Robert C Malenka

List of Publications by Year in Descending Order

158 papers	49,682 citations	99 h-index	188 g-index
188 ext. papers	56,469 ext. citations	22.9 avg, IF	7.88 L-index

#	Paper	IF	Citations
158	5-HT modulation of a medial septal circuit tunes social memory stability. *Nature*, **2021**, 599, 96-101	50.4	4
157	Accumbens coordinated reset stimulation in mice exhibits ameliorating aftereffects on binge alcohol drinking. *Brain Stimulation*, **2021**, 14, 330-334	5.1	2
156	Input-specific modulation of murine nucleus accumbens differentially regulates hedonic feeding. *Nature Communications*, **2021**, 12, 2135	17.4	6
155	Selective filtering of excitatory inputs to nucleus accumbens by dopamine and serotonin. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
154	Dissecting neural mechanisms of prosocial behaviors. *Current Opinion in Neurobiology*, **2021**, 68, 9-14	7.6	8
153	Anterior cingulate inputs to nucleus accumbens control the social transfer of pain and analgesia. *Science*, **2021**, 371, 153-159	33.3	31
152	Systemic enhancement of serotonin signaling reverses social deficits in multiple mouse models for ASD. *Neuropsychopharmacology*, **2021**, 46, 2000-2010	8.7	6
151	A Molecular Calcium Integrator Reveals a Striatal Cell Type Driving Aversion. *Cell*, **2020**, 183, 2003-2019.e16	36.2	7
150	Long-term potentiation is independent of the C-tail of the GluA1 AMPA receptor subunit. *ELife*, **2020**, 9,	8.9	12
149	Continuous and Discrete Neuron Types of the Adult Murine Striatum. *Neuron*, **2020**, 105, 688-699.e8	13.9	42
148	Brain-Responsive Neurostimulation for Loss of Control Eating: Early Feasibility Study. *Neurosurgery*, **2020**, 87, 1277-1288	3.2	7
147	Deep posteromedial cortical rhythm in dissociation. *Nature*, **2020**, 586, 87-94	50.4	50
146	Loss of the neural-specific BAF subunit ACTL6B relieves repression of early response genes and causes recessive autism. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 10055-10066	11.5	14
145	Amygdala-Midbrain Connections Modulate Appetitive and Aversive Learning. *Neuron*, **2020**, 106, 1026-1043.e9	13.9	25
144	Disruptive Psychopharmacology. *JAMA Psychiatry*, **2019**, 76, 775-776	14.5	12
143	SynGO: An Evidence-Based, Expert-Curated Knowledge Base for the Synapse. *Neuron*, **2019**, 103, 217-234.e4	13.9	147
142	Neuroligin-1 Signaling Controls LTP and NMDA Receptors by Distinct Molecular Pathways. *Neuron*, **2019**, 102, 621-635.e3	13.9	39

