Yuji Ikegaya

List of Publications by Year in Descending Order

299 papers	8,340 citations	49 h-index	80 g-index
338 ext. papers	9,771 ext. citations	5.3 avg, IF	6.22 L-index

#	Paper	IF	Citations
299	Phasic firing of dopaminergic neurons in the ventral tegmental area triggers peripheral immune responses.. *Scientific Reports*, **2022**, 12, 1447	4.9	0
298	Identification of an exporter that regulates vitamin C supply from blood to the brain.. *IScience*, **2022**, 25, 103642	6.1	1
297	Inhibition allocates spikes during hippocampal ripples.. *Nature Communications*, **2022**, 13, 1280	17.4	0
296	Weak representation of awake/sleep states by local field potentials in aged mice.. *Scientific Reports*, **2022**, 12, 7766	4.9	
295	Cell type-specific patterned neural activity instructs neural map formation in the mouse olfactory system. *Neuroscience Research*, **2021**, 170, 1-5	2.9	0
294	Histamine: A Key Neuromodulator of Memory Consolidation and Retrieval. *Current Topics in Behavioral Neurosciences*, **2021**,	3.4	3
293	Thermosensitive receptors in neural stem cells link stress-induced hyperthermia to impaired neurogenesis via microglial engulfment. *Science Advances*, **2021**, 7, eabj8080	14.3	3
292	Delayed reinforcement hinders subsequent extinction.. *Biochemical and Biophysical Research Communications*, **2021**, 591, 20-25	3.4	0
291	Prioritized experience replays on a hippocampal predictive map for learning. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	18
290	Phylogeny and ontogeny of mental time. *Neuroscience Research*, **2021**, 170, 13-17	2.9	1
289	The effects of microglia- and astrocyte-derived factors on neurogenesis in health and disease. *European Journal of Neuroscience*, **2021**, 54, 5880-5901	3.5	26
288	Prefrontal synaptic activation during hippocampal memory reactivation. *Cell Reports*, **2021**, 34, 108885	10.6	3
287	Spatiotemporal dynamics of responses to biological motion in the human brain. *Cortex*, **2021**, 136, 124-138	3.8	3
286	Minute-encoding neurons in hippocampal-striatal circuits. *Current Biology*, **2021**, 31, 1438-1449.e6	6.3	6
285	Highly active neurons emerging in vitro. *Journal of Neurophysiology*, **2021**, 125, 1322-1329	3.2	1
284	The subiculum sensitizes retrosplenial cortex layer 2/3 pyramidal neurons. *Journal of Physiology*, **2021**, 599, 3151-3167	3.9	2
283	Molecular Characterization of Superficial Layers of the Presubiculum During Development. *Frontiers in Neuroanatomy*, **2021**, 15, 662724	3.6	0

282	Acute Ramelteon Treatment Maintains the Cardiac Rhythms of Rats during Non-REM Sleep. *Biological and Pharmaceutical Bulletin*, **2021**, 44, 789-797	2.3	1
281	Concurrent recordings of hippocampal neuronal spikes and prefrontal synaptic inputs from an awake rat. *STAR Protocols*, **2021**, 2, 100572	1.4	1
280	Ramelteon modulates gamma oscillations in the rat primary motor cortex during non-REM sleep. *Journal of Pharmacological Sciences*, **2021**, 145, 97-104	3.7	3
279	Neuronal brain-derived neurotrophic factor manipulates microglial dynamics. *Glia*, **2021**, 69, 890-904	9	5
278	Contextual Fear Memory Retrieval Is Vulnerable to Hippocampal Noise. *Cerebral Cortex*, **2021**, 31, 785-794	5.1	5
277	Astrocytic cAMP modulates memory via synaptic plasticity. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	10
276	Tb-doped fluorescent glass for biology. *Science Advances*, **2021**, 7,	14.3	2
275	In Vivo Whole-Cell Patch-Clamp Methods: Recent Technical Progress and Future Perspectives. *Sensors*, **2021**, 21,	3.8	3
