David A Leopold

List of Publications by Year
in descending order

126 papers	17,685 citations	31976 53 h-index	19190 118 g-index
140 all docs	140 docs citations	140 times ranked	14650 citing authors

#	Article	IF	Citations
1	Dynamic functional connectivity: Promise, issues, and interpretations. NeuroImage, 2013, 80, 360-378.	4.2	2,358
2	Multistable phenomena: changing views in perception. Trends in Cognitive Sciences, 1999, 3, 254-264.	7.8	1,109
3	Activity changes in early visual cortex reflect monkeys' percepts during binocular rivalry. Nature, 1996, 379, 549-553.	27.8	916
4	Neural basis of global resting-state fMRI activity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10238-10243.	7.1	860
5	Prototype-referenced shape encoding revealed by high-level aftereffects. Nature Neuroscience, 2001, 4, 89-94.	14.8	755
6	Anatomical accuracy of brain connections derived from diffusion MRI tractography is inherently limited. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16574-16579.	7.1	657
7	Very Slow Activity Fluctuations in Monkey Visual Cortex: Implications for Functional Brain Imaging. Cerebral Cortex, 2003, 13, 422-433.	2.9	594
8	What is rivalling during binocular rivalry?. Nature, 1996, 380, 621-624.	27.8	570
9	Neuronal correlates of spontaneous fluctuations in fMRI signals in monkey visual cortex: Implications for functional connectivity at rest. Human Brain Mapping, 2008, 29, 751-761.	3.6	529
10	Norm-based face encoding by single neurons in the monkey inferotemporal cortex. Nature, 2006, 442, 572-575.	27.8	366
11	Superficial white matter fiber systems impede detection of long-range cortical connections in diffusion MR tractography. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2820-8.	7.1	364
12	Layer-Specific Entrainment of Gamma-Band Neural Activity by the Alpha Rhythm in Monkey Visual Cortex. Current Biology, 2012, 22, 2313-2318.	3.9	337
13	Stable perception of visually ambiguous patterns. Nature Neuroscience, 2002, 5, 605-609.	14.8	328
14	Large-amplitude, spatially correlated fluctuations in BOLD fMRI signals during extended rest and early sleep stages. Magnetic Resonance Imaging, 2006, 24, 979-992.	1.8	326
15	Blindsight depends on the lateral geniculate nucleus. Nature, 2010, 466, 373-377.	27.8	324
16	Morphometric Similarity Networks Detect Microscale Cortical Organization and Predict Inter-Individual Cognitive Variation. Neuron, 2018, 97, 231-247.e7.	8.1	307
17	Divergence of fMRI and neural signals in V1 during perceptual suppression in the awake monkey. Nature Neuroscience, 2008, 11, 1193-1200.	14.8	272
18	Tracking brain arousal fluctuations with fMRI. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4518-4523.	7.1	269

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19	Marmosets: A Neuroscientific Model of Human Social Behavior. Neuron, 2016, 90, 219-233.	8.1	260
20	Brains, Genes, and Primates. Neuron, 2015, 86, 617-631.	8.1	231
21	A comparative view of face perception.. Journal of Comparative Psychology (Washington, D C: 1983), 2010, 124, 233-251.	0.5	229
22	The dynamics of visual adaptation to faces. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 897-904.	2.6	207
23	Distinct Superficial and deep laminar domains of activity in the visual cortex during rest and stimulation. Frontiers in Systems Neuroscience, 2010, 4, .	2.5	191
24	An Open Resource for Non-human Primate Imaging. Neuron, 2018, 100, 61-74.e2.	8.1	190
25	The marmoset monkey as a model for visual neuroscience. Neuroscience Research, 2015, 93, 20-46.	1.9	189
26	The Basal Forebrain Regulates Global Resting-State fMRI Fluctuations. Neuron, 2018, 97, 940-952.e4.	8.1	181
27	Subcortical evidence for a contribution of arousal to fMRI studies of brain activity. Nature Communications, 2018, 9, 395.	12.8	174
28	Local field potential reflects perceptual suppression in monkey visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17507-17512.	7.1	166
29	A population MRI brain template and analysis tools for the macaque. NeuroImage, 2018, 170, 121-131.	4.2	165
30	Neural activity in the visual thalamus reflects perceptual suppression. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9465-9470.	7.1	152
31	Three-Dimensional Digital Template Atlas of the Macaque Brain. Cerebral Cortex, 2017, 27, 4463-4477.	2.9	145
32	Pulvinar Inactivation Disrupts Selection of Movement Plans. Journal of Neuroscience, 2010, 30, 8650-8659.	3.6	141
33	Adaptive Pulvinar Circuitry Supports Visual Cognition. Trends in Cognitive Sciences, 2016, 20, 146-157.	7.8	138
34	Functional Mapping of Face-Selective Regions in the Extrastriate Visual Cortex of the Marmoset. Journal of Neuroscience, 2015, 35, 1160-1172.	3.6	137
35	Primary Visual Cortex: Awareness and Blindsight. Annual Review of Neuroscience, 2012, 35, 91-109.	10.7	130
36	Dynamic Suppression of Average Facial Structure Shapes Neural Tuning in Three Macaque Face Patches. Current Biology, 2021, 31, 1-12.e5.	3.9	130

