Paul W Frankland

List of Publications by Year
in descending order

146 papers	20,387 citations	13854 67 h-index	11601 135 g-index
163 all docs	163 docs citations	163 times ranked	17879 citing authors

#	Article	IF	Citations
1	The organization of recent and remote memories. Nature Reviews Neuroscience, 2005, 6, 119-130.	4.9	1,693
2	CREB AND MEMORY. Annual Review of Neuroscience, 1998, 21, 127-148.	5.0	1,345
3	Memory Reconsolidation and Extinction Have Distinct Temporal and Biochemical Signatures. Journal of Neuroscience, 2004, 24, 4787-4795.	1.7	1,010
4	The Involvement of the Anterior Cingulate Cortex in Remote Contextual Fear Memory. Science, 2004, 304, 881-883.	6.0	805
5	Preferential incorporation of adult-generated granule cells into spatial memory networks in the dentate gyrus. Nature Neuroscience, 2007, 10, 355-362.	7.1	761
6	Human Adult Neurogenesis: Evidence and Remaining Questions. Cell Stem Cell, 2018, 23, 25-30.	5.2	601
7	Hippocampal Neurogenesis Regulates Forgetting During Adulthood and Infancy. Science, 2014, 344, 598-602.	6.0	579
8	Finding the engram. Nature Reviews Neuroscience, 2015, 16, 521-534.	4.9	493
9	Selective Erasure of a Fear Memory. Science, 2009, 323, 1492-1496.	6.0	461
10	Metformin Activates an Atypical PKC-CBP Pathway to Promote Neurogenesis and Enhance Spatial Memory Formation. Cell Stem Cell, 2012, 11, 23-35.	5.2	396
11	The acoustic startle reflex: neurons and connections. Brain Research Reviews, 1995, 21, 301-314.	9.1	394
12	Optical controlling reveals time-dependent roles for adult-born dentate granule cells. Nature Neuroscience, 2012, 15, 1700-1706.	7.1	371
13	Î±-CaMKII-dependent plasticity in the cortex is required for permanent memory. Nature, 2001, 411, 309-313.	13.7	368
14	The HMG-CoA Reductase Inhibitor Lovastatin Reverses the Learning and Attention Deficits in a Mouse Model of Neurofibromatosis Type 1. Current Biology, 2005, 15, 1961-1967.	1.8	361
15	A mouse model for the learning and memory deficits associated with neurofibromatosis type I. Nature Genetics, 1997, 15, 281-284.	9.4	336
16	Stimulation of Entorhinal Cortex Promotes Adult Neurogenesis and Facilitates Spatial Memory. Journal of Neuroscience, 2011, 31, 13469-13484.	1.7	336
17	Spaced training induces normal long-term memory in CREB mutant mice. Current Biology, 1997, 7, 1-11.	1.8	322
18	Neurons Are Recruited to a Memory Trace Based on Relative Neuronal Excitability Immediately before Training. Neuron, 2014, 83, 722-735.	3.8	319