274	Hippocampal beta oscillations predict mouse object-location associative memory performance. *Hippocampus*, **2021**, 31, 503-511	3.5	5
273	Multiple states in ongoing neural activity in the rat visual cortex. *PLoS ONE*, **2021**, 16, e0256791	3.7	0
272	Extracellular Vesicles Taken up by Astrocytes. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
271	Functional Multiple-Spine Calcium Imaging from Brain Slices. *STAR Protocols*, **2020**, 1, 100121	1.4	1
270	Vascular Abnormalities and the Role of Vascular Endothelial Growth Factor in the Epileptic Brain. *Frontiers in Pharmacology*, **2020**, 11, 20	5.6	19
269	Visualization and molecular characterization of whole-brain vascular networks with capillary resolution. *Nature Communications*, **2020**, 11, 1104	17.4	23
268	Locally sequential synaptic reactivation during hippocampal ripples. *Science Advances*, **2020**, 6, eaay1492	14.3	6
267	Machine-learning-based quality control of contractility of cultured human-induced pluripotent stem-cell-derived cardiomyocytes. *Biochemical and Biophysical Research Communications*, **2020**, 526, 751-755	3.4	6
266	Polyherbal Formulation Enhancing Cerebral Slow Waves in Sleeping Rats. *Biological and Pharmaceutical Bulletin*, **2020**, 43, 1356-1360	2.3	3
265	Dual real-time in vivo monitoring system of the brain-gut axis. *Biochemical and Biophysical Research Communications*, **2020**, 524, 340-345	3.4	5

264	Microglia attenuate the kainic acid-induced death of hippocampal neurons in slice cultures. *Neuropsychopharmacology Reports*, **2020**, 40, 85-91	2.2	6
263	Microglia modulate the structure and function of the hippocampus after early-life seizures. *Journal of Pharmacological Sciences*, **2020**, 144, 212-217	3.7	3
262	Urethane anesthesia suppresses hippocampal subthreshold activity and neuronal synchronization. *Brain Research*, **2020**, 1749, 147137	3.7	1
261	A cytosolically localized far-red to near-infrared rhodamine-based fluorescent probe for calcium ions. *Analyst, The*, **2020**, 145, 7736-7740	5	7
260	Acute Effects of Ethanol on Hippocampal Spatial Representation and Offline Reactivation. *Frontiers in Cellular Neuroscience*, **2020**, 14, 571175	6.1	2
259	Microglia in animal models of autism spectrum disorders. *Progress in Molecular Biology and Translational Science*, **2020**, 173, 239-273	4	3
258	Improved hyperacuity estimation of spike timing from calcium imaging. *Scientific Reports*, **2020**, 10, 17844	4.9	6
257	A live imaging-friendly slice culture method using collagen membranes. *Neuropsychopharmacology Reports*, **2020**, 40, 307-313	2.2	3
256	Confocal and multiphoton calcium imaging of the enteric nervous system in anesthetized mice. *Neuroscience Research*, **2020**, 151, 53-60	2.9	2
255	Sniffing behaviour-related changes in cardiac and cortical activity in rats. *Journal of Physiology*, **2019**, 597, 5295-5306	3.9	3
254	The role of CaMKII-Tiam1 complex on learning and memory. *Neurobiology of Learning and Memory*, **2019**, 166, 107070	3.1	7
253	Involvement of l-lactate in hippocampal dysfunction of type I diabetes. *Journal of Pharmacological Sciences*, **2019**, 141, 79-82	3.7	3
252	Whisker electromyograms signify awake and anesthetized states in mice. *Neuroscience Research*, **2019**, 148, 61-65	2.9	
251	Maternal Immune Activation in Pregnant Mice Produces Offspring with Altered Hippocampal Ripples. *Biological and Pharmaceutical Bulletin*, **2019**, 42, 666-670	2.3	2