141	Complementary Genetic Targeting and Monosynaptic Input Mapping Reveal Recruitment and Refinement of Distributed Corticostriatal Ensembles by Cocaine. *Neuron*, **2019**, 104, 916-930.e5	13.9	18
140	Electrical and synaptic integration of glioma into neural circuits. *Nature*, **2019**, 573, 539-545	50.4	303
139	Distinct neural mechanisms for the prosocial and rewarding properties of MDMA. *Science Translational Medicine*, **2019**, 11,	17.5	32
138	Topological Organization of Ventral Tegmental Area Connectivity Revealed by Viral-Genetic Dissection of Input-Output Relations. *Cell Reports*, **2019**, 26, 159-167.e6	10.6	38
137	Closing the loop on impulsivity via nucleus accumbens delta-band activity in mice and man. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 192-197	11.5	51
136	Parallel circuits from the bed nuclei of stria terminalis to the lateral hypothalamus drive opposing emotional states. *Nature Neuroscience*, **2018**, 21, 1084-1095	25.5	104
135	Cocaine-Induced Structural Plasticity in Input Regions to Distinct Cell Types in Nucleus Accumbens. *Biological Psychiatry*, **2018**, 84, 893-904	7.9	24
134	5-HT release in nucleus accumbens rescues social deficits in mouse autism model. *Nature*, **2018**, 560, 589-594	50.4	92
133	Nucleus Accumbens Modulation in Reward and Aversion. *Cold Spring Harbor Symposia on Quantitative Biology*, **2018**, 83, 119-129	3.9	32
132	Deletion of in adult mice impairs basal AMPA receptor transmission and LTP in hippocampal CA1 pyramidal neurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5382-E5389	11.5	30
131	Modulation of excitation on parvalbumin interneurons by neuroligin-3 regulates the hippocampal network. *Nature Neuroscience*, **2017**, 20, 219-229	25.5	42
130	A Brainstem-Spinal Cord Inhibitory Circuit for Mechanical Pain Modulation by GABA and Enkephalins. *Neuron*, **2017**, 93, 822-839.e6	13.9	152
129	The Retromer Supports AMPA Receptor Trafficking During LTP. *Neuron*, **2017**, 94, 74-82.e5	13.9	49
128	Postsynaptic synaptotagmins mediate AMPA receptor exocytosis during LTP. *Nature*, **2017**, 544, 316-321	50.4	106
127	Postsynaptic adhesion GPCR latrophilin-2 mediates target recognition in entorhinal-hippocampal synapse assembly. *Journal of Cell Biology*, **2017**, 216, 3831-3846	7.3	52
126	Gating of social reward by oxytocin in the ventral tegmental area. *Science*, **2017**, 357, 1406-1411	33.3	238
125	Rabies screen reveals GPe control of cocaine-triggered plasticity. *Nature*, **2017**, 549, 345-350	50.4	39
124	Cellular Taxonomy of the Mouse Striatum as Revealed by Single-Cell RNA-Seq. *Cell Reports*, **2016**, 16, 1126-1137	10.6	227

123	Optogenetic Approaches to Neural Circuit Analysis in the Mammalian Brain **2016**, 221-231		2
122	Structural foundations of optogenetics: Determinants of channelrhodopsin ion selectivity. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 822-9	11.5	136
121	From Synapses to Behavior: What Rodent Models Can Tell Us About Neuropsychiatric Disease. *Biological Psychiatry*, **2016**, 79, 4-6	7.9	4
120	MDMA as a Probe and Treatment for Social Behaviors. *Cell*, **2016**, 166, 269-272	56.2	24
119	Diversity of transgenic mouse models for selective targeting of midbrain dopamine neurons. *Neuron*, **2015**, 85, 429-38	13.9	220
118	Intact-Brain Analyses Reveal Distinct Information Carried by SNc Dopamine Subcircuits. *Cell*, **2015**, 162, 635-47	56.2	379
117	Circuit Architecture of VTA Dopamine Neurons Revealed by Systematic Input-Output Mapping. *Cell*, **2015**, 162, 622-34	56.2	481
116	Neurexins Control Neural Circuits by Regulating Synaptic Endocannabinoid Signaling. *Cell*, **2015**, 162, 593-606	56.2	88
115	Viral-genetic tracing of the input-output organization of a central noradrenaline circuit. *Nature*, **2015**, 524, 88-92	50.4	397
114	Single-Cell mRNA Profiling Reveals Cell-Type-Specific Expression of Neurexin Isoforms. *Neuron*, **2015**, 87, 326-40	13.9	101
113	Neuronal Activity Promotes Glioma Growth through Neuroligin-3 Secretion. *Cell*, **2015**, 161, 803-16	56.2	314
112	Synaptic Function of Rab11Fip5: Selective Requirement for Hippocampal Long-Term Depression. *Journal of Neuroscience*, **2015**, 35, 7460-74	6.6	18
111	Retinoic Acid and LTP Recruit Postsynaptic AMPA Receptors Using Distinct SNARE-Dependent Mechanisms. *Neuron*, **2015**, 86, 442-56	13.9	52
110	Input- and Output-Specific Regulation of Serial Order Performance by Corticostriatal Circuits. *Neuron*, **2015**, 88, 345-56	13.9	68
109	Optogenetics: 10 years after ChR2 in neurons--views from the community. *Nature Neuroscience*, **2015**, 18, 1202-12	25.5	98
108	Illuminating circuitry relevant to psychiatric disorders with optogenetics. *Current Opinion in Neurobiology*, **2015**, 30, 9-16	7.6	67
107	????????????????. *Nature Digest*, **2015**, 12, 28-30	0	
106	Optogenetics and the circuit dynamics of psychiatric disease. *JAMA - Journal of the American Medical Association*, **2015**, 313, 2019-20	27.4	32