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19	Competition between engrams influences fear memory formation and recall. Science, 2016, 353, 383-387.	6.0	278
20	Maze training in mice induces MRI-detectable brain shape changes specific to the type of learning. NeuroImage, 2011, 54, 2086-2095.	2.1	276
21	Tactile, acoustic and vestibular systems sum to elicit the startle reflex. Neuroscience and Biobehavioral Reviews, 2002, 26, 1-11.	2.9	271
22	Disruption of Oligodendrogenesis Impairs Memory Consolidation in Adult Mice. Neuron, 2020, 105, 150-164.e6.	3.8	263
23	Identification of a Functional Connectome for Long-Term Fear Memory in Mice. PLoS Computational Biology, 2013, 9, e1002853.	1.5	246
24	Involvement of the Anterior Cingulate Cortex in the Expression of Remote Spatial Memory. Journal of Neuroscience, 2006, 26, 7555-7564.	1.7	238
25	Brain Region-Specific Gene Expression Activation Required for Reconsolidation and Extinction of Contextual Fear Memory. Journal of Neuroscience, 2009, 29, 402-413.	1.7	237
26	Stability of recent and remote contextual fear memory. Learning and Memory, 2006, 13, 451-457.	0.5	217
27	Chemogenetic Interrogation of a Brain-wide Fear Memory Network in Mice. Neuron, 2017, 94, 363-374.e4.	3.8	211
28	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.	3.3	197
29	Treatment of inflammatory and neuropathic pain by uncoupling Src from the NMDA receptor complex. Nature Medicine, 2008, 14, 1325-1332.	15.2	195
30	Hippocampal neurogenesis and forgetting. Trends in Neurosciences, 2013, 36, 497-503.	4.2	195
31	The Persistence and Transience of Memory. Neuron, 2017, 94, 1071-1084.	3.8	195
32	Neurogenesis-mediated forgetting minimizes proactive interference. Nature Communications, 2016, 7, 10838.	5.8	179
33	Functional Connectivity of Multiple Brain Regions Required for the Consolidation of Social Recognition Memory. Journal of Neuroscience, 2017, 37, 4103-4116.	1.7	170
34	Impaired learning in mice with abnormal short-lived plasticity. Current Biology, 1996, 6, 1509-1518.	1.8	169
35	Posttraining Ablation of Adult-Generated Neurons Degrades Previously Acquired Memories. Journal of Neuroscience, 2011, 31, 15113-15127.	1.7	166
36	Mesenchymal Precursor Cells in Adult Nerves Contribute to Mammalian Tissue Repair and Regeneration. Cell Stem Cell, 2019, 24, 240-256.e9.	5.2	159

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37	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.	3.3	152
38	Parvalbumin-positive interneurons mediate neocortical-hippocampal interactions that are necessary for memory consolidation. ELife, 2017, 6, .	2.8	151
39	Computer-Assisted Behavioral Assessment of Pavlovian Fear Conditioning in Mice. Learning and Memory, 2000, 7, 58-72.	0.5	150
40	The Role of The RNA Demethylase FTO (Fat Mass and Obesity-Associated) and mRNA Methylation in Hippocampal Memory Formation. Neuropsychopharmacology, 2017, 42, 1502-1510.	2.8	145
41	Functional convergence of developmentally and adultâ€generated granule cells in dentate gyrus circuits supporting hippocampusâ€dependent memory. Hippocampus, 2011, 21, 1348-1362.	0.9	144
42	Neuronal Allocation to a Hippocampal Engram. Neuropsychopharmacology, 2016, 41, 2987-2993.	2.8	133
43	The precision of remote context memories does not require the hippocampus. Nature Neuroscience, 2009, 12, 253-255.	7.1	132
44	Patterns across multiple memories are identified over time. Nature Neuroscience, 2014, 17, 981-986.	7.1	130
45	Memory Allocation: Mechanisms and Function. Annual Review of Neuroscience, 2018, 41, 389-413.	5.0	130
46	Activation of LVGCCs and CB1 receptors required for destabilization of reactivated contextual fear memories. Learning and Memory, 2008, 15, 426-433.	0.5	128
47	Consolidation of CS and US representations in associative fear conditioning. Hippocampus, 2004, 14, 557-569.	0.9	125
48	Optimization of CLARITY for Clearing Whole-Brain and Other Intact Organs. ENeuro, 2015, 2, ENEURO.0022-15.2015.	0.9	123
49	The neurobiological foundation of memory retrieval. Nature Neuroscience, 2019, 22, 1576-1585.	7.1	116
50	Infantile amnesia: A neurogenic hypothesis. Learning and Memory, 2012, 19, 423-433.	0.5	110
51	MEF2 negatively regulates learning-induced structural plasticity and memory formation. Nature Neuroscience, 2012, 15, 1255-1264.	7.1	108
52	Inducible, pharmacogenetic approaches to the study of learning and memory. Nature Neuroscience, 2001, 4, 1238-1243.	7.1	102
53	Manipulating a â€œCocaine Engramâ€•in Mice. Journal of Neuroscience, 2014, 34, 14115-14127.	1.7	98
54	Shifting to automatic. Frontiers in Integrative Neuroscience, 2010, 4, 1.	1.0	96

