# Eric R Kandel

List of Publications by Year
in descending order



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|---|---|---|---|
| 200 papers | 39,885 citations | 2426 97 h-index | 2624 194 g-index |
| 210 all docs | 210 docs citations | 210 times ranked | 25651 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Subregion- and Cell Typeâ€“Restricted Gene Knockout in Mouse Brain. Cell, 1996, 87, 1317-1326. | 13.5 | 1,207 |
| 2 | Recombinant BDNF Rescues Deficits in Basal Synaptic Transmission and Hippocampal LTP in BDNF Knockout Mice. Neuron, 1996, 16, 1137-1145. | 3.8 | 1,144 |
| 3 | Genetic Demonstration of a Role for PKA in the Late Phase of LTP and in Hippocampus-Based Long-Term Memory. Cell, 1997, 88, 615-626. | 13.5 | 1,125 |
| 4 | Cognitive Neuroscience and the Study of Memory. Neuron, 1998, 20, 445-468. | 3.8 | 1,117 |
| 5 | The long and the short of longâ€“term memoryâ€”a molecular framework. Nature, 1986, 322, 419-422. | 13.7 | 1,007 |
| 6 | Ablation of hippocampal neurogenesis impairs contextual fear conditioning and synaptic plasticity in the dentate gyrus. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17501-17506. | 3.3 | 915 |
| 7 | Chromatin Acetylation, Memory, and LTP Are Impaired in CBP+/âˆ' Mice. Neuron, 2004, 42, 947-959. | 3.8 | 839 |
| 8 | MORPHOLOGICAL AND FUNCTIONAL PROPERTIES OF IDENTIFIED NEURONS IN THE ABDOMINAL GANGLION OF <i>APLYSIA CALIFORNICA</i>. Journal of Neurophysiology, 1967, 30, 1288-1351. | 0.9 | 833 |
| 9 | The Molecular and Systems Biology of Memory. Cell, 2014, 157, 163-186. | 13.5 | 833 |
| 10 | Tissue-plasminogen activator is induced as an immediateâ€“early gene during seizure, kindling and long-term potentiation. Nature, 1993, 361, 453-457. | 13.7 | 771 |
| 11 | The molecular biology of memory: cAMP, PKA, CRE, CREB-1, CREB-2, and CPEB. Molecular Brain, 2012, 5, 14. | 1.3 | 708 |
| 12 | Injection of the cAMP-responsive element into the nucleus of Aplysia sensory neurons blocks long-term facilitation. Nature, 1990, 345, 718-721. | 13.7 | 698 |
| 13 | Synapse-Specific, Long-Term Facilitation of Aplysia Sensory to Motor Synapses: A Function for Local Protein Synthesis in Memory Storage. Cell, 1997, 91, 927-938. | 13.5 | 693 |
| 14 | Serotonin and cyclic AMP close single K+ channels in Aplysia sensory neurones. Nature, 1982, 299, 413-417. | 13.7 | 649 |
| 15 | Long-term potentiation in the hippocampus is blocked by tyrosine kinase inhibitors. Nature, 1991, 353, 558-560. | 13.7 | 552 |
| 16 | MAP Kinase Translocates into the Nucleus of the Presynaptic Cell and Is Required for Long-Term Facilitation in Aplysia. Neuron, 1997, 18, 899-912. | 3.8 | 535 |
| 17 | Aplysia CREB2 represses long-term facilitation: Relief of repression converts transient facilitation into long-term functional and structural change. Cell, 1995, 83, 979-992. | 13.5 | 530 |
| 18 | Expression of Constitutively Active CREB Protein Facilitates the Late Phase of Long-Term Potentiation by Enhancing Synaptic Capture. Cell, 2002, 108, 689-703. | 13.5 | 530 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A Neuronal Isoform of the Aplysia CPEB Has Prion-Like Properties. Cell, 2003, 115, 879-891. | 13.5 | 526 |
| 20 | C/EBP is an immediate-early gene required for the consolidation of long-term facilitation in Aplysia. Cell, 1994, 76, 1099-1114. | 13.5 | 514 |
