Christoph Koch

List of Publications by Year
in descending order

388 papers	69,022 citations	1299 109 h-index	1089 232 g-index
461 all docs	461 docs citations	461 times ranked	44308 citing authors

#	Article	IF	Citations
1	Computational modelling of visual attention. Nature Reviews Neuroscience, 2001, 2, 194-203.	4.9	3,766
2	The origin of extracellular fields and currents â€" EEG, ECoG, LFP and spikes. Nature Reviews Neuroscience, 2012, 13, 407-420.	4.9	3,271
3	A saliency-based search mechanism for overt and covert shifts of visual attention. Vision Research, 2000, 40, 1489-1506.	0.7	2,623
4	An anatomically comprehensive atlas of the adult human brain transcriptome. Nature, 2012, 489, 391-399.	13.7	2,321
5	A mesoscale connectome of the mouse brain. Nature, 2014, 508, 207-214.	13.7	2,143
6	Invariant visual representation by single neurons in the human brain. Nature, 2005, 435, 1102-1107.	13.7	1,580
7	Fully integrated silicon probes for high-density recording of neural activity. Nature, 2017, 551, 232-236.	13.7	1,531
8	Adult mouse cortical cell taxonomy revealed by single cell transcriptomics. Nature Neuroscience, 2016, 19, 335-346.	7.1	1,522
9	Computational vision and regularization theory. Nature, 1985, 317, 314-319.	13.7	1,382
10	Shared and distinct transcriptomic cell types across neocortical areas. Nature, 2018, 563, 72-78.	13.7	1,323
11	Shifts in Selective Visual Attention: Towards the Underlying Neural Circuitry. , 1987, , 115-141.		1,290
12	Conserved cell types with divergent features in human versus mouse cortex. Nature, 2019, 573, 61-68.	13.7	1,198
13	Are we aware of neural activity in primary visual cortex?. Nature, 1995, 375, 121-123.	13.7	1,127
14	A framework for consciousness. Nature Neuroscience, 2003, 6, 119-126.	7.1	1,111
15	Modeling attention to salient proto-objects. Neural Networks, 2006, 19, 1395-1407.	3.3	1,100
16	Neural correlates of consciousness: progress and problems. Nature Reviews Neuroscience, 2016, 17, 307-321.	4.9	966
17	Integrated information theory: from consciousness to its physical substrate. Nature Reviews Neuroscience, 2016, 17, 450-461.	4.9	930
18	The Secrets of Salient Object Segmentation. , 2014, , .		832

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19	Attention and consciousness: two distinct brain processes. Trends in Cognitive Sciences, 2007, 11, 16-22.	4.0	831
20	Continuous flash suppression reduces negative afterimages. Nature Neuroscience, 2005, 8, 1096-1101.	7.1	726
21	Image Signature: Highlighting Sparse Salient Regions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 194-201.	9.7	717
22	Neural correlates of consciousness in humans. Nature Reviews Neuroscience, 2002, 3, 261-270.	4.9	665
23	Rapid natural scene categorization in the near absence of attention. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9596-9601.	3.3	636
24	A direct quantitative relationship between the functional properties of human and macaque V5. Nature Neuroscience, 2000, 3, 716-723.	7.1	599
25	The Allen Mouse Brain Common Coordinate Framework: A 3D Reference Atlas. Cell, 2020, 181, 936-953.e20.	13.5	597
26	Components of bottom-up gaze allocation in natural images. Vision Research, 2005, 45, 2397-2416.	0.7	591
27	What is the function of the claustrum?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 1271-1279.	1.8	563
28	Is perception discrete or continuous?. Trends in Cognitive Sciences, 2003, 7, 207-213.	4.0	528
29	On the Origin of the Extracellular Action Potential Waveform: A Modeling Study. Journal of Neurophysiology, 2006, 95, 3113-3128.	0.9	513
30	Canonical genetic signatures of the adult human brain. Nature Neuroscience, 2015, 18, 1832-1844.	7.1	503
31	Biophysics of Computation. , 1998, , .		498
32	The control of retinogeniculate transmission in the mammalian lateral geniculate nucleus. Experimental Brain Research, 1986, 63, 1-20.	0.7	455
33	Category-specific visual responses of single neurons in the human medial temporal lobe. Nature Neuroscience, 2000, 3, 946-953.	7.1	450
34	Ephaptic coupling of cortical neurons. Nature Neuroscience, 2011, 14, 217-223.	7.1	443
35	The Neural Correlates of Consciousness. Annals of the New York Academy of Sciences, 2008, 1124, 239-261.	1.8	432
36	The role of single neurons in information processing. Nature Neuroscience, 2000, 3, 1171-1177.	7.1	428

