibodies: Differential targeting of synapsin I domains. <i>PLoS ONE</i> , 2018 , 13, e0208636	3.7	4
32	Expanding the Nude SCID/CID Phenotype Associated with FOXP1 Homozygous, Compound Heterozygous, or Heterozygous Mutations. <i>Journal of Clinical Immunology</i> , 2021 , 41, 756-768	5.7	4
31	Synapsins are expressed at neuronal and non-neuronal locations in Octopus vulgaris. <i>Scientific Reports</i> , 2019 , 9, 15430	4.9	3
30	Proline-rich transmembrane protein 2 (PRRT2) regulates the actin cytoskeleton during synaptogenesis. <i>Cell Death and Disease</i> , 2020 , 11, 856	9.8	3
29	An interaction between PRRT2 and Na/K ATPase contributes to the control of neuronal excitability. <i>Cell Death and Disease</i> , 2021 , 12, 292	9.8	3
28	REST/NRSF deficiency impairs autophagy and leads to cellular senescence in neurons. <i>Aging Cell</i> , 2021 , 20, e13471	9.9	3
27	¹ H NMR Spectroscopy Characterization of Porcine Vitreous Humor in Physiological and Photoreceptor Degeneration Conditions 2019 , 60, 741-747		2
26	The porcine iodoacetic acid model of retinal degeneration: Morpho-functional characterization of the visual system. <i>Experimental Eye Research</i> , 2020 , 193, 107979	3.7	2
25	Controlling cell functions by light 2015 ,		2
24	REST/NRSF drives homeostatic plasticity of inhibitory synapses in a target-dependent fashion. <i>ELife</i> , 2021 , 10,	8.9	2
23	Synapsins and Synaptic Vesicle Storage 2015 , 295-326		2
22	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	5.7	2
21	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2080071	6	2
20	The physics of plasma membrane photostimulation. <i>APL Materials</i> , 2021 , 9, 030901	5.7	2

19	The enhancement of activity rescues the establishment of Mecp2 null neuronal phenotypes. <i>EMBO Molecular Medicine</i> , 2021 , 13, e12433	12	2
18	PRRT2 modulates presynaptic Ca influx by interacting with P/Q-type channels. <i>Cell Reports</i> , 2021 , 35, 109248	10.6	2
17	Clinical and Genetic Features in Patients With Reflex Bathing Epilepsy. <i>Neurology</i> , 2021 , 97, e577-e586	6.5	2
16	A developmental stage- and Kidins220-dependent switch in astrocyte responsiveness to brain-derived neurotrophic factor. <i>Journal of Cell Science</i> , 2021 , 134,	5.3	2
15	The lipid composition of few layers graphene and graphene oxide biomolecular corona. <i>Carbon</i> , 2021 , 185, 591-591	10.4	2
14	Organic Optoelectronic Interfaces for Vision Restoration 2017 , 269-286		1
13	3D Cell Cultures: Nanostructured Superhydrophobic Substrates Trigger the Development of 3D Neuronal Networks (Small 3/2013). <i>Small</i> , 2013 , 9, 334-334	11	1
12	Structural Mechanism of \bar{E} 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	6.1	1
11	Graphene Nanoplatelets Render Poly(3-Hydroxybutyrate) a Suitable Scaffold to Promote Neuronal Network Development. <i>Frontiers in Neuroscience</i> , 2021 , 15, 731198	5.1	1
10	Reply to: Questions about the role of P3HT nanoparticles in retinal stimulation. <i>Nature Nanotechnology</i> , 2021 ,	28.7	1
9	Magnetic Tunnel Junction Based Chip to Detect the Magnetic Field of Neuronal Signals: A Platform for In Vitro Studies. <i>Proceedings (mdpi)</i> , 2017 , 1, 735	0.3	
8	Kidins220/ARMS modulates brain morphology and anxiety-like traits in adult mice.. <i>Cell Death Discovery</i> , 2022 , 8, 58	6.9	
7	Pathophysiology of Paroxysmal Dyskinesia 2021 , 95-108		
6	Reply to Comment on Conopeptide-Functionalized Nanoparticles Selectively Antagonize Extrasynaptic N-Methyl-d-aspartate Receptors and Protect Hippocampal Neurons from Excitotoxicity In Vitro. <i>ACS Nano</i> , 2021 , 15, 15409-15417	16.7	
5	Complexity and Computation at the Synapse: Multilayer Architecture and Role of Diffusion in Shaping Synaptic Activity and Computation 2014 , 269-298		
4	Modulation of neuronal firing: what role can nanotechnology play?. <i>Nanomedicine</i> , 2020 , 15, 2895-2900	5.6	
3	Neuronal Networks: Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity (Adv. Funct. Mater. 11/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170075	15.6	
2	Stability Studies of New Caged bis-deoxy-coelenterazine Derivatives and Their Potential Use as Cellular pH Probes. <i>Photochemistry and Photobiology</i> , 2021 , 97, 343-352	3.6	

- 1 Giving names to the actors of synaptic transmission: The long journey from synaptic vesicles to neural plasticity. *Advances in Pharmacology*, **2021**, 90, 19-37

5·7