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37	A digital 3D atlas of the marmoset brain based on multi-modal MRI. NeuroImage, 2018, 169, 106-116.	4.2	127
38	Ongoing physiological processes in the cerebral cortex. NeuroImage, 2012, 62, 2190-2200.	4.2	114
39	Generalized Flash Suppression of Salient Visual Targets. Neuron, 2003, 39, 1043-1052.	8.1	102
40	Perception of Temporally Interleaved Ambiguous Patterns. Current Biology, 2003, 13, 1076-1085.	3.9	101
41	Stable perception of visually ambiguous patterns. Nature Neuroscience, 2002, 5, 605-609.	14.8	99
42	The timecourse of higher-level face aftereffects. Vision Research, 2007, 47, 2291-2296.	1.4	94
43	Infragranular Sources of Sustained Local Field Potential Responses in Macaque Primary Visual Cortex. Journal of Neuroscience, 2011, 31, 1971-1980.	3.6	94
44	Functional MRI mapping of dynamic visual features during natural viewing in the macaque. NeuroImage, 2015, 109, 84-94.	4.2	90
45	fMRI in the awake marmoset: Somatosensory-evoked responses, functional connectivity, and comparison with propofol anesthesia. NeuroImage, 2013, 78, 186-195.	4.2	87
46	Anatomical and functional investigation of the marmoset default mode network. Nature Communications, 2019, 10, 1975.	12.8	82
47	The contribution of electrophysiology to functional connectivity mapping. NeuroImage, 2013, 80, 297-306.	4.2	79
48	A resource for the detailed 3D mapping of white matter pathways in the marmoset brain. Nature Neuroscience, 2020, 23, 271-280.	14.8	77
49	Occipital White Matter Tracts in Human and Macaque. Cerebral Cortex, 2017, 27, 3346-3359.	2.9	73
50	Face Pareidolia in the Rhesus Monkey. Current Biology, 2017, 27, 2505-2509.e2.	3.9	72
51	Spontaneous High-Gamma Band Activity Reflects Functional Organization of Auditory Cortex in the Awake Macaque. Neuron, 2012, 74, 899-910.	8.1	69
52	Single-trial evoked potential estimation using wavelets. Computers in Biology and Medicine, 2007, 37, 463-473.	7.0	68
53	Ipsilateral cortical fMRI responses after peripheral nerve damage in rats reflect increased interneuron activity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14114-14119.	7.1	67
54	Face-selective neurons maintain consistent visual responses across months. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8251-8256.	7.1	67