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37	Hierarchical organization of cortical and thalamic connectivity. Nature, 2019, 575, 195-202.	13.7	421
38	Attention activates winner-take-all competition among visual filters. Nature Neuroscience, 1999, 2, 375-381.	7.1	403
39	Consciousness: here, there and everywhere?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140167.	1.8	394
40	Feature combination strategies for saliency-based visual attention systems. Journal of Electronic Imaging, 2001, 10, 161.	0.5	375
41	Theta Phase Segregation of Input-Specific Gamma Patterns in Entorhinal-Hippocampal Networks. Neuron, 2014, 84, 470-485.	3.8	374
42	Comparative cellular analysis of motor cortex in human, marmoset and mouse. Nature, 2021, 598, 111-119.	13.7	361
43	Are the Neural Correlates of Consciousness in the Front or in the Back of the Cerebral Cortex? Clinical and Neuroimaging Evidence. Journal of Neuroscience, 2017, 37, 9603-9613.	1.7	360
44	Multiplicative computation in a visual neuron sensitive to looming. Nature, 2002, 420, 320-324.	13.7	351
45	Transcranial Electric Stimulation Entrains Cortical Neuronal Populations in Rats. Journal of Neuroscience, 2010, 30, 11476-11485.	1.7	345
46	Classification of electrophysiological and morphological neuron types in the mouse visual cortex. Nature Neuroscience, 2019, 22, 1182-1195.	7.1	333
47	Electrical interactions via the extracellular potential near cell bodies. , 1999, 6, 169-184.		323
48	Constraints on cortical and thalamic projections: the no-strong-loops hypothesis. Nature, 1998, 391, 245-250.	13.7	319
49	Imagery neurons in the human brain. Nature, 2000, 408, 357-361.	13.7	315
50	What do we perceive in a glance of a real-world scene?. Journal of Vision, 2007, 7, 10.	0.1	312
51	Pupil dilation reflects perceptual selection and predicts subsequent stability in perceptual rivalry. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1704-1709.	3.3	304
52	Temporal Precision of Spike Trains in Extrastriate Cortex of the Behaving Macaque Monkey. Neural Computation, 1996, 8, 1185-1202.	1.3	303
53	Comprehensive cellularâ€resolution atlas of the adult human brain. Journal of Comparative Neurology, 2016, 524, 3127-3481.	0.9	302
54	Complexity and the Nervous System. Science, 1999, 284, 96-98.	6.0	300

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55	Integrated Morphoelectric and Transcriptomic Classification of Cortical GABAergic Cells. Cell, 2020, 183, 935-953.e19.	13.5	290
56	Trace but not delay fear conditioning requires attention and the anterior cingulate cortex. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13087-13092.	3.3	289
57	Survey of spiking in the mouse visual system reveals functional hierarchy. Nature, 2021, 592, 86-92.	13.7	284
58	Encoding of Visual Information by LGN Bursts. Journal of Neurophysiology, 1999, 81, 2558-2569.	0.9	272
59	Faces and text attract gaze independent of the task: Experimental data and computer model. Journal of Vision, 2009, 9, 10-10.	0.1	271
60	A Biophysically Detailed Model of Neocortical Local Field Potentials Predicts the Critical Role of Active Membrane Currents. Neuron, 2013, 79, 375-390.	3.8	259
61	Gender differences in the functional organization of the brain for working memory. NeuroReport, 2000, 11, 2581-2585.	0.6	258
62	Computing motion using analog and binary resistive networks. Computer, 1988, 21, 52-63.	1.2	257
63	Relative visual saliency differences induce sizable bias in consumer choice. Journal of Consumer Psychology, 2012, 22, 67-74.	3.2	244
64	Challenges and opportunities for large-scale electrophysiology with Neuropixels probes. Current Opinion in Neurobiology, 2018, 50, 92-100.	2.0	244
65	Cable theory in neurons with active, linearized membranes. Biological Cybernetics, 1984, 50, 15-33.	0.6	240
66	A large-scale standardized physiological survey reveals functional organization of the mouse visual cortex. Nature Neuroscience, 2020, 23, 138-151.	7.1	232
67	Sparse but not â€˜Grandmother-cellâ€™ coding in the medial temporal lobe. Trends in Cognitive Sciences, 2008, 12, 87-91.	4.0	230
68	Shunting Inhibition Does Not Have a Divisive Effect on Firing Rates. Neural Computation, 1997, 9, 1001-1013.	1.3	226
69	Task-demands can immediately reverse the effects of sensory-driven saliency in complex visual stimuli. Journal of Vision, 2008, 8, 2.	0.1	222
70	From stimulus encoding to feature extraction in weakly electric fish. Nature, 1996, 384, 564-567.	13.7	220
71	Learning a saliency map using fixated locations in natural scenes. Journal of Vision, 2011, 11, 9-9.	0.1	214
72	Information integration without awareness. Trends in Cognitive Sciences, 2014, 18, 488-496.	4.0	208

