Robert Desimone

List of Publications by Year
in descending order

107 papers	38,536 citations	13827 67 h-index	31759 101 g-index
112 all docs	112 docs citations	112 times ranked	19124 citing authors

#	Article	IF	Citations
1	The cortical connectome of primate lateral prefrontal cortex. Neuron, 2022, 110, 312-327.e7.	3.8	25
2	Alpha Synchrony and the Neurofeedback Control of Spatial Attention. Neuron, 2020, 105, 577-587.e5.	3.8	90
3	Atypical behaviour and connectivity in SHANK3-mutant macaques. Nature, 2019, 570, 326-331.	13.7	172
4	The role of prefrontal cortex in the control of feature attention in area V4. Nature Communications, 2019, 10, 5727.	5.8	46
5	Enhanced Neural Processing by Covert Attention only during Microsaccades Directed toward the Attended Stimulus. Neuron, 2018, 99, 207-214.e3.	3.8	87
6	Alpha and gamma neurofeedback reinforce control of spatial attention. Journal of Vision, 2017, 17, 385.	0.1	4
7	Protein-retention expansion microscopy of cells and tissues labeled using standard fluorescent proteins and antibodies. Nature Biotechnology, 2016, 34, 987-992.	9.4	510
8	Opportunities and challenges in modeling human brain disorders in transgenic primates. Nature Neuroscience, 2016, 19, 1123-1130.	7.1	115
9	Gamma-Rhythmic Gain Modulation. Neuron, 2016, 92, 240-251.	3.8	111
10	Pulvinar-Cortex Interactions in Vision and Attention. Neuron, 2016, 89, 209-220.	3.8	257
11	Transcranial alternating current stimulation (tACS) reveals causal role of brain oscillations in visual attention. Journal of Vision, 2016, 16, 937.	0.1	4
12	Custom-fit radiolucent cranial implants for neurophysiological recording and stimulation. Journal of Neuroscience Methods, 2015, 241, 146-154.	1.3	29
13	A Source for Feature-Based Attention in the Prefrontal Cortex. Neuron, 2015, 88, 832-844.	3.8	258
14	Connectional subdivision of the claustrum: two visuotopic subdivisions in the macaque. Frontiers in Systems Neuroscience, 2014, 8, 63.	1.2	29
15	Subcortical Projections of Area V2 in the Macaque. Journal of Cognitive Neuroscience, 2014, 26, 1220-1233.	1.1	21
16	Effect of Microstimulation of the Superior Colliculus on Visual Space Attention. Journal of Cognitive Neuroscience, 2014, 26, 1208-1219.	1.1	8
17	Stimulus repetition modulates gamma-band synchronization in primate visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3626-3631.	3.3	112
18	Neural Mechanisms of Object-Based Attention. Science, 2014, 344, 424-427.	6.0	445

