

# Karl Deisseroth

## List of Articles by Year in descending order

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355

PR articles

70,812

PR citations

251

132

PR h-index

556

257

g-index

416

documents

103556

doc citations

122

161

h-index

86396

citing authors

#	ARTICLE	IF	CITATIONS
1	Mapping the cellular etiology of schizophrenia and complex brain phenotypes. <i>Nature Neuroscience</i> , 2025, 28, 248-258.	17.0	36
2	A deep learning pipeline for three-dimensional brain-wide mapping of local neuronal ensembles in teravoxel light-sheet microscopy. <i>Nature Methods</i> , 2025, 22, 600-611.	24.6	9
3	Food and water intake are regulated by distinct central amygdala circuits revealed using intersectional genetics. <i>Nature Communications</i> , 2025, 16, .	13.7	4
4	Neurobiology of Thirst and Hunger Drives. <i>Annual Review of Neuroscience</i> , 2025, 48, 381-403.	11.4	7
5	Enhancer AAVs for targeting spinal motor neurons and descending motor pathways in rodents and macaque. <i>Cell Reports</i> , 2025, 44, 115730.	6.3	11
6	Conserved brain-wide emergence of emotional response from sensory experience in humans and mice. <i>Science</i> , 2025, 388, .	36.2	13
7	Saliency Signaling and Stimulus Scaling of Ventral Tegmental Area Glutamate Neuron Subtypes. <i>Journal of Neuroscience</i> , 2025, 45, e1073242025.	3.7	1
8	Cholinergic neuronal activity promotes diffuse midline glioma growth through muscarinic signaling. <i>Cell</i> , 2025, 188, 4640-4657.e30.	33.7	18
9	A distinct cortical code for socially learned threat. <i>Nature</i> , 2024, 626, 1066-1072.	37.9	27
10	Retrograde endocannabinoid signaling at inhibitory synapses in vivo. <i>Science</i> , 2024, 383, 967-970.	36.2	30
11	Prefrontal cortical dynorphin peptidergic transmission constrains threat-driven behavioral and network states. <i>Neuron</i> , 2024, 112, 2062-2078.e7.	11.0	20
12	Applications of synthetic polymers directed toward living cells. <i>Nature Synthesis</i> , 2024, 3, 943-957.	18.1	33
13	The parasubthalamic nucleus refeeding ensemble delays feeding initiation and hastens water drinking. <i>Molecular Psychiatry</i> , 2024, 30, 37-49.	7.8	4
14	Host circuit engagement of human cortical organoids transplanted in rodents. <i>Nature Protocols</i> , 2024, 19, 3542-3567.	14.4	12
15	Monosynaptic Inputs to Ventral Tegmental Area Glutamate and GABA Co-transmitting Neurons. <i>Journal of Neuroscience</i> , 2024, 44, e2184232024.	3.7	6
16	Video-based pooled screening yields improved far-red genetically encoded voltage indicators. <i>Nature Methods</i> , 2023, 20, 1082-1094.	24.6	67
17	All-optical physiology resolves a synaptic basis for behavioral timescale plasticity. <i>Cell</i> , 2023, 186, 543-559.e19.	33.7	134
18	Integrated cardio-behavioral responses to threat define defensive states. <i>Nature Neuroscience</i> , 2023, , .	17.0	36

