Joe Z Tsien

List of Publications by Year
in descending order

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97	12,566	76196 40	45213 90
papers	citations	h-index	g-index

100	100	100	13327
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neural Coding of Cell Assemblies via Spike-Timing Self-Information. Cerebral Cortex, 2018, 28, 2563-2576.	1.6	3
2	Cre-lox Neurogenetics. , 2018, , 479-490.		0
3	Histone Deacetylase Inhibitor Alleviates the Neurodegenerative Phenotypes and Histone Dysregulation in Presenilins-Deficient Mice. Frontiers in Aging Neuroscience, 2018, 10, 137.	1.7	28
4	Neural Coding of Appetitive Food Experiences in the Amygdala. Neurobiology of Learning and Memory, 2018, 155, 261-275.	1.0	14
5	Transcriptome Architecture of Adult Mouse Brain Revealed by Sparse Coding of Genome-Wide In Situ Hybridization Images. Neuroinformatics, 2017, 15, 285-295.	1.5	8
6	Discover mouse gene coexpression landscapes using dictionary learning and sparse coding. Brain Structure and Function, 2017, 222, 4253-4270.	1.2	7
7	Adult forebrain NMDA receptors gate social motivation and social memory. Neurobiology of Learning and Memory, 2017, 138, 164-172.	1.0	23
8	Neural Codeâ€"Neural Self-information Theory on How Cell-Assembly Code Rises from Spike Time and Neuronal Variability. Frontiers in Cellular Neuroscience, 2017, 11, 236.	1.8	20
9	Distinct retrosplenial cortex cell populations and their spike dynamics during ketamine-induced unconscious state. PLoS ONE, 2017, 12, e0187198.	1.1	5
10	The Emerging Wearable Solutions in mHealth. , 2016, , .		0
11	Cre-Lox Neurogenetics: 20 Years of Versatile Applications in Brain Research and Countingâ€¦. Frontiers in Genetics, 2016, 7, 19.	1.1	53
12	Theory of Connectivity: Nature and Nurture of Cell Assemblies and Cognitive Computation. Frontiers in Neural Circuits, 2016, 10, 34.	1.4	25
13	Camera-Based, Non-Contact, Vital-Signs Monitoring Technology May Provide a Way for the Early Prevention of SIDS in Infants. Frontiers in Neurology, 2016, 7, 236.	1.1	18
14	512-Channel and 13-Region Simultaneous Recordings Coupled with Optogenetic Manipulation in Freely Behaving Mice. Frontiers in Systems Neuroscience, 2016, 10, 48.	1.2	23
15	Brain Computation Is Organized via Power-of-Two-Based Permutation Logic. Frontiers in Systems Neuroscience, 2016, 10, 95.	1.2	27
16	Dopamine Rebound-Excitation Theory: Putting Brakes on PTSD. Frontiers in Psychiatry, 2016, 7, 163.	1.3	32
17	Computational Classification Approach to Profile Neuron Subtypes from Brain Activity Mapping Data. Scientific Reports, 2015, 5, 12474.	1.6	16
18	Technology platforms for remote monitoring of vital signs in the new era of telemedicine. Expert Review of Medical Devices, 2015, 12, 411-429.	1.4	23