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73	Neuroscience thinks big (and collaboratively). Nature Reviews Neuroscience, 2013, 14, 659-664.	4.9	206
74	How voltage-dependent conductances can adapt to maximize the information encoded by neuronal firing rate. Nature Neuroscience, 1999, 2, 521-527.	7.1	204
75	The Spiking Component of Oscillatory Extracellular Potentials in the Rat Hippocampus. Journal of Neuroscience, 2012, 32, 11798-11811.	1.7	189
76	Latency and Selectivity of Single Neurons Indicate Hierarchical Processing in the Human Medial Temporal Lobe. Journal of Neuroscience, 2008, 28, 8865-8872.	1.7	188
77	Selective visual attention enables learning and recognition of multiple objects in cluttered scenes. Computer Vision and Image Understanding, 2005, 100, 41-63.	3.0	184
78	Brain Areas Specific for Attentional Load in a Motion-Tracking Task. Journal of Cognitive Neuroscience, 2001, 13, 1048-1058.	1.1	183
79	Sparse Representation in the Human Medial Temporal Lobe. Journal of Neuroscience, 2006, 26, 10232-10234.	1.7	183
80	Morphological diversity of single neurons in molecularly defined cell types. Nature, 2021, 598, 174-181.	13.7	180
81	A Brief History of Time (Constants). Cerebral Cortex, 1996, 6, 93-101.	1.6	178
82	Single-neuron correlates of subjective vision in the human medial temporal lobe. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8378-8383.	3.3	178
83	Computation and the single neuron. Nature, 1997, 385, 207-210.	13.7	176
84	Simultaneous modeling of visual saliency and value computation improves predictions of economic choice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3858-67.	3.3	176
85	On the relationship between synaptic input and spike output jitter in individual neurons. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 735-740.	3.3	174
86	Neurodata Without Borders: Creating a Common Data Format for Neurophysiology. Neuron, 2015, 88, 629-634.	3.8	171
87	The Effect of Spatially Inhomogeneous Extracellular Electric Fields on Neurons. Journal of Neuroscience, 2010, 30, 1925-1936.	1.7	169
88	Explicit Encoding of Multimodal Percepts by Single Neurons in the Human Brain. Current Biology, 2009, 19, 1308-1313.	1.8	168
89	Depth of interocular suppression associated with continuous flash suppression, flash suppression, and binocular rivalry. Journal of Vision, 2006, 6, 6.	0.1	167
90	Generalized leaky integrate-and-fire models classify multiple neuron types. Nature Communications, 2018, 9, 709.	5.8	164

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91	Systematic Integration of Structural and Functional Data into Multi-scale Models of Mouse Primary Visual Cortex. Neuron, 2020, 106, 388-403.e18.	3.8	163
92	Organization of the connections between claustrum and cortex in the mouse. Journal of Comparative Neurology, 2017, 525, 1317-1346.	0.9	162
93	Consciousness and Attention: On Sufficiency and Necessity. Frontiers in Psychology, 2010, 1, 217.	1.1	160
94	Human neocortical expansion involves glutamatergic neuron diversification. Nature, 2021, 598, 151-158.	13.7	160
95	Does anesthesia cause loss of consciousness?. Trends in Neurosciences, 1991, 14, 6-10.	4.2	157
96	Face-gender discrimination is possible in the near-absence of attention. Journal of Vision, 2004, 4, 4.	0.1	156
97	A model for the neuronal implementation of selective visual attention based on temporal correlation among neurons. Journal of Computational Neuroscience, 1994, 1, 141-158.	0.6	154
98	Optimal reward harvesting in complex perceptual environments. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5232-5237.	3.3	150
99	An oscillation-based model for the neuronal basis of attention. Vision Research, 1993, 33, 2789-2802.	0.7	149
100	Working memory and fear conditioning. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1399-1404.	3.3	149
101	Detecting and Estimating Signals in Noisy Cable Structures, I: Neuronal Noise Sources. Neural Computation, 1999, 11, 1797-1829.	1.3	144
102	Neuronal Shot Noise and Brownian 1/f2 Behavior in the Local Field Potential. PLoS ONE, 2009, 4, e4338.	1.1	142
103	Sparse recurrent excitatory connectivity in the microcircuit of the adult mouse and human cortex. ELife, 2018, 7, .	2.8	142
104	Face Adaptation Depends on Seeing the Face. Neuron, 2005, 45, 169-175.	3.8	141
105	Visual Motion Area MT+/V5 Responds to Auditory Motion in Human Sight-Recovery Subjects. Journal of Neuroscience, 2008, 28, 5141-5148.	1.7	141
106	AdaBoost for Text Detection in Natural Scene. , 2011, , .		141
107	On-line, voluntary control of human temporal lobe neurons. Nature, 2010, 467, 1104-1108.	13.7	140
108	The ethics of experimenting with human brain tissue. Nature, 2018, 556, 429-432.	13.7	139