105	Excitatory transmission at thalamo-striatal synapses mediates susceptibility to social stress. *Nature Neuroscience*, **2015**, 18, 962-4	25.5	73
104	B-lymphocyte-mediated delayed cognitive impairment following stroke. *Journal of Neuroscience*, **2015**, 35, 2133-45	6.6	188
103	Synaptotagmin-1 and -7 Are Redundantly Essential for Maintaining the Capacity of the Readily-Releasable Pool of Synaptic Vesicles. *PLoS Biology*, **2015**, 13, e1002267	9.7	55
102	Cav1.3 channels control D2-autoreceptor responses via NCS-1 in substantia nigra dopamine neurons. *Brain*, **2014**, 137, 2287-302	11.2	87
101	Depression: the best way forward. *Nature*, **2014**, 515, 200-1	50.4	79
100	Natural neural projection dynamics underlying social behavior. *Cell*, **2014**, 157, 1535-51	56.2	732
99	Autism-associated neuroligin-3 mutations commonly impair striatal circuits to boost repetitive behaviors. *Cell*, **2014**, 158, 198-212	56.2	279
98	Chronic pain. Decreased motivation during chronic pain requires long-term depression in the nucleus accumbens. *Science*, **2014**, 345, 535-42	33.3	181
97	The emerging role of nucleus accumbens oxytocin in social cognition. *Biological Psychiatry*, **2014**, 76, 354-5	7.9	19
96	Behavioral abnormalities and circuit defects in the basal ganglia of a mouse model of 16p11.2 deletion syndrome. *Cell Reports*, **2014**, 7, 1077-1092	10.6	137
95	Reward and aversion in a heterogeneous midbrain dopamine system. *Neuropharmacology*, **2014**, 76 Pt B, 351-9	5.5	445
94	Leucine-rich repeat transmembrane proteins are essential for maintenance of long-term potentiation. *Neuron*, **2013**, 79, 439-46	13.9	52
93	Social reward requires coordinated activity of nucleus accumbens oxytocin and serotonin. *Nature*, **2013**, 501, 179-84	50.4	668
92	Rapid release revealed: honoring the synapse. *Cell*, **2013**, 154, 1171-4	56.2	1
91	LTP requires a unique postsynaptic SNARE fusion machinery. *Neuron*, **2013**, 77, 542-58	13.9	144
90	Diverging neural pathways assemble a behavioural state from separable features in anxiety. *Nature* , **2013**, 496, 219-23	50.4	410
89	Autism-associated neuroligin-3 mutations commonly disrupt tonic endocannabinoid signaling. *Neuron*, **2013**, 78, 498-509	13.9	195
88	Presynaptic neurexin-3 alternative splicing trans-synaptically controls postsynaptic AMPA receptor trafficking. *Cell*, **2013**, 154, 75-88	56.2	197

