

Thomas Knopf

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219 papers	12,002 citations	62 h-index	100 g-index
259 ext. papers	13,458 ext. citations	5.7 avg, IF	6.29 L-index

#	Paper	IF	Citations
219	Transgenic mice for intersectional targeting of neural sensors and effectors with high specificity and performance. <i>Neuron</i> , 2015 , 85, 942-58	13.9	631
218	Cortex-restricted disruption of NMDAR1 impairs neuronal patterns in the barrel cortex. <i>Nature</i> , 2000 , 406, 726-31	50.4	415
217	Potassium conductances in hippocampal neurons blocked by excitatory amino-acid transmitters. <i>Nature</i> , 1990 , 347, 765-7	50.4	382
216	Metabotropic glutamate receptors: a new target for the therapy of neurodegenerative disorders?. <i>Trends in Neurosciences</i> , 1996 , 19, 267-71	13.3	360
215	Synaptic integration in a model of cerebellar granule cells. <i>Journal of Neurophysiology</i> , 1994 , 72, 999-1009	39.2	231
214	Imaging brain electric signals with genetically targeted voltage-sensitive fluorescent proteins. <i>Nature Methods</i> , 2010 , 7, 643-9	21.6	212
213	Glial protein S100B modulates long-term neuronal synaptic plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 4037-42	11.5	206
212	Design and characterization of a DNA-encoded, voltage-sensitive fluorescent protein. <i>European Journal of Neuroscience</i> , 2001 , 13, 2314-8	3.5	189
211	Imaging neural circuit dynamics with a voltage-sensitive fluorescent protein. <i>Journal of Neurophysiology</i> , 2012 , 108, 2323-37	3.2	186
210	Engineering and characterization of an enhanced fluorescent protein voltage sensor. <i>PLoS ONE</i> , 2007 , 2, e440	3.7	174
209	Morphological and electrophysiological properties of GABAergic and non-GABAergic cells in the deep cerebellar nuclei. <i>Journal of Neurophysiology</i> , 2007 , 97, 901-11	3.2	173
208	Responses to Metabotropic Glutamate Receptor Activation in Cerebellar Purkinje Cells: Induction of an Inward Current. <i>European Journal of Neuroscience</i> , 1992 , 4, 832-839	3.5	173
207	Climbing Fibre Responses in Olivo-cerebellar Slice Cultures. II. Dynamics of Cytosolic Calcium in Purkinje Cells. <i>European Journal of Neuroscience</i> , 1991 , 3, 343-348	3.5	166
206	Increased seizure susceptibility in mice lacking metabotropic glutamate receptor 7. <i>Journal of Neuroscience</i> , 2001 , 21, 8734-45	6.6	164
205	Genetically encoded optical indicators for the analysis of neuronal circuits. <i>Nature Reviews Neuroscience</i> , 2012 , 13, 687-700	13.5	151
204	Activation of metabotropic glutamate receptors coupled to inositol phospholipid hydrolysis amplifies NMDA-induced neuronal degeneration in cultured cortical cells. <i>Neuropharmacology</i> , 1995 , 34, 1089-98	5.5	147
203	Involvement of protein synthesis and degradation in long-term potentiation of Schaffer collateral CA1 synapses. <i>Journal of Neuroscience</i> , 2006 , 26, 4949-55	6.6	144

202	Engineering of a genetically encodable fluorescent voltage sensor exploiting fast Ci-VSP voltage-sensing movements. <i>PLoS ONE</i> , 2008 , 3, e2514	3.7	129
201	Expression and coupling to polyphosphoinositide hydrolysis of group I metabotropic glutamate receptors in early postnatal and adult rat brain. <i>European Journal of Neuroscience</i> , 1997 , 9, 12-7	3.5	125