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109	Attentional Selection for Object Recognition â€" A Gentle Way. Lecture Notes in Computer Science, 2002, , 472-479.	1.0	136
110	h-Channels Contribute to Divergent Intrinsic Membrane Properties of Supragranular Pyramidal Neurons in Human versus Mouse Cerebral Cortex. Neuron, 2018, 100, 1194-1208.e5.	3.8	134
111	A category-specific response to animals in the right human amygdala. Nature Neuroscience, 2011, 14, 1247-1249.	7.1	129
112	Face identification in the near-absence of focal attention. Vision Research, 2006, 46, 2336-2343.	0.7	128
113	Inverse temporal contributions of the dorsal hippocampus and medial prefrontal cortex to the expression of long-term fear memories. Learning and Memory, 2008, 15, 368-372.	0.5	127
114	Using extracellular action potential recordings to constrain compartmental models. Journal of Computational Neuroscience, 2007, 23, 39-58.	0.6	126
115	Contingency awareness in human aversive conditioning involves the middle frontal gyrus. NeuroImage, 2006, 29, 1007-1012.	2.1	125
116	Local connectivity and synaptic dynamics in mouse and human neocortex. Science, 2022, 375, eabj5861.	6.0	124
117	Quantum mechanics in the brain. Nature, 2006, 440, 611-611.	13.7	123
118	Opposing effects of attention and consciousness on afterimages. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8883-8888.	3.3	123
119	Systematic generation of biophysically detailed models for diverse cortical neuron types. Nature Communications, 2018, 9, 710.	5.8	123
120	Optogenetics: 10 years after ChR2 in neuronsâ€"views from the community. Nature Neuroscience, 2015, 18, 1202-1212.	7.1	122
121	Ephaptic coupling to endogenous electric field activity: why bother?. Current Opinion in Neurobiology, 2015, 31, 95-103.	2.0	120
122	Predicting the visual world: silence is golden. Nature Neuroscience, 1999, 2, 9-10.	7.1	119
123	<title>Comparison of feature combination strategies for saliency-based visual attention systems</title>. , 1999, , .		118
124	Subthreshold voltage noise due to channel fluctuations in active neuronal membranes. Journal of Computational Neuroscience, 2000, 9, 133-148.	0.6	118
125	Pupil dilation betrays the timing of decisions. Frontiers in Human Neuroscience, 2010, 4, 18.	1.0	117
126	Seeing properties of an invisible object: Feature inheritance and shine-through. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 4271-4275.	3.3	116

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127	Relationship between simultaneously recorded spiking activity and fluorescence signal in GCaMP6 transgenic mice. ELife, 2021, 10, .	2.8	114
128	Visual Selective Behavior Can Be Triggered by a Feed-Forward Process. Journal of Cognitive Neuroscience, 2003, 15, 209-217.	1.1	113
129	The action of the corticofugal pathway on sensory thalamic nuclei: A hypothesis. Neuroscience, 1987, 23, 399-406.	1.1	110
130	The Effect of Synchronized Inputs at the Single Neuron Level. Neural Computation, 1994, 6, 622-641.	1.3	109
131	Subthreshold voltage noise of rat neocortical pyramidal neurones. Journal of Physiology, 2005, 564, 145-160.	1.3	109
132	The Problem of Consciousness. Scientific American, 1992, 267, 152-159.	1.0	108
133	Worldwide initiatives to advance brain research. Nature Neuroscience, 2016, 19, 1118-1122.	7.1	107
134	Attention-driven discrete sampling of motion perception. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5291-5296.	3.3	106
135	The Continuous Wagon Wheel Illusion Is Associated with Changes in Electroencephalogram Power at Â13 Hz. Journal of Neuroscience, 2006, 26, 502-507.	1.7	105
136	Cortical Cells Should Fire Regularly, But Do Not. Neural Computation, 1992, 4, 643-646.	1.3	104
137	Decoding Visual Inputs From Multiple Neurons in the Human Temporal Lobe. Journal of Neurophysiology, 2007, 98, 1997-2007.	0.9	104
138	Persistent Single-Neuron Activity during Working Memory in the Human Medial Temporal Lobe. Current Biology, 2017, 27, 1026-1032.	1.8	104
139	The zombie within. Nature, 2001, 411, 893-893.	13.7	101
140	Computational Models of Interoception and Body Regulation. Trends in Neurosciences, 2021, 44, 63-76.	4.2	97
141	Making the hard problem of consciousness easier. Science, 2021, 372, 911-912.	6.0	96
142	Toward color image segmentation in analog VLSI: Algorithm and hardware. International Journal of Computer Vision, 1994, 12, 17-42.	10.9	95
143	Why does natural scene categorization require little attention? Exploring attentional requirements for natural and synthetic stimuli. Visual Cognition, 2005, 12, 893-924.	0.9	94
144	Spatial vision thresholds in the near absence of attention. Vision Research, 1997, 37, 2409-2418.	0.7	93

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145	Visual attention and target detection in cluttered natural scenes. Optical Engineering, 2001, 40, 1784.	0.5	92
146	Visual Search and Dual Tasks Reveal Two Distinct Attentional Resources. Journal of Cognitive Neuroscience, 2004, 16, 4-14.	1.1	92
147	Spatial displacement, but not temporal asynchrony, destroys figural binding. Vision Research, 1995, 35, 491-494.	0.7	90
148	Detecting and Estimating Signals over Noisy and Unreliable Synapses: Information-Theoretic Analysis. Neural Computation, 2001, 13, 1-33.	1.3	88
149	Physiology of Layer 5 Pyramidal Neurons in Mouse Primary Visual Cortex: Coincidence Detection through Bursting. PLoS Computational Biology, 2015, 11, e1004090.	1.5	88
150	Observatories of the mind. Nature, 2012, 483, 397-398.	13.7	86
151	Integrated Information Increases with Fitness in the Evolution of Animats. PLoS Computational Biology, 2011, 7, e1002236.	1.5	84
152	Spatial attention increases performance but not subjective confidence in a discrimination task. Journal of Vision, 2008, 8, 7.	0.1	82
153	Inferring cortical function in the mouse visual system through large-scale systems neuroscience. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7337-7344.	3.3	82
154	Computing optical flow across multiple scales: An adaptive coarse-to-fine strategy. International Journal of Computer Vision, 1991, 6, 133-145.	10.9	81
155	Multiplying with Synapses and Neurons. , 1992, , 315-345.		81
156	Intrinsic Noise in Cultured Hippocampal Neurons: Experiment and Modeling. Journal of Neuroscience, 2004, 24, 9723-9733.	1.7	80
157	Revisiting spatial vision: toward a unifying model. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 1899.	0.8	79
158	Pupil responses allow communication in locked-in syndrome patients. Current Biology, 2013, 23, R647-R648.	1.8	79
159	Learning saliency-based visual attention: A review. Signal Processing, 2013, 93, 1401-1407.	2.1	79
160	A robust ex vivo experimental platform for molecular-genetic dissection of adult human neocortical cell types and circuits. Scientific Reports, 2018, 8, 8407.	1.6	77
161	Neuronal connections underlying orientation selectivity in cat visual cortex. Trends in Neurosciences, 1987, 10, 487-492.	4.2	76
162	Network Amplification of Local Fluctuations Causes High Spike Rate Variability, Fractal Firing Patterns and Oscillatory Local Field Potentials. Neural Computation, 1994, 6, 795-836.	1.3	76