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19	Cardiogenic control of affective behavioural state. <i>Nature</i> , 2023, 615, 292-299.	37.9	256
20	Causal evidence for the processing of bodily self in the anterior precuneus. <i>Neuron</i> , 2023, 111, 2502-2512.e4.	11.0	59
21	CLARITY increases sensitivity and specificity of fluorescence immunostaining in long-term archived human brain tissue. <i>BMC Biology</i> , 2023, 21, .	3.9	10
22	Unique functional responses differentially map onto genetic subtypes of dopamine neurons. <i>Nature Neuroscience</i> , 2023, 26, 1762-1774.	17.0	137
23	Genetically targeted chemical assembly of polymers specifically localized extracellularly to surface membranes of living neurons. <i>Science Advances</i> , 2023, 9, .	10.9	23
24	Orbitofrontal cortex control of striatum leads economic decision-making. <i>Nature Neuroscience</i> , 2023, 26, 1566-1574.	17.0	43
25	Human OPRM1 and murine Oprm1 promoter driven viral constructs for genetic access to $\mu$ -opioidergic cell types. <i>Nature Communications</i> , 2023, 14, .	13.7	24
26	Lifelong restructuring of 3D genome architecture in cerebellar granule cells. <i>Science</i> , 2023, 381, 1112-1119.	36.2	60
27	<scp>Opto $\mu$ 1AR</scp> activation in astrocytes modulates basal hippocampal synaptic excitation and inhibition in a stimulation $\mu$ specific manner. <i>Hippocampus</i> , 2023, 33, 1277-1291.	2.5	12
28	Ketamine $\mu$ TM's acute effects on negative brain states are mediated through distinct altered states of consciousness in humans. <i>Nature Communications</i> , 2023, 14, .	13.7	18
29	Neural landscape diffusion resolves conflicts between needs across time. <i>Nature</i> , 2023, 623, 571-579.	37.9	27
30	A functional cellular framework for sex and estrous cycle-dependent gene expression and behavior. <i>Cell</i> , 2022, 185, 654-671.e22.	33.7	135
31	Structural basis for channel conduction in the pump-like channelrhodopsin ChRmine. <i>Cell</i> , 2022, 185, 672-689.e23.	33.7	132
32	Regulation of sensorimotor gating via Disc1/Huntingtin-mediated Bdnf transport in the cortico-striatal circuit. <i>Molecular Psychiatry</i> , 2022, 27, 1805-1815.	7.8	9
33	Brain-wide perception of the emotional valence of light is regulated by distinct hypothalamic neurons. <i>Molecular Psychiatry</i> , 2022, 27, 3777-3793.	7.8	11
34	Investigation of Nociceptive Endogenous Opioid Dynamics in the Periaqueductal Gray. <i>Journal of Pain</i> , 2022, 23, 18.	1.3	1
35	Multiregion neuronal activity: the forest and the trees. <i>Nature Reviews Neuroscience</i> , 2022, 23, 683-704.	20.8	60
36	Maturation and circuit integration of transplanted human cortical organoids. <i>Nature</i> , 2022, 610, 319-326.	37.9	379

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37	Activity of a direct VTA to ventral pallidum GABA pathway encodes unconditioned reward value and sustains motivation for reward. <i>Science Advances</i> , 2022, 8, .	10.9	47
38	Changes in genome architecture and transcriptional dynamics progress independently of sensory experience during post-natal brain development. <i>Cell</i> , 2021, 184, 741-758.e17.	33.7	195
39	Septohippocampal transmission from parvalbumin-positive neurons features rapid recovery from synaptic depression. <i>Scientific Reports</i> , 2021, 11, .	3.4	6
40	Comparison of diffusion MRI and CLARITY fiber orientation estimates in both gray and white matter regions of human and primate brain. <i>NeuroImage</i> , 2021, 228, 117692.	4.4	37
41	Reciprocal Lateral Hypothalamic and Raphe GABAergic Projections Promote Wakefulness. <i>Journal of Neuroscience</i> , 2021, 41, 4840-4849.	3.7	30
42	Dendritic calcium signals in rhesus macaque motor cortex drive an optical brain-computer interface. <i>Nature Communications</i> , 2021, 12, .	13.7	62
43	Selective filtering of excitatory inputs to nucleus accumbens by dopamine and serotonin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.5	49
44	Form and function in the brain. <i>Lancet Neurology</i> , The, 2021, 20, 508.	17.9	0
45	A neural circuit state change underlying skilled movements. <i>Cell</i> , 2021, 184, 3731-3747.e21.	33.7	82
46	CloudReg: automatic terabyte-scale cross-modal brain volume registration. <i>Nature Methods</i> , 2021, 18, 845-846.	24.6	17
47	Maximally selective single-cell target for circuit control in epilepsy models. <i>Neuron</i> , 2021, 109, 2556-2572.e6.	11.0	46
48	Excitatory synapses and gap junctions cooperate to improve Pv neuronal burst firing and cortical social cognition in Shank2-mutant mice. <i>Nature Communications</i> , 2021, 12, .	13.7	30
49	From microbial membrane proteins to the mysteries of emotion. <i>Cell</i> , 2021, 184, 5279-5285.	33.7	15
50	Genetically identified amygdala-striatal circuits for valence-specific behaviors. <i>Nature Neuroscience</i> , 2021, 24, 1586-1600.	17.0	110
51	An uncommon neuronal class conveys visual signals from rods and cones to retinal ganglion cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.5	10
52	Transcriptional and functional divergence in lateral hypothalamic glutamate neurons projecting to the lateral habenula and ventral tegmental area. <i>Neuron</i> , 2021, 109, 3823-3837.e6.	11.0	72
53	Sox6 expression distinguishes dorsally and ventrally biased dopamine neurons in the substantia nigra with distinctive properties and embryonic origins. <i>Cell Reports</i> , 2021, 37, 109975.	6.3	86
54	An Open Resource for Non-human Primate Optogenetics. <i>Neuron</i> , 2020, 108, 1075-1090.e6.	11.0	115

