Fabio Benfenati

List of Publications by Year in Descending Order

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	Kidins220/ARMS modulates brain morphology and anxiety-like traits in adult mice.. *Cell Death Discovery*, **2022**, 8, 58	6.9	
215	Pathophysiology of Paroxysmal Dyskinesia **2021**, 95-108		
214	REST/NRSF drives homeostatic plasticity of inhibitory synapses in a target-dependent fashion. *ELife* , **2021**, 10,	8.9	2
213	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	16.7	
212	Isobaric Labeling Proteomics Allows a High-Throughput Investigation of Protein Corona Orientation. *Analytical Chemistry*, **2021**, 93, 784-791	7.8	6
211	The physics of plasma membrane photostimulation. *APL Materials*, **2021**, 9, 030901	5.7	2
210	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	15.6	
209	The enhancement of activity rescues the establishment of Mecp2 null neuronal phenotypes. *EMBO Molecular Medicine*, **2021**, 13, e12433	12	2
208	An interaction between PRRT2 and Na/K ATPase contributes to the control of neuronal excitability. *Cell Death and Disease*, **2021**, 12, 292	9.8	3
207	Increased responsiveness at the cerebellar input stage in the PRRT2 knockout model of paroxysmal kinesigenic dyskinesia. *Neurobiology of Disease*, **2021**, 152, 105275	7.5	5
206	PRRT2 modulates presynaptic Ca influx by interacting with P/Q-type channels. *Cell Reports*, **2021**, 35, 109248	10.6	2
205	Clinical and Genetic Features in Patients With Reflex Bathing Epilepsy. *Neurology*, **2021**, 97, e577-e586	6.5	2
204	Dysfunction of the serotonergic system in the brain of synapsin triple knockout mice is associated with behavioral abnormalities resembling synapsin-related human pathologies. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2021**, 105, 110135	5.5	5
203	Stability Studies of New Caged bis-deoxy-coelenterazine Derivatives and Their Potential Use as Cellular pH Probes. *Photochemistry and Photobiology*, **2021**, 97, 343-352	3.6	
202	Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity. *Advanced Functional Materials*, **2021**, 31, 2005300	15.6	9
201	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	
200	Hydrogenated Graphene Improves Neuronal Network Maturation and Excitatory Transmission. *Advanced Biology*, **2021**, 5, e2000177		4

199	Neuroinflammation induces synaptic scaling through IL-1□mediated activation of the transcriptional repressor REST/NRSF. *Cell Death and Disease*, **2021**, 12, 180	9.8	8
198	Structural Mechanism of □Currents in a Mutated Kv7.2 Voltage Sensor Domain from Molecular Dynamics Simulations. *Journal of Chemical Information and Modeling*, **2021**, 61, 1354-1367	6.1	1
197	A developmental stage- and Kidins220-dependent switch in astrocyte responsiveness to brain-derived neurotrophic factor. *Journal of Cell Science*, **2021**, 134,	5.3	2
196	Graphene Nanoplatelets Render Poly(3-Hydroxybutyrate) a Suitable Scaffold to Promote Neuronal Network Development. *Frontiers in Neuroscience*, **2021**, 15, 731198	5.1	1
195	The lipid composition of few layers graphene and graphene oxide biomolecular corona. *Carbon*, **2021**, 185, 591-591	10.4	2
194	REST/NRSF deficiency impairs autophagy and leads to cellular senescence in neurons. *Aging Cell*, **2021**, 20, e13471	9.9	3
193	An updated reappraisal of synapsins: structure, function and role in neurological and psychiatric disorders. *Neuroscience and Biobehavioral Reviews*, **2021**, 130, 33-60	9	6
192	Expanding the Nude SCID/CID Phenotype Associated with FOXN1 Homozygous, Compound Heterozygous, or Heterozygous Mutations. *Journal of Clinical Immunology*, **2021**, 41, 756-768	5.7	4
191	Reply to: Questions about the role of P3HT nanoparticles in retinal stimulation. *Nature Nanotechnology*, **2021**,	28.7	1
190	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. *Advanced Intelligent Systems*, **2020**, 2, 2000096	6	27
189	Conopeptide-Functionalized Nanoparticles Selectively Antagonize Extrasynaptic -Methyl-d-aspartate Receptors and Protect Hippocampal Neurons from Excitotoxicity. *ACS Nano*, **2020**, 14, 6866-6877	16.7	7
188	Membrane Environment Enables Ultrafast Isomerization of Amphiphilic Azobenzene. *Advanced Science*, **2020**, 7, 1903241	13.6	14