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163	A Test for Consciousness. Scientific American, 2011, 304, 44-47.	1.0	76
164	Multisensory Integration in Complete Unawareness: Evidence From Audiovisual Congruency Priming. Psychological Science, 2014, 25, 2006-2016.	1.8	76
165	Probabilistic modeling of eye movement data during conjunction search via feature-based attention. Journal of Vision, 2007, 7, 5.	0.1	75
166	Visual physiology of the layer 4 cortical circuit in silico. PLoS Computational Biology, 2018, 14, e1006535.	1.5	75
167	Learning visual saliency by combining feature maps in a nonlinear manner using AdaBoost. Journal of Vision, 2012, 12, 22-22.	0.1	74
168	Binding sites for metabolic disease related transcription factors inferred at base pair resolution by chromatin immunoprecipitation and genomic microarrays. Human Molecular Genetics, 2005, 14, 3435-3447.	1.4	71
169	Evolution of Integrated Causal Structures in Animats Exposed to Environments of Increasing Complexity. PLoS Computational Biology, 2014, 10, e1003966.	1.5	71
170	Cell type- and activity-dependent extracellular correlates of intracellular spiking. Journal of Neurophysiology, 2015, 114, 608-623.	0.9	70
171	High-density extracellular probes reveal dendritic backpropagation and facilitate neuron classification. Journal of Neurophysiology, 2019, 121, 1831-1847.	0.9	70
172	Transcriptomic evidence that von Economo neurons are regionally specialized extratelencephalic-projecting excitatory neurons. Nature Communications, 2020, 11, 1172.	5.8	70
173	Towards the neuronal correlate of visual awareness. Current Opinion in Neurobiology, 1996, 6, 158-164.	2.0	69
174	Robustness and Variability of Neuronal Coding by Amplitude-Sensitive Afferents in the Weakly Electric FishEigenmannia. Journal of Neurophysiology, 2000, 84, 189-204.	0.9	68
175	Automated High-Throughput Characterization of Single Neurons by Means of Simplified Spiking Models. PLoS Computational Biology, 2015, 11, e1004275.	1.5	68
176	Local Field Potentials and Spikes in the Human Medial Temporal Lobe are Selective to Image Category. Journal of Cognitive Neuroscience, 2007, 19, 479-492.	1.1	66
177	Do neurons have a voltage or a current threshold for action potential initiation?. Journal of Computational Neuroscience, 1995, 2, 63-82.	0.6	65
178	Multiplication and stimulus invariance in a looming-sensitive neuron. Journal of Physiology (Paris), 2004, 98, 19-34.	2.1	65
179	Flanker effects in peripheral contrast discriminationâ€"psychophysics and modeling. Vision Research, 2001, 41, 3663-3675.	0.7	64
180	Coding of Time-Varying Signals in Spike Trains of Integrate-and-Fire Neurons with Random Threshold. Neural Computation, 1996, 8, 44-66.	1.3	63

