

# W Martin Usrey

## List of Publications by Year in descending order

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58  
papers

6,347  
citations

147726

31  
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149623

56  
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67  
all docs

67  
docs citations

67  
times ranked

5094  
citing authors

#	ARTICLE	IF	CITATIONS
1	Canonical Microcircuits for Predictive Coding. <i>Neuron</i> , 2012, 76, 695-711.	3.8	1,876
2	Precisely correlated firing in cells of the lateral geniculate nucleus. <i>Nature</i> , 1996, 383, 815-819.	13.7	437
3	SYNCHRONOUS ACTIVITY IN THE VISUAL SYSTEM. <i>Annual Review of Physiology</i> , 1999, 61, 435-456.	5.6	320
4	Rules of Connectivity between Geniculate Cells and Simple Cells in Cat Primary Visual Cortex. <i>Journal of Neuroscience</i> , 2001, 21, 4002-4015.	1.7	304
5	Coding of visual information by precisely correlated spikes in the lateral geniculate nucleus. <i>Nature Neuroscience</i> , 1998, 1, 501-507.	7.1	220
6	Specificity and Strength of Retinogeniculate Connections. <i>Journal of Neurophysiology</i> , 1999, 82, 3527-3540.	0.9	216
7	Emerging views of corticothalamic function. <i>Current Opinion in Neurobiology</i> , 2008, 18, 403-407.	2.0	207
8	Paired-spike interactions and synaptic efficacy of retinal inputs to the thalamus. <i>Nature</i> , 1998, 395, 384-387.	13.7	204
9	Synaptic Interactions between Thalamic Inputs to Simple Cells in Cat Visual Cortex. <i>Journal of Neuroscience</i> , 2000, 20, 5461-5467.	1.7	203
10	Saccadic Eye Movements Modulate Visual Responses in the Lateral Geniculate Nucleus. <i>Neuron</i> , 2002, 35, 961-974.	3.8	187
11	Corticothalamic feedback and sensory processing. <i>Current Opinion in Neurobiology</i> , 2003, 13, 440-445.	2.0	159
12	Attention enhances synaptic efficacy and the signal-to-noise ratio in neural circuits. <i>Nature</i> , 2013, 499, 476-480.	13.7	158
13	Origin and Dynamics of Extraclassical Suppression in the Lateral Geniculate Nucleus of the Macaque Monkey. <i>Neuron</i> , 2008, 57, 135-146.	3.8	126
14	A Fast, Reciprocal Pathway between the Lateral Geniculate Nucleus and Visual Cortex in the Macaque Monkey. <i>Journal of Neuroscience</i> , 2007, 27, 5431-5436.	1.7	115
15	Influence of Contrast on Orientation and Temporal Frequency Tuning in Ferret Primary Visual Cortex. <i>Journal of Neurophysiology</i> , 2004, 91, 2797-2808.	0.9	113
16	Corticothalamic feedback and visual processing in the primate. <i>Journal of Physiology</i> , 2011, 589, 33-40.	1.3	112
17	The sublaminal organization of corticothalamic neurons in layer 6 of macaque striate cortex. <i>Visual Neuroscience</i> , 1994, 11, 307-315.	0.5	108
18	Simultaneous Recordings from the Primary Visual Cortex and Lateral Geniculate Nucleus Reveal Rhythmic Interactions and a Cortical Source for Gamma-Band Oscillations. <i>Journal of Neuroscience</i> , 2014, 34, 7639-7644.	1.7	102