200	The second intracellular loop of metabotropic glutamate receptor 1 cooperates with the other intracellular domains to control coupling to G-proteins. <i>Journal of Biological Chemistry</i> , 1996 , 271, 2199-205	5.4	125
199	Electrotonic coupling of excitable and nonexcitable cells in the heart revealed by optogenetics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 14852-14857	11.5	125
198	The G-protein-coupled receptor kinase GRK4 mediates homologous desensitization of metabotropic glutamate receptor 1. <i>FASEB Journal</i> , 2000 , 14, 2569-80	0.9	119
197	Excitatory synaptic potentials in neurons of the deep nuclei in olivo-cerebellar slice cultures. <i>Neuroscience</i> , 1992 , 49, 903-11	3.9	113
196	High-frequency network oscillations in cerebellar cortex. <i>Neuron</i> , 2008 , 58, 763-74	13.9	111
195	Evidence for N-methyl-D-aspartic acid receptor-mediated modulation of the commissural input to central vestibular neurons of the frog. <i>Brain Research</i> , 1987 , 426, 212-24	3.7	109
194	Optical probing of neuronal circuit dynamics: genetically encoded versus classical fluorescent sensors. <i>Trends in Neurosciences</i> , 2006 , 29, 160-6	13.3	107
193	Three fluorescent protein voltage sensors exhibit low plasma membrane expression in mammalian cells. <i>Journal of Neuroscience Methods</i> , 2007 , 161, 32-8	3	99
192	Activation of cerebellar parallel fibers monitored in transgenic mice expressing a fluorescent Ca ²⁺ indicator protein. <i>European Journal of Neuroscience</i> , 2005 , 22, 627-35	3.5	99
191	Immunohistochemical distribution of metabotropic glutamate receptor subtypes mGluR1b, mGluR2/3, mGluR4a and mGluR5 in human hippocampus. <i>Brain Research</i> , 1996 , 736, 217-26	3.7	99
190	Delayed increase of extracellular arginine, the nitric oxide precursor, following electrical white matter stimulation in rat cerebellar slices. <i>Neuroscience Letters</i> , 1992 , 142, 211-4	3.3	99
189	Blocking acid-sensing ion channel 1 alleviates HuntingtonQ disease pathology via an ubiquitin-proteasome system-dependent mechanism. <i>Human Molecular Genetics</i> , 2008 , 17, 3223-35	5.6	98
188	Cellular and subcellular localization of the mGluR5a metabotropic glutamate receptor in rat spinal cord. <i>NeuroReport</i> , 1994 , 6, 209-13	1.7	98
187	Metabotropic glutamate receptors: electrical and chemical signaling properties. <i>Neuroscientist</i> , 2002 , 8, 551-61	7.6	97
186	Interaction of Kv3 potassium channels and resurgent sodium current influences the rate of spontaneous firing of Purkinje neurons. <i>Journal of Neuroscience</i> , 2006 , 26, 4602-12	6.6	96
185	Molecular and functional characterization of recombinant human metabotropic glutamate receptor subtype 5. <i>Neuropharmacology</i> , 1995 , 34, 871-86	5.5	96

184	Voltage imaging of waking mouse cortex reveals emergence of critical neuronal dynamics. <i>Journal of Neuroscience</i> , 2014 , 34, 16611-20	6.6	94
183	A novel splice variant of a metabotropic glutamate receptor, human mGluR7b. <i>Neuropharmacology</i> , 1997 , 36, 153-9	5.5	94
182	Facilitated Anion Transport Induces Hyperpolarization of the Cell Membrane That Triggers Differentiation and Cell Death in Cancer Stem Cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15892-8	16.4	93
181	The relationship between blood flow and neuronal activity in the rodent olfactory bulb. <i>Journal of Neuroscience</i> , 2007 , 27, 6452-60	6.6	93