87	FosB differentially modulates nucleus accumbens direct and indirect pathway function. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 1923-8	11.5	144
86	Input-specific control of reward and aversion in the ventral tegmental area. *Nature*, **2012**, 491, 212-7	50.4	865
85	NMDA receptor-dependent long-term potentiation and long-term depression (LTP/LTD). *Cold Spring Harbor Perspectives in Biology*, **2012**, 4,	10.2	531
84	Postsynaptic complexin controls AMPA receptor exocytosis during LTP. *Neuron*, **2012**, 73, 260-7	13.9	98
83	Anhedonia requires MC4R-mediated synaptic adaptations in nucleus accumbens. *Nature*, **2012**, 487, 183-9	50.4	251
82	A comparison of striatal-dependent behaviors in wild-type and hemizygous Drd1a and Drd2 BAC transgenic mice. *Journal of Neuroscience*, **2012**, 32, 9119-23	6.6	42
81	Drug-evoked synaptic plasticity in addiction: from molecular changes to circuit remodeling. *Neuron*, **2011**, 69, 650-63	13.9	715
80	Projection-specific modulation of dopamine neuron synapses by aversive and rewarding stimuli. *Neuron*, **2011**, 70, 855-62	13.9	505
79	Neuroligins/LRRTMs prevent activity- and Ca2+/calmodulin-dependent synapse elimination in cultured neurons. *Journal of Cell Biology*, **2011**, 194, 323-34	7.3	78
78	The neurexin ligands, neuroligins and leucine-rich repeat transmembrane proteins, perform convergent and divergent synaptic functions in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 16502-9	11.5	110
77	Autism-linked neuroligin-3 R451C mutation differentially alters hippocampal and cortical synaptic function. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 13764-9	11.5	241
76	A calcineurin/AKAP complex is required for NMDA receptor-dependent long-term depression. *Nature Neuroscience*, **2010**, 13, 1053-5	25.5	81
75	Postsynaptic TRPV1 triggers cell type-specific long-term depression in the nucleus accumbens. *Nature Neuroscience*, **2010**, 13, 1519-25	25.5	271
74	Calcium binding to PICK1 is essential for the intracellular retention of AMPA receptors underlying long-term depression. *Journal of Neuroscience*, **2010**, 30, 16437-52	6.6	94
73	The addicted synapse: mechanisms of synaptic and structural plasticity in nucleus accumbens. *Trends in Neurosciences*, **2010**, 33, 267-76	13.3	473
72	A critical role for PSD-95/AKAP interactions in endocytosis of synaptic AMPA receptors. *Nature Neuroscience*, **2009**, 12, 172-81	25.5	136
71	LRRTM2 functions as a neurexin ligand in promoting excitatory synapse formation. *Neuron*, **2009**, 64, 791-8	13.9	275
70	Synaptic plasticity: multiple forms, functions, and mechanisms. *Neuropsychopharmacology*, **2008**, 33, 18-41	8.7	968

69	Molecular dissociation of the role of PSD-95 in regulating synaptic strength and LTD. *Neuron*, **2008**, 57, 248-62	13.9	143
68	Striatal plasticity and basal ganglia circuit function. *Neuron*, **2008**, 60, 543-54	13.9	688
67	Mechanism and time course of cocaine-induced long-term potentiation in the ventral tegmental area. *Journal of Neuroscience*, **2008**, 28, 9092-100	6.6	401
66	Spike timing-dependent long-term potentiation in ventral tegmental area dopamine cells requires PKC. *Journal of Neurophysiology*, **2008**, 100, 533-8	3.2	39
65	Mechanisms underlying dedepression of synaptic NMDA receptors in the hippocampus. *Journal of Neurophysiology*, **2008**, 99, 254-63	3.2	8
64	Synaptic plasticity and addiction. *Nature Reviews Neuroscience*, **2007**, 8, 844-58	13.5	1179
63	Activation of NR2B-containing NMDA receptors is not required for NMDA receptor-dependent long-term depression. *Neuropharmacology*, **2007**, 52, 71-6	5.5	184
62	Substrate localization creates specificity in calcium/calmodulin-dependent protein kinase II signaling at synapses. *Journal of Biological Chemistry*, **2006**, 281, 13794-13804	5.4	34
61	Alternative N-terminal domains of PSD-95 and SAP97 govern activity-dependent regulation of synaptic AMPA receptor function. *Neuron*, **2006**, 51, 99-111	13.9	186
60	CREB modulates excitability of nucleus accumbens neurons. *Nature Neuroscience*, **2006**, 9, 475-7	25.5	265
59	Synaptic scaling mediated by glial TNF-alpha. *Nature*, **2006**, 440, 1054-9	50.4	1251
58	Neural mechanisms of addiction: the role of reward-related learning and memory. *Annual Review of Neuroscience*, **2006**, 29, 565-98	17	2134
57	Distinct triggering and expression mechanisms underlie LTD of AMPA and NMDA synaptic responses. *Nature Neuroscience*, **2005**, 8, 1043-50	25.5	154
56	The role of synaptic plasticity in addiction. *Clinical Neuroscience Research*, **2005**, 5, 141-146		0
55	Differential regulation of AMPA receptor and GABA receptor trafficking by tumor necrosis factor-alpha. *Journal of Neuroscience*, **2005**, 25, 3219-28	6.6	686
54	Acute and chronic cocaine-induced potentiation of synaptic strength in the ventral tegmental area: electrophysiological and behavioral correlates in individual rats. *Journal of Neuroscience*, **2004**, 24, 7482-90	6.6	457
53	Activity-dependent regulation of dendritic synthesis and trafficking of AMPA receptors. *Nature Neuroscience*, **2004**, 7, 244-53	25.5	432
52	LTP and LTD: an embarrassment of riches. *Neuron*, **2004**, 44, 5-21	13.9	2910