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55	Recovery of â€œLostâ€•Infant Memories in Mice. Current Biology, 2018, 28, 2283-2290.e3.	1.8	93
56	Inhibiting glycogen synthesis prevents lafora disease in a mouse model. Annals of Neurology, 2013, 74, 297-300.	2.8	91
57	Changes in context-specificity during memory reconsolidation: Selective effects of hippocampal lesions. Learning and Memory, 2009, 16, 722-729.	0.5	90
58	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.	1.7	89
59	Dorsal hippocampal CREB is both necessary and sufficient for spatial memory. Learning and Memory, 2010, 17, 280-283.	0.5	88
60	p73 Regulates Neurodegeneration and Phospho-Tau Accumulation during Aging and Alzheimer's Disease. Neuron, 2008, 59, 708-721.	3.8	84
61	Abolition of aberrant neurogenesis ameliorates cognitive impairment after stroke in mice. Journal of Clinical Investigation, 2019, 129, 1536-1550.	3.9	84
62	Molecular, Cellular, and Neuroanatomical Substrates of Place Learning. Neurobiology of Learning and Memory, 1998, 70, 44-61.	1.0	83
63	Development of Adult-Generated Cell Connectivity with Excitatory and Inhibitory Cell Populations in the Hippocampus. Journal of Neuroscience, 2015, 35, 10600-10612.	1.7	81
64	Heroes of the Engram. Journal of Neuroscience, 2017, 37, 4647-4657.	1.7	79
65	Activity-dependent myelination: A glial mechanism of oscillatory self-organization in large-scale brain networks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13227-13237.	3.3	79
66	Activation of Amygdala CholecystokininBReceptors Potentiates the Acoustic Startle Response in the Rat. Journal of Neuroscience, 1997, 17, 1838-1847.	1.7	78
67	Memory formation in the absence of experience. Nature Neuroscience, 2019, 22, 933-940.	7.1	77
68	Hippocampal neurogenesis enhancers promote forgetting of remote fear memory after hippocampal reactivation by retrieval. ELife, 2016, 5, .	2.8	77
69	PTG protein depletion rescues malinâ€deficient Lafora disease in mouse. Annals of Neurology, 2014, 75, 442-446.	2.8	76
70	Parvalbumin interneurons constrain the size of the lateral amygdala engram. Neurobiology of Learning and Memory, 2016, 135, 91-99.	1.0	74
71	Uncoupling the D1-N-Methyl-D-Aspartate (NMDA) Receptor Complex Promotes NMDA-Dependent Long-Term Potentiation and Working Memory. Biological Psychiatry, 2010, 67, 246-254.	0.7	70
72	Elevation of Hippocampal Neurogenesis Induces a Temporally Graded Pattern of Forgetting of Contextual Fear Memories. Journal of Neuroscience, 2018, 38, 3190-3198.	1.7	70

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73	Forgetting as a form of adaptive engram cell plasticity. Nature Reviews Neuroscience, 2022, 23, 173-186.	4.9	70
74	Rotarod training in mice is associated with changes in brain structure observable with multimodal MRI. NeuroImage, 2015, 107, 182-189.	2.1	65
75	Memory Allocation. Neuropsychopharmacology, 2015, 40, 243-243.	2.8	61
76	Inactivation of the anterior cingulate cortex blocks expression of remote, but not recent, conditioned taste aversion memory. Learning and Memory, 2008, 15, 290-293.	0.5	60
77	Ontogeny of contextual fear memory formation, specificity, and persistence in mice. Learning and Memory, 2012, 19, 598-604.	0.5	58
78	Fast track to the medial prefrontal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 509-510.	3.3	57
79	Ageâ€dependent effects of hippocampal neurogenesis suppression on spatial learning. Hippocampus, 2013, 23, 66-74.	0.9	56
80	Whole-brain mapping of behaviourally induced neural activation in mice. Brain Structure and Function, 2015, 220, 2043-2057.	1.2	56
81	A Compact Headâ€Mounted Endoscope for In Vivo Calcium Imaging in Freely Behaving Mice. Current Protocols in Neuroscience, 2018, 84, e51.	2.6	55
82	Imaging activation of adult-generated granule cells in spatial memory. Nature Protocols, 2007, 2, 3033-3044.	5.5	53
83	p63 Regulates Adult Neural Precursor and Newly Born Neuron Survival to Control Hippocampal-Dependent Behavior. Journal of Neuroscience, 2013, 33, 12569-12585.	1.7	45
84	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.	2.8	44
85	Contextual fear conditioning in zebrafish. Learning and Memory, 2017, 24, 516-523.	0.5	44
86	The role of the genome in experience-dependent plasticity: Extending the analogy of the genomic action potential. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23252-23260.	3.3	44
87	Hippocampal clock regulates memory retrieval via Dopamine and PKA-induced GluA1 phosphorylation. Nature Communications, 2019, 10, 5766.	5.8	43
88	Distinct Influences of Neonatal Epidermal Growth Factor Challenge on Adult Neurobehavioral Traits in Four Mouse Strains. Behavior Genetics, 2005, 35, 615-629.	1.4	41
89	Deep brain stimulation of the ventromedial prefrontal cortex causes reorganization of neuronal processes and vasculature. NeuroImage, 2016, 125, 422-427.	2.1	41
90	CREB regulates spine density of lateral amygdala neurons: implications for memory allocation. Frontiers in Behavioral Neuroscience, 2013, 7, 209.	1.0	40