180	Imaging the awake visual cortex with a genetically encoded voltage indicator. <i>Journal of Neuroscience</i> , 2015 , 35, 53-63	6.6	92
179	Differential cellular localization of three splice variants of the mGluR1 metabotropic glutamate receptor in rat cerebellum. <i>NeuroReport</i> , 1994 , 5, 2249-52	1.7	90
178	Toward the second generation of optogenetic tools. <i>Journal of Neuroscience</i> , 2010 , 30, 14998-5004	6.6	89
177	Characterization of a calcium-dependent current generating a slow afterdepolarization of CA3 pyramidal cells in rat hippocampal slice cultures. <i>European Journal of Neuroscience</i> , 1993 , 5, 560-9	3.5	86
176	Trans-ACPD-induced Ca ²⁺ signals in cerebellar Purkinje cells. <i>NeuroReport</i> , 1991 , 2, 759-62	1.7	80
175	mGluR5 metabotropic glutamate receptor distribution in rat and human spinal cord: a developmental study. <i>Neuroscience Research</i> , 1997 , 28, 49-57	2.9	79
174	Functional classification of neurons in the mouse lateral cerebellar nuclei. <i>Cerebellum</i> , 2011 , 10, 637-46	4.3	78
173	Red-shifted voltage-sensitive fluorescent proteins. <i>Chemistry and Biology</i> , 2009 , 16, 1268-77		78
172	Muscarinic and beta-adrenergic depression of the slow Ca ²⁺ (+)-activated potassium conductance in hippocampal CA3 pyramidal cells is not mediated by a reduction of depolarization-induced cytosolic Ca ²⁺ transients. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990 , 87, 4083-7	11.5	76
171	Genetically encoded fluorescent sensors of membrane potential. <i>Brain Cell Biology</i> , 2008 , 36, 53-67		75
170	Responses to excitatory amino acids of Purkinje cells and neurones of the deep nuclei in cerebellar slice cultures. <i>Journal of Physiology</i> , 1990 , 430, 297-313	3.9	75
169	Immunohistochemical localization of the mGluR1 metabotropic glutamate receptor in the adult rodent forebrain: Evidence for a differential distribution of mGluR1 splice variants 1998 , 400, 391-407		74
168	Motor dysfunction and altered synaptic transmission at the parallel fiber-Purkinje cell synapse in mice lacking potassium channels Kv3.1 and Kv3.3. <i>Journal of Neuroscience</i> , 2003 , 23, 7677-84	6.6	74
167	Immunocytochemical visualization of the mGluR1a metabotropic glutamate receptor at synapses of corticothalamic terminals originating from area 17 of the rat. <i>European Journal of Neuroscience</i> , 1996 , 8, 1061-71	3.5	68

166	Spectrally-resolved response properties of the three most advanced FRET based fluorescent protein voltage probes. <i>PLoS ONE</i> , 2009 , 4, e4555	3.7	64
165	Second and third generation voltage-sensitive fluorescent proteins for monitoring membrane potential. <i>Frontiers in Molecular Neuroscience</i> , 2009 , 2, 5	6.1	64
164	Signal transmission in the parallel fiber-Purkinje cell system visualized by high-resolution imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994 , 91, 13014-7	11.5	64
163	Optical imaging of postsynaptic odor representation in the glomerular layer of the mouse olfactory bulb. <i>Journal of Neurophysiology</i> , 2009 , 102, 817-30	3.2	63
162	GABAergic synaptic communication in the GABAergic and non-GABAergic cells in the deep cerebellar nuclei. <i>Neuroscience</i> , 2008 , 156, 537-49	3.9	63
161	Immunolocalization of the mGluR1b splice variant of the metabotropic glutamate receptor 1 at parallel fiber-Purkinje cell synapses in the rat cerebellar cortex. <i>Journal of Neurochemistry</i> , 2000 , 74, 1301-9	6	63