250	Deep learning-based quality control of cultured human-induced pluripotent stem cell-derived cardiomyocytes. *Journal of Pharmacological Sciences*, **2019**, 140, 313-316	3.7	15
249	Structured spike series specify gene expression patterns for olfactory circuit formation. *Science*, **2019**, 365,	33.3	25
248	Exercise Reverses Behavioral and Synaptic Abnormalities after Maternal Inflammation. *Cell Reports*, **2019**, 27, 2817-2825.e5	10.6	29
247	The Integration of Goal-Directed Signals onto Spatial Maps of Hippocampal Place Cells. *Cell Reports* , **2019**, 27, 1516-1527.e5	10.6	14

246	Heterogeneous expression patterns of fibronectin in the mouse subiculum. *Journal of Chemical Neuroanatomy*, **2019**, 98, 131-138	3.2	2
245	Collection of biochemical samples with brain-wide electrophysiological recordings from a freely moving rodent. *Journal of Pharmacological Sciences*, **2019**, 139, 346-351	3.7	6
244	Prior observation of fear learning enhances subsequent self-experienced fear learning with an overlapping neuronal ensemble in the dorsal hippocampus. *Molecular Brain*, **2019**, 12, 21	4.5	5
243	Synchronous spike patterns in differently mixed cultures of human iPSC-derived glutamatergic and GABAergic neurons. *Biochemical and Biophysical Research Communications*, **2019**, 513, 300-305	3.4	9
242	Induced neuronal activity does not attenuate amyloid beta-induced synaptic loss in vitro. *Neuropsychopharmacology Reports*, **2019**, 39, 306-311	2.2	3
241	Cortical-wide functional correlations are associated with stress-induced cardiac dysfunctions in individual rats. *Scientific Reports*, **2019**, 9, 10581	4.9	2
240	Social defeat stress causes selective attenuation of neuronal activity in the ventromedial prefrontal cortex. *Scientific Reports*, **2019**, 9, 9447	4.9	13
239	Spikes in the sleeping brain. *Science*, **2019**, 366, 306-307	33.3	0
238	Microglia as possible therapeutic targets for autism spectrum disorders. *Progress in Molecular Biology and Translational Science*, **2019**, 167, 223-245	4	5
237	The Pharmacological Assessment of GABA Receptor Activation in Experimental Febrile Seizures in Mice. *ENeuro*, **2019**, 6,	3.9	6
236	The Astrocytic cAMP Pathway in Health and Disease. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	14
235	Auxin-mediated rapid degradation of target proteins in hippocampal neurons. *NeuroReport*, **2019**, 30, 908-913	1.7	5
234	Immature electrophysiological properties of human-induced pluripotent stem cell-derived neurons transplanted into the mouse cortex for 7 weeks. *NeuroReport*, **2019**, 30, 169-173	1.7	1
233	Synaptic Pruning by Microglia in Epilepsy. *Journal of Clinical Medicine*, **2019**, 8,	5.1	24
232	Recurrent connections between CA2 pyramidal cells. *Hippocampus*, **2019**, 29, 305-312	3.5	7
231	Quick visualization of neurons in brain tissues using an optical clearing technique. *Anatomical Science International*, **2019**, 94, 199-208	2	5
230	Vagus nerve spiking activity associated with locomotion and cortical arousal states in a freely moving rat. *European Journal of Neuroscience*, **2019**, 49, 1298-1312	3.5	7
229	Central Histamine Boosts Perirhinal Cortex Activity and Restores Forgotten Object Memories. *Biological Psychiatry*, **2019**, 86, 230-239	7.9	12

228	GABAergic inhibition reduces the impact of synaptic excitation on somatic excitation. *Neuroscience Research*, **2019**, 146, 22-35	2.9	4