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19	Optimization of large-scale mouse brain connectome via joint evaluation of DTI and neuron tracing data. NeuroImage, 2015, 115, 202-213.	2.1	43
20	A Postulate on the Brain's Basic Wiring Logic. Trends in Neurosciences, 2015, 38, 669-671.	4.2	25
21	Importance of the GluN2B carboxy-terminal domain for enhancement of social memories. Learning and Memory, 2015, 22, 401-410.	0.5	19
22	Principles of Intelligence: On Evolutionary Logic of the Brain. Frontiers in Systems Neuroscience, 2015, 9, 186.	1.2	18
23	Heart Rate and Heart Rate Variability Assessment Identifies Individual Differences in Fear Response Magnitudes to Earthquake, Free Fall, and Air Puff in Mice. PLoS ONE, 2014, 9, e93270.	1.1	31
24	Molecular and Genetic Determinants of the NMDA Receptor for Superior Learning and Memory Functions. PLoS ONE, 2014, 9, e111865.	1.1	17
25	Detecting cell assembly interaction patterns via Bayesian based change-point detection and graph inference model. , 2014, , .		2
26	Targeting the NMDA receptor subunit NR2B for treating or preventing age-related memory decline. Expert Opinion on Therapeutic Targets, 2014, 18, 1121-1130.	1.5	47
27	On initial Brain Activity Mapping of episodic and semantic memory code in the hippocampus. Neurobiology of Learning and Memory, 2013, 105, 200-210.	1.0	22
28	On brain activity mapping: insights and lessons from Brain Decoding Project to map memory patterns in the hippocampus. Science China Life Sciences, 2013, 56, 767-779.	2.3	4
29	Increased NR2A:NR2B ratio compresses long-term depression range and constrains long-term memory. Scientific Reports, 2013, 3, 1036.	1.6	89
30	Mild Blast Events Alter Anxiety, Memory, and Neural Activity Patterns in the Anterior Cingulate Cortex. PLoS ONE, 2013, 8, e64907.	1.1	37
31	Changes in Heart Rate Variability Are Associated with Expression of Short-Term and Long-Term Contextual and Cued Fear Memories. PLoS ONE, 2013, 8, e63590.	1.1	29
32	Remote Measurements of Heart and Respiration Rates for Telemedicine. PLoS ONE, 2013, 8, e71384.	1.1	139
33	Mapping and Deciphering Neural Codes of NMDA Receptor-Dependent Fear Memory Engrams in the Hippocampus. PLoS ONE, 2013, 8, e79454.	1.1	20
34	Learning and Memory. , 2012, , 963-981.		3
35	Genetic Overexpression of NR2B Subunit Enhances Social Recognition Memory for Different Strains and Species. PLoS ONE, 2012, 7, e36387.	1.1	35
36	Robust Action Recognition Using Multi-Scale Spatial-Temporal Concatenations of Local Features as Natural Action Structures. PLoS ONE, 2012, 7, e46686.	1.1	4

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37	Large-Scale Neural Ensembles in Mice: Methods for Recording and Data Analysis. Neuromethods, 2011, , 103-126.	0.2	3
38	NMDA Receptors in Dopaminergic Neurons Are Crucial for Habit Learning. Neuron, 2011, 72, 1055-1066.	3.8	99
39	Differential Consolidation and Pattern Reverberations within Episodic Cell Assemblies in the Mouse Hippocampus. PLoS ONE, 2011, 6, e16507.	1.1	16
40	Conjunctive Processing of Locomotor Signals by the Ventral Tegmental Area Neuronal Population. PLoS ONE, 2011, 6, e16528.	1.1	43
41	Convergent Processing of Both Positive and Negative Motivational Signals by the VTA Dopamine Neuronal Populations. PLoS ONE, 2011, 6, e17047.	1.1	84
42	NMDA Receptors Are Not Required for Pattern Completion During Associative Memory Recall. PLoS ONE, 2011, 6, e19326.	1.1	11
43	A Hierarchical Probabilistic Model for Rapid Object Categorization in Natural Scenes. PLoS ONE, 2011, 6, e20002.	1.1	8
44	Forebrain NR2B Overexpression Facilitating the Prefrontal Cortex Long-Term Potentiation and Enhancing Working Memory Function in Mice. PLoS ONE, 2011, 6, e20312.	1.1	108
45	A novel behavioral paradigm for assessing the concept of nests in mice. Journal of Neuroscience Methods, 2010, 189, 169-175.	1.3	4
46	Conditional Knockout of NMDA Receptors in Dopamine Neurons Prevents Nicotine-Conditioned Place Preference. PLoS ONE, 2010, 5, e8616.	1.1	28
47	Temporal Dynamics of Distinct CA1 Cell Populations during Unconscious State Induced by Ketamine. PLoS ONE, 2010, 5, e15209.	1.1	23
48	Balanced Dopamine Is Critical for Pattern Completion during Associative Memory Recall. PLoS ONE, 2010, 5, e15401.	1.1	20
49	Cognition Enhancement Strategies: Figure 1.. Journal of Neuroscience, 2010, 30, 14987-14992.	1.7	42
50	Emergence of Visual Saliency from Natural Scenes via Context-Mediated Probability Distributions Coding. PLoS ONE, 2010, 5, e15796.	1.1	12
51	Genetic Enhancement of Memory and Long-Term Potentiation but Not CA1 Long-Term Depression in NR2B Transgenic Rats. PLoS ONE, 2009, 4, e7486.	1.1	111
52	In VivoEvidence for NMDA Receptor-Mediated Excitotoxicity in a Murine Genetic Model of Huntington Disease. Journal of Neuroscience, 2009, 29, 3200-3205.	1.7	100
53	Neuronal PPARÎ³ Deficiency Increases Susceptibility to Brain Damage after Cerebral Ischemia. Journal of Neuroscience, 2009, 29, 6186-6195.	1.7	148
54	Towards transgenic primates: What can we learn from mouse genetics?. Science in China Series C: Life Sciences, 2009, 52, 506-514.	1.3	2