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55	Functional MRI of visual responses in the awake, behaving marmoset. NeuroImage, 2015, 120, 1-11.	4.2	61
56	Receptive field focus of visual area V4 neurons determines responses to illusory surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17095-17100.	7.1	60
57	Arousal transitions in sleep, wakefulness, and anesthesia are characterized by an orderly sequence of cortical events. NeuroImage, 2015, 116, 222-231.	4.2	59
58	One month in the life of a neuron: longitudinal single-unit electrophysiology in the monkey visual system. Journal of Neurophysiology, 2014, 112, 1748-1762.	1.8	57
59	Single-Unit Activity during Natural Vision: Diversity, Consistency, and Spatial Sensitivity among AF Face Patch Neurons. Journal of Neuroscience, 2015, 35, 5537-5548.	3.6	54
60	Natural behavior is the language of the brain. Current Biology, 2022, 32, R482-R493.	3.9	53
61	Visibility states modulate microsaccade rate and direction. Vision Research, 2009, 49, 228-236.	1.4	52
62	Transient visual pathway critical for normal development of primate grasping behavior. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1364-1369.	7.1	51
63	Spatial Patterns of Spontaneous Local Field Activity in the Monkey Visual Cortex. Reviews in the Neurosciences, 2003, 14, 195-205.	2.9	50
64	Long-Term Stability of Visual Pattern Selective Responses of Monkey Temporal Lobe Neurons. PLoS ONE, 2009, 4, e8222.	2.5	48
65	Effect of sound intensity on tonotopic fMRI maps in the unanesthetized monkey. NeuroImage, 2010, 49, 150-157.	4.2	48
66	Neurons in the Primate Medial Basal Forebrain Signal Combined Information about Reward Uncertainty, Value, and Punishment Anticipation. Journal of Neuroscience, 2015, 35, 7443-7459.	3.6	47
67	Ongoing Alpha Activity in V1 Regulates Visually Driven Spiking Responses. Cerebral Cortex, 2017, 27, 1113-1124.	2.9	46
68	Brain Activity Fluctuations Propagate as Waves Traversing the Cortical Hierarchy. Cerebral Cortex, 2021, 31, 3986-4005.	2.9	43
69	Beta Oscillation Dynamics in Extrastriate Cortex after Removal of Primary Visual Cortex. Journal of Neuroscience, 2014, 34, 11857-11864.	3.6	42
70	Temporalâ€“prefrontal cortical network for discrimination of valuable objects in long-term memory. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2135-E2144.	7.1	42
71	Functional Subpopulations of Neurons in a Macaque Face Patch Revealed by Single-Unit fMRI Mapping. Neuron, 2017, 95, 971-981.e5.	8.1	40
72	Differential Coding of Conspecific Vocalizations in the Ventral Auditory Cortical Stream. Journal of Neuroscience, 2014, 34, 4665-4676.	3.6	39

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73	Spatial Attention Deficits Are Causally Linked to an Area in Macaque Temporal Cortex. Current Biology, 2019, 29, 726-736.e4.	3.9	39
74	Visual processing in the ketamine-anesthetized monkey. Experimental Brain Research, 2002, 143, 359-372.	1.5	37
75	Context-dependent perceptual modulation of single neurons in primate visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5620-5625.	7.1	37
76	Studying the visual brain in its natural rhythm. NeuroImage, 2020, 216, 116790.	4.2	37
77	Robust Long-Range Coordination of Spontaneous Neural Activity in Waking, Sleep and Anesthesia. Cerebral Cortex, 2015, 25, 2929-2938.	2.9	33
78	Stimulus Timing-Dependent Plasticity in High-Level Vision. Current Biology, 2012, 22, 332-337.	3.9	32
79	Midbrain activity shapes high-level visual properties in the primate temporal cortex. Neuron, 2021, 109, 690-699.e5.	8.1	32
80	Brain regions modulated during covert visual attention in the macaque. Scientific Reports, 2018, 8, 15237.	3.3	31
81	Physiologically inspired neural model for the encoding of face spaces. Neurocomputing, 2005, 65-66, 93-101.	5.9	30
82	Motion-Sensitive Responses in Visual Area V4 in the Absence of Primary Visual Cortex. Journal of Neuroscience, 2013, 33, 18740-18745.	3.6	30
83	Audiovisual integration in macaque face patch neurons. Current Biology, 2021, 31, 1826-1835.e3.	3.9	30
84	Spiking Suppression Precedes Cued Attentional Enhancement of Neural Responses in Primary Visual Cortex. Cerebral Cortex, 2019, 29, 77-90.	2.9	28
85	Parallel Processing of Facial Expression and Head Orientation in the Macaque Brain. Journal of Neuroscience, 2020, 40, 8119-8131.	3.6	28
86	A parameterized digital 3D model of the Rhesus macaque face for investigating the visual processing of social cues. Journal of Neuroscience Methods, 2019, 324, 108309.	2.5	23
87	Global competition dictates local suppression in pattern rivalry. Journal of Vision, 2005, 5, 2.	0.3	22
88	pyElectrode: An open-source tool using structural MRI for electrode positioning and neuron mapping. Journal of Neuroscience Methods, 2013, 213, 123-131.	2.5	21
89	Distinct fMRI Responses to Self-Induced versus Stimulus Motion during Free Viewing in the Macaque. Journal of Neuroscience, 2016, 36, 9580-9589.	3.6	21
90	Functional magnetic resonance imaging of auditory cortical fields in awake marmosets. NeuroImage, 2017, 162, 86-92.	4.2	21