| 21 | cAMP contributes to mossy fiber LTP by initiating both a covalently mediated early phase and macromolecular synthesis-dependent late phase. Cell, 1994, 79, 69-79. | 13.5 | 479 |
| 22 | A Role for Neuronal piRNAs in the Epigenetic Control of Memory-Related Synaptic Plasticity. Cell, 2012, 149, 693-707. | 13.5 | 474 |
| 23 | A Transient, Neuron-Wide Form of CREB-Mediated Long-Term Facilitation Can Be Stabilized at Specific Synapses by Local Protein Synthesis. Cell, 1999, 99, 221-237. | 13.5 | 471 |
| 24 | Integration of Long-Term-Memory-Related Synaptic Plasticity Involves Bidirectional Regulation of Gene Expression and Chromatin Structure. Cell, 2002, 111, 483-493. | 13.5 | 466 |
| 25 | Abolition of Long-Term Stability of New Hippocampal Place Cell Maps by NMDA Receptor Blockade. Science, 1998, 280, 2121-2126. | 6.0 | 458 |
| 26 | Learning to Modulate Transmitter Release: Themes and Variations in Synaptic Plasticity. Annual Review of Neuroscience, 1993, 16, 625-665. | 5.0 | 447 |
| 27 | Inducible and Reversible Enhancement of Learning, Memory, and Long-Term Potentiation by Genetic Inhibition of Calcineurin. Cell, 2001, 104, 675-686. | 13.5 | 440 |
| 28 | Dopamine release from the locus coeruleus to the dorsal hippocampus promotes spatial learning and memory. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14835-14840. | 3.3 | 438 |
| 29 | Different Training Procedures Recruit Either One or Two Critical Periods for Contextual Memory Consolidation, Each of Which Requires Protein Synthesis and PKA. Learning and Memory, 1998, 5, 365-374. | 0.5 | 429 |
| 30 | Reversible Inhibition of CREB/ATF Transcription Factors in Region CA1 of the Dorsal Hippocampus Disrupts Hippocampus-Dependent Spatial Memory. Neuron, 2002, 34, 447-462. | 3.8 | 425 |
| 31 | Activation of cAMP-Responsive genes by stimuli that produce long-term facilitation in aplysia sensory neurons. Neuron, 1993, 10, 427-435. | 3.8 | 393 |
| 32 | A Neuronal Isoform of CPEB Regulates Local Protein Synthesis and Stabilizes Synapse-Specific Long-Term Facilitation in Aplysia. Cell, 2003, 115, 893-904. | 13.5 | 390 |
| 33 | Characterization of Small RNAs in Aplysia Reveals a Role for miR-124 in Constraining Synaptic Plasticity through CREB. Neuron, 2009, 63, 803-817. | 3.8 | 374 |
| 34 | Nitric Oxide Acts Directly in the Presynaptic Neuron to Produce Long-Term Potentiationin Cultured Hippocampal Neurons. Cell, 1996, 87, 1025-1035. | 13.5 | 372 |
| 35 | Is Heterosynaptic modulation essential for stabilizing hebbian plasiticity and memory. Nature Reviews Neuroscience, 2000, 1, 11-20. | 4.9 | 369 |
| 36 | Synapses and Memory Storage. Cold Spring Harbor Perspectives in Biology, 2012, 4, a005751-a005751. | 2.3 | 366 |

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| 37 | Aplysia CPEB Can Form Prion-like Multimers in Sensory Neurons that Contribute to Long-Term Facilitation. Cell, 2010, 140, 421-435. | 13.5 | 360 |
| 38 | Ubiquitin C-Terminal Hydrolase Is an Immediate-Early Gene Essential for Long-Term Facilitation in Aplysia. Cell, 1997, 89, 115-126. | 13.5 | 352 |
| 39 | Genetic and Pharmacological Evidence for a Novel, Intermediate Phase of Long-Term Potentiation Suppressed by Calcineurin. Cell, 1998, 92, 25-37. | 13.5 | 338 |