51	Synaptic plasticity in the mesolimbic dopamine system. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2003**, 358, 815-9	5.8	99
50	Synaptic plasticity and AMPA receptor trafficking. *Annals of the New York Academy of Sciences*, **2003**, 1003, 1-11	6.5	272
49	The long-term potential of LTP. *Nature Reviews Neuroscience*, **2003**, 4, 923-6	13.5	169
48	A developmental switch in the signaling cascades for LTP induction. *Nature Neuroscience*, **2003**, 6, 15-6	25.5	260
47	Drugs of abuse and stress trigger a common synaptic adaptation in dopamine neurons. *Neuron*, **2003**, 37, 577-82	13.9	1175
46	RIM1alpha is required for presynaptic long-term potentiation. *Nature*, **2002**, 415, 327-30	50.4	331
45	AMPA receptor trafficking and synaptic plasticity. *Annual Review of Neuroscience*, **2002**, 25, 103-26	17	2062
44	NIH workshop report: taming the brainЋs complexity. *Neuron*, **2002**, 36, 29-30	13.9	8
43	NMDAR EPSC kinetics do not regulate the critical period for LTP at thalamocortical synapses. *Nature Neuroscience*, **2001**, 4, 235-6	25.5	157
42	Long-term depression in the nucleus accumbens: a neural correlate of behavioral sensitization to cocaine. *Nature Neuroscience*, **2001**, 4, 1217-23	25.5	554
41	Role of AMPA receptor endocytosis in synaptic plasticity. *Nature Reviews Neuroscience*, **2001**, 2, 315-24	13.5	358
40	Single cocaine exposure in vivo induces long-term potentiation in dopamine neurons. *Nature*, **2001**, 411, 583-7	50.4	1128
39	Addiction and the brain: the neurobiology of compulsion and its persistence. *Nature Reviews Neuroscience*, **2001**, 2, 695-703	13.5	1024
38	Regulation of synaptic strength by protein phosphatase 1. *Neuron*, **2001**, 32, 1133-48	13.9	193
37	Delivering the goods to synapses. *Nature Neuroscience*, **2000**, 3, 1064-6	25.5	5
36	Regulation of AMPA receptor endocytosis by a signaling mechanism shared with LTD. *Nature Neuroscience*, **2000**, 3, 1291-300	25.5	605
35	Dopaminergic modulation of neuronal excitability in the striatum and nucleus accumbens. *Annual Review of Neuroscience*, **2000**, 23, 185-215	17	759
34	Rabphilin knock-out mice reveal that rabphilin is not required for rab3 function in regulating neurotransmitter release. *Journal of Neuroscience*, **1999**, 19, 5834-46	6.6	149