160	L-homocysteic acid but not L-glutamate is an endogenous N-methyl-D-aspartic acid receptor preferring agonist in rat neocortical neurons in vitro. <i>Neuroscience Letters</i> , 1987 , 81, 188-92	3.3	63
159	Voltage imaging to understand connections and functions of neuronal circuits. <i>Journal of Neurophysiology</i> , 2016 , 116, 135-52	3.2	62
158	Optical voltage imaging in neurons: moving from technology development to practical tool. <i>Nature Reviews Neuroscience</i> , 2019 , 20, 719-727	13.5	62
157	In vivo calcium imaging from genetically specified target cells in mouse cerebellum. <i>NeuroImage</i> , 2007 , 34, 859-69	7.9	62
156	Two-photon voltage imaging using a genetically encoded voltage indicator. <i>Scientific Reports</i> , 2013 , 3, 2231	4.9	61
155	Group I metabotropic glutamate receptors mediate an inward current in rat substantia nigra dopamine neurons that is independent from calcium mobilization. <i>Journal of Neurophysiology</i> , 1999 , 82, 1974-81	3.2	59
154	Mouse transgenic approaches in optogenetics. <i>Progress in Brain Research</i> , 2012 , 196, 193-213	2.9	58
153	Molecular cloning, functional expression and pharmacological characterization of the human metabotropic glutamate receptor type 2. <i>European Journal of Neuroscience</i> , 1995 , 7, 622-9	3.5	58
152	Effect of voltage sensitive fluorescent proteins on neuronal excitability. <i>Biophysical Journal</i> , 2009 , 96, 3959-76	2.9	57
151	Allele-dependent changes of olivocerebellar circuit properties in the absence of the voltage-gated potassium channels Kv3.1 and Kv3.3. <i>European Journal of Neuroscience</i> , 2004 , 19, 3317-27	3.5	56
150	Glutamate uptake controls expression of a slow postsynaptic current mediated by mGluRs in cerebellar Purkinje cells. <i>Journal of Neurophysiology</i> , 2002 , 87, 1974-80	3.2	56
149	Exploration of fluorescent protein voltage probes based on circularly permuted fluorescent proteins. <i>Frontiers in Neuroengineering</i> , 2009 , 2, 14		55

148	Molecular cloning, functional expression and pharmacological characterization of the human metabotropic glutamate receptor type 4. <i>Neuropharmacology</i> , 1995 , 34, 149-55	5.5	55
147	Interaction of Cupidin/Homer2 with two actin cytoskeletal regulators, Cdc42 small GTPase and Drebrin, in dendritic spines. <i>BMC Neuroscience</i> , 2009 , 10, 25	3.2	54
146	An NMDA receptor/nitric oxide cascade in presynaptic parallel fiber-Purkinje neuron long-term potentiation. <i>Journal of Neuroscience</i> , 2007 , 27, 3408-15	6.6	54
145	The C-terminal domain of the mGluR1 metabotropic glutamate receptor affects sensitivity to agonists. <i>Journal of Neurochemistry</i> , 1996 , 67, 58-63	6	54
144	Activation of group III metabotropic glutamate receptors is neuroprotective in cortical cultures. <i>European Journal of Pharmacology</i> , 1996 , 310, 61-6	5.3	54
143	Pharmacological characterization of synaptic transmission through mGluRs in rat cerebellar slices. <i>Neuropharmacology</i> , 1997 , 36, 401-3	5.5	53
142	Selective blockade of mGlu5 metabotropic glutamate receptors protects rat hepatocytes against hypoxic damage. <i>Hepatology</i> , 2000 , 31, 649-55	11.2	53
141	Optogenetic monitoring of membrane potentials. <i>Experimental Physiology</i> , 2011 , 96, 13-8	2.4	52
140	Optical measurement of mGluR1 conformational changes reveals fast activation, slow deactivation, and sensitization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 11388-93	11.5	52