| 40 | Restricted and Regulated Overexpression Reveals Calcineurin as a Key Component in the Transition from Short-Term to Long-Term Memory. Cell, 1998, 92, 39-49. | 13.5 | 336 |
| 41 | CREB1 Encodes a Nuclear Activator, a Repressor, and a Cytoplasmic Modulator that Form a Regulatory Unit Critical for Long-Term Facilitation. Cell, 1998, 95, 211-223. | 13.5 | 332 |
| 42 | Postsynaptic Induction and PKA-Dependent Expression of LTP in the Lateral Amygdala. Neuron, 1998, 21, 169-178. | 3.8 | 310 |
| 43 | Neuronal Transcriptome of Aplysia: Neuronal Compartments and Circuitry. Cell, 2006, 127, 1453-1467. | 13.5 | 310 |
| 44 | ERK Plays a Regulatory Role in Induction of LTP by Theta Frequency Stimulation and Its Modulation by Î²-Adrenergic Receptors. Neuron, 1999, 24, 715-726. | 3.8 | 300 |
| 45 | Roles of PKA and PKC in facilitation of evoked and spontaneous transmitter release at depressed and nondepressed synapses in aplysia sensory neurons. Neuron, 1992, 9, 479-489. | 3.8 | 296 |
| 46 | A Molecular Basis for Nicotine as a Gateway Drug. New England Journal of Medicine, 2014, 371, 932-943. | 13.9 | 293 |
| 47 | Memory Suppressor Genes: Inhibitory Constraints on the Storage of Long-Term Memory. Science, 1998, 279, 338-341. | 6.0 | 288 |
| 48 | Presynaptic BDNF Required for a Presynaptic but Not Postsynaptic Component of LTP at Hippocampal CA1-CA3 Synapses. Neuron, 2003, 39, 975-990. | 3.8 | 288 |
| 49 | A genetic test of the effects of mutations in PKA on mossy fiber ltp and its relation to spatial and contextual learning. Cell, 1995, 83, 1211-1222. | 13.5 | 285 |
| 50 | Structural Components of Synaptic Plasticity and Memory Consolidation. Cold Spring Harbor Perspectives in Biology, 2015, 7, a021758. | 2.3 | 279 |
| 51 | NOBEL LECTURE: The Molecular Biology of Memory Storage: A Dialog Between Genes and Synapses. Bioscience Reports, 2001, 21, 565-611. | 1.1 | 278 |
| 52 | The Regulation of Transcription in Memory Consolidation. Cold Spring Harbor Perspectives in Biology, 2015, 7, a021741. | 2.3 | 269 |
| 53 | A Macromolecular Synthesis-Dependent Late Phase of Long-Term Potentiation Requiring cAMP in the Medial Perforant Pathway of Rat Hippocampal Slices. Journal of Neuroscience, 1996, 16, 3189-3198. | 1.7 | 255 |
| 54 | Positive and negative regulatory mechanisms that mediate long-term memory storage1Published on the World Wide Web on 13 January 1998.1. Brain Research Reviews, 1998, 26, 360-378. | 9.1 | 252 |

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|---|---|---|---|
| 55 | The Persistence of Long-Term Memory. Neuron, 2004, 44, 49-57. | 3.8 | 250 |
| 56 | Inducible Enhancement of Memory Storage and Synaptic Plasticity in Transgenic Mice Expressing an Inhibitor of ATF4 (CREB-2) and C/EBP Proteins. Neuron, 2003, 39, 655-669. | 3.8 | 247 |
| 57 | Mice Expressing Activated CaMKII Lack Low Frequency LTP and Do Not Form Stable Place Cells in the CA1 Region of the Hippocampus. Cell, 1996, 87, 1351-1361. | 13.5 | 243 |
| 58 | Molecular Mechanism for a Gateway Drug: Epigenetic Changes Initiated by Nicotine Prime Gene Expression by Cocaine. Science Translational Medicine, 2011, 3, 107ra109. | 5.8 | 243 |
| 59 | Inducible and Reversible Gene Expression with the rtTA System for the Study of Memory. Neuron, 1998, 21, 257-265. | 3.8 | 239 |
