Sheena Ann Josselyn

List of Publications by Year
in descending order

99 papers	12,558 citations	30068 54 h-index	37202 96 g-index
107 all docs	107 docs citations	107 times ranked	11327 citing authors

#	Article	IF	Citations
1	Memory Reconsolidation and Extinction Have Distinct Temporal and Biochemical Signatures. Journal of Neuroscience, 2004, 24, 4787-4795.	3.6	1,010
2	Hippocampal Neurogenesis Regulates Forgetting During Adulthood and Infancy. Science, 2014, 344, 598-602.	12.6	579
3	Neuronal Competition and Selection During Memory Formation. Science, 2007, 316, 457-460.	12.6	573
4	CREB required for the stability of new and reactivated fear memories. Nature Neuroscience, 2002, 5, 348-355.	14.8	554
5	Memory engrams: Recalling the past and imagining the future. Science, 2020, 367, .	12.6	530
6	Finding the engram. Nature Reviews Neuroscience, 2015, 16, 521-534.	10.2	493
7	Selective Erasure of a Fear Memory. Science, 2009, 323, 1492-1496.	12.6	461
8	Long-Term Memory Is Facilitated by cAMP Response Element-Binding Protein Overexpression in the Amygdala. Journal of Neuroscience, 2001, 21, 2404-2412.	3.6	396
9	Optical controlling reveals time-dependent roles for adult-born dentate granule cells. Nature Neuroscience, 2012, 15, 1700-1706.	14.8	371
10	Stimulation of Entorhinal Cortex Promotes Adult Neurogenesis and Facilitates Spatial Memory. Journal of Neuroscience, 2011, 31, 13469-13484.	3.6	336
11	Neurons Are Recruited to a Memory Trace Based on Relative Neuronal Excitability Immediately before Training. Neuron, 2014, 83, 722-735.	8.1	319
12	Competition between engrams influences fear memory formation and recall. Science, 2016, 353, 383-387.	12.6	278
13	Maze training in mice induces MRI-detectable brain shape changes specific to the type of learning. NeuroImage, 2011, 54, 2086-2095.	4.2	276
14	MAPK, CREB andzif268are all required for the consolidation of recognition memory. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 805-814.	4.0	274
15	Disruption of Oligodendrogenesis Impairs Memory Consolidation in Adult Mice. Neuron, 2020, 105, 150-164.e6.	8.1	263
16	Upregulation of CREB-Mediated Transcription Enhances Both Short- and Long-Term Memory. Journal of Neuroscience, 2011, 31, 8786-8802.	3.6	223
17	Chemogenetic Interrogation of a Brain-wide Fear Memory Network in Mice. Neuron, 2017, 94, 363-374.e4.	8.1	211
18	Structural foundations of optogenetics: Determinants of channelrhodopsin ion selectivity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 822-829.	7.1	197