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55	Memory and the NMDA Receptors. New England Journal of Medicine, 2009, 361, 302-303.	13.9	289
56	Neural Population-Level Memory Traces in the Mouse Hippocampus. PLoS ONE, 2009, 4, e8256.	1.1	52
57	CaMKII Activation State Underlies Synaptic Labile Phase of LTP and Short-Term Memory Formation. Current Biology, 2008, 18, 1546-1554.	1.8	37
58	Calorie restriction ameliorates neurodegenerative phenotypes in forebrain-specific presenilin-1 and presenilin-2 double knockout mice. Neurobiology of Aging, 2008, 29, 1502-1511.	1.5	103
59	Inducible and Selective Erasure of Memories in the Mouse Brain via Chemical-Genetic Manipulation. Neuron, 2008, 60, 353-366.	3.8	61
60	Functional disturbances in the striatum by region-specific ablation of NMDA receptors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12961-12966.	3.3	18
61	Efficient reproduction of cynomolgus monkey using pronuclear embryo transfer technique. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12956-12960.	3.3	26
62	Chapter 4.1 Neural coding of episodic memory. Handbook of Behavioral Neuroscience, 2008, , 399-625.	0.7	1
63	Real-time neural coding of memory. Progress in Brain Research, 2007, 165, 105-122.	0.9	10
64	Neural encoding of the concept of nest in the mouse brain. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6066-6071.	3.3	72
65	Dentate gyrus-specific manipulation of Î²-Ca ²⁺ /calmodulin-dependent kinase II disrupts memory consolidation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16317-16322.	3.3	26
66	Subspace Projection Approaches to Classification and Visualization of Neural Network-Level Encoding Patterns. PLoS ONE, 2007, 2, e404.	1.1	13
67	The Memory Code. Scientific American, 2007, 297, 52-59.	1.0	49
68	Maintenance of superior learning and memory function in NR2B transgenic mice during ageing. European Journal of Neuroscience, 2007, 25, 1815-1822.	1.2	158
69	Environment enrichment rescues the neurodegenerative phenotypes in presenilinsâ€deficient mice. European Journal of Neuroscience, 2007, 26, 101-112.	1.2	52
70	The Organizing Principles of Real-Time Memory Encoding: Neural Clique Assemblies and Universal Neural Codes. Research and Perspectives in Neurosciences, 2007, , 99-112.	0.4	0
71	Forebrain Overexpression of CaMKII abolishes Cingulate Long Term Depression and Reduces Mechanical Allodynia and Thermal Hyperalgesia. Molecular Pain, 2006, 2, 1744-8069-2-21.	1.0	23
72	Molecular and systems mechanisms of memory consolidation and storage. Progress in Neurobiology, 2006, 79, 123-135.	2.8	184