227	Monitoring brain neuronal activity with manipulation of cardiac events in a freely moving rat. *Neuroscience Research*, **2018**, 136, 56-62	2.9	4
226	Time-varying synchronous cell ensembles during consummatory periods correlate with variable numbers of place cell spikes. *Hippocampus*, **2018**, 28, 471-483	3.5	7
225	Simultaneous Recordings of Cortical Local Field Potentials, Electrocardiogram, Electromyogram, and Breathing Rhythm from a Freely Moving Rat. *Journal of Visualized Experiments*, **2018**,	1.6	7
224	Hippocampal ripples down-regulate synapses. *Science*, **2018**, 359, 1524-1527	33.3	105
223	Cortical and subcortical responses to biological motion. *NeuroImage*, **2018**, 174, 87-96	7.9	12
222	Sharp wave-associated activity patterns of cortical neurons in the mouse piriform cortex. *European Journal of Neuroscience*, **2018**, 48, 3246-3254	3.5	2
221	Neonatal Seizure Models to Study Epileptogenesis. *Frontiers in Pharmacology*, **2018**, 9, 385	5.6	6
220	Characterization of Peripheral Activity States and Cortical Local Field Potentials of Mice in an Elevated Plus Maze Test. *Frontiers in Behavioral Neuroscience*, **2018**, 12, 62	3.5	17
219	The Molecular and Cellular Mechanisms of Axon Guidance in Mossy Fiber Sprouting. *Frontiers in Neurology*, **2018**, 9, 382	4.1	16
218	Microglia after Seizures and in Epilepsy. *Cells*, **2018**, 7,	7.9	56
217	In vivo one-photon confocal calcium imaging of neuronal activity from the mouse neocortex. *Journal of Integrative Neuroscience*, **2018**, 17, 671-678	1.5	0
216	GABAergic malfunction in the anterior cingulate cortex underlying maternal immune activation-induced social deficits. *Journal of Neuroimmunology*, **2018**, 321, 92-96	3.5	9
215	Live imaging of synapse engulfment by microglia in vitro. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO1-1-114	0	
214	Spike properties of granule retrosplenial cortex L2/3 neurons. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO4-1-115	0	
213	Effect of neonatal hyperthermia on brain function. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO3-1-9	0	
212	Hippocampal neuron firing is variable across laps in a linear track task. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO1-1-18	0	
211	A simple method for simultaneous monitoring of respiratory and cardiac function in mice. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO4-1-146	0	

210	Temporally coordinated spiking activity of human induced pluripotent stem cell-derived neurons co-cultured with astrocytes. *Biochemical and Biophysical Research Communications*, **2018**, 495, 1028-1033	3.4	19
209	Answering hastily retards learning. *PLoS ONE*, **2018**, 13, e0195404	3.7	
208	Ethanol facilitates socially evoked memory recall in mice by recruiting pain-sensitive anterior cingulate cortical neurons. *Nature Communications*, **2018**, 9, 3526	17.4	28
207	Ischemic Brain Injury Leads to Brain Edema via Hyperthermia-Induced TRPV4 Activation. *Journal of Neuroscience*, **2018**, 38, 5700-5709	6.6	34
206	Specificity of action selection modulates the perceived temporal order of action and sensory events. *Experimental Brain Research*, **2018**, 236, 2157-2164	2.3	3
205	Simultaneous monitoring of mouse respiratory and cardiac rates through a single precordial electrode. *Journal of Pharmacological Sciences*, **2018**, 137, 177-186	3.7	7
204	Activation of perineuronal net-expressing excitatory neurons during associative memory encoding and retrieval. *Scientific Reports*, **2017**, 7, 46024	4.9	32