139	A comprehensive concept of optogenetics. <i>Progress in Brain Research</i> , 2012 , 196, 1-28	2.9	51
138	Diversity of neuronal elements and circuitry in the cerebellar nuclei. <i>Cerebellum</i> , 2012 , 11, 420-1	4.3	51
137	Elevation of intradendritic sodium concentration mediated by synaptic activation of metabotropic glutamate receptors in cerebellar Purkinje cells. <i>European Journal of Neuroscience</i> , 2000 , 12, 2199-204	3.5	51
136	Presynaptically expressed long-term depression at cerebellar parallel fiber synapses. <i>Pflugers Archiv European Journal of Physiology</i> , 2009 , 457, 865-75	4.6	50
135	The metabotropic glutamate receptor mGlu5 controls the onset of developmental apoptosis in cultured cerebellar neurons. <i>European Journal of Neuroscience</i> , 1998 , 10, 2173-84	3.5	50
134	Optical imaging of odor preference memory in the rat olfactory bulb. <i>Journal of Neurophysiology</i> , 2002 , 87, 3156-9	3.2	50
133	Transgenic mice expressing a pH and Cl ⁻ sensing yellow-fluorescent protein under the control of a potassium channel promoter. <i>European Journal of Neuroscience</i> , 2002 , 15, 40-50	3.5	50
132	Sensing Cardiac Electrical Activity With a Cardiac Myocyte--Targeted Optogenetic Voltage Indicator. <i>Circulation Research</i> , 2015 , 117, 401-12	15.7	49
131	Charge movement of a voltage-sensitive fluorescent protein. <i>Biophysical Journal</i> , 2009 , 96, L19-21	2.9	49

130	GlyT2+ neurons in the lateral cerebellar nucleus. <i>Cerebellum</i> , 2010 , 9, 42-55	4.3	49
129	Subcellular localization of the voltage-dependent potassium channel Kv3.1b in postnatal and adult rat medial nucleus of the trapezoid body. <i>Neuroscience</i> , 2003 , 118, 889-98	3.9	49
128	Genetically encoded voltage indicators for large scale cortical imaging come of age. <i>Current Opinion in Chemical Biology</i> , 2015 , 27, 75-83	9.7	47
127	Plasma membrane Ca ²⁺ ATPase 2 contributes to short-term synapse plasticity at the parallel fiber to Purkinje neuron synapse. <i>Journal of Neuroscience</i> , 2007 , 27, 3753-8	6.6	47
126	Functional topology of the mossy fibre-granule cell-Purkinje cell system revealed by imaging of intrinsic fluorescence in mouse cerebellum. <i>European Journal of Neuroscience</i> , 2004 , 20, 740-8	3.5	47
125	Whole cell patch-clamp recordings of rat midbrain dopaminergic neurons isolate a sulphonylurea- and ATP-sensitive component of potassium currents activated by hypoxia. <i>Journal of Neurophysiology</i> , 1998 , 79, 1239-45	3.2	47
124	Presynaptic plasma membrane Ca ²⁺ ATPase isoform 2a regulates excitatory synaptic transmission in rat hippocampal CA3. <i>Journal of Physiology</i> , 2007 , 579, 85-99	3.9	46
123	Metabotropic glutamate receptors in the cerebellum with a focus on their function in Purkinje cells. <i>Cerebellum</i> , 2002 , 1, 19-26	4.3	45
122	Exploration of genetically encoded voltage indicators based on a chimeric voltage sensing domain. <i>Frontiers in Molecular Neuroscience</i> , 2014 , 7, 78	6.1	44
121	Genetically engineered fluorescent voltage reporters. <i>ACS Chemical Neuroscience</i> , 2012 , 3, 585-92	5.7	44
120	Pharmacological characterization of MCCG and MAP4 at the mGluR1b, mGluR2 and mGluR4a human metabotropic glutamate receptor subtypes. <i>Neuropharmacology</i> , 1995 , 34, 1099-102	5.5	44