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55	A Genetically Defined Compartmentalized Striatal Direct Pathway for Negative Reinforcement. <i>Cell</i> , 2020, 183, 211-227.e20.	33.7	101
56	Distinct Signaling by Ventral Tegmental Area Glutamate, GABA, and Combinatorial Glutamate-GABA Neurons in Motivated Behavior. <i>Cell Reports</i> , 2020, 32, 108094.	6.3	114
57	Optogenetic manipulation of an ascending arousal system tunes cortical broadband gamma power and reveals functional deficits relevant to schizophrenia. <i>Molecular Psychiatry</i> , 2020, 26, 3461-3475.	7.8	40
58	Striosomes Mediate Value-Based Learning Vulnerable in Age and a Huntington's Disease Model. <i>Cell</i> , 2020, 183, 918-934.e49.	33.7	54
59	Deep posteromedial cortical rhythm in dissociation. <i>Nature</i> , 2020, 586, 87-94.	37.9	239
60	A Molecular Calcium Integrator Reveals a Striatal Cell Type Driving Aversion. <i>Cell</i> , 2020, 183, 2003-2019.e16.	33.7	84
61	An Ultra-Sensitive Step-Function Opsin for Minimally Invasive Optogenetic Stimulation in Mice and Macaques. <i>Neuron</i> , 2020, 107, 38-51.e8.	11.0	130
62	Comprehensive Dual- and Triple-Feature Intersectional Single-Vector Delivery of Diverse Functional Payloads to Cells of Behaving Mammals. <i>Neuron</i> , 2020, 107, 836-853.e11.	11.0	165
63	Multiple convergent hypothalamus-brainstem circuits drive defensive behavior. <i>Nature Neuroscience</i> , 2020, 23, 959-967.	17.0	92
64	Activity in grafted human iPSC cell-derived cortical neurons integrated in stroke-injured rat brain regulates motor behavior. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 9094-9100.	7.5	94
65	Two genetically, anatomically and functionally distinct cell types segregate across anteroposterior axis of paraventricular thalamus. <i>Nature Neuroscience</i> , 2020, 23, 217-228.	17.0	175
66	High-speed interferometric imaging reveals dynamics of neuronal deformation during the action potential. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10278-10285.	7.5	102
67	Amygdala-Midbrain Connections Modulate Appetitive and Aversive Learning. <i>Neuron</i> , 2020, 106, 1026-1043.e9.	11.0	115
68	Deep brain optogenetics without intracranial surgery. <i>Nature Biotechnology</i> , 2020, 39, 161-164.	29.8	200
69	Cortical Observation by Synchronous Multifocal Optical Sampling Reveals Widespread Population Encoding of Actions. <i>Neuron</i> , 2020, 107, 351-367.e19.	11.0	91
70	Cerebellar nuclei evolved by repeatedly duplicating a conserved cell-type set. <i>Science</i> , 2020, 370, .	36.2	216
71	Cortical layer-specific critical dynamics triggering perception. <i>Science</i> , 2019, 365, .	36.2	628
72	Neural signatures of sleep in zebrafish. <i>Nature</i> , 2019, 571, 198-204.	37.9	178