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19	Hippocampal neurogenesis and forgetting. Trends in Neurosciences, 2013, 36, 497-503.	8.6	195
20	Neurogenesis-mediated forgetting minimizes proactive interference. Nature Communications, 2016, 7, 10838.	12.8	179
21	CREB, Synapses and Memory Disorders: Past Progress and Future Challenges. CNS and Neurological Disorders, 2005, 4, 481-497.	4.3	168
22	Posttraining Ablation of Adult-Generated Neurons Degrades Previously Acquired Memories. Journal of Neuroscience, 2011, 31, 15113-15127.	3.6	166
23	Suppression of adult neurogenesis impairs population coding of similar contexts in hippocampal CA3 region. Nature Communications, 2012, 3, 1253.	12.8	155
24	Spine growth in the anterior cingulate cortex is necessary for the consolidation of contextual fear memory. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8456-8460.	7.1	152
25	Parvalbumin-positive interneurons mediate neocortical-hippocampal interactions that are necessary for memory consolidation. ELife, 2017, 6, .	6.0	151
26	Computer-Assisted Behavioral Assessment of Pavlovian Fear Conditioning in Mice. Learning and Memory, 2000, 7, 58-72.	1.3	150
27	The Role of The RNA Demethylase FTO (Fat Mass and Obesity-Associated) and mRNA Methylation in Hippocampal Memory Formation. Neuropsychopharmacology, 2017, 42, 1502-1510.	5.4	145
28	Neuronal Allocation to a Hippocampal Engram. Neuropsychopharmacology, 2016, 41, 2987-2993.	5.4	133
29	Patterns across multiple memories are identified over time. Nature Neuroscience, 2014, 17, 981-986.	14.8	130
30	Memory Allocation: Mechanisms and Function. Annual Review of Neuroscience, 2018, 41, 389-413.	10.7	130
31	Consolidation of CS and US representations in associative fear conditioning. Hippocampus, 2004, 14, 557-569.	1.9	125
32	Optimization of CLARITY for Clearing Whole-Brain and Other Intact Organs. ENeuro, 2015, 2, ENEURO.0022-15.2015.	1.9	123
33	Optogenetics: 10 years after ChR2 in neuronsâ€”views from the community. Nature Neuroscience, 2015, 18, 1202-1212.	14.8	122
34	Memory recall and modifications by activating neurons with elevated CREB. Nature Neuroscience, 2014, 17, 65-72.	14.8	118
35	FoxO6 regulates memory consolidation and synaptic function. Genes and Development, 2012, 26, 2780-2801.	5.9	116
36	The neurobiological foundation of memory retrieval. Nature Neuroscience, 2019, 22, 1576-1585.	14.8	116

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37	Infantile amnesia: A neurogenic hypothesis. Learning and Memory, 2012, 19, 423-433.	1.3	110
38	MEF2 negatively regulates learning-induced structural plasticity and memory formation. Nature Neuroscience, 2012, 15, 1255-1264.	14.8	108
39	Increasing CREB in the auditory thalamus enhances memory and generalization of auditory conditioned fear. Learning and Memory, 2008, 15, 443-453.	1.3	103
40	Manipulating a â€œCocaine Engramâ€•in Mice. Journal of Neuroscience, 2014, 34, 14115-14127.	3.6	98
41	Continuing the search for the engram: examining the mechanism of fear memories. Journal of Psychiatry and Neuroscience, 2010, 35, 221-228.	2.4	96
42	Recovery of â€œLostâ€•Infant Memories in Mice. Current Biology, 2018, 28, 2283-2290.e3.	3.9	93
43	Increasing CRTC1 Function in the Dentate Gyrus during Memory Formation or Reactivation Increases Memory Strength without Compromising Memory Quality. Journal of Neuroscience, 2012, 32, 17857-17868.	3.6	89
44	Dorsal hippocampal CREB is both necessary and sufficient for spatial memory. Learning and Memory, 2010, 17, 280-283.	1.3	88
45	Increasing CREB Function in the CA1 Region of Dorsal Hippocampus Rescues the Spatial Memory Deficits in a Mouse Model of Alzheimer's Disease. Neuropsychopharmacology, 2011, 36, 2169-2186.	5.4	87
46	Neuropeptide Y: Intraaccumbens injections produce a place preference that is blocked by cis-flupenthixol. Pharmacology Biochemistry and Behavior, 1993, 46, 543-552.	2.9	86
47	Development of Adult-Generated Cell Connectivity with Excitatory and Inhibitory Cell Populations in the Hippocampus. Journal of Neuroscience, 2015, 35, 10600-10612.	3.6	81
48	Heroes of the Engram. Journal of Neuroscience, 2017, 37, 4647-4657.	3.6	79
49	Activation of Amygdala CholecystokininBReceptors Potentiates the Acoustic Startle Response in the Rat. Journal of Neuroscience, 1997, 17, 1838-1847.	3.6	78
50	Memory formation in the absence of experience. Nature Neuroscience, 2019, 22, 933-940.	14.8	77
51	Parvalbumin interneurons constrain the size of the lateral amygdala engram. Neurobiology of Learning and Memory, 2016, 135, 91-99.	1.9	74
52	Elevation of Hippocampal Neurogenesis Induces a Temporally Graded Pattern of Forgetting of Contextual Fear Memories. Journal of Neuroscience, 2018, 38, 3190-3198.	3.6	70
53	The Nucleus Accumbens is not Critically Involved in Mediating the Effects of a Safety Signal on Behavior. Neuropsychopharmacology, 2005, 30, 17-26.	5.4	63
54	Memory Allocation. Neuropsychopharmacology, 2015, 40, 243-243.	5.4	61