119	Immunocytochemical localization of the mGluR1b metabotropic glutamate receptor in the rat hypothalamus. <i>Journal of Comparative Neurology</i> , 1998 , 390, 225-33	3.4	41
118	Optical recordings of membrane potential using genetically targeted voltage-sensitive fluorescent proteins. <i>Methods</i> , 2003 , 30, 42-8	4.6	41
117	Model of very fast (> 75 Hz) network oscillations generated by electrical coupling between the proximal axons of cerebellar Purkinje cells. <i>European Journal of Neuroscience</i> , 2008 , 28, 1603-16	3.5	40
116	Continuous presence of nerve growth factor is required for maintenance of cholinergic septal neurons in organotypic slice cultures. <i>Neuroscience</i> , 1990 , 36, 27-31	3.9	40
115	Cortical Entropy, Mutual Information and Scale-Free Dynamics in Waking Mice. <i>Cerebral Cortex</i> , 2016 , 26, 3945-52	5.1	36
114	Optogenetics enlightens neuroscience drug discovery. <i>Nature Reviews Drug Discovery</i> , 2016 , 15, 97-109	64.1	35
113	Biophysical characterization of the fluorescent protein voltage probe VSFP2.3 based on the voltage-sensing domain of Ci-VSP. <i>European Biophysics Journal</i> , 2010 , 39, 1625-35	1.9	35

112	Behavioral motor dysfunction in Kv3-type potassium channel-deficient mice. <i>Genes, Brain and Behavior</i> , 2006 , 5, 472-82	3.6	35
111	Developmental expression of the group III metabotropic glutamate receptor mGluR4a in the medial nucleus of the trapezoid body of the rat. <i>Journal of Comparative Neurology</i> , 1999 , 411, 431-40	3.4	35
110	Climbing Fibre Responses in Olivo-cerebellar Slice Cultures. I. Microelectrode Recordings from Purkinje Cells. <i>European Journal of Neuroscience</i> , 1990 , 2, 726-732	3.5	35
109	Optogenetic reporters. <i>Biology of the Cell</i> , 2013 , 105, 14-29	3.5	33
108	Distinct spatiotemporal activity in principal neurons of the mouse olfactory bulb in anesthetized and awake states. <i>Frontiers in Neural Circuits</i> , 2013 , 7, 46	3.5	33
107	Reduced expression of the Ca(2+) transporter protein PMCA2 slows Ca(2+) dynamics in mouse cerebellar Purkinje neurones and alters the precision of motor coordination. <i>Journal of Physiology</i> , 2010 , 588, 907-22	3.9	33
106	Distribution of the metabotropic glutamate receptor subtype mGluR5 in rat midbrain periaqueductal grey and relationship with ascending spinofugal afferents. <i>Neuroscience Letters</i> , 1997 , 228, 1-4	3.3	32
105	Sodium imaging of climbing fiber innervation fields in developing mouse Purkinje cells. <i>Journal of Neurophysiology</i> , 2003 , 89, 2555-63	3.2	32
104	Intracellular sodium and calcium homeostasis during hypoxia in dopamine neurons of rat substantia nigra pars compacta. <i>Journal of Neurophysiology</i> , 1998 , 80, 2237-43	3.2	32
103	(+/-)-beta-Parachlorophenylglutamate selectively enhances the depolarizing response to L-homocysteic acid in neocortical neurons of the rat: evidence for a specific uptake system. <i>Brain Research</i> , 1988 , 443, 373-6	3.7	31
102	Olfactory nerve stimulation-evoked mGluR1 slow potentials, oscillations, and calcium signaling in mouse olfactory bulb mitral cells. <i>Journal of Neurophysiology</i> , 2006 , 95, 3097-104	3.2	30
101	Light and electron microscopic demonstration of mGluR5 metabotropic glutamate receptor immunoreactive neuronal elements in the rat cerebellar cortex. <i>Journal of Comparative Neurology</i> , 1997 , 385, 641-50	3.4	29