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73	Prefrontal cortex neuronal ensembles encoding fear drive fear expression during long-term memory retrieval. <i>Scientific Reports</i> , 2019, 9, .	3.4	31
74	Stretchable and Fully Degradable Semiconductors for Transient Electronics. <i>ACS Central Science</i> , 2019, 5, 1884-1891.	9.2	138
75	A neuronal circuit for activating descending modulation of neuropathic pain. <i>Nature Neuroscience</i> , 2019, 22, 1659-1668.	17.0	288
76	Mapping Brain-Wide Afferent Inputs of Parvalbumin-Expressing GABAergic Neurons in Barrel Cortex Reveals Local and Long-Range Circuit Motifs. <i>Cell Reports</i> , 2019, 28, 3450-3461.e8.	6.3	74
77	Rational Engineering of XCaMPs, a Multicolor GECI Suite for In Vivo Imaging of Complex Brain Circuit Dynamics. <i>Cell</i> , 2019, 177, 1346-1360.e24.	33.7	257
78	Multimodal characterization of the human nucleus accumbens. <i>NeuroImage</i> , 2019, 198, 137-149.	4.4	47
79	Neuronal Dynamics Regulating Brain and Behavioral State Transitions. <i>Cell</i> , 2019, 177, 970-985.e20.	33.7	252
80	Thalamic Reticular Nucleus Parvalbumin Neurons Regulate Sleep Spindles and Electrophysiological Aspects of Schizophrenia in Mice. <i>Scientific Reports</i> , 2019, 9, .	3.4	74
81	Dopamine Modulation of Prefrontal Cortex Activity Is Manifold and Operates at Multiple Temporal and Spatial Scales. <i>Cell Reports</i> , 2019, 27, 99-114.e6.	6.3	86
82	Fast near-whole-brain imaging in adult <i>Drosophila</i> during responses to stimuli and behavior. <i>PLoS Biology</i> , 2019, 17, e2006732.	5.0	161
83	Two eARCHT3.0 Lines for Optogenetic Silencing of Dopaminergic and Serotonergic Neurons. <i>Frontiers in Neural Circuits</i> , 2019, 13, .	2.5	7
84	A hypothalamus-habenula circuit controls aversion. <i>Molecular Psychiatry</i> , 2019, 24, 1351-1368.	7.8	166
85	Functional maturation of human neural stem cells in a 3D bioengineered brain model enriched with fetal brain-derived matrix. <i>Scientific Reports</i> , 2019, 9, .	3.4	64
86	Multimodal image registration and connectivity analysis for integration of connectomic data from microscopy to MRI. <i>Nature Communications</i> , 2019, 10, .	13.7	96
87	A Neural Circuit Mechanism for Encoding Aversive Stimuli in the Mesolimbic Dopamine System. <i>Neuron</i> , 2019, 101, 133-151.e7.	11.0	518
88	Interacting neural ensembles in orbitofrontal cortex for social and feeding behaviour. <i>Nature</i> , 2019, 565, 645-649.	37.9	218
89	Investigating the feasibility of channelrhodopsin variants for nanoscale optogenetics. <i>Neurophotonics</i> , 2019, 6, 1.	2.9	21
90	Sustained rescue of prefrontal circuit dysfunction by antidepressant-induced spine formation. <i>Science</i> , 2019, 364, .	36.2	589