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19	Subcortical connections of area V4 in the macaque. Journal of Comparative Neurology, 2014, 522, 1941-1965.	0.9	71
20	Lesions of prefrontal cortex reduce attentional modulation of neuronal responses and synchrony in V4. Nature Neuroscience, 2014, 17, 1003-1011.	7.1	166
21	A procedure for testing across-condition rhythmic spike-field association change. Journal of Neuroscience Methods, 2013, 213, 43-62.	1.3	18
22	Attentional Modulation of Cell-Class-Specific Gamma-Band Synchronization in Awake Monkey Area V4. Neuron, 2013, 80, 1077-1089.	3.8	174
23	Rhythmic neuronal synchronization in visual cortex entails spatial phase relation diversity that is modulated by stimulation and attention. NeuroImage, 2013, 74, 99-116.	2.1	36
24	Cell-Type-Specific Synchronization of Neural Activity in FEF with V4 during Attention. Neuron, 2012, 73, 581-594.	3.8	217
25	Feature-Based Attention in the Frontal Eye Field and Area V4 during Visual Search. Neuron, 2011, 70, 1205-1217.	3.8	190
26	A High-Light Sensitivity Optical Neural Silencer: Development and Application to Optogenetic Control of Non-Human Primate Cortex. Frontiers in Systems Neuroscience, 2011, 5, 18.	1.2	421
27	Stimulation of the nucleus accumbens as behavioral reward in awake behaving monkeys. Journal of Neuroscience Methods, 2011, 199, 265-272.	1.3	21
28	Laminar differences in gamma and alpha coherence in the ventral stream. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11262-11267.	3.3	547
29	Object decoding with attention in inferior temporal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8850-8855.	3.3	150
30	A backward progression of attentional effects in the ventral stream. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 361-365.	3.3	252
31	Neural synchrony and selective attention. , 2009, , .		1
32	A Microsaccadic Rhythm Modulates Gamma-Band Synchronization and Behavior. Journal of Neuroscience, 2009, 29, 9471-9480.	1.7	202
33	Attentional control during the transient updating of cue information. Brain Research, 2009, 1247, 149-158.	1.1	31
34	The prefrontal cortex and the executive control of attention. Experimental Brain Research, 2009, 192, 489-497.	0.7	269
35	Millisecond-Timescale Optical Control of Neural Dynamics in the Nonhuman Primate Brain. Neuron, 2009, 62, 191-198.	3.8	460
36	Long-range neural coupling through synchronization with attention. Progress in Brain Research, 2009, 176, 35-45.	0.9	76

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37	High-Frequency, Long-Range Coupling Between Prefrontal and Visual Cortex During Attention. Science, 2009, 324, 1207-1210.	6.0	1,075
38	Cortical Connections of Area V4 in the Macaque. Cerebral Cortex, 2008, 18, 477-499.	1.6	274
39	The Effects of Visual Stimulation and Selective Visual Attention on Rhythmic Neuronal Synchronization in Macaque Area V4. Journal of Neuroscience, 2008, 28, 4823-4835.	1.7	379
40	Prosthetic systems for therapeutic optical activation and silencing of genetically targeted neurons. Proceedings of SPIE, 2008, 6854, 68540H.	0.8	57
41	Topâ€"Down Attentional Deficits in Macaques with Lesions of Lateral Prefrontal Cortex. Journal of Neuroscience, 2007, 27, 11306-11314.	1.7	157
42	Modulation of Neuronal Interactions Through Neuronal Synchronization. Science, 2007, 316, 1609-1612.	6.0	1,197
43	Chapter 9 Finding a face in the crowd: parallel and serial neural mechanisms of visual selection. Progress in Brain Research, 2006, 155, 147-156.	0.9	34
44	Gamma-band synchronization in visual cortex predicts speed of change detection. Nature, 2006, 439, 733-736.	13.7	690
45	Empirical mode decomposition: a method for analyzing neural data. Neurocomputing, 2005, 65-66, 801-807.	3.5	104
46	Empirical mode decomposition of field potentials from macaque V4 in visual spatial attention. Biological Cybernetics, 2005, 92, 380-392.	0.6	73
47	Parallel and Serial Neural Mechanisms for Visual Search in Macaque Area V4. Science, 2005, 308, 529-534.	6.0	609
48	Selectivity and sparseness in the responses of striate complex cells. Vision Research, 2005, 45, 57-73.	0.7	68
49	Selective Visual Attention Modulates Oscillatory Neuronal Synchronization. , 2005, , 520-525.		3
50	Impaired Filtering of Distracter Stimuli by TE Neurons following V4 and TEO Lesions in Macaques. Cerebral Cortex, 2004, 15, 141-151.	1.6	34
51	Temporal dynamics of attention-modulated neuronal synchronization in macaque V4. Neurocomputing, 2003, 52-54, 481-487.	3.5	15
52	Generalized deficits in visual selective attention after V4 and TEO lesions in macaques. European Journal of Neuroscience, 2003, 18, 1671-1691.	1.2	33
53	From Humble Neural Beginnings Comes Knowledge of Numbers. Neuron, 2003, 37, 4-6.	3.8	3
54	Interacting Roles of Attention and Visual Salience in V4. Neuron, 2003, 37, 853-863.	3.8	379