203	Machine learning-based prediction of adverse drug effects: An example of seizure-inducing compounds. *Journal of Pharmacological Sciences*, **2017**, 133, 70-78	3.7	28
202	cAMP-Dependent Calcium Oscillations of Astrocytes: An Implication for Pathology. *Cerebral Cortex*, **2017**, 27, 1602-1614	5.1	10
201	Synthesis of practical red fluorescent probe for cytoplasmic calcium ions with greatly improved cell-membrane permeability. *Data in Brief*, **2017**, 12, 351-357	1.2	1
200	Differential timing of neurogenesis underlies dorsal-ventral topographic projection of olfactory sensory neurons. *Neural Development*, **2017**, 12, 2	3.9	12
199	Selective attenuation of electrophysiological activity of the dentate gyrus in a social defeat mouse model. *Journal of Physiological Sciences*, **2017**, 67, 507-513	2.3	4
198	Simultaneous Recordings of Central and Peripheral Bioelectrical Signals in a Freely Moving Rodent. *Biological and Pharmaceutical Bulletin*, **2017**, 40, 711-715	2.3	15
197	Caffeine Increases Hippocampal Sharp Waves in Vitro. *Biological and Pharmaceutical Bulletin*, **2017**, 40, 1111-1115	2.3	1
196	Neural Circuits for Reproducing Spontaneous Activity in Hippocampal CA3 Slice Culture. *Seibutsu Butsuri*, **2017**, 57, 033-035	0	
195	Juvenile Hippocampal CA2 Region Expresses Aggrecan. *Frontiers in Neuroanatomy*, **2017**, 11, 41	3.6	11
194	Differentiation of Human Induced Pluripotent Stem Cell (hiPSC)-Derived Neurons in Mouse Hippocampal Slice Cultures. *Frontiers in Cellular Neuroscience*, **2017**, 11, 143	6.1	15
193	Spatial Representation of Hippocampal Place Cells in a T-Maze with an Aversive Stimulation. *Frontiers in Neural Circuits*, **2017**, 11, 101	3.5	11

192	Flashing Lights Induce Prolonged Distortions in Visual Cortical Responses and Visual Perception. *ENeuro*, **2017**, 4,	3.9	6
191	Spatial clusters of constitutively active neurons in mouse visual cortex. *Anatomical Science International*, **2016**, 91, 188-95	2	7
190	Development of practical red fluorescent probe for cytoplasmic calcium ions with greatly improved cell-membrane permeability. *Cell Calcium*, **2016**, 60, 256-65	4	20
189	Nitric Oxide-induced Activation of the Type 1 Ryanodine Receptor Is Critical for Epileptic Seizure-induced Neuronal Cell Death. *EBioMedicine*, **2016**, 11, 253-261	8.8	21
188	Functional Organization of Flash-Induced V1 Offline Reactivation. *Journal of Neuroscience*, **2016**, 36, 11727-11738	6.6	15
187	Photoactivated adenylyl cyclase (PAC) reveals novel mechanisms underlying cAMP-dependent axonal morphogenesis. *Scientific Reports*, **2016**, 5, 19679	4.9	32
186	Early Failures Benefit Subsequent Task Performance. *Scientific Reports*, **2016**, 6, 21293	4.9	2
185	Re-analysis on geometric energy. *Anatomical Science International*, **2016**, 91, 425-6	2	
184	Subcellular Imbalances in Synaptic Activity. *Cell Reports*, **2016**, 14, 1348-1354	10.6	5
183	Accurate detection of low signal-to-noise ratio neuronal calcium transient waves using a matched filter. *Journal of Neuroscience Methods*, **2016**, 259, 1-12	3	12
182	Depth and time-dependent heterogeneity of microglia in mouse hippocampal slice cultures. *Neuroscience Research*, **2016**, 111, 64-9	2.9	10
181	Structural insight into photoactivation of an adenylate cyclase from a photosynthetic cyanobacterium. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 6659-64	11.5	48
180	Unexpected Photo-instability of 2,6-Sulfonamide-Substituted BODIPYs and Its Application to Caged GABA. *ChemBioChem*, **2016**, 17, 1233-40	3.8	12