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91	Thirst regulates motivated behavior through modulation of brainwide neural population dynamics. <i>Science</i> , 2019, 364, .	36.2	359
92	Excitation of Diverse Classes of Cholecystokinin Interneurons in the Basal Amygdala Facilitates Fear Extinction. <i>ENeuro</i> , 2019, 6, ENEURO.0220-19.2019.	2.1	38
93	Three-dimensional in situ sequencing of single cells in intact tissue. <i>FASEB Journal</i> , 2019, 33, .	0.6	1
94	Hierarchical neural architecture underlying thirst regulation. <i>Nature</i> , 2018, 555, 204-209.	37.9	159
95	Neuronal activity regulates neurotransmitter switching in the adult brain following light-induced stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5064-5071.	7.5	60
96	Phasic Dopamine Signals in the Nucleus Accumbens that Cause Active Avoidance Require Endocannabinoid Mobilization in the Midbrain. <i>Current Biology</i> , 2018, 28, 1392-1404.e5.	3.6	96
97	Uneven balance of power between hypothalamic peptidergic neurons in the control of feeding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, .	7.5	51
98	Scale-Invariant Visual Capabilities Explained by Topographic Representations of Luminance and Texture in Primate V1. <i>Neuron</i> , 2018, 100, 1504-1512.e4.	11.0	11
99	A community-developed open-source computational ecosystem for big neuro data. <i>Nature Methods</i> , 2018, 15, 846-847.	24.6	60
100	Structural mechanisms of selectivity and gating in anion channelrhodopsins. <i>Nature</i> , 2018, 561, 349-354.	37.9	84
101	Crystal structure of the natural anion-conducting channelrhodopsin GtACR1. <i>Nature</i> , 2018, 561, 343-348.	37.9	118
102	Hydrogel-Tissue Chemistry: Principles and Applications. <i>Annual Review of Biophysics</i> , 2018, 47, 355-376.	12.3	111
103	Development of an optogenetic toolkit for neural circuit dissection in squirrel monkeys. <i>Scientific Reports</i> , 2018, 8, .	3.4	29
104	Mapping projections of molecularly defined dopamine neuron subtypes using intersectional genetic approaches. <i>Nature Neuroscience</i> , 2018, 21, 1260-1271.	17.0	405
105	Coordinated Reductions in Excitatory Input to the Nucleus Accumbens Underlie Food Consumption. <i>Neuron</i> , 2018, 99, 1260-1273.e4.	11.0	93
106	5-HT release in nucleus accumbens rescues social deficits in mouse autism model. <i>Nature</i> , 2018, 560, 589-594.	37.9	243
107	Three-dimensional intact-tissue sequencing of single-cell transcriptional states. <i>Science</i> , 2018, 361, .	36.2	1,470
108	Linking real-time activity with detailed anatomy at cellular resolution across the vertebrate brain. <i>Proceedings for Annual Meeting of the Japanese Pharmacological Society</i> , 2018, WCP2018, PL-2.	0.0	0

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109	Dopaminergic dynamics underlying sex-specific cocaine reward. <i>Nature Communications</i> , 2017, 8, .	13.7	344
110	Gamma oscillations organize top-down signalling to hypothalamus and enable food seeking. <i>Nature</i> , 2017, 542, 232-236.	37.9	125
111	A Brainstem-Spinal Cord Inhibitory Circuit for Mechanical Pain Modulation by GABA and Enkephalins. <i>Neuron</i> , 2017, 93, 822-839.e6.	11.0	316
112	Brain-Derived Neurotrophic Factor in the Mesolimbic Reward Circuitry Mediates Nociception in Chronic Neuropathic Pain. <i>Biological Psychiatry</i> , 2017, 82, 608-618.	5.4	97
113	The separate effects of lipids and proteins on brain MRI contrast revealed through tissue clearing. <i>NeuroImage</i> , 2017, 156, 412-422.	4.4	63
114	Global Representations of Goal-Directed Behavior in Distinct Cell Types of Mouse Neocortex. <i>Neuron</i> , 2017, 94, 891-907.e6.	11.0	396
115	Next-generation probes, particles, and proteins for neural interfacing. <i>Science Advances</i> , 2017, 3, .	10.9	490
116	CLARITY reveals dynamics of ovarian follicular architecture and vasculature in three-dimensions. <i>Scientific Reports</i> , 2017, 7, .	3.4	115
117	Integration of optogenetics with complementary methodologies in systems neuroscience. <i>Nature Reviews Neuroscience</i> , 2017, 18, 222-235.	20.8	682
118	Bidirectional Control of Generalized Epilepsy Networks via Rapid Real-Time Switching of Firing Mode. <i>Neuron</i> , 2017, 93, 194-210.	11.0	125
119	Whole-tissue biopsy phenotyping of three-dimensional tumours reveals patterns of cancer heterogeneity. <i>Nature Biomedical Engineering</i> , 2017, 1, 796-806.	22.4	180
120	Ancestral Circuits for the Coordinated Modulation of Brain State. <i>Cell</i> , 2017, 171, 1411-1423.e17.	33.7	181
121	Long-Range GABAergic Inputs Regulate Neural Stem Cell Quiescence and Control Adult Hippocampal Neurogenesis. <i>Cell Stem Cell</i> , 2017, 21, 604-617.e5.	16.4	143
122	The central amygdala controls learning in the lateral amygdala. <i>Nature Neuroscience</i> , 2017, 20, 1680-1685.	17.0	184
123	Modular organization of the brainstem noradrenaline system coordinates opposing learning states. <i>Nature Neuroscience</i> , 2017, 20, 1602-1611.	17.0	348
124	A radial axis defined by semaphorin-to-neuropilin signaling controls pancreatic islet morphogenesis. <i>Development (Cambridge)</i> , 2017, 144, 3744-3754.	3.1	34
125	Rabies screen reveals GPe control of cocaine-triggered plasticity. <i>Nature</i> , 2017, 549, 345-350.	37.9	136
126	The form and function of channelrhodopsin. <i>Science</i> , 2017, 357, .	36.2	284