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91	Memory and the single molecule. Nature, 2013, 493, 312-313.	13.7	39
92	Adolescent Cocaine Exposure Causes Enduring Macroscale Changes in Mouse Brain Structure. Journal of Neuroscience, 2013, 33, 1797-1803.	1.7	38
93	The ontogeny of memory persistence and specificity. Developmental Cognitive Neuroscience, 2019, 36, 100591.	1.9	38
94	Axons and synapses mediating electrically evoked startle: collision tests and latency analysis. Brain Research, 1995, 670, 97-111.	1.1	35
95	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.	1.7	35
96	A Glo1-Methylglyoxal Pathway that Is Perturbed in Maternal Diabetes Regulates Embryonic and Adult Neural Stem Cell Pools in Murine Offspring. Cell Reports, 2016, 17, 1022-1036.	2.9	35
97	A Pharmacogenetic Inducible Approach to the Study of NMDA/Î±CaMKII Signaling in Synaptic Plasticity. Current Biology, 2002, 12, 654-656.	1.8	34
98	Neural correlates of ingroup bias for prosociality in rats. ELife, 2021, 10, .	2.8	33
99	Age-dependent changes in spatial memory retention and flexibility in mice. Neurobiology of Learning and Memory, 2017, 143, 59-66.	1.0	31
100	An inhibitory hippocampalâ€“thalamic pathway modulates remote memory retrieval. Nature Neuroscience, 2021, 24, 685-693.	7.1	31
101	Disrupting Jagged1â€“Notch signaling impairs spatial memory formation in adult mice. Neurobiology of Learning and Memory, 2013, 103, 39-49.	1.0	28
102	Posttraining Ablation of Adult-Generated Olfactory Granule Cells Degrades Odorâ€“Reward Memories. Journal of Neuroscience, 2014, 34, 15793-15803.	1.7	27
103	Hippocampal Neurogenesis and Memory Clearance. Neuropsychopharmacology, 2016, 41, 382-383.	2.8	27
104	The conjunctive trace. Hippocampus, 2013, 23, 207-212.	0.9	26
105	Increased transforming growth factor-Î²1 modulates glutamate receptor expression in the hippocampus. International Journal of Physiology, Pathophysiology and Pharmacology, 2011, 3, 9-20.	0.8	26
106	Chronic over-expression of TGFÎ²1 alters hippocampal structure and causes learning deficits. Hippocampus, 2013, 23, 1198-1211.	0.9	25
107	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.	2.8	25
108	Memory allocation and integration in rodents and humans. Current Opinion in Behavioral Sciences, 2017, 17, 90-98.	2.0	23