33	An immunocytochemical assay for activity-dependent redistribution of glutamate receptors from the postsynaptic plasma membrane. *Annals of the New York Academy of Sciences*, **1999**, 868, 550-3	6.5	6
32	Rapid redistribution of glutamate receptors contributes to long-term depression in hippocampal cultures. *Nature Neuroscience*, **1999**, 2, 454-60	25.5	384
31	Role of AMPA receptor cycling in synaptic transmission and plasticity. *Neuron*, **1999**, 24, 649-58	13.9	600
30	Postsynaptic membrane fusion and long-term potentiation. *Science*, **1998**, 279, 399-403	33.3	369
29	Development of excitatory circuitry in the hippocampus. *Journal of Neurophysiology*, **1998**, 79, 2013-24	3.2	214
28	Modulation of synaptic transmission by dopamine and norepinephrine in ventral but not dorsal striatum. *Journal of Neurophysiology*, **1998**, 79, 1768-76	3.2	136
27	Learning mechanisms: the case for CaM-KII. *Science*, **1997**, 276, 2001-2	33.3	119
26	Two distinct forms of long-term depression coexist in CA1 hippocampal pyramidal cells. *Neuron*, **1997**, 18, 969-82	13.9	465
25	Dopamine depresses excitatory and inhibitory synaptic transmission by distinct mechanisms in the nucleus accumbens. *Journal of Neuroscience*, **1997**, 17, 5697-710	6.6	163
24	Use-dependent increases in glutamate concentration activate presynaptic metabotropic glutamate receptors. *Nature*, **1997**, 385, 630-4	50.4	410
23	Kainate receptors mediate a slow postsynaptic current in hippocampal CA3 neurons. *Nature*, **1997**, 388, 182-6	50.4	436
22	Rab3A is essential for mossy fibre long-term potentiation in the hippocampus. *Nature*, **1997**, 388, 590-3	50.4	314
21	Cyclic AMP mediates a presynaptic form of LTP at cerebellar parallel fiber synapses. *Neuron*, **1996**, 16, 797-803	13.9	350
20	Ca2+ signaling requirements for long-term depression in the hippocampus. *Neuron*, **1996**, 16, 825-33	13.9	371
19	Long-term potentiation in cultures of single hippocampal granule cells: a presynaptic form of plasticity. *Neuron*, **1996**, 16, 1147-57	13.9	125
18	Role of intercellular interactions in heterosynaptic long-term depression. *Nature*, **1996**, 380, 446-50	50.4	94
17	A critical period for long-term potentiation at thalamocortical synapses. *Nature*, **1995**, 375, 325-8	50.4	589
16	Essential functions of synapsins I and II in synaptic vesicle regulation. *Nature*, **1995**, 375, 488-93	50.4	635

15	Contrasting properties of two forms of long-term potentiation in the hippocampus. *Nature*, **1995**, 377, 115-8	50.4	760
14	Independent mechanisms for long-term depression of AMPA and NMDA responses. *Neuron*, **1995**, 15, 417-26	13.9	120
13	Evidence for silent synapses: implications for the expression of LTP. *Neuron*, **1995**, 15, 427-34	13.9	1056
12	Simultaneous LTP of non-NMDA- and LTD of NMDA-receptor-mediated responses in the nucleus accumbens. *Nature*, **1994**, 368, 242-6	50.4	183
11	Involvement of a calcineurin/inhibitor-1 phosphatase cascade in hippocampal long-term depression. *Nature*, **1994**, 369, 486-8	50.4	930
10	Synaptic plasticity in the hippocampus: LTP and LTD. *Cell*, **1994**, 78, 535-8	56.2	526
9	Synaptic plasticity: LTP and LTD. *Current Opinion in Neurobiology*, **1994**, 4, 389-99	7.6	1048
8	NMDA-receptor-dependent synaptic plasticity: multiple forms and mechanisms. *Trends in Neurosciences*, **1993**, 16, 521-7	13.3	721
7	Temporal limits on the rise in postsynaptic calcium required for the induction of long-term potentiation. *Neuron*, **1992**, 9, 121-8	13.9	207
6	Mechanisms underlying induction of homosynaptic long-term depression in area CA1 of the hippocampus. *Neuron*, **1992**, 9, 967-75	13.9	911
5	Postsynaptic factors control the duration of synaptic enhancement in area CA1 of the hippocampus. *Neuron*, **1991**, 6, 53-60	13.9	264
4	An essential role for postsynaptic calmodulin and protein kinase activity in long-term potentiation. *Nature*, **1989**, 340, 554-7	50.4	1014
3	NMDA application potentiates synaptic transmission in the hippocampus. *Nature*, **1988**, 334, 250-2	50.4	428
2	Potentiation of synaptic transmission in the hippocampus by phorbol esters. *Nature*, **1986**, 321, 175-7	50.4	612
1	Phorbol esters block a voltage-sensitive chloride current in hippocampal pyramidal cells. *Nature*, **1986**, 321, 695-7	50.4	210