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55	Posterior parietal cortex and the filtering of distractors. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4263-4268.	3.3	145
56	Impairments in Spatial Generalization of Visual Skills After V4 and TEO Lesions in Macaques (Macaca) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	10
57	Modulation of Oscillatory Neuronal Synchronization by Selective Visual Attention. Science, 2001, 291, 1560-1563.	6.0	2,496
58	Modulation of Sensory Suppression: Implications for Receptive Field Sizes in the Human Visual Cortex. Journal of Neurophysiology, 2001, 86, 1398-1411.	0.9	252
59	Contextual Modulation in Primary Visual Cortex of Macaques. Journal of Neuroscience, 2001, 21, 1698-1709.	1.7	154
60	Learning Increases Stimulus Salience in Anterior Inferior Temporal Cortex of the Macaque. Journal of Neurophysiology, 2001, 86, 290-303.	0.9	78
61	Attention Increases Sensitivity of V4 Neurons. Neuron, 2000, 26, 703-714.	3.8	922
62	Clustering of perirhinal neurons with similar properties following visual experience in adult monkeys. Nature Neuroscience, 2000, 3, 1143-1148.	7.1	101
63	Subcortical connections of area V4 in the macaque. Anais Da Academia Brasileira De Ciencias, 2000, 72, 443-444.	0.3	0
64	Cortical connections of area V4 in the macaque. Anais Da Academia Brasileira De Ciencias, 2000, 72, 444-444.	0.3	0
65	Competitive Mechanisms Subserve Attention in Macaque Areas V2 and V4. Journal of Neuroscience, 1999, 19, 1736-1753.	1.7	1,177
66	Responses of Macaque Perirhinal Neurons during and after Visual Stimulus Association Learning. Journal of Neuroscience, 1999, 19, 10404-10416.	1.7	209
67	Loss of attentional stimulus selection after extrastriate cortical lesions in macaques. Nature Neuroscience, 1999, 2, 753-758.	7.1	154
68	Internal globus pallidus discharge is nearly suppressed during levodopa-induced dyskinesias. Annals of Neurology, 1999, 46, 732-738.	2.8	168
69	Increased Activity in Human Visual Cortex during Directed Attention in the Absence of Visual Stimulation. Neuron, 1999, 22, 751-761.	3.8	1,508
70	The Role of Neural Mechanisms of Attention in Solving the Binding Problem. Neuron, 1999, 24, 19-29.	3.8	325
71	Cognitive neuroscience. Current Opinion in Neurobiology, 1998, 8, 175-177.	2.0	3
72	Perceptual filling-in: a parametric study. Vision Research, 1998, 38, 2721-2734.	0.7	156