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55	Ontogeny of contextual fear memory formation, specificity, and persistence in mice. Learning and Memory, 2012, 19, 598-604.	1.3	58
56	Ageâ€dependent effects of hippocampal neurogenesis suppression on spatial learning. Hippocampus, 2013, 23, 66-74.	1.9	56
57	A Compact Headâ€Mounted Endoscope for In Vivo Calcium Imaging in Freely Behaving Mice. Current Protocols in Neuroscience, 2018, 84, e51.	2.6	55
58	Neuronal competition: microcircuit mechanisms define the sparsity of the engram. Current Opinion in Neurobiology, 2019, 54, 163-170.	4.2	52
59	p63 Regulates Adult Neural Precursor and Newly Born Neuron Survival to Control Hippocampal-Dependent Behavior. Journal of Neuroscience, 2013, 33, 12569-12585.	3.6	45
60	Upregulation of Anandamide Hydrolysis in the Basolateral Complex of Amygdala Reduces Fear Memory Expression and Indices of Stress and Anxiety. Journal of Neuroscience, 2019, 39, 1275-1292.	3.6	45
61	Entorhinal Cortical Deep Brain Stimulation Rescues Memory Deficits in Both Young and Old Mice Genetically Engineered to Model Alzheimerâ€™s Disease. Neuropsychopharmacology, 2017, 42, 2493-2503.	5.4	44
62	Contextual fear conditioning in zebrafish. Learning and Memory, 2017, 24, 516-523.	1.3	44
63	Caution When Diagnosing Your Mouse With Schizophrenia: The Use and Misuse of Model Animals for Understanding Psychiatric Disorders. Biological Psychiatry, 2016, 79, 32-38.	1.3	43
64	Hippocampal clock regulates memory retrieval via Dopamine and PKA-induced GluA1 phosphorylation. Nature Communications, 2019, 10, 5766.	12.8	43
65	CREB regulates spine density of lateral amygdala neurons: implications for memory allocation. Frontiers in Behavioral Neuroscience, 2013, 7, 209.	2.0	40
66	Conditional Deletion of Î±-CaMKII Impairs Integration of Adult-Generated Granule Cells into Dentate Gyrus Circuits and Hippocampus-Dependent Learning. Journal of Neuroscience, 2014, 34, 11919-11928.	3.6	35
67	Reflections on the past two decades of neuroscience. Nature Reviews Neuroscience, 2020, 21, 524-534.	10.2	35
68	Optogenetic Inhibitor of the Transcription Factor CREB. Chemistry and Biology, 2015, 22, 1531-1539.	6.0	34
69	Prefrontal consolidation supports the attainment of fear memory accuracy. Learning and Memory, 2014, 21, 394-405.	1.3	32
70	Age-dependent changes in spatial memory retention and flexibility in mice. Neurobiology of Learning and Memory, 2017, 143, 59-66.	1.9	31
71	An inhibitory hippocampalâ€“thalamic pathway modulates remote memory retrieval. Nature Neuroscience, 2021, 24, 685-693.	14.8	31
72	What's right with my mouse model? New insights into the molecular and cellular basis of cognition from mouse models of Rubinstein-Taybi Syndrome. Learning and Memory, 2005, 12, 80-83.	1.3	30