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73	Organizing principles of real-time memory encoding: neural clique assemblies and universal neural codes. Trends in Neurosciences, 2006, 29, 48-57.	4.2	203
74	Large-scale neural ensemble recording in the brains of freely behaving mice. Journal of Neuroscience Methods, 2006, 155, 28-38.	1.3	94
75	Requirement of NMDA receptor reactivation for consolidation and storage of nondeclarative taste memory revealed by inducible NR1 knockout. European Journal of Neuroscience, 2005, 22, 755-763.	1.2	57
76	Acquired deficit of forebrain glucocorticoid receptor produces depression-like changes in adrenal axis regulation and behavior. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 473-478.	3.3	330
77	Identification of network-level coding units for real-time representation of episodic experiences in the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6125-6130.	3.3	114
78	Forebrain degeneration and ventricle enlargement caused by double knockout of Alzheimer's presenilin-1 and presenilin-2. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8162-8167.	3.3	116
79	Inducible and Reversible NR1 Knockout Reveals Crucial Role of the NMDA Receptor in Preserving Remote Memories in the Brain. Neuron, 2004, 41, 781-793.	3.8	159
80	An Emerging Molecular and Cellular Framework for Memory Processing by the Hippocampus. ChemInform, 2003, 34, no.	0.1	0
81	Inducible protein knockout reveals temporal requirement of CaMKII reactivation for memory consolidation in the brain. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4287-4292.	3.3	149
82	An emerging molecular and cellular framework for memory processing by the hippocampus. Trends in Neurosciences, 2002, 25, 501-505.	4.2	130
83	Synaptic reentry reinforcement based network model for long-term memory consolidation. Hippocampus, 2002, 12, 637-647.	0.9	96
84	c-fos regulates neuronal excitability and survival. Nature Genetics, 2002, 30, 416-420.	9.4	263
85	Deficient Neurogenesis in Forebrain-Specific Presenilin-1 Knockout Mice Is Associated with Reduced Clearance of Hippocampal Memory Traces. Neuron, 2001, 32, 911-926.	3.8	443
86	Effect of transgenic overexpression of NR2B on NMDA receptor function and synaptic plasticity in visual cortex. Neuropharmacology, 2001, 41, 762-770.	2.0	70
87	Do 'smart' mice feel more pain, or are they just better learners?. Nature Neuroscience, 2001, 4, 453-453.	7.1	9
88	Genetic analysis of learning behavior-induced structural plasticity. Hippocampus, 2000, 10, 605-609.	0.9	77
89	Enrichment induces structural changes and recovery from nonspatial memory deficits in CA1 NMDAR1-knockout mice. Nature Neuroscience, 2000, 3, 238-244.	7.1	699
90	Building a Brainier Mouse. Scientific American, 2000, 282, 62-68.	1.0	70

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91	A chemical switch for inhibitor-sensitive alleles of any protein kinase. Nature, 2000, 407, 395-401.	13.7	1,001
92	NMDA Receptor-Dependent Synaptic Reinforcement as a Crucial Process for Memory Consolidation. Science, 2000, 290, 1170-1174.	6.0	495
93	Genetic enhancement of learning and memory in mice. Nature, 1999, 401, 63-69.	13.7	1,666
94	Chapter 3.1.3 Brain region-specific and temporally restricted gene knockout using the Cre recombinase system. Handbook of Behavioral Neuroscience, 1999, 13, 282-290.	0.0	1
95	Subregion- and Cell Typeâ€“Restricted Gene Knockout in Mouse Brain. Cell, 1996, 87, 1317-1326.	13.5	1,207
96	The Essential Role of Hippocampal CA1 NMDA Receptorâ€“Dependent Synaptic Plasticity in Spatial Memory. Cell, 1996, 87, 1327-1338.	13.5	1,604
97	Impaired Hippocampal Representation of Space in CA1-Specific NMDAR1 Knockout Mice. Cell, 1996, 87, 1339-1349.	13.5	561