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127	A Guide to Creating and Testing New INTRSECT Constructs. <i>Current Protocols in Neuroscience</i> , 2017, 80, .	3.5	28
128	Developmental Dysfunction of VIP Interneurons Impairs Cortical Circuits. <i>Neuron</i> , 2017, 95, 884-895.e9.	11.0	146
129	Molecular and Circuit-Dynamical Identification of Top-Down Neural Mechanisms for Restraint of Reward Seeking. <i>Cell</i> , 2017, 170, 1013-1027.e14.	33.7	158
130	Pathways to clinical CLARITY: volumetric analysis of irregular, soft, and heterogeneous tissues in development and disease. <i>Scientific Reports</i> , 2017, 7, .	3.4	37
131	Vasopressin excites interneurons to suppress hippocampal network activity across a broad span of brain maturity at birth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, .	7.5	62
132	The need for calcium imaging in nonhuman primates: New motor neuroscience and brain-machine interfaces. <i>Experimental Neurology</i> , 2017, 287, 437-451.	4.0	54
133	Place field assembly distribution encodes preferred locations. <i>PLoS Biology</i> , 2017, 15, e2002365.	5.0	65
134	Quantitative validation of immunofluorescence and lectin staining using reduced CLARITY acrylamide formulations. <i>Brain Structure and Function</i> , 2017, 223, 987-999.	2.5	10
135	Activation of a novel p70 S6 kinase 1-dependent intracellular cascade in the basolateral nucleus of the amygdala is required for the acquisition of extinction memory. <i>Molecular Psychiatry</i> , 2017, 23, 1394-1401.	7.8	13
136	In Vivo Fiber Photometry Reveals Signature of Future Stress Susceptibility in Nucleus Accumbens. <i>Neuropsychopharmacology</i> , 2017, 43, 255-263.	5.3	128
137	Distinct Thalamic Reticular Cell Types Differentially Modulate Normal and Pathological Cortical Rhythms. <i>Cell Reports</i> , 2017, 19, 2130-2142.	6.3	197
138	Estrous cycle-dependent alterations in cocaine affinity at the dopamine transporter underlie enhanced cocaine reward in females. <i>FASEB Journal</i> , 2017, 31, .	0.6	0
139	Sustained Attentional States Require Distinct Temporal Involvement of the Dorsal and Ventral Medial Prefrontal Cortex. <i>Frontiers in Neural Circuits</i> , 2016, 10, .	2.5	48
140	Optogenetic approaches addressing extracellular modulation of neural excitability. <i>Scientific Reports</i> , 2016, 6, .	3.4	34
141	Patterned photostimulation via visible-wavelength photonic probes for deep brain optogenetics. <i>Neurophotonics</i> , 2016, 4, 1.	2.9	86
142	Dynamic changes in neural circuitry during adolescence are associated with persistent attenuation of fear memories. <i>Nature Communications</i> , 2016, 7, .	13.7	159
143	Wiring and Molecular Features of Prefrontal Ensembles Representing Distinct Experiences. <i>Cell</i> , 2016, 165, 1776-1788.	33.7	345
144	Endocannabinoid Modulation of Orbitostriatal Circuits Gates Habit Formation. <i>Neuron</i> , 2016, 90, 1312-1324.	11.0	244