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73	Posttraining Ablation of Adult-Generated Olfactory Granule Cells Degrades Odorâ€“Reward Memories. Journal of Neuroscience, 2014, 34, 15793-15803.	3.6	27
74	Hippocampal Neurogenesis and Memory Clearance. Neuropsychopharmacology, 2016, 41, 382-383.	5.4	27
75	Cerebellar abnormalities in purine nucleoside phosphorylase deficient mice. Neurobiology of Disease, 2012, 47, 201-209.	4.4	25
76	Cholinergic control of morphineâ€induced locomotion in rostromedial tegmental nucleus versus ventral tegmental area sites. European Journal of Neuroscience, 2013, 38, 2774-2785.	2.6	25
77	A time-dependent role for the transcription factor CREB in neuronal allocation to an engram underlying a fear memory revealed using a novel in vivo optogenetic tool to modulate CREB function. Neuropsychopharmacology, 2020, 45, 916-924.	5.4	25
78	Development and validation of a sensitive entropy-based measure for the water maze. Frontiers in Integrative Neuroscience, 2009, 3, 33.	2.1	22
79	The molecules of forgetfulness. Nature, 2002, 418, 929-930.	27.8	21
80	Basal variability in CREB phosphorylation predicts trait-like differences in amygdala-dependent memory. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16645-16650.	7.1	21
81	The role of neuronal excitability, allocation to an engram and memory linking in the behavioral generation of a false memory in mice. Neurobiology of Learning and Memory, 2020, 174, 107284.	1.9	21
82	Forgetting at biologically realistic levels of neurogenesis in a large-scale hippocampal model. Behavioural Brain Research, 2019, 376, 112180.	2.2	17
83	Impaired Recent, but Preserved Remote, Autobiographical Memory in Pediatric Brain Tumor Patients. Journal of Neuroscience, 2018, 38, 8251-8261.	3.6	15
84	The past, present and future of light-gated ion channels and optogenetics. ELife, 2018, 7, .	6.0	14
85	Electroconvulsive therapy with a memory reactivation intervention for post-traumatic stress disorder: A randomized controlled trial. Brain Stimulation, 2021, 14, 635-642.	1.6	11
86	Voluntary Exercise Increases Neurogenesis and Mediates Forgetting of Complex Paired Associates Memories. Neuroscience, 2021, 475, 1-9.	2.3	11
87	Assessing Individual Neuronal Activity Across the Intact Brain: Using Hybridization Chain Reaction (HCR) to Detect Arc mRNA Localized to the Nucleus in Volumes of Cleared Brain Tissue. Current Protocols in Neuroscience, 2018, 84, e49.	2.6	10
88	Automated Curation of CNMF-E-Extracted ROI Spatial Footprints and Calcium Traces Using Open-Source AutoML Tools. Frontiers in Neural Circuits, 2020, 14, 42.	2.8	10
89	Fear Extinction Requires Reward. Cell, 2018, 175, 639-640.	28.9	8
90	Reprint of: Disrupting Jagged1â€“Notch signaling impairs spatial memory formation in adult mice. Neurobiology of Learning and Memory, 2013, 105, 20-30.	1.9	5

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91	Retinoic acid receptor plays both sides of homeostatic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6528-6530.	7.1	5
92	Starring role for astrocytes in memory. Nature Neuroscience, 2020, 23, 1181-1182.	14.8	5
93	Facing your fears. Science, 2018, 360, 1186-1187.	12.6	4
94	Why Have Two When One Will Do? Comparing Task Representations across Amygdala and Prefrontal Cortex in Single Neurons and Neuronal Populations. Neuron, 2020, 107, 597-599.	8.1	2
95	Editorial overview: Neurobiology of learning and plasticity. Current Opinion in Neurobiology, 2021, 67, iii-v.	4.2	2
96	Chapter XIII CREB, plasticity and memory. Handbook of Chemical Neuroanatomy, 2002, 19, 329-361.	0.3	1
97	CREB: A Cornerstone of Memory Consolidation?. , 2005, , 359-380.		1
98	The Role of CREB and CREB Co-activators in Memory Formation. , 2012, , 171-194.		1
99	Memory: Ironing Out a Wrinkle in Time. Current Biology, 2018, 28, R599-R601.	3.9	1