187	Emerging Role of the Autophagy/Lysosomal Degradative Pathway in Neurodevelopmental Disorders With Epilepsy. *Frontiers in Cellular Neuroscience*, **2020**, 14, 39	6.1	9
186	Subretinally injected semiconducting polymer nanoparticles rescue vision in a rat model of retinal dystrophy. *Nature Nanotechnology*, **2020**, 15, 698-708	28.7	55
185	Clinical spectrum and genotype-phenotype correlations in PRRT2 Italian patients. *European Journal of Paediatric Neurology*, **2020**, 28, 193-197	3.8	10
184	Alpha-synuclein/synapsin III pathological interplay boosts the motor response to methylphenidate. *Neurobiology of Disease*, **2020**, 138, 104789	7.5	5
183	A hybrid P3HT-Graphene interface for efficient photostimulation of neurons. *Carbon*, **2020**, 162, 308-317	10.4	17
182	The porcine iodoacetic acid model of retinal degeneration: Morpho-functional characterization of the visual system. *Experimental Eye Research*, **2020**, 193, 107979	3.7	2

181	Acute knockdown of Depdc5 leads to synaptic defects in mTOR-related epileptogenesis. *Neurobiology of Disease*, **2020**, 139, 104822	7.5	12
180	Progress of Induced Pluripotent Stem Cell Technologies to Understand Genetic Epilepsy. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	6
179	Genotype-phenotype correlations in patients with de novo pathogenic variants. *Neurology: Genetics* , **2020**, 6, e528	3.8	9
178	Neuronal firing modulation by a membrane-targeted photoswitch. *Nature Nanotechnology*, **2020**, 15, 296-306	28.7	38
177	Proline-rich transmembrane protein 2 (PRRT2) regulates the actin cytoskeleton during synaptogenesis. *Cell Death and Disease*, **2020**, 11, 856	9.8	3
176	Biocompatibility of a Conjugated Polymer Retinal Prosthesis in the Domestic Pig. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 579141	5.8	4
175	Modulation of neuronal firing: what role can nanotechnology play?. *Nanomedicine*, **2020**, 15, 2895-2900	5.6	
174	Presynaptic L-Type Ca Channels Increase Glutamate Release Probability and Excitatory Strength in the Hippocampus during Chronic Neuroinflammation. *Journal of Neuroscience*, **2020**, 40, 6825-6841	6.6	4
173	Engineering REST-Specific Synthetic PUF Proteins to Control Neuronal Gene Expression: A Combined Experimental and Computational Study. *ACS Synthetic Biology*, **2020**, 9, 2039-2054	5.7	2
172	Brain-Inspired Structural Plasticity through Reweighting and Rewiring in Multi-Terminal Self-Organizing Memristive Nanowire Networks. *Advanced Intelligent Systems*, **2020**, 2, 2080071	6	2
171	Kidins220/ARMS controls astrocyte calcium signaling and neuron-astrocyte communication. *Cell Death and Differentiation*, **2020**, 27, 1505-1519	12.7	9
170	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. *Molecular Therapy*, **2020**, 28, 235-253	11.7	74
169	Neurite-Enriched MicroRNA-218 Stimulates Translation of the GluA2 Subunit and Increases Excitatory Synaptic Strength. *Molecular Neurobiology*, **2019**, 56, 5701-5714	6.2	22
168	Photochemistry of Organic Retinal Prostheses. *Annual Review of Physical Chemistry*, **2019**, 70, 99-121	15.7	10
167	Synapsin I Controls Synaptic Maturation of Long-Range Projections in the Lateral Amygdala in a Targeted Selective Fashion. *Frontiers in Cellular Neuroscience*, **2019**, 13, 220	6.1	5
166	Leucine-rich repeat kinase 2 phosphorylation on synapsin I regulates glutamate release at pre-synaptic sites. *Journal of Neurochemistry*, **2019**, 150, 264-281	6	11
165	Neuronal Cultures and Nanomaterials. *Advances in Neurobiology*, **2019**, 22, 51-79	2.1	4
164	An Increase in Membrane Cholesterol by Graphene Oxide Disrupts Calcium Homeostasis in Primary Astrocytes. *Small*, **2019**, 15, e1900147	11	24

163	TBC1D24 regulates axonal outgrowth and membrane trafficking at the growth cone in rodent and human neurons. *Cell Death and Differentiation*, **2019**, 26, 2464-2478	12.7	11
162	1H NMR Spectroscopy Characterization of Porcine Vitreous Humor in Physiological and Photoreceptor Degeneration Conditions **2019**, 60, 741-747		2
161	Spike-Related Electrophysiological Identification of Cultured Hippocampal Excitatory and Inhibitory Neurons. *Molecular Neurobiology*, **2019**, 56, 6276-6292	6.2	12