179	Differential expression of axon-sorting molecules in mouse olfactory sensory neurons. *European Journal of Neuroscience*, **2016**, 44, 1998-2003	3.5	5
178	Experimental febrile seizures induce age-dependent structural plasticity and improve memory in mice. *Neuroscience*, **2016**, 318, 34-44	3.9	15
177	Homeostatic changes in neuronal network oscillations in response to continuous hypoperfusion in the mouse forebrain. *Neuroscience Research*, **2016**, 109, 28-34	2.9	1
176	A Computationally Efficient Filter for Reducing Shot Noise in Low S/N Data. *PLoS ONE*, **2016**, 11, e0157595	3.7	15
175	Activation of Hilar Mossy Cells and Dentate Granule Cells During Sharp Wave/Ripples. *Current Research in Neuroscience*, **2016**, 7, 1-8	0	

174	Neuraminidase-Dependent Degradation of Polysialic Acid Is Required for the Lamination of Newly Generated Neurons. *PLoS ONE*, **2016**, 11, e0146398	3.7	11
173	Microglia engulf viable newborn cells in the epileptic dentate gyrus. *Glia*, **2016**, 64, 1508-17	9	47
172	Subcellular calcium dynamics during juvenile development in mouse hippocampal astrocytes. *European Journal of Neuroscience*, **2016**, 43, 923-32	3.5	11
171	Late Arc/Arg3.1 expression in the basolateral amygdala is essential for persistence of newly-acquired and reactivated contextual fear memories. *Scientific Reports*, **2016**, 6, 21007	4.9	26
170	Empirical Bayesian significance measure of neuronal spike response. *BMC Neuroscience*, **2016**, 17, 27	3.2	1
169	A new device for the simultaneous recording of cerebral, cardiac, and muscular electrical activity in freely moving rodents. *Journal of Pharmacological Sciences*, **2016**, 132, 105-108	3.7	16
168	Microglia and neurogenesis in the epileptic dentate gyrus. *Neurogenesis (Austin, Tex)*, **2016**, 3, e1235525		11
167	3-Hz subthreshold oscillations of CA2 neurons In vivo. *Hippocampus*, **2016**, 26, 1570-1578	3.5	13
166	Brief fear preexposure facilitates subsequent fear conditioning. *Neuroscience Research*, **2015**, 95, 66-73	2.9	4
165	A neural network model of reliably optimized spike transmission. *Cognitive Neurodynamics*, **2015**, 9, 265-77	4.2	6
164	Microglia in the pathogenesis of autism spectrum disorders. *Neuroscience Research*, **2015**, 100, 1-5	2.9	69
163	Memory formation and retrieval of neuronal silencing in the auditory cortex. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 9740-4	11.5	8
162	Visual cortical prosthesis with a geomagnetic compass restores spatial navigation in blind rats. *Current Biology*, **2015**, 25, 1091-5	6.3	14
161	Simultaneous silence organizes structured higher-order interactions in neural populations. *Scientific Reports*, **2015**, 5, 9821	4.9	22
160	Subtle modulation of ongoing calcium dynamics in astrocytic microdomains by sensory inputs. *Physiological Reports*, **2015**, 3, e12454	2.6	20
159	Heterogeneous effects of antiepileptic drugs in an in vitro epilepsy model--a functional multineuron calcium imaging study. *European Journal of Neuroscience*, **2015**, 42, 1818-29	3.5	13
158	Topological organization of CA3-to-CA1 excitation. *European Journal of Neuroscience*, **2015**, 42, 2135-43	3.5	8
157	Novelty-Induced Phase-Locked Firing to Slow Gamma Oscillations in the Hippocampus: Requirement of Synaptic Plasticity. *Neuron*, **2015**, 86, 1265-76	13.9	32

156	Frontal association cortex is engaged in stimulus integration during associative learning. *Current Biology*, **2015**, 25, 117-23	6.3	24