| 60 | A novel intermediate stage in the transition between short- and long-term facilitation in the sensory to motor neuron synapse of aplysia. Neuron, 1995, 14, 413-420. | 3.8 | 233 |
| 61 | Local protein synthesis and its role in synapse-specific plasticity. Current Opinion in Neurobiology, 2000, 10, 587-592. | 2.0 | 226 |
| 62 | Essential Role of Coiled Coils for Aggregation and Activity of Q/N-Rich Prions and PolyQ Proteins. Cell, 2010, 143, 1121-1135. | 13.5 | 223 |
| 63 | Strain-dependent Differences in LTP and Hippocampus-dependent Memory in Inbred Mice. Learning and Memory, 2000, 7, 170-179. | 0.5 | 215 |
| 64 | Transient expansion of synaptically connected dendritic spines upon induction of hippocampal long-term potentiation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16665-16670. | 3.3 | 213 |
| 65 | Molecular Mechanisms of Memory Storage in<i>Aplysia</i>. Biological Bulletin, 2006, 210, 174-191. | 0.7 | 209 |
| 66 | Neuroscience thinks big (and collaboratively). Nature Reviews Neuroscience, 2013, 14, 659-664. | 4.9 | 206 |
| 67 | An Analysis of Dishabituation and Sensitization of The Gill-Withdrawal Reflex In Aplysia. International Journal of Neuroscience, 1971, 2, 79-98. | 0.8 | 196 |
| 68 | Recruitment of New Sites of Synaptic Transmission During the cAMP-Dependent Late Phase of LTP at CA3â€“CA1 Synapses in the Hippocampus. Neuron, 1997, 19, 635-651. | 3.8 | 195 |
| 69 | Gpr158 mediates osteocalcinâ€™s regulation of cognition. Journal of Experimental Medicine, 2017, 214, 2859-2873. | 4.2 | 194 |
| 70 | Presynaptic and Postsynaptic Roles of NO, cGK, and RhoA in Long-Lasting Potentiation and Aggregation of Synaptic Proteins. Neuron, 2005, 45, 389-403. | 3.8 | 193 |
| 71 | A circuit from hippocampal CA2 to lateral septum disinhibits social aggression. Nature, 2018, 564, 213-218. | 13.7 | 184 |
| 72 | Inhibitors of protein and RNA synthesis block structural changes that accompany long-term heterosynaptic plasticity in Aplysia. Neuron, 1992, 9, 749-758. | 3.8 | 182 |

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| 73 | Activity-Dependent Presynaptic Facilitation and Hebbian LTP Are Both Required and Interact during Classical Conditioning in Aplysia. Neuron, 2003, 37, 135-147. | 3.8 | 181 |
| 74 | The Persistence of Hippocampal-Based Memory Requires Protein Synthesis Mediated by the Prion-like Protein CPEB3. Neuron, 2015, 86, 1433-1448. | 3.8 | 180 |
| 75 | The Biology of Memory: A Forty-Year Perspective. Journal of Neuroscience, 2009, 29, 12748-12756. | 1.7 | 179 |
| 76 | Mechanisms for Generating the Autonomous cAMP-Dependent Protein Kinase Required for Long-Term Facilitation in Aplysia. Neuron, 1999, 22, 147-156. | 3.8 | 173 |
| 77 | Mutation in the Phosphorylation Sites of MAP Kinase Blocks Learning-Related Internalization of apCAM in Aplysia Sensory Neurons. Neuron, 1997, 18, 913-924. | 3.8 | 172 |
| 78 | CREB, memory enhancement and the treatment of memory disorders: promises, pitfalls and prospects. Expert Opinion on Therapeutic Targets, 2003, 7, 101-114. | 1.5 | 172 |
| 79 | Two previously undescribed members of the mouse CPEB family of genes and their inducible expression in the principal cell layers of the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9602-9607. | 3.3 | 171 |