160	Mild Inactivation of RE-1 Silencing Transcription Factor (REST) Reduces Susceptibility to Kainic Acid-Induced Seizures. *Frontiers in Cellular Neuroscience*, **2019**, 13, 580	6.1	4
159	Synapsins are expressed at neuronal and non-neuronal locations in Octopus vulgaris. *Scientific Reports*, **2019**, 9, 15430	4.9	3
158	Biallelic DMXL2 mutations impair autophagy and cause Ohtahara syndrome with progressive course. *Brain*, **2019**, 142, 3876-3891	11.2	11
157	Autoantibodies to synapsin I sequestrate synapsin I and alter synaptic function. *Cell Death and Disease*, **2019**, 10, 864	9.8	8
156	Sub-millisecond Control of Neuronal Firing by Organic Light-Emitting Diodes. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 278	5.8	13
155	Obligatory role of endoplasmic reticulum in brain FDG uptake. *European Journal of Nuclear Medicine and Molecular Imaging*, **2019**, 46, 1184-1196	8.8	13
154	The epilepsy-associated protein TBC1D24 is required for normal development, survival and vesicle trafficking in mammalian neurons. *Human Molecular Genetics*, **2019**, 28, 584-597	5.6	23
153	Constitutive Inactivation of the PRRT2 Gene Alters Short-Term Synaptic Plasticity and Promotes Network Hyperexcitability in Hippocampal Neurons. *Cerebral Cortex*, **2019**, 29, 2010-2033	5.1	19
152	New technologies for developing second generation retinal prostheses. *Lab Animal*, **2018**, 47, 71-75	0.4	21
151	Use of SU8 as a stable and biocompatible adhesion layer for gold bioelectrodes. *Scientific Reports*, **2018**, 8, 5560	4.9	24
150	The evolution of artificial light actuators in living systems: from planar to nanostructured interfaces. *Chemical Society Reviews*, **2018**, 47, 4757-4780	58.5	47
149	De novo mutations of the ATP6V1A gene cause developmental encephalopathy with epilepsy. *Brain*, **2018**, 141, 1703-1718	11.2	44
148	Delivery of Brain-Derived Neurotrophic Factor by 3D Biocompatible Polymeric Scaffolds for Neural Tissue Engineering and Neuronal Regeneration. *Molecular Neurobiology*, **2018**, 55, 8788-8798	6.2	21
147	Altered Intracellular Calcium Homeostasis Underlying Enhanced Glutamatergic Transmission in Striatal-Enriched Tyrosine Phosphatase (STEP) Knockout Mice. *Molecular Neurobiology*, **2018**, 55, 8084-8102	6.2	6
146	PRRT2 controls neuronal excitability by negatively modulating Na+ channel 1.2/1.6 activity. *Brain*, **2018**, 141, 1000-1016	11.2	64

145	Small-Animal F-FDG PET for Research on : Applications and Future Directions in Invertebrate Neuroscience and Tissue Regeneration. *Journal of Nuclear Medicine*, **2018**, 59, 1302-1307	8.9	9
144	Synapsin III deficiency hampers -synuclein aggregation, striatal synaptic damage and nigral cell loss in an AAV-based mouse model of Parkinson's disease. *Acta Neuropathologica*, **2018**, 136, 621-639	14.3	33
143	Interfacing Graphene-Based Materials With Neural Cells. *Frontiers in Systems Neuroscience*, **2018**, 12, 12	3.5	61
142	Graphene Oxide Upregulates the Homeostatic Functions of Primary Astrocytes and Modulates Astrocyte-to-Neuron Communication. *Nano Letters*, **2018**, 18, 5827-5838	11.5	37
141	Roadmap on semiconductor-cell biointerfaces. *Physical Biology*, **2018**, 15, 031002	3	34
140	Effect of starvation on brain glucose metabolism and F-2-fluoro-2-deoxyglucose uptake: an experimental in-vivo and ex-vivo study. *EJNMMI Research*, **2018**, 8, 44	3.6	9
139	Synapsin I and Synapsin II regulate neurogenesis in the dentate gyrus of adult mice. *Oncotarget*, **2018**, 9, 18760-18774	3.3	8
138	Epitope specificity of anti-synapsin autoantibodies: Differential targeting of synapsin I domains. *PLoS ONE*, **2018**, 13, e0208636	3.7	4
137	Behavioral Assessment of Vision in Pigs. *Journal of the American Association for Laboratory Animal Science*, **2018**, 57, 350-356	1.3	6
136	Biocompatibility of a Magnetic Tunnel Junction Sensor Array for the Detection of Neuronal Signals in Culture. *Frontiers in Neuroscience*, **2018**, 12, 909	5.1	11
135	Safety Assessment of Graphene-Based Materials: Focus on Human Health and the Environment. *ACS Nano*, **2018**, 12, 10582-10620	16.7	292
134	Molecular Dynamics Simulations of Ion Selectivity in a Claudin-15 Paracellular Channel. *Journal of Physical Chemistry B*, **2018**, 122, 10783-10792	3.4	17