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19	Parallel Processing in the Corticogeniculate Pathway of the Macaque Monkey. <i>Neuron</i> , 2009, 62, 135-146.	3.8	101
20	Corticofugal circuits: Communication lines from the cortex to the rest of the brain. <i>Journal of Comparative Neurology</i> , 2019, 527, 640-650.	0.9	90
21	Visual Functions of the Thalamus. <i>Annual Review of Vision Science</i> , 2015, 1, 351-371.	2.3	86
22	Retinal oscillations carry visual information to cortex. <i>Frontiers in Systems Neuroscience</i> , 2009, 3, 4.	1.2	72
23	Distinct Properties of Stimulus-Evoked Bursts in the Lateral Geniculate Nucleus. <i>Journal of Neuroscience</i> , 2005, 25, 514-523.	1.7	71
24	Visual physiology of the lateral geniculate nucleus in two species of New World monkey: <i>Saimiri sciureus</i> and <i>Aotus trivirgatus</i> . <i>Journal of Physiology</i> , 2000, 523, 755-769.	1.3	66
25	Spike Timing and Information Transmission at Retinogeniculate Synapses. <i>Journal of Neuroscience</i> , 2010, 30, 13558-13566.	1.7	64
26	A comparison of visual responses in the lateral geniculate nucleus of alert and anaesthetized macaque monkeys. <i>Journal of Physiology</i> , 2011, 589, 87-99.	1.3	60
27	Receptive Fields and Response Properties of Neurons in Layer 4 of Ferret Visual Cortex. <i>Journal of Neurophysiology</i> , 2003, 89, 1003-1015.	0.9	56
28	Morphological Substrates for Parallel Streams of Corticogeniculate Feedback Originating in Both V1 and V2 of the Macaque Monkey. <i>Neuron</i> , 2016, 90, 388-399.	3.8	52
29	The role of spike timing for thalamocortical processing. <i>Current Opinion in Neurobiology</i> , 2002, 12, 411-417.	2.0	40
30	Orientation Tuning, But Not Direction Selectivity, Is Invariant to Temporal Frequency in Primary Visual Cortex. <i>Journal of Neurophysiology</i> , 2005, 94, 1336-1345.	0.9	36
31	Lateral geniculate projections to the superficial layers of visual cortex in the tree shrew. <i>Journal of Comparative Neurology</i> , 1992, 319, 159-171.	0.9	35
32	Temporal properties of feedforward and feedback pathways between the thalamus and visual cortex in the ferret. <i>Thalamus &amp; Related Systems</i> , 2005, 3, 133.	0.5	30
33	Rapid Plasticity of Visual Responses in the Adult Lateral Geniculate Nucleus. <i>Neuron</i> , 2011, 71, 812-819.	3.8	30
34	Retinal and Nonretinal Contributions to Extraclassical Surround Suppression in the Lateral Geniculate Nucleus. <i>Journal of Neuroscience</i> , 2017, 37, 226-235.	1.7	27
35	Spike timing and visual processing in the retinogeniculocortical pathway. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2002, 357, 1729-1737.	1.8	24
36	Stimulus Contrast and Retinogeniculate Signal Processing. <i>Frontiers in Neural Circuits</i> , 2016, 10, 8.	1.4	23

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37	The Augmentation of Retinogeniculate Communication during Thalamic Burst Mode. Journal of Neuroscience, 2019, 39, 5697-5710.	1.7	23
38	Interspike Interval Analysis of Retinal Ganglion Cell Receptive Fields. Journal of Neurophysiology, 2007, 98, 911-919.	0.9	22
39	Attention Enhances the Efficacy of Communication in V1 Local Circuits. Journal of Neuroscience, 2019, 39, 1066-1076.	1.7	22
40	Cortical control of behavior and attention from an evolutionary perspective. Neuron, 2021, 109, 3048-3054.	3.8	20
41	Preparatory Effects of Distractor Suppression: Evidence from Visual Cortex. PLoS ONE, 2011, 6, e27700.	1.1	20
42	Dynamic properties of thalamic neurons for vision. Progress in Brain Research, 2005, 149, 83-90.	0.9	17
43	Surround suppression and temporal processing of visual signals. Journal of Neurophysiology, 2015, 113, 2605-2617.	0.9	17
44	Dissecting the Dynamics of Corticothalamic Feedback. Neuron, 2015, 86, 605-607.	3.8	12
45	Contrast gain control and retinogeniculate communication. European Journal of Neuroscience, 2019, 49, 1061-1068.	1.2	11
46	Distinct Mechanisms for Size Tuning in Primate Visual Cortex. Journal of Neuroscience, 2011, 31, 12644-12649.	1.7	9
47	Cortical activity influences geniculocortical spike efficacy in the macaque monkey. Frontiers in Integrative Neuroscience, 2007, 1, 3.	1.0	7
48	Spatiotemporal flow of information in the early visual pathway. European Journal of Neuroscience, 2014, 39, 593-601.	1.2	7
49	Stimulus Contrast Affects Spatial Integration in the Lateral Geniculate Nucleus of Macaque Monkeys. Journal of Neuroscience, 2021, 41, 6246-6256.	1.7	7
50	Modulation of gamma-band activity across local cortical circuits. Frontiers in Integrative Neuroscience, 2009, 3, 15.	1.0	6
51	Integration of Thalamic Inputs to Cat Primary Visual Cortex. , 2002, , 319-342.		4
52	Orientation Tuning of Correlated Activity in the Developing Lateral Geniculate Nucleus. Journal of Neuroscience, 2017, 37, 11549-11558.	1.7	4
53	Retinal and Nonretinal Contributions to Extraclassical Surround Suppression in the Lateral Geniculate Nucleus. Journal of Neuroscience, 2017, 37, 226-235.	1.7	3
54	AMPA autoreceptors fill the gap in olfactory temporal coding. Nature Neuroscience, 2002, 5, 1108-1109.	7.1	2

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55	Depressed from deprivation? Look to the molecules.... Nature Neuroscience, 2003, 6, 787-788.	7.1	2
56	A shrewd insight for vision. Nature Neuroscience, 2004, 7, 796-797.	7.1	1
57	Contextual Modulation of Feedforward Inputs to Primary Visual Cortex. Frontiers in Systems Neuroscience, 2022, 16, 818633.	1.2	1
58	Eye to Brain: Parallel Visual Pathways. , 2020, , 362-368.		0