| 80 | Neuralized1 Activates CPEB3: A Function for Nonproteolytic Ubiquitin in Synaptic Plasticity and Memory Storage. Cell, 2011, 147, 1369-1383. | 13.5 | 170 |
| 81 | Parallel processing of short-term memory for sensitization inAplysia. Journal of Neurobiology, 1988, 19, 297-334. | 3.7 | 168 |
| 82 | Cell Adhesion Molecules, CREB, and the Formation of New Synaptic Connections. Neuron, 1996, 17, 567-570. | 3.8 | 162 |
| 83 | The Molecular Biology of Memory Storage: A Dialog Between Genes and Synapses. Bioscience Reports, 2004, 24, 475-522. | 1.1 | 160 |
| 84 | Rapid Increase in Clusters of Presynaptic Proteins at Onset of Long-Lasting Potentiation. Science, 2001, 294, 1547-1550. | 6.0 | 152 |
| 85 | Molecular Mechanisms of the Memory Trace. Trends in Neurosciences, 2019, 42, 14-22. | 4.2 | 148 |
| 86 | Cyclic AMP induces functional presynaptic boutons in hippocampal CA3â€“CA1 neuronal cultures. Nature Neuroscience, 1999, 2, 24-30. | 7.1 | 146 |
| 87 | Selective Modulation of Some Forms of Schaffer Collateral-CA1 Synaptic Plasticity in Mice With a Disruption of the CPEB-1 Gene. Learning and Memory, 2004, 11, 318-327. | 0.5 | 142 |
| 88 | Involvement of Presynaptic and Postsynaptic Mechanisms in a Cellular Analog of Classical Conditioning at<i>Aplysia</i>Sensory-Motor Neuron Synapses in Isolated Cell Culture. Journal of Neuroscience, 1998, 18, 458-466. | 1.7 | 140 |
| 89 | The Emergence of Modern Neuroscience: Some Implications for Neurology and Psychiatry. Annual Review of Neuroscience, 2000, 23, 343-391. | 5.0 | 140 |
| 90 | Persistent and transcriptionally-dependent increase in protein phosphorylation in long-term facilitation ofAplysia sensory neurons. Nature, 1989, 339, 51-54. | 13.7 | 135 |

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| 91 | Sustained CPEB-Dependent Local Protein Synthesis Is Required to Stabilize Synaptic Growth for Persistence of Long-Term Facilitation in Aplysia. Neuron, 2008, 59, 1024-1036. | 3.8 | 127 |
| 92 | Presynaptic Activation of Silent Synapses and Growth of New Synapses Contribute to Intermediate and Long-Term Facilitation in Aplysia. Neuron, 2003, 40, 151-165. | 3.8 | 125 |
| 93 | Attention Enhances the Retrieval and Stability of Visuospatial and Olfactory Representations in the Dorsal Hippocampus. PLoS Biology, 2009, 7, e1000140. | 2.6 | 122 |
| 94 | Parallel Instabilities of Long-Term Potentiation, Place Cells, and Learning Caused by Decreased Protein Kinase A Activity. Journal of Neuroscience, 2000, 20, 8096-8102. | 1.7 | 116 |
| 95 | SUMOylation Is an Inhibitory Constraint that Regulates the Prion-like Aggregation and Activity of CPEB3. Cell Reports, 2015, 11, 1694-1702. | 2.9 | 116 |
| 96 | The Neurobiology of Fear Generalization. Frontiers in Behavioral Neuroscience, 2018, 12, 329. | 1.0 | 116 |
| 97 | Chapter 10 Synaptic remodeling, synaptic growth and the storage of long-term memory in Aplysia. Progress in Brain Research, 2008, 169, 179-198. | 0.9 | 109 |
| 98 | The CPEB3 Protein Is a Functional Prion that Interacts with the Actin Cytoskeleton. Cell Reports, 2015, 11, 1772-1785. | 2.9 | 109 |
| 99 | The past, the future and the biology of memory storage. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 2027-2052. | 1.8 | 106 |