133	Synapsins Are Downstream Players of the BDNF-Mediated Axonal Growth. *Molecular Neurobiology*, **2017**, 54, 484-494	6.2	17
132	The PRRT2 knockout mouse recapitulates the neurological diseases associated with PRRT2 mutations. *Neurobiology of Disease*, **2017**, 99, 66-83	7.5	44
131	A fully organic retinal prosthesis restores vision in a rat model of degenerative blindness. *Nature Materials*, **2017**, 16, 681-689	27	158
130	Neuronal hyperactivity causes Na/H exchanger-induced extracellular acidification at active synapses. *Journal of Cell Science*, **2017**, 130, 1435-1449	5.3	10
129	Selective lowering of synapsins induced by oligomeric -synuclein exacerbates memory deficits. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E4648-E4657	11.5	34
128	A novel SYN1 missense mutation in non-syndromic X-linked intellectual disability affects synaptic vesicle life cycle, clustering and mobility. *Human Molecular Genetics*, **2017**, 26, 4699-4714	5.6	26

127	Optogenetic Modulation of Intracellular Signalling and Transcription: Focus on Neuronal Plasticity. *Journal of Experimental Neuroscience*, **2017**, 11, 1179069517703354	3.6	18
126	Organic Optoelectronic Interfaces for Vision Restoration **2017**, 269-286		1
125	The Knockout of Synapsin II in Mice Impairs Social Behavior and Functional Connectivity Generating an ASD-like Phenotype. *Cerebral Cortex*, **2017**, 27, 5014-5023	5.1	28
124	Magnetic Tunnel Junction Based Chip to Detect the Magnetic Field of Neuronal Signals: A Platform for In Vitro Studies. *Proceedings (mdpi)*, **2017**, 1, 735	0.3	
123	Synapsin-antibodies in psychiatric and neurological disorders: Prevalence and clinical findings. *Brain, Behavior, and Immunity*, **2017**, 66, 125-134	16.6	6
122	Intersectin associates with synapsin and regulates its nanoscale localization and function. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12057-12062	11.5	24
121	The Transcription Factors EBF1 and EBF2 Are Positive Regulators of Myelination in Schwann Cells. *Molecular Neurobiology*, **2017**, 54, 8117-8127	6.2	4
120	APache Is an AP2-Interacting Protein Involved in Synaptic Vesicle Trafficking and Neuronal Development. *Cell Reports*, **2017**, 21, 3596-3611	10.6	7
119	Pavlovian Conditioning of Larval : An Illustrated, Multilingual, Hands-On Manual for Odor-Taste Associative Learning in Maggots. *Frontiers in Behavioral Neuroscience*, **2017**, 11, 45	3.5	14
118	A refined model of claudin-15 tight junction paracellular architecture by molecular dynamics simulations. *PLoS ONE*, **2017**, 12, e0184190	3.7	17
117	Impaired GABA-mediated presynaptic inhibition increases excitatory strength and alters short-term plasticity in synapsin knockout mice. *Oncotarget*, **2017**, 8, 90061-90076	3.3	4
116	PRRT2: from Paroxysmal Disorders to Regulation of Synaptic Function. *Trends in Neurosciences*, **2016**, 39, 668-679	13.3	49
115	2-Deoxy-d-glucose enhances tonic inhibition through the neurosteroid-mediated activation of extrasynaptic GABA receptors. *Epilepsia*, **2016**, 57, 1987-2000	6.4	25
114	Light-evoked hyperpolarization and silencing of neurons by conjugated polymers. *Scientific Reports*, **2016**, 6, 22718	4.9	61
113	Fine Tuning of Synaptic Plasticity and Filtering by GABA Released from Hippocampal Autaptic Granule Cells. *Cerebral Cortex*, **2016**, 26, 1149-67	5.1	11
112	A Novel Topology of Proline-rich Transmembrane Protein 2 (PRRT2): HINTS FOR AN INTRACELLULAR FUNCTION AT THE SYNAPSE. *Journal of Biological Chemistry*, **2016**, 291, 6111-23	5.4	40
111	Regulation of neural gene transcription by optogenetic inhibition of the RE1-silencing transcription factor. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E91-100	11.5	38
110	Cell adhesion molecule L1 contributes to neuronal excitability regulating the function of voltage-gated Na+ channels. *Journal of Cell Science*, **2016**, 129, 1878-91	5.3	17

109	Arf6 regulates the cycling and the readily releasable pool of synaptic vesicles at hippocampal synapse. *ELife*, **2016**, 5,	8.9	30
108	Nanoparticles: A Challenging Vehicle for Neural Stimulation. *Frontiers in Neuroscience*, **2016**, 10, 105	5.1	33