155	Long-delayed expression of the immediate early gene Arc/Arg3.1 refines neuronal circuits to perpetuate fear memory. *Journal of Neuroscience*, **2015**, 35, 819-30	6.6	56
154	Neocortical Rebound Depolarization Enhances Visual Perception. *PLoS Biology*, **2015**, 13, e1002231	9.7	27
153	Homeostatic Hippocampal Activity against Reduced Glutamatergic Neurotransmission. *International Journal of Pharmacology*, **2015**, 11, 318-326	0.7	2
152	Prefrontal dopamine regulates fear reinstatement through the downregulation of extinction circuits. *ELife*, **2015**, 4,	8.9	20
151	Operant conditioning of synaptic and spiking activity patterns in single hippocampal neurons. *Journal of Neuroscience*, **2014**, 34, 5044-53	6.6	24
150	Unbalanced excitability underlies offline reactivation of behaviorally activated neurons. *Nature Neuroscience*, **2014**, 17, 503-5	25.5	47
149	Interneuron firing precedes sequential activation of neuronal ensembles in hippocampal slices. *European Journal of Neuroscience*, **2014**, 39, 2027-36	3.5	12
148	Synaptic plasticity associated with a memory engram in the basolateral amygdala. *Journal of Neuroscience*, **2014**, 34, 9305-9	6.6	41
147	Fear extinction requires Arc/Arg3.1 expression in the basolateral amygdala. *Molecular Brain*, **2014**, 7, 30	4.5	16
146	Astrocyte calcium signalling orchestrates neuronal synchronization in organotypic hippocampal slices. *Journal of Physiology*, **2014**, 592, 2771-83	3.9	37
145	Dopamine receptor activation reorganizes neuronal ensembles during hippocampal sharp waves in vitro. *PLoS ONE*, **2014**, 9, e104438	3.7	19
144	A statistical method of identifying interactions in neuron-glia systems based on functional multicell Ca2+ imaging. *PLoS Computational Biology*, **2014**, 10, e1003949	5	7
143	Ex vivo cultured neuronal networks emit in vivo-like spontaneous activity. *Journal of Physiological Sciences*, **2014**, 64, 421-31	2.3	13
142	Large-scale imaging of subcellular calcium dynamics of cortical neurons with G-CaMP6-actin. *NeuroReport*, **2014**, 25, 501-6	1.7	2
141	Sound-induced hyperpolarization of hippocampal neurons. *NeuroReport*, **2014**, 25, 1013-7	1.7	7
140	Sound-induced modulation of hippocampal □scillations. *NeuroReport*, **2014**, 25, 1368-74	1.7	6
139	Red Fluorescent Probe for Monitoring the Dynamics of Cytoplasmic Calcium Ions. *Angewandte Chemie*, **2013**, 125, 3966-3969	3.6	7

138	Interpyramid spike transmission stabilizes the sparseness of recurrent network activity. *Cerebral Cortex*, **2013**, 23, 293-304	5.1	89
137	Novel contribution of cell surface and intracellular M1-muscarinic acetylcholine receptors to synaptic plasticity in hippocampus. *Journal of Neurochemistry*, **2013**, 126, 360-71	6	26
136	The accuracy and precision of signal source localization with tetrodes. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 531-4	0.9	4
135	Layer III neurons control synchronized waves in the immature cerebral cortex. *Journal of Neuroscience*, **2013**, 33, 987-1001	6.6	29
134	Red fluorescent probe for monitoring the dynamics of cytoplasmic calcium ions. *Angewandte Chemie - International Edition*, **2013**, 52, 3874-7	16.4	63
133	Subicular activation preceding hippocampal ripples in vitro. *Scientific Reports*, **2013**, 3, 2696	4.9	13
132	Multineuronal spike sequences repeat with millisecond precision. *Frontiers in Neural Circuits*, **2013**, 7, 112	3.5	10