100	Clustering of the group III metabotropic glutamate receptor 4a at parallel fiber synaptic terminals in the rat cerebellar molecular layer. <i>Neuroscience Research</i> , 1999 , 35, 71-4	2.9	29
99	Cytosolic calcium during glucose deprivation in hippocampal pyramidal cells of rats. <i>Neuroscience Letters</i> , 1990 , 117, 295-9	3.3	29
98	Optogenetic excitation of neurons with channelrhodopsins: light instrumentation, expression systems, and channelrhodopsin variants. <i>Progress in Brain Research</i> , 2012 , 196, 29-47	2.9	28
97	Organotypic Co-Cultures of Rat Locus Coeruleus and Hippocampus. <i>European Journal of Neuroscience</i> , 1989 , 1, 678-689	3.5	28
96	Optogenetic sensors in the zebrafish heart: a novel in vivo electrophysiological tool to study cardiac arrhythmogenesis. <i>Theranostics</i> , 2018 , 8, 4750-4764	12.1	28
95	Cardiac optogenetics: using light to monitor cardiac physiology. <i>Basic Research in Cardiology</i> , 2017 , 112, 56	11.8	27

94	Transfer of Kv3.1 voltage sensor features to the isolated Ci-VSP voltage-sensing domain. <i>Biophysical Journal</i> , 2012 , 103, 669-76	2.9	27
93	Profiling of trans-azetidine-2,4-dicarboxylic acid at the human metabotropic glutamate receptors mGlu1b, -2, -4a and -5a. <i>European Journal of Pharmacology</i> , 1995 , 288, 389-92		26
92	Long-term depression at olfactory nerve synapses. <i>Journal of Neuroscience</i> , 2005 , 25, 4252-9	6.6	24
91	Metabotropic glutamate receptors: potential drug targets. <i>Drug Discovery Today</i> , 1996 , 1, 103-108	8.8	24
90	Delivery of differentiation factors by mesoporous silica particles assists advanced differentiation of transplanted murine embryonic stem cells. <i>Stem Cells Translational Medicine</i> , 2013 , 2, 906-15	6.9	23
89	Early sodium elevations induced by combined oxygen and glucose deprivation in pyramidal cortical neurons. <i>European Journal of Neuroscience</i> , 1998 , 10, 3572-4	3.5	22
88	Evidence Against a Role for Protein Kinase C in the Inhibition of the Calcium-activated Potassium Current IAHP by Muscarinic Stimulants in Rat Hippocampal Neurons. <i>European Journal of Neuroscience</i> , 1992 , 4, 785-791	3.5	22
87	Assessing spatiotemporal variability of brain spontaneous activity by multiscale entropy and functional connectivity. <i>NeuroImage</i> , 2019 , 198, 198-220	7.9	21
86	Cellular localisation of metabotropic glutamate receptors in the mammalian optic nerve: a mechanism for axon-glia communication. <i>Brain Research</i> , 1996 , 741, 75-81	3.7	21
85	Dynamics of maculo-ocular reflexes in the frog. <i>Neuroscience</i> , 1984 , 11, 645-50	3.9	21
84	Tolerance and Tachyphylaxis to Head Twitches Induced by the 5-HT _{2A} Agonist 25CN-NBOH in Mice. <i>Frontiers in Pharmacology</i> , 2018 , 9, 17	5.6	20
83	Cortical signatures of wakeful somatosensory processing. <i>Scientific Reports</i> , 2018 , 8, 11977	4.9	20
82	Functional characterization of permuted enhanced green fluorescent proteins comprising varying linker peptides. <i>Photochemistry and Photobiology</i> , 2001 , 74, 356-63	3.6	20
81	Activation of metabotropic glutamate receptors induces an outward current which is potentiated by methylxanthines in rat cerebellar Purkinje cells. <i>Neuroscience Research</i> , 1993 , 16, 209-15	2.9	20
80	Calculation of calcium dynamics from single wavelength fura-2 fluorescence recordings. <i>Pflugers Archiv European Journal of Physiology</i> , 1991 , 418, 184-9	4.6	20