107	Molecular Machines Determining the Fate of Endocytosed Synaptic Vesicles in Nerve Terminals. *Frontiers in Synaptic Neuroscience*, **2016**, 8, 10	3.5	8
106	Graphene Oxide Nanosheets Disrupt Lipid Composition, Ca(2+) Homeostasis, and Synaptic Transmission in Primary Cortical Neurons. *ACS Nano*, **2016**, 10, 7154-71	16.7	93
105	Characterization of a Polymer-Based, Fully Organic Prosthesis for Implantation into the Subretinal Space of the Rat. *Advanced Healthcare Materials*, **2016**, 5, 2271-82	10.1	54
104	PRRT2 Is a Key Component of the Ca(2+)-Dependent Neurotransmitter Release Machinery. *Cell Reports*, **2016**, 15, 117-131	10.6	82
103	Functional Interaction between the Scaffold Protein Kidins220/ARMS and Neuronal Voltage-Gated Na+ Channels. *Journal of Biological Chemistry*, **2015**, 290, 18045-18055	5.4	11
102	synuclein and synapsin III cooperatively regulate synaptic function in dopamine neurons. *Journal of Cell Science*, **2015**, 128, 2231-43	5.3	75
101	TAAR1 Modulates Cortical Glutamate NMDA Receptor Function. *Neuropsychopharmacology*, **2015**, 40, 2217-27	8.7	74
100	Identification and Expression of Acetylcholinesterase in Octopus vulgaris Arm Development and Regeneration: a Conserved Role for ACHE?. *Molecular Neurobiology*, **2015**, 52, 45-56	6.2	21
99	Rapid Conversion of Fibroblasts into Functional Forebrain GABAergic Interneurons by Direct Genetic Reprogramming. *Cell Stem Cell*, **2015**, 17, 719-734	18	111
98	Synapsin III acts downstream of semaphorin 3A/CDK5 signaling to regulate radial migration and orientation of pyramidal neurons in vivo. *Cell Reports*, **2015**, 11, 234-48	10.6	14
97	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. *Neurobiology of Disease*, **2015**, 74, 314-24	7.5	13
96	Shedding Light on Living Cells. *Advanced Materials*, **2015**, 27, 7662-9	24	29
95	Photothermal cellular stimulation in functional bio-polymer interfaces. *Scientific Reports*, **2015**, 5, 8911	4.9	105
94	Intrathecal immunoglobulin A and G antibodies to synapsin in a patient with limbic encephalitis. *Neurology: Neuroimmunology and NeuroInflammation*, **2015**, 2, e169	9.1	12
93	Asynchronous GABA Release Is a Key Determinant of Tonic Inhibition and Controls Neuronal Excitability: A Study in the Synapsin II-/- Mouse. *Cerebral Cortex*, **2015**, 25, 3356-68	5.1	27
92	X-linked focal epilepsy with reflex bathing seizures: Characterization of a distinct epileptic syndrome. *Epilepsia*, **2015**, 56, 1098-108	6.4	34

91	Investigation of the stability and biocompatibility of commonly used electrode materials in organic neuro-optoelectronics **2015**,		4
90	Controlling cell functions by light **2015**,		2
89	Phosphorylation by PKA and Cdk5 Mediates the Early Effects of Synapsin III in Neuronal Morphological Maturation. *Journal of Neuroscience*, **2015**, 35, 13148-59	6.6	15
88	Direct conversion of fibroblasts into functional astrocytes by defined transcription factors. *Stem Cell Reports*, **2015**, 4, 25-36	8	137
87	Presynaptic NMDA receptors - dynamics and distribution in developing axons in vitro and in vivo. *Journal of Cell Science*, **2015**, 128, 768-80	5.3	23
86	Synapsins and Synaptic Vesicle Storage **2015**, 295-326		2
85	Classification framework for graphene-based materials. *Angewandte Chemie - International Edition*, **2014**, 53, 7714-8	16.4	287
84	Bio-inspired hybrid microelectrodes: a hybrid solution to improve long-term performance of chronic intracortical implants. *Frontiers in Neuroengineering*, **2014**, 7, 7		35
83	Involvement of synaptic genes in the pathogenesis of autism spectrum disorders: the case of synapsins. *Frontiers in Pediatrics*, **2014**, 2, 94	3.4	42
82	TBC1D24 regulates neuronal migration and maturation through modulation of the ARF6-dependent pathway. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2337-42	11.5	69
81	Synaptic recruitment of gephyrin regulates surface GABAA receptor dynamics for the expression of inhibitory LTP. *Nature Communications*, **2014**, 5, 3921	17.4	115
80	Rahmenbedingungen f□ die Klassifizierung graphenbasierter Materialien. *Angewandte Chemie*, **2014**, 126, 7846-7850	3.6	6