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73	Visual attention mediated by biased competition in extrastriate visual cortex. Philosophical Transactions of the Royal Society B: Biological Sciences, 1998, 353, 1245-1255.	1.8	587
74	Mechanisms of Directed Attention in the Human Extrastriate Cortex as Revealed by Functional MRI. , 1998, 282, 108-111.		821
75	Responses of Neurons in Inferior Temporal Cortex During Memory-Guided Visual Search. Journal of Neurophysiology, 1998, 80, 2918-2940.	0.9	630
76	Attention control og visual perception. Electroencephalography and Clinical Neurophysiology, 1997, 102, P4.	0.3	2
77	Object and Place Memory in the Macaque Entorhinal Cortex. Journal of Neurophysiology, 1997, 78, 1062-1081.	0.9	346
78	Neural Mechanisms of Spatial Selective Attention in Areas V1, V2, and V4 of Macaque Visual Cortex. Journal of Neurophysiology, 1997, 77, 24-42.	0.9	1,507
79	Neural Mechanisms of Visual Working Memory in Prefrontal Cortex of the Macaque. Journal of Neuroscience, 1996, 16, 5154-5167.	1.7	1,363
80	Cue-dependent deficits in grating orientation discrimination after V4 lesions in macaques. Visual Neuroscience, 1996, 13, 529-538.	0.5	132
81	ATTENTION CONTROL OF VISUAL PERCEPTION. Journal of Clinical Neurophysiology, 1996, 13, 349-350.	0.9	0
82	Is dopamine a missing link?. Nature, 1995, 376, 549-550.	13.7	62
83	Responses of cells in monkey visual cortex during perceptual filling-in of an artificial scotoma. Nature, 1995, 377, 731-734.	13.7	290
84	Neural Mechanisms of Selective Visual Attention. Annual Review of Neuroscience, 1995, 18, 193-222.	5.0	7,228
85	Inferior Temporal Mechanisms for Invariant Object Recognition. Cerebral Cortex, 1994, 4, 523-531.	1.6	204
86	A neural basis for visual search in inferior temporal cortex. Nature, 1993, 363, 345-347.	13.7	1,257
87	Memory-guided attentional systems. Spatial Vision, 1993, 7, 85.	1.4	0
88	A role for the corpus callosum in visual area V4 of the macaque. Visual Neuroscience, 1993, 10, 159-171.	0.5	76
89	Comparison of subcortical connections of inferior temporal and posterior parietal cortex in monkeys. Visual Neuroscience, 1993, 10, 59-72.	0.5	181
90	Scopolamine affects short-term memory but not inferior temporal neurons. NeuroReport, 1993, 4, 81.	0.6	59

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91	Subcortical connections of visual areas MST and FST in macaques. Visual Neuroscience, 1992, 9, 291-302.	0.5	128
92	Neural mechanisms of attention and memory in extrastriate cortex. Neuroscience Research Supplement: the Official Journal of the Japan Neuroscience Society, 1991, 16, X.	0.0	1
93	Visual topography of area TEO in the macaque. Journal of Comparative Neurology, 1991, 306, 554-575.	0.9	434
94	Face-Selective Cells in the Temporal Cortex of Monkeys. Journal of Cognitive Neuroscience, 1991, 3, 1-8.	1.1	504
95	Complexity at the neuronal level. Behavioral and Brain Sciences, 1990, 13, 446-446.	0.4	4
96	Pathways for motion analysis: Cortical connections of the medial superior temporal and fundus of the superior temporal visual areas in the macaque. Journal of Comparative Neurology, 1990, 296, 462-495.	0.9	627
97	Organization of visual cortical inputs to the striatum and subsequent outputs to the pallido-nigral complex in the monkey. Journal of Comparative Neurology, 1990, 298, 129-156.	0.9	304
98	Neural Mechanisms of Attention in Extrastriate Cortex of Monkeys. Research Notes in Neural Computing, 1989, , 169-182.	0.1	7
99	Projections to the superior temporal sulcus from the central and peripheral field representations of V1 and V2. Journal of Comparative Neurology, 1986, 248, 147-163.	0.9	175
100	Multiple visual areas in the caudal superior temporal sulcus of the macaque. Journal of Comparative Neurology, 1986, 248, 164-189.	0.9	562
101	Cortical connections of visual area MT in the macaque. Journal of Comparative Neurology, 1986, 248, 190-222.	0.9	885
102	Contour, color and shape analysis beyond the striate cortex. Vision Research, 1985, 25, 441-452.	0.7	538
103	Form, Color, and Motion Analysis in Prestriate Cortex of the Macaque. Experimental Brain Research Supplementum, 1985, , 165-178.	1.0	1
104	Subcortical projections of area MT in the macaque. Journal of Comparative Neurology, 1984, 223, 368-386.	0.9	242
105	PROPERTIES OF INFERIOR TEMPORAL NEURONS IN THE MACAQUE. , 1981, , 287-289.		0
106	Prestriate afferents to inferior temporal cortex: an HRP study. Brain Research, 1980, 184, 41-55.	1.1	169
107	Visual areas in the temporal cortex of the macaque. Brain Research, 1979, 178, 363-380.	1.1	538