| 100 | Involvement of Pre- and Postsynaptic Mechanisms in Posttetanic Potentiation atAplysiaSynapses. Science, 1997, 275, 969-973. | 6.0 | 103 |
| 101 | Transgenic approaches to cognition. Current Opinion in Neurobiology, 1995, 5, 141-148. | 2.0 | 101 |
| 102 | Molecular Mechanism for Age-Related Memory Loss: The Histone-Binding Protein RbAp48. Science Translational Medicine, 2013, 5, 200ra115. | 5.8 | 99 |
| 103 | Serotonin-Induced Regulation of the Actin Network for Learning-Related Synaptic Growth Requires Cdc42, N-WASP, and PAK in Aplysia Sensory Neurons. Neuron, 2005, 45, 887-901. | 3.8 | 95 |
| 104 | The Role of Functional Prion-Like Proteins in the Persistence of Memory. Cold Spring Harbor Perspectives in Biology, 2016, 8, a021774. | 2.3 | 95 |
| 105 | Cyclic Adenosine Monophosphate in the Nervous System of Aplysia californica. Journal of General Physiology, 1972, 60, 558-569. | 0.9 | 94 |
| 106 | A Simplified Preparation for Relating Cellular Events to Behavior: Mechanisms Contributing to Habituation, Dishabituation, and Sensitization of theAplysiaGill-Withdrawal Reflex. Journal of Neuroscience, 1997, 17, 2886-2899. | 1.7 | 90 |
| 107 | The Contribution of Activity-Dependent Synaptic Plasticity to Classical Conditioning in<i>Aplysia</i>. Journal of Neuroscience, 2001, 21, 6413-6422. | 1.7 | 86 |
| 108 | Neurexin-Neuroligin Transsynaptic Interaction Mediates Learning-Related Synaptic Remodeling and Long-Term Facilitation in Aplysia. Neuron, 2011, 70, 468-481. | 3.8 | 86 |

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| 109 | p38 MAP Kinase Mediates Both Short-Term and Long-Term Synaptic Depression in<i>Aplysia</i>. Journal of Neuroscience, 2003, 23, 7317-7325. | 1.7 | 84 |
| 110 | A New Component in Synaptic Plasticity: Upregulation of Kinesin in the Neurons of the Gill-Withdrawal Reflex. Cell, 2008, 135, 960-973. | 13.5 | 83 |
| 111 | Learning-induced and stathmin-dependent changes in microtubule stability are critical for memory and disrupted in ageing. Nature Communications, 2014, 5, 4389. | 5.8 | 81 |
| 112 | A Molecular Switch for the Consolidation of Long-Term Memory: cAMP-Inducible Gene Expression. Annals of the New York Academy of Sciences, 1995, 758, 261-286. | 1.8 | 80 |
| 113 | TIA-1 Self-Multimerization, Phase Separation, and Recruitment into Stress Granules Are Dynamically Regulated by Zn2+. Cell Reports, 2018, 22, 59-71. | 2.9 | 80 |
| 114 | A Quantitative Study of the Ca2+/Calmodulin Sensitivity of Adenylyl Cyclase in Aplysia, Drosophila, and Rat. Journal of Neurochemistry, 1992, 59, 1736-1744. | 2.1 | 79 |
| 115 | New mechanisms in memory storage: piRNAs and epigenetics. Trends in Neurosciences, 2013, 36, 535-542. | 4.2 | 78 |
| 116 | Roles for small noncoding RNAs in silencing of retrotransposons in the mammalian brain. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12697-12702. | 3.3 | 77 |
| 117 | A cellular model of memory reconsolidation involves reactivation-induced destabilization and restabilization at the sensorimotor synapse in <i>Aplysia</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14200-14205. | 3.3 | 76 |
| 118 | Characterization of prion-like conformational changes of the neuronal isoform of AplysiaÂCPEB. Nature Structural and Molecular Biology, 2013, 20, 495-501. | 3.6 | 73 |