79	SYN2 is an autism predisposing gene: loss-of-function mutations alter synaptic vesicle cycling and axon outgrowth. *Human Molecular Genetics*, **2014**, 23, 90-103	5.6	61
78	Phosphorylation of synapsin I by cyclin-dependent kinase-5 sets the ratio between the resting and recycling pools of synaptic vesicles at hippocampal synapses. *Journal of Neuroscience*, **2014**, 34, 7266-80	6.6	52
77	Functional role of ATP binding to synapsin I in synaptic vesicle trafficking and release dynamics. *Journal of Neuroscience*, **2014**, 34, 14752-68	6.6	18
76	Complexity and Computation at the Synapse: Multilayer Architecture and Role of Diffusion in Shaping Synaptic Activity and Computation **2014**, 269-298		
75	Autism-related behavioral abnormalities in synapsin knockout mice. *Behavioural Brain Research*, **2013**, 251, 65-74	3.4	97
74	Nanostructured superhydrophobic substrates trigger the development of 3D neuronal networks. *Small*, **2013**, 9, 402-12	11	77

73	Octopus arm regeneration: Role of acetylcholinesterase during morphological modification. *Journal of Experimental Marine Biology and Ecology*, **2013**, 447, 93-99	2.1	27
72	A polymer optoelectronic interface restores light sensitivity in blind rat retinas. *Nature Photonics*, **2013**, 7, 400-406	33.9	210
71	Novel compound heterozygous mutations in TBC1D24 cause familial malignant migrating partial seizures of infancy. *Human Mutation*, **2013**, 34, 869-72	4.7	99
70	Synapsin II desynchronizes neurotransmitter release at inhibitory synapses by interacting with presynaptic calcium channels. *Nature Communications*, **2013**, 4, 1512	17.4	69
69	Kainate induces mobilization of synaptic vesicles at the growth cone through the activation of protein kinase A. *Cerebral Cortex*, **2013**, 23, 531-41	5.1	13
68	Epileptogenic Q555X SYN1 mutant triggers imbalances in release dynamics and short-term plasticity. *Human Molecular Genetics*, **2013**, 22, 2186-99	5.6	55
67	Synaptic and extrasynaptic origin of the excitation/inhibition imbalance in the hippocampus of synapsin I/II/III knockout mice. *Cerebral Cortex*, **2013**, 23, 581-93	5.1	58
66	REST/NRSF-mediated intrinsic homeostasis protects neuronal networks from hyperexcitability. *EMBO Journal*, **2013**, 32, 2994-3007	13	66
65	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. *Journal of Biological Chemistry*, **2013**, 288, 3227-39	5.4	37
64	3D Cell Cultures: Nanostructured Superhydrophobic Substrates Trigger the Development of 3D Neuronal Networks (Small 3/2013). *Small*, **2013**, 9, 334-334	11	1
63	Dentate gyrus network dysfunctions precede the symptomatic phase in a genetic mouse model of seizures. *Frontiers in Cellular Neuroscience*, **2013**, 7, 138	6.1	13
62	Long-term optical stimulation of channelrhodopsin-expressing neurons to study network plasticity. *Frontiers in Molecular Neuroscience*, **2013**, 6, 22	6.1	29
61	Lithium rescues synaptic plasticity and memory in Down syndrome mice. *Journal of Clinical Investigation*, **2013**, 123, 348-61	15.9	112
60	Nonsense-mediated mRNA decay and loss-of-function of the protein underlie the X-linked epilepsy associated with the W356mutation in synapsin I. *PLoS ONE*, **2013**, 8, e67724	3.7	21
59	Synapsins contribute to the dynamic spatial organization of synaptic vesicles in an activity-dependent manner. *Journal of Neuroscience*, **2012**, 32, 12214-27	6.6	46
58	Strategies to maximize the performance of a STED microscope. *Optics Express*, **2012**, 20, 7362-74	3.3	88
57	Kidins220/ARMS is a novel modulator of short-term synaptic plasticity in hippocampal GABAergic neurons. *PLoS ONE*, **2012**, 7, e35785	3.7	11
56	Kidins220/ARMS as a functional mediator of multiple receptor signalling pathways. *Journal of Cell Science*, **2012**, 125, 1845-54	5.3	45

55	Site-specific synapsin I phosphorylation participates in the expression of post-tetanic potentiation and its enhancement by BDNF. *Journal of Neuroscience*, **2012**, 32, 5868-79	6.6	48
54	A hybrid bioorganic interface for neuronal photoactivation. *Nature Communications*, **2011**, 2, 166	17.4	196
53	Synapsins: from synapse to network hyperexcitability and epilepsy. *Seminars in Cell and Developmental Biology*, **2011**, 22, 408-15	7.5	43