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181	Attentional capacity is undifferentiated: Concurrent discrimination of form, color, and motion. Perception & Psychophysics, 1999, 61, 1241-1255.	2.3	63
182	Visual Saliency Computations: Mechanisms, Constraints, and the Effect of Feedback. Journal of Neuroscience, 2010, 30, 12831-12843.	1.7	63
183	Seeing Chips: Analog VLSI Circuits for Computer Vision. Neural Computation, 1989, 1, 184-200.	1.3	59
184	Experimentalists and modelers: can we all just get along?. Trends in Neurosciences, 1992, 15, 458-461.	4.2	59
185	Functional properties of models for direction selectivity in the retina. Synapse, 1987, 1, 417-434.	0.6	58
186	The Influence of Synaptic Weight Distribution on Neuronal Population Dynamics. PLoS Computational Biology, 2013, 9, e1003248.	1.5	58
187	BioNet: A Python interface to NEURON for modeling large-scale networks. PLoS ONE, 2018, 13, e0201630.	1.1	58
188	Analog VLSI-Based Modeling of the Primate Oculomotor System. Neural Computation, 1999, 11, 243-265.	1.3	57
189	Homo economicus in visual search. Journal of Vision, 2009, 9, 31-31.	0.1	57
190	Selectivity of pyramidal cells and interneurons in the human medial temporal lobe. Journal of Neurophysiology, 2011, 106, 1713-1721.	0.9	57
191	Local Field Potentials Encode Place Cell Ensemble Activation during Hippocampal Sharp Wave Ripples. Neuron, 2015, 87, 590-604.	3.8	57
192	Removing independent noise in systems neuroscience data using DeepInterpolation. Nature Methods, 2021, 18, 1401-1408.	9.0	57
193	Competition and selection during visual processing of natural scenes and objects. Journal of Vision, 2003, 3, 8.	0.1	56
194	Attention and consciousness: related yet different. Trends in Cognitive Sciences, 2012, 16, 103-105.	4.0	56
195	A simple algorithm for solving the cable equation in dendritic trees of arbitrary geometry. Journal of Neuroscience Methods, 1985, 12, 303-315.	1.3	55
196	Perceptual awareness negativity: a physiological correlate of sensory consciousness. Trends in Cognitive Sciences, 2021, 25, 660-670.	4.0	54
197	Signature morpho-electric, transcriptomic, and dendritic properties of human layer 5 neocortical pyramidal neurons. Neuron, 2021, 109, 2914-2927.e5.	3.8	54
198	Betting the house on consciousness. Nature Neuroscience, 2007, 10, 140-141.	7.1	53

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199	Can machines be conscious?. IEEE Spectrum, 2008, 45, 55-59.	0.5	53
200	Electrical properties of dendritic spines. Trends in Neurosciences, 1983, 6, 80-83.	4.2	52
201	Analog hardware for detecting discontinuities in early vision. International Journal of Computer Vision, 1990, 4, 211-223.	10.9	52
202	Spatial aspects of object formation revealed by a new illusion, shine-through. Vision Research, 2001, 41, 2325-2335.	0.7	52
203	A Robust Analog VLSI Motion Sensor Based on the Visual System of the Fly. , 1999, 7, 211-224.		51
204	Attentional effects on contrast detection in the presence of surround masks. Vision Research, 2000, 40, 3717-3724.	0.7	51
205	Attention in hierarchical models of object recognition. Progress in Brain Research, 2007, 165, 57-78.	0.9	51
206	The role of the polycomb complex in silencing Î±-globin gene expression in nonerythroid cells. Blood, 2008, 112, 3889-3899.	0.6	51
207	Posterior and anterior cortex â€" where is the difference that makes the difference?. Nature Reviews Neuroscience, 2016, 17, 666-666.	4.9	51
208	Stimulus Encoding and Feature Extraction by Multiple Sensory Neurons. Journal of Neuroscience, 2002, 22, 2374-2382.	1.7	50
209	Consciousness and Neurosurgery. Neurosurgery, 2004, 55, 273-282.	0.6	50
210	The sound of change: visually-induced auditory synesthesia. Current Biology, 2008, 18, R650-R651.	1.8	49
211	Modular Biological Complexity. Science, 2012, 337, 531-532.	6.0	49
212	Distinct Transcriptomic Cell Types and Neural Circuits of the Subiculum and Prosubiculum along the Dorsal-Ventral Axis. Cell Reports, 2020, 31, 107648.	2.9	49
213	The duration of the attentional blink in natural scenes depends on stimulus category. Vision Research, 2007, 47, 597-607.	0.7	47
214	Responses of Human Medial Temporal Lobe Neurons Are Modulated by Stimulus Repetition. Journal of Neurophysiology, 2010, 103, 97-107.	0.9	47
215	Big Science, Team Science, and Open Science for Neuroscience. Neuron, 2016, 92, 612-616.	3.8	47
216	High-Amplitude Positive Spikes Recorded Extracellularly in Cat Visual Cortex. Journal of Neurophysiology, 2009, 102, 3340-3351.	0.9	46

#	Article	IF	Citations
217	To the Cloud! A Grassroots Proposal to Accelerate Brain Science Discovery. Neuron, 2016, 92, 622-627.	3.8	46
218	Emergence of Slow-Switching Assemblies in Structured Neuronal Networks. PLoS Computational Biology, 2015, 11, e1004196.	1.5	45
219	Spatial Organization of Chromatic Pathways in the Mouse Dorsal Lateral Geniculate Nucleus. Journal of Neuroscience, 2017, 37, 1102-1116.	1.7	45
220	Human single neuron activity precedes emergence of conscious perception. Nature Communications, 2018, 9, 2057.	5.8	45
221	Computational approaches to cognition: the bottom-up view. Current Opinion in Neurobiology, 1993, 3, 203-208.	2.0	44
222	A Robust Analog VLSI Reichardt Motion Sensor. , 2000, 24, 213-229.		44
223	Motion-induced blindness does not affect the formation of negative afterimages. Consciousness and Cognition, 2004, 13, 691-708.	0.8	44
224	Low-level awareness accompanies â€œunconsciousâ€•high-level processing during continuous flash suppression. Journal of Vision, 2016, 16, 3.	0.1	43
225	Are we underestimating the richness of visual experience?. Neuroscience of Consciousness, 2017, 2017, niw023.	1.4	43
226	Computations in the vertebrate retina: gain enhancement, differentiation and motion discrimination. Trends in Neurosciences, 1986, 9, 204-211.	4.2	42
227	Computing Optical Flow in the Primate Visual System. Neural Computation, 1989, 1, 92-103.	1.3	41
228	Oscillator-phase coupling for different two-dimensional network connectivities. Physical Review A, 1991, 44, 6895-6904.	1.0	41
229	Brain Cells for Grandmother. Scientific American, 2013, 308, 30-35.	1.0	41
230	Single-cell and single-nucleus RNA-seq uncovers shared and distinct axes of variation in dorsal LGN neurons in mice, non-human primates, and humans. ELife, 2021, 10, .	2.8	41
231	Resistive Fuses: Analog Hardware for Detecting Discontinuities in Early Vision. Kluwer International Series in Engineering and Computer Science, 1989, , 27-55.	0.2	40
232	A Modular Multi-Chip Neuromorphic Architecture for Real-Time Visual Motion Processing. , 2000, 24, 195-211.		40
233	Topâ€“down biases win against focal attention in the fusiform face area. NeuroImage, 2007, 38, 730-739.	2.1	40
234	Detecting and Estimating Signals in Noisy Cable Structures, II: Information Theoretical Analysis. Neural Computation, 1999, 11, 1831-1873.	1.3	39