| 119 | Transcriptional regulation of long-term memory in the marine snail Aplysia. Molecular Brain, 2008, 1, 3. | 1.3 | 72 |
| 120 | Functional Role of Tia1/Pub1 and Sup35 Prion Domains: Directing Protein Synthesis Machinery to the Tubulin Cytoskeleton. Molecular Cell, 2014, 55, 305-318. | 4.5 | 71 |
| 121 | Genes, synapses, and long-term memory. Journal of Cellular Physiology, 1997, 173, 124-125. | 2.0 | 70 |
| 122 | MicroRNA-22 Gates Long-Term Heterosynaptic Plasticity in Aplysia through Presynaptic Regulation of CPEB and Downstream Targets. Cell Reports, 2015, 11, 1866-1875. | 2.9 | 69 |
| 123 | CPEB3 inhibits translation of mRNA targets by localizing them to P bodies. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18078-18087. | 3.3 | 69 |
| 124 | Enhancement of Memory-Related Long-Term Facilitation by ApAF, a Novel Transcription Factor that Acts Downstream from Both CREB1 and CREB2. Cell, 2000, 103, 595-608. | 13.5 | 64 |
| 125 | Capture of the Late Phase of Long-Term Potentiation within and across the Apical and Basilar Dendritic Compartments of CA1 Pyramidal Neurons: Synaptic Tagging Is Compartment Restricted. Journal of Neuroscience, 2006, 26, 256-264. | 1.7 | 64 |
| 126 | The Contribution of Facilitation of Monosynaptic PSPs to Dishabituation and Sensitization of theAplysiaSiphon Withdrawal Reflex. Journal of Neuroscience, 1999, 19, 10438-10450. | 1.7 | 63 |

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| 127 | A genetic switch for long-term memory. Comptes Rendus De L'AcadÃ©mie Des Sciences SÃ©rie 3, Sciences De La Vie, 1998, 321, 91-96. | 0.8 | 61 |
| 128 | Increased dopamine D2 receptor activity in the striatum alters the firing pattern of dopamine neurons in the ventral tegmental area. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1498-506. | 3.3 | 56 |
| 129 | RbAp48 Protein Is a Critical Component of GPR158/OCN Signaling and Ameliorates Age-Related Memory Loss. Cell Reports, 2018, 25, 959-973.e6. | 2.9 | 56 |
| 130 | Memory and behavior: a second generation of genetically modified mice. Current Biology, 1997, 7, R580-R589. | 1.8 | 55 |
| 131 | FMRFamide reverses protein phosphorylation produced by 5-HT and cAMP in Aplysia sensory neurons. Nature, 1989, 342, 275-278. | 13.7 | 53 |
| 132 | Presynaptic and Postsynaptic Mechanisms of Synaptic Plasticity and Metaplasticity during Intermediate-Term Memory Formation in<i>Aplysia</i>. Journal of Neuroscience, 2010, 30, 5781-5791. | 1.7 | 53 |
| 133 | 3D neuronal mitochondrial morphology in axons, dendrites, and somata of the aging mouse hippocampus. Cell Reports, 2021, 36, 109509. | 2.9 | 52 |
| 134 | A Simplified Preparation for Relating Cellular Events to Behavior: Contribution of LE and Unidentified Siphon Sensory Neurons to Mediation and Habituation of theAplysiaGill- and Siphon-Withdrawal Reflex. Journal of Neuroscience, 1997, 17, 2900-2913. | 1.7 | 50 |
| 135 | Cognitive neuroscience. Current Opinion in Neurobiology, 2000, 10, 612-624. | 2.0 | 50 |
| 136 | Nuclear Translocation of CAM-Associated Protein Activates Transcription for Long-Term Facilitation in Aplysia. Cell, 2007, 129, 801-812. | 13.5 | 50 |
| 137 | Dopamine Regulation of Amygdala Inhibitory Circuits for Expression of Learned Fear. Neuron, 2015, 88, 378-389. | 3.8 | 49 |