52	The synapsins: multitask modulators of neuronal development. *Seminars in Cell and Developmental Biology*, **2011**, 22, 378-86	7.5	32
51	Effects of phosphorylation and neuronal activity on the control of synapse formation by synapsin I. *Journal of Cell Science*, **2011**, 124, 3643-53	5.3	25
50	Influence of GABAAR monoliganded states on GABAergic responses. *Journal of Neuroscience*, **2011**, 31, 1752-61	6.6	24
49	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. *Journal of Neuroscience*, **2011**, 31, 7275-90	6.6	177
48	Synapsin I senses membrane curvature by an amphipathic lipid packing sensor motif. *Journal of Neuroscience*, **2011**, 31, 18149-54	6.6	29
47	SYN1 loss-of-function mutations in autism and partial epilepsy cause impaired synaptic function. *Human Molecular Genetics*, **2011**, 20, 2297-307	5.6	162
46	Binding of protein kinase inhibitors to synapsin I inferred from pair-wise binding site similarity measurements. *PLoS ONE*, **2010**, 5, e12214	3.7	51
45	MAPK/Erk-dependent phosphorylation of synapsin mediates formation of functional synapses and short-term homosynaptic plasticity. *Journal of Cell Science*, **2010**, 123, 881-93	5.3	77
44	Tyrosine phosphorylation of synapsin I by Src regulates synaptic-vesicle trafficking. *Journal of Cell Science*, **2010**, 123, 2256-65	5.3	46
43	The highly conserved synapsin domain E mediates synapsin dimerization and phospholipid vesicle clustering. *Biochemical Journal*, **2010**, 426, 55-64	3.8	27
42	TBC1D24, an ARF6-interacting protein, is mutated in familial infantile myoclonic epilepsy. *American Journal of Human Genetics*, **2010**, 87, 365-70	11	117
41	The role of synapsins in neuronal development. *Cellular and Molecular Life Sciences*, **2010**, 67, 1383-96	10.3	82
40	The synapsin gene family in basal chordates: evolutionary perspectives in metazoans. *BMC Evolutionary Biology*, **2010**, 10, 32	3	21
39	ERK activation in axonal varicosities modulates presynaptic plasticity in the CA3 region of the hippocampus through synapsin I. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 9872-7	11.5	43
38	Opposite changes in glutamatergic and GABAergic transmission underlie the diffuse hyperexcitability of synapsin I-deficient cortical networks. *Cerebral Cortex*, **2009**, 19, 1422-39	5.1	93

37	Synapsin-I- and synapsin-II-null mice display an increased age-dependent cognitive impairment. *Journal of Cell Science*, **2008**, 121, 3042-51	5.3	82
36	Identification of a developmentally regulated pathway of membrane retrieval in neuronal growth cones. *Journal of Cell Science*, **2008**, 121, 3757-69	5.3	46
35	Influence of synapsin I on synaptic vesicles: an analysis by force-volume mode of the atomic force microscope and dynamic light scattering. *Biophysical Journal*, **2007**, 93, 1051-60	2.9	20
34	Lack of synapsin I reduces the readily releasable pool of synaptic vesicles at central inhibitory synapses. *Journal of Neuroscience*, **2007**, 27, 13520-31	6.6	129
33	Synapsin phosphorylation by SRC tyrosine kinase enhances SRC activity in synaptic vesicles. *Journal of Biological Chemistry*, **2007**, 282, 15754-67	5.4	34
32	Phosphorylation of synapsin domain A is required for post-tetanic potentiation. *Journal of Cell Science*, **2007**, 120, 3228-37	5.3	39
31	Protein kinase A-mediated synapsin I phosphorylation is a central modulator of Ca2+-dependent synaptic activity. *Journal of Neuroscience*, **2006**, 26, 11670-81	6.6	109
30	The synapsin domain E accelerates the exoendocytotic cycle of synaptic vesicles in cerebellar Purkinje cells. *Journal of Cell Science*, **2006**, 119, 4257-68	5.3	33
29	Structural domains involved in the regulation of transmitter release by synapsins. *Journal of Neuroscience*, **2005**, 25, 2658-69	6.6	109
28	Phosphorylation of synapsin I by cAMP-dependent protein kinase controls synaptic vesicle dynamics in developing neurons. *Journal of Neuroscience*, **2005**, 25, 7299-308	6.6	72
27	Synapsin is a novel Rab3 effector protein on small synaptic vesicles. II. Functional effects of the Rab3A-synapsin I interaction. *Journal of Biological Chemistry*, **2004**, 279, 43769-79	5.4	51
26	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. *Journal of Biological Chemistry*, **2004**, 279, 43760-8	5.4	45