79	Genetically encoded probes for optical imaging of brain electrical activity. <i>Progress in Brain Research</i> , 2012 , 196, 63-77	2.9	19
78	Metabotropic glutamate receptor agonists stimulate polyphosphoinositide hydrolysis in primary cultures of rat hepatocytes. <i>European Journal of Pharmacology</i> , 1997 , 338, R1-2	5.3	19
77	Glutamate-induced elevations in intracellular chloride concentration in hippocampal cell cultures derived from EYFP-expressing mice. <i>European Journal of Neuroscience</i> , 2004 , 19, 2915-22	3.5	19

76	Transgenic mice expressing a fluorescent in vivo label in a distinct subpopulation of neocortical layer 5 pyramidal cells. <i>Journal of Comparative Neurology</i> , 2004 , 480, 72-88	3.4	19
75	Immortalized hypothalamic neurons express metabotropic glutamate receptors positively coupled to cyclic AMP formation. <i>European Journal of Neuroscience</i> , 1996 , 8, 2407-15	3.5	19
74	Phenylglycine derivatives antagonize the excitatory response to Purkinje cells to 1S,3R-ACPD: an in vivo and in vitro study. <i>Neuroscience Research</i> , 1993 , 18, 229-34	2.9	19
73	Climbing fiber-triggered metabotropic slow potentials enhance dendritic calcium transients and simple spike firing in cerebellar Purkinje cells. <i>Molecular and Cellular Neurosciences</i> , 2007 , 35, 596-603	4.8	18
72	The role of the calcium transporter protein plasma membrane calcium ATPase PMCA2 in cerebellar Purkinje neuron function. <i>Functional Neurology</i> , 2010 , 25, 153-8	2.2	17
71	Probing neuronal activities with genetically encoded optical indicators: from a historical to a forward-looking perspective. <i>Pflügers Archiv European Journal of Physiology</i> , 2013 , 465, 361-71	4.6	16
70	Modulation of excitation by metabotropic glutamate receptors. <i>Results and Problems in Cell Differentiation</i> , 2008 , 44, 163-75	1.4	16
69	Immunocytochemical localization of the metabotropic glutamate receptor mGluR4a in the piriform cortex of the rat. <i>Journal of Comparative Neurology</i> , 2000 , 417, 263-274	3.4	16
68	Roadmap on neurophotronics. <i>Journal of Optics (United Kingdom)</i> , 2016 , 18,	1.7	16
67	Single-Neuron Level One-Photon Voltage Imaging With Sparsely Targeted Genetically Encoded Voltage Indicators. <i>Frontiers in Cellular Neuroscience</i> , 2019 , 13, 39	6.1	15
66	Transgenic Strategies for Sparse but Strong Expression of Genetically Encoded Voltage and Calcium Indicators. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	15
65	State-Dependent Modulation of Slow Wave Motifs towards Awakening. <i>Frontiers in Cellular Neuroscience</i> , 2017 , 11, 108	6.1	15
64	Comparative performance of a genetically-encoded voltage indicator and a blue voltage sensitive dye for large scale cortical voltage imaging. <i>Frontiers in Cellular Neuroscience</i> , 2015 , 9, 147	6.1	15
63	Subcellular localization of the voltage-gated potassium channels Kv3.1b and Kv3.3 in the cerebellar dentate nucleus of glutamic acid decarboxylase 67-green fluorescent protein transgenic mice. <i>Neuroscience</i> , 2008 , 155, 1059-69	3.9	15
62	Optogenetic targeting of cardiac myocytes and non-myocytes: Tools, challenges and utility. <i>Progress in Biophysics and Molecular Biology</i> , 2017 , 130, 140-149	4.7	14
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