| 138 | Identification of a serotonin receptor coupled to adenylyl cyclase involved in learning-related heterosynaptic facilitation in <i>Aplysia</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14634-14639. | 3.3 | 48 |
| 139 | PP2A methylation controls sensitivity and resistance to Î²-amyloidâ€“induced cognitive and electrophysiological impairments. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3347-3352. | 3.3 | 48 |
| 140 | Reductionism in Art and Brain Science. , 2016, , . | | 48 |
| 141 | A direct lateral entorhinal cortex to hippocampal CA2 circuit conveys social information required for social memory. Neuron, 2022, 110, 1559-1572.e4. | 3.8 | 48 |
| 142 | Selective Overexpression of Dopamine D3 Receptors in the Striatum Disrupts Motivation but not Cognition. Biological Psychiatry, 2014, 76, 823-831. | 0.7 | 45 |
| 143 | Prior alcohol use enhances vulnerability to compulsive cocaine self-administration by promoting degradation of HDAC4 and HDAC5. Science Advances, 2017, 3, e1701682. | 4.7 | 45 |
| 144 | A Single Aplysia Neurotrophin Mediates Synaptic Facilitation via Differentially Processed Isoforms. Cell Reports, 2013, 3, 1213-1227. | 2.9 | 44 |

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|---|---|---|---|
| 145 | Whereas short-term facilitation is presynaptic, intermediate-term facilitation involves both presynaptic and postsynaptic protein kinases and protein synthesis. Learning and Memory, 2011, 18, 96-102. | 0.5 | 43 |
| 146 | Designing a norepinephrine optical tracer for imaging individual noradrenergic synapses and their activity in vivo. Nature Communications, 2018, 9, 2838. | 5.8 | 42 |
| 147 | Classical conditioning, differential conditioning, and second-order conditioning of the Aplysia gill-withdrawal reflex in a simplified mantle organ preparation.. Behavioral Neuroscience, 1998, 112, 636-645. | 0.6 | 41 |
| 148 | Sex Differences in Remote Contextual Fear Generalization in Mice. Frontiers in Behavioral Neuroscience, 2019, 13, 56. | 1.0 | 40 |
| 149 | Cannabinoid exposure in rat adolescence reprograms the initial behavioral, molecular, and epigenetic response to cocaine. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9991-10002. | 3.3 | 39 |
| 150 | Differential contribution of TRPM4 and TRPM5 nonselective cation channels to the slow afterdepolarization in mouse prefrontal cortex neurons. Frontiers in Cellular Neuroscience, 2014, 8, 267. | 1.8 | 38 |
| 151 | Chronic nicotine exposure induces a long-lasting and pathway-specific facilitation of LTP in the amygdala. Learning and Memory, 2008, 15, 603-610. | 0.5 | 37 |
| 152 | Spontaneous transmitter release recruits postsynaptic mechanisms of long-term and intermediate-term facilitation in <i>Aplysia</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9137-9142. | 3.3 | 36 |
| 153 | Relationship between dishabituation, sensitization, and inhibition of the gill- and siphon-withdrawal reflex in Aplysia californica: Effects of response measure, test time, and training stimulus.. Behavioral Neuroscience, 1998, 112, 24-38. | 0.6 | 35 |
| 154 | Operant Conditioning of Gill Withdrawal in Aplysia. Journal of Neuroscience, 2006, 26, 2443-2448. | 1.7 | 33 |
| 155 | The New Science of Mind and the Future of Knowledge. Neuron, 2013, 80, 546-560. | 3.8 | 32 |
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