#	Article	IF	Citations
235	A Single-Neuron Correlate of Change Detection and Change Blindness in the Human Medial Temporal Lobe. Current Biology, 2006, 16, 2066-2072.	1.8	39
236	The Computational Properties of a Simplified Cortical Column Model. PLoS Computational Biology, 2016, 12, e1005045.	1.5	38
237	Understanding awareness at the neuronal level. Behavioral and Brain Sciences, 1991, 14, 683-685.	0.4	37
238	Single-Cell Responses to Face Adaptation in the Human Medial Temporal Lobe. Neuron, 2014, 84, 363-369.	3.8	37
239	Scene-selective coding by single neurons in the human parahippocampal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1153-1158.	3.3	37
240	Neural correlates of consciousness. Scholarpedia Journal, 2007, 2, 1740.	0.3	37
241	A Silicon Implementation of the Fly's Optomotor Control System. Neural Computation, 2000, 12, 2291-2304.	1.3	35
242	The relation of phase noise and luminance contrast to overt attention in complex visual stimuli. Journal of Vision, 2006, 6, 1-1.	0.1	35
243	Modeling Reverse-Phi Motion-Selective Neurons in Cortex: Double Synaptic-Veto Mechanism. Neural Computation, 2003, 15, 735-759.	1.3	34
244	Identifying gene regulatory elements by genomic microarray mapping of DNaseI hypersensitive sites. Genome Research, 2006, 16, 1310-1319.	2.4	34
245	A direct comparison of unconscious face processing under masking and interocular suppression. Frontiers in Psychology, 2014, 5, 659.	1.1	34
246	Brain Modeling ToolKit: An open source software suite for multiscale modeling of brain circuits. PLoS Computational Biology, 2020, 16, e1008386.	1.5	34
247	Computing motion using analog VLSI vision chips: An experimental comparison among different approaches. International Journal of Computer Vision, 1992, 8, 203-216.	10.9	33
248	Changes in functional connectivity support conscious object recognition. NeuroImage, 2012, 63, 1909-1917.	2.1	33
249	Evidence for two distinct mechanisms directing gaze in natural scenes. Journal of Vision, 2012, 12, 9-9.	0.1	31
250	The Minimal Complexity of Adapting Agents Increases with Fitness. PLoS Computational Biology, 2013, 9, e1003111.	1.5	31
251	A Computational Analysis of the Function of Three Inhibitory Cell Types in Contextual Visual Processing. Frontiers in Computational Neuroscience, 2017, 11, 28.	1.2	31
252	Revealing cell assemblies at multiple levels of granularity. Journal of Neuroscience Methods, 2014, 236, 92-106.	1.3	30

#	Article	IF	Citations
253	From Maxwell's equations to the theory of currentâ€source density analysis. European Journal of Neuroscience, 2017, 45, 1013-1023.	1.2	30
254	Shine-through: temporal aspects. Vision Research, 2001, 41, 2337-2346.	0.7	29
255	Consciousness science: real progress and lingering misconceptions. Trends in Cognitive Sciences, 2014, 18, 556-557.	4.0	29
256	A Simple Network Showing Burst Synchronization without Frequency Locking. Neural Computation, 1992, 4, 211-223.	1.3	28
257	Differential processing of invisible congruent and incongruent scenes: A case for unconscious integration. Journal of Vision, 2013, 13, 24-24.	0.1	28
258	Reconciling functional differences in populations of neurons recorded with two-photon imaging and electrophysiology. ELife, 2021, 10, .	2.8	28
259	The Unconscious Homunculus. Neuropsychoanalysis, 2000, 2, 3-11.	0.1	27
260	Spike propagation in dendrites with stochastic ion channels. Journal of Computational Neuroscience, 2006, 20, 77-84.	0.6	27
261	Dynamic Moment Analysis of the Extracellular Electric Field of a Biologically Realistic Spiking Neuron. Neural Computation, 2008, 20, 2070-2084.	1.3	27
262	Multi-regional module-based signal transmission in mouse visual cortex. Neuron, 2022, 110, 1585-1598.e9.	3.8	27
263	A bottomâ€“up model of spatial attention predicts human error patterns in rapid scene recognition. Journal of Vision, 2007, 7, 6.	0.1	26
264	A Neurobiological Framework for Consciousness. , 0, , 567-579.		26
265	Boundary Detection Benchmarking: Beyond F-Measures. , 2013, , .		26
266	Temporal structure coding with and without awareness. Cognition, 2014, 131, 404-414.	1.1	26
267	System implementations of analog VLSI velocity sensors. IEEE Micro, 1996, 16, 40-49.	1.8	25
268	Bewusstsein - ein neurobiologisches RÃtsel. , 2005, , .		25
269	<title>Implementing early vision algorithms in analog hardware: an overview</title>. , 1991, , .		24
270	Fusion of competing features is not serial. Vision Research, 2003, 43, 1951-1960.	0.7	23