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91	Visual Cortex: The Eccentric Area Prostriata in the Human Brain. Current Biology, 2018, 28, R17-R19.	3.9	20
92	Pre-emptive blood flow. Nature, 2009, 457, 387-388.	27.8	18
93	Design and implementation of embedded 8â€channel receiveâ€only arrays for wholeâ€brain MRI and fMRI of conscious awake marmosets. Magnetic Resonance in Medicine, 2017, 78, 387-398.	3.0	18
94	Theta, but Not Gamma Oscillations in Area V4 Depend on Input from Primary Visual Cortex. Current Biology, 2021, 31, 635-642.e3.	3.9	16
95	Single-neuron firing cascades underlie global spontaneous brain events. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
96	Brain Networks Sensitive to Object Novelty, Value, and Their Combination. Cerebral Cortex Communications, 2020, 1, tgaa034.	1.6	14
97	Spatial organization of occipital white matter tracts in the common marmoset. Brain Structure and Function, 2020, 225, 1313-1326.	2.3	14
98	Failure to engage the temporoparietal junction/posterior superior temporal sulcus predicts impaired naturalistic social cognition in schizophrenia. Brain, 2021, 144, 1898-1910.	7.6	14
99	Adaptive Norm-Based Coding of Face Identity. , 2011, , .		14
100	fMRI under the spotlight. Nature, 2010, 465, 700-701.	27.8	11
101	Lesions to right posterior parietal cortex impair visual depth perception from disparity but not motion cues. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150263.	4.0	11
102	Correlated activity of cortical neurons survives extensive removal of feedforward sensory input. Scientific Reports, 2016, 6, 34886.	3.3	11
103	What you see is what you get: visual scanning failures of naturalistic social scenes in schizophrenia. Psychological Medicine, 2021, 51, 2923-2932.	4.5	11
104	Adaptation to Complex Visual Patterns in Humans and Monkeys. , 2005, , 189-212.		11
105	Dissociable Perceptual Effects of Visual Adaptation. PLoS ONE, 2009, 4, e6183.	2.5	11
106	Parallel functional subnetworks embedded in the macaque face patch system. Science Advances, 2022, 8, eabm2054.	10.3	9
107	Anisotropy of ongoing neural activity in the primate visual cortex. Eye and Brain, 2014, 6, 113.	2.5	8
108	Thalamus exhibits less sensory variability quenching than cortex. Scientific Reports, 2019, 9, 7590.	3.3	8

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109	Perceptual memory drives learning of retinotopic biases for bistable stimuli. Frontiers in Psychology, 2014, 5, 60.	2.1	7
110	Perceptual rivalry across animal species. Journal of Comparative Neurology, 2020, 528, 3123-3133.	1.6	7
111	Visualization of iron-rich subcortical structures in non-human primates in vivo by quantitative susceptibility mapping at 3T MRI. NeuroImage, 2021, 241, 118429.	4.2	7
112	Visual Perception: Shaping What We See. Current Biology, 2003, 13, R10-R12.	3.9	6
113	Neuroimaging: Perception at the Brain's Core. Current Biology, 2006, 16, R95-R98.	3.9	5
114	Relaxation-Based Multichannel Signal Combination (RELAX-MUSIC) for ROC Analysis of Percept-Related Neuronal Activity. IEEE Transactions on Biomedical Engineering, 2006, 53, 2615-2618.	4.2	4
115	The Marmoset as a Model for Visual Neuroscience. , 2019, , 377-413.		4
116	Self-tuition as an essential design feature of the brain. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20200530.	4.0	4
117	How the brain pays attention to othersâ€™ attention. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3901-3903.	7.1	3
118	Visual Neurophysiology: Recordings from the Human Primate. Current Biology, 2002, 12, R582-R584.	3.9	2
119	Neuroimaging: Seeing the Trees for the Forest. Current Biology, 2005, 15, R766-R768.	3.9	2
120	Motion perception: read my LIP. Nature Neuroscience, 2003, 6, 548-549.	14.8	1
121	Neurophysiology: The Three-Dimensional Building Blocks of Object Vision. Current Biology, 2021, 31, R9-R11.	3.9	1
122	Spatiotemporal Integration of Neuronal Activity for Single-Trial Classifications of Bistable Perception. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	0
123	What is it like to be a human?. Cognitive Neuroscience, 2011, 2, 121-122.	1.4	0
124	Human Neurophysiology: Sampling the Perceptual World. Current Biology, 2017, 27, R71-R73.	3.9	0
125	Local image features dominate responses of AM and AF face patch neurons. Journal of Vision, 2019, 19, 259b.	0.3	0
126	Mortimer Mishkin (1926â€"2021): A life of science with humility and grace. Neuron, 2021, 109, 3392-3394.	8.1	0