25	S100A1 codistributes with synapsin I in discrete brain areas and inhibits the F-actin-bundling activity of synapsin I. *Journal of Neurochemistry*, **2004**, 89, 1260-70	6	23
24	Using the atomic force microscope to study the interaction between two solid supported lipid bilayers and the influence of synapsin I. *Biophysical Journal*, **2004**, 87, 2446-55	2.9	80
23	Synaptophysin I controls the targeting of VAMP2/synaptobrevin II to synaptic vesicles. *Molecular Biology of the Cell*, **2003**, 14, 4909-19	3.5	93
22	Fluorescence resonance energy transfer detection of synaptophysin I and vesicle-associated membrane protein 2 interactions during exocytosis from single live synapses. *Molecular Biology of the Cell*, **2002**, 13, 2706-17	3.5	57
21	Identification of synapsin I peptides that insert into lipid membranes. *Biochemical Journal*, **2001**, 354, 57-66	3.8	30
20	Identification of synapsin I peptides that insert into lipid membranes. *Biochemical Journal*, **2001**, 354, 57-66	3.8	46

19	Synapsin controls both reserve and releasable synaptic vesicle pools during neuronal activity and short-term plasticity in Aplysia. *Journal of Neuroscience*, **2001**, 21, 4195-206	6.6	111
18	Interleukin-6 inhibits neurotransmitter release and the spread of excitation in the rat cerebral cortex. *European Journal of Neuroscience*, **2000**, 12, 1241-52	3.5	82
17	Specificity of the binding of synapsin I to Src homology 3 domains. *Journal of Biological Chemistry*, **2000**, 275, 29857-67	5.4	41
16	Anti-synapsin monoclonal antibodies: epitope mapping and inhibitory effects on phosphorylation and Grb2 binding. *Molecular Brain Research*, **1997**, 52, 1-16		31
15	Phosphorylation-dependent effects of synapsin IIa on actin polymerization and network formation. *European Journal of Neuroscience*, **1997**, 9, 2712-22	3.5	36
14	Kinetic analysis of the phosphorylation-dependent interactions of synapsin I with rat brain synaptic vesicles. *Journal of Physiology*, **1997**, 504 (Pt 3), 501-15	3.9	50
13	Phosphorylation of VAMP/synaptobrevin in synaptic vesicles by endogenous protein kinases. *Journal of Neurochemistry*, **1995**, 65, 1712-20	6	75
12	Accelerated structural maturation induced by synapsin I at developing neuromuscular synapses of Xenopus laevis. *European Journal of Neuroscience*, **1995**, 7, 261-70	3.5	65
11	Synapsin I, an actin-binding protein regulating synaptic vesicle traffic in the nerve terminal. *Advances in Second Messenger and Phosphoprotein Research*, **1994**, 29, 31-45		56
10	B-50/GAP-43 binds to actin filaments without affecting actin polymerization and filament organization. *Journal of Neurochemistry*, **1993**, 61, 1530-3	6	43
9	Botulinum neurotoxins serotypes A and E cleave SNAP-25 at distinct COOH-terminal peptide bonds. *FEBS Letters*, **1993**, 335, 99-103	3.8	350
8	Interaction of free and synaptic vesicle-bound synapsin I with F-actin. *Neuron*, **1992**, 8, 377-86	13.9	145
7	Synaptic vesicle-associated Ca2+/calmodulin-dependent protein kinase II is a binding protein for synapsin I. *Nature*, **1992**, 359, 417-20	50.4	265
6	Tetanus and botulinum-B neurotoxins block neurotransmitter release by proteolytic cleavage of synaptobrevin. *Nature*, **1992**, 359, 832-5	50.4	1518
5	The synapsins. *Annual Review of Cell Biology*, **1990**, 6, 433-60		251
4	Protein phosphorylation in rat pineal gland and its regulation in supersensitive and subsensitive states. *Journal of Neurochemistry*, **1987**, 48, 1069-76	6	6
3	Studies of neurotensin-dopamine receptor interactions in striatal membranes of the male rat. The influence of 6-hydroxydopamine-induced dopamine receptor supersensitivity. *Acta Physiologica Scandinavica*, **1986**, 126, 147-9		13
2	Gangliosides increase the survival of lesioned nigral dopamine neurons and favour the recovery of dopaminergic synaptic function in striatum of rats by collateral sprouting. *Acta Physiologica Scandinavica*, **1983**, 119, 347-63		138

1 Modulation by cholecystokinins of 3H-spiroperidol binding in rat striatum: evidence for increased affinity and reduction in the number of binding sites. *Acta Physiologica Scandinavica*, **1981**, 113, 567-9 154