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145	Astrocyte Intermediaries of Septal Cholinergic Modulation in the Hippocampus. <i>Neuron</i> , 2016, 90, 853-865.	11.0	120
146	Locus coeruleus and dopaminergic consolidation of everyday memory. <i>Nature</i> , 2016, 537, 357-362.	37.9	750
147	Pontomesencephalic Tegmental Afferents to VTA Non-dopamine Neurons Are Necessary for Appetitive Pavlovian Learning. <i>Cell Reports</i> , 2016, 16, 2699-2710.	6.3	41
148	Serotonin engages an anxiety and fear-promoting circuit in the extended amygdala. <i>Nature</i> , 2016, 537, 97-101.	37.9	446
149	Beyond the brain: Optogenetic control in the spinal cord and peripheral nervous system. <i>Science Translational Medicine</i> , 2016, 8, .	12.5	145
150	InÂVivo Interrogation of Spinal Mechanosensory Circuits. <i>Cell Reports</i> , 2016, 17, 1699-1710.	6.3	70
151	Optogenetic and chemogenetic strategies for sustained inhibition of pain. <i>Scientific Reports</i> , 2016, 6, .	3.4	92
152	A Look Inside the Brain. <i>Scientific American</i> , 2016, 315, 30-37.	0.1	8
153	Optogenetic Stimulation of Neural Grafts Enhances Neurotransmission and Downregulates the Inflammatory Response in Experimental Stroke Model. <i>Cell Transplantation</i> , 2016, 25, 1371-1380.	2.7	42
154	Hilar somatostatin interneuron loss reduces dentate gyrus inhibition in a mouse model of temporal lobe epilepsy. <i>Epilepsia</i> , 2016, 57, 977-983.	4.4	46
155	Segregated cholinergic transmission modulates dopamine neurons integrated in distinct functional circuits. <i>Nature Neuroscience</i> , 2016, 19, 1025-1033.	17.0	147
156	Dysregulation of Prefrontal Cortex-Mediated Slow-Evolving Limbic Dynamics Drives Stress-Induced Emotional Pathology. <i>Neuron</i> , 2016, 91, 439-452.	11.0	125
157	Midbrain circuits for defensive behaviour. <i>Nature</i> , 2016, 534, 206-212.	37.9	699
158	Prefrontal Parvalbumin Neurons in Control of Attention. <i>Cell</i> , 2016, 164, 208-218.	33.7	472
159	Nucleus accumbens D2R cells signal prior outcomes and control risky decision-making. <i>Nature</i> , 2016, 531, 642-646.	37.9	215
160	Multiplexed Intact-Tissue Transcriptional Analysis at Cellular Resolution. <i>Cell</i> , 2016, 164, 792-804.	33.7	141
161	Simultaneous fast measurement of circuit dynamics at multiple sites across the mammalian brain. <i>Nature Methods</i> , 2016, 13, 325-328.	24.6	468
162	In vivo imaging identifies temporal signature of D1 and D2 medium spiny neurons in cocaine reward. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2726-2731.	7.5	336

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163	Hypothalamic control of male aggression-seeking behavior. <i>Nature Neuroscience</i> , 2016, 19, 596-604.	17.0	241
164	Communication in Neural Circuits: Tools, Opportunities, and Challenges. <i>Cell</i> , 2016, 164, 1136-1150.	33.7	161
165	Prefrontal cortical regulation of brainwide circuit dynamics and reward-related behavior. <i>Science</i> , 2016, 351, .	36.2	496
166	Structural foundations of optogenetics: Determinants of channelrhodopsin ion selectivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 822-829.	7.5	225
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