131	Muscarinic receptor activation disrupts hippocampal sharp wave-ripples. *Brain Research*, **2012**, 1461, 1-9	3.7	26
130	Heterogeneity and independency of unitary synaptic outputs from hippocampal CA3 pyramidal cells. *Journal of Physiology*, **2012**, 590, 4869-80	3.9	7
129	Preinspiratory calcium rise in putative pre-Botzinger complex astrocytes. *Journal of Physiology*, **2012**, 590, 4933-44	3.9	51
128	Power-Law Scaling of Synchronization Robustly Reproduced in the Hippocampal CA3 Slice Culture Model with Small-World Topology. *Lecture Notes in Computer Science*, **2012**, 152-159	0.9	
127	Targeted axon-attached recording with fluorescent patch-clamp pipettes in brain slices. *Nature Protocols*, **2012**, 7, 1228-34	18.8	33
126	An improved genetically encoded red fluorescent Ca2+ indicator for detecting optically evoked action potentials. *PLoS ONE*, **2012**, 7, e39933	3.7	100
125	Genetically encoded green fluorescent Ca2+ indicators with improved detectability for neuronal Ca2+ signals. *PLoS ONE*, **2012**, 7, e51286	3.7	161
124	Locally synchronized synaptic inputs. *Science*, **2012**, 335, 353-6	33.3	219
123	GABAergic excitation after febrile seizures induces ectopic granule cells and adult epilepsy. *Nature Medicine*, **2012**, 18, 1271-8	50.5	126
122	Synchronized spike waves in immature dentate gyrus networks. *European Journal of Neuroscience*, **2012**, 35, 673-81	3.5	7
121	Effects of axonal topology on the somatic modulation of synaptic outputs. *Journal of Neuroscience*, **2012**, 32, 2868-76	6.6	31

120	Normal learning ability of mice with a surgically exposed hippocampus. *NeuroReport*, **2012**, 23, 457-61	1.7	7
119	Cannabinoid receptor activation disrupts the internal structure of hippocampal sharp wave-ripple complexes. *Journal of Pharmacological Sciences*, **2012**, 118, 288-94	3.7	11
118	Action-potential modulation during axonal conduction. *Science*, **2011**, 331, 599-601	33.3	150
117	Thoracotomy reduces intrinsic brain movement caused by heartbeat and respiration: a simple method to prevent motion artifact for in vivo experiments. *Neuroscience Research*, **2011**, 71, 188-91	2.9	3
116	Asynchronously enhanced spiking activity of ischemic neuronal networks. *Biological and Pharmaceutical Bulletin*, **2011**, 34, 764-7	2.3	3
115	Intact internal dynamics of the neocortex in acutely paralyzed mice. *Journal of Physiological Sciences*, **2011**, 61, 343-8	2.3	9
114	Chaotic neuron clock. *Chaos, Solitons and Fractals*, **2011**, 44, 342-347	9.3	1
113	High-speed multineuron calcium imaging using Nipkow-type confocal microscopy. *Current Protocols in Neuroscience*, **2011**, Chapter 2, Unit 2.14	2.7	15
112	Development of a far-red to near-infrared fluorescence probe for calcium ion and its application to multicolor neuronal imaging. *Journal of the American Chemical Society*, **2011**, 133, 14157-9	16.4	160
111	Locally synchronized astrocytes. *Cerebral Cortex*, **2011**, 21, 1889-900	5.1	61
110	Large-scale calcium waves traveling through astrocytic networks in vivo. *Journal of Neuroscience*, **2011**, 31, 2607-14	6.6	189
109	Hippocampal polysynaptic computation. *Journal of Neuroscience*, **2011**, 31, 13168-79	6.6	7
108	Nipkow confocal imaging from deep brain tissues. *Journal of Integrative Neuroscience*, **2011**, 10, 121-9	1.5	14
107	Power Laws for Spontaneous Neuronal Activity in Hippocampal CA3 Slice Culture. *Lecture Notes in Computer Science*, **2011**, 370-379	0.9	
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