#	Article	IF	Citations
271	The Relationship Between Consciousness and Top-Down Attention. , 2016, , 71-91.		23
272	Adaptive Neural Coding Dependent on the Time-Varying Statistics of the Somatic Input Current. Neural Computation, 1999, 11, 1893-1913.	1.3	22
273	Novel genes in cell cycle control and lipid metabolism with dynamically regulated binding sites for sterol regulatory elementâ€binding proteinâ€ƒ1 and RNA polymeraseâ€ƒII in HepG2 cells detected by chromatin immunoprecipitation with microarray detection. FEBS Journal, 2009, 276, 1878-1890.	2.2	22
274	Wiring Nanoscale Biosensors with Piezoelectric Nanomechanical Resonators. Nano Letters, 2010, 10, 1769-1773.	4.5	22
275	Conscious machines: Defining questions. Science, 2018, 359, 400-400.	6.0	22
276	Variability and coding efficiency of noisy neural spike encoders. BioSystems, 2001, 62, 87-97.	0.9	21
277	Effects of Chronic Sleep Restriction during Early Adolescence on the Adult Pattern of Connectivity of Mouse Secondary Motor Cortex. ENeuro, 2016, 3, ENEURO.0053-16.2016.	0.9	20
278	Cortical areas in visual awareness. Nature, 1995, 377, 294-295.	13.7	19
279	A robot for high yield electrophysiology and morphology of single neurons in vivo. Nature Communications, 2017, 8, 15604.	5.8	19
280	What Is Consciousness?. Scientific American, 2018, 318, 60-64.	1.0	19
281	Brain organoids, consciousness, ethics and moral status. Seminars in Cell and Developmental Biology, 2023, 144, 97-102.	2.3	19
282	The biophysical properties of spines as a basis for their electrical function: a comment on Kawato & Tsukahara (1983). Journal of Theoretical Biology, 1985, 113, 225-229.	0.8	18
283	Dynamic range and sensitivity adaptation in a silicon spiking neuron. IEEE Transactions on Neural Networks, 1999, 10, 1232-1238.	4.8	18
284	The Impact of Spike Timing Variability on the Signal-Encoding Performance of Neural Spiking Models. Neural Computation, 2002, 14, 347-367.	1.3	18
285	Top-down attention and consciousness: comment on Cohen et al.. Trends in Cognitive Sciences, 2012, 16, 527.	4.0	18
286	Unsupervised Learning of Individuals and Categories from Images. Neural Computation, 2008, 20, 1165-1178.	1.3	17
287	Time course of target recognition in visual search. Frontiers in Human Neuroscience, 2010, 4, 31.	1.0	17
288	Inferring the direction of implied motion depends on visual awareness. Journal of Vision, 2014, 14, 4-4.	0.1	17

#	Article	IF	Citations
289	Recognizing the gist of a visual scene: possible perceptual and neural mechanisms. Neurocomputing, 2002, 44-46, 979-984.	3.5	16
290	A paradoxical isopotentiality: a spatially uniform noise spectrum in neocortical pyramidal cells. Frontiers in Cellular Neuroscience, 2008, 2, 3.	1.8	16
291	Bewusstsein. , 2013, , .		16
292	The SCP is not specific enough to represent conscious content. Trends in Cognitive Sciences, 2009, 13, 367.	4.0	15
293	The Relationship Between Consciousness and Attention. , 2009, , 63-77.		15
294	<title>Multiplication-based analog motion detection chip</title>. , 1991, , .		14
295	Observers are consistent when rating image conspicuity. Vision Research, 2007, 47, 3052-3060.	0.7	14
296	Spatial Attention Is Attracted in a Sustained Fashion toward Singular Points in the Optic Flow. PLoS ONE, 2012, 7, e41040.	1.1	14
297	Decoding What People See from Where They Look: Predicting Visual Stimuli from Scanpaths. Lecture Notes in Computer Science, 2009, , 15-26.	1.0	14
298	Linking Linear Threshold Units with Quadratic Models of Motion Perception. Neural Computation, 1989, 1, 318-320.	1.3	13
299	Activity in the Visual Cortex is Modulated by Top-Down Attention Locked to Reaction Time. Journal of Cognitive Neuroscience, 2007, 19, 331-340.	1.1	13
300	Phenomenology without conscious access is a form of consciousness without top-down attention. Behavioral and Brain Sciences, 2007, 30, 509-510.	