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109	A 3D adult zebrafish brain atlas (AZBA) for the digital age. ELife, 2021, 10, .	2.8	22
110	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.	1.0	21
111	Restoration of hippocampal neural precursor function by ablation of senescent cells in the aging stem cell niche. Stem Cell Reports, 2022, 17, 259-275.	2.3	21
112	Intracerebroventricular infusion of the CCKB receptor agonist pentagastrin potentiates acoustic startle. Brain Research, 1996, 733, 129-132.	1.1	18
113	Memory Transformation Enhances Reinforcement Learning in Dynamic Environments. Journal of Neuroscience, 2016, 36, 12228-12242.	1.7	17
114	Running promotes spatial bias independently of adult neurogenesis. Hippocampus, 2017, 27, 871-882.	0.9	17
115	Forgetting at biologically realistic levels of neurogenesis in a large-scale hippocampal model. Behavioural Brain Research, 2019, 376, 112180.	1.2	17
116	Impaired Recent, but Preserved Remote, Autobiographical Memory in Pediatric Brain Tumor Patients. Journal of Neuroscience, 2018, 38, 8251-8261.	1.7	15
117	COVID fog demystified. Cell, 2022, 185, 2391-2393.	13.5	15
118	Neurogenic evangelism: Comment on Urbach et al. (2013).. Behavioral Neuroscience, 2013, 127, 126-129.	0.6	14
119	Deficiency of a Glycogen Synthase-associated Protein, Epm2aip1, Causes Decreased Glycogen Synthesis and Hepatic Insulin Resistance. Journal of Biological Chemistry, 2013, 288, 34627-34637.	1.6	14
120	Grading the gradient: Evidence for time-dependent memory reorganization in experimental animals. Debates in Neuroscience, 2007, 1, 67-78.	1.7	12
121	The aPKC-CBP Pathway Regulates Adult Hippocampal Neurogenesis in an Age-Dependent Manner. Stem Cell Reports, 2016, 7, 719-734.	2.3	12
122	mTORC2: actin on your memory. Nature Neuroscience, 2013, 16, 379-380.	7.1	11
123	Neurogenesis-dependent transformation of hippocampal engrams. Neuroscience Letters, 2021, 762, 136176.	1.0	11
124	Voluntary Exercise Increases Neurogenesis and Mediates Forgetting of Complex Paired Associates Memories. Neuroscience, 2021, 475, 1-9.	1.1	11
125	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
126	Automated Curation of CNMF-E-Extracted ROI Spatial Footprints and Calcium Traces Using Open-Source AutoML Tools. Frontiers in Neural Circuits, 2020, 14, 42.	1.4	10

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127	Regenerating your senses: multiple roles for neurogenesis in the adult brain. Nature Neuroscience, 2008, 11, 1124-1126.	7.1	8
128	Fear Extinction Requires Reward. Cell, 2018, 175, 639-640.	13.5	8
129	In search of the memory molecule. Nature, 2016, 535, 41-42.	13.7	7
130	PTCHD1: Identification and Neurodevelopmental Contributions of an Autism Spectrum Disorder and Intellectual Disability Susceptibility Gene. Genes, 2022, 13, 527.	1.0	7
131	Pharmacologically Regulated Induction of Silent Mutations (PRISM): Combined Pharmacological and Genetic Approaches for Learning and Memory. Neuroscientist, 2003, 9, 104-109.	2.6	6
132	Ectopic expression of aPKC-mediated phosphorylation in p300 modulates hippocampal neurogenesis, CREB binding and fear memory differently with age. Scientific Reports, 2018, 8, 13489.	1.6	5
133	Starring role for astrocytes in memory. Nature Neuroscience, 2020, 23, 1181-1182.	7.1	5
134	Chasing the Trace. Neuron, 2014, 84, 243-246.	3.8	4
135	Facing your fears. Science, 2018, 360, 1186-1187.	6.0	4
136	Mechanism, function, and computation in neural systems. Behavioural Processes, 2015, 117, 4-11.	0.5	3
137	Adult Hippocampal Neurogenesis and Memory. , 2012, , 81-146.		2
138	Re-engineering the Hippocampus. Neuron, 2016, 91, 1190-1191.	3.8	2
139	Another twist in the histone memory code. Cell Research, 2015, 25, 151-152.	5.7	1
140	The Young and the Promiscuous. Neuron, 2016, 90, 6-8.	3.8	1
141	Cover Image, Volume 27, Issue 8. Hippocampus, 2017, 27, C1.	0.9	1
142	Memory: Ironing Out a Wrinkle in Time. Current Biology, 2018, 28, R599-R601.	1.8	1
143	Ptchd1 exon3 truncating mutations recapitulate more clinically relevant autistic-like traits in mice. IBRO Reports, 2019, 6, S507.	0.3	1
144	Making connections. ELife, 2014, 3, .	2.8	1

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145	Cognitive Neuroscience: Exciting Developments in Schematic Learning. Current Biology, 2018, 28, R1096-R1098.	1.8	0
146	To learn something new, do something new. Cell Research, 2021, 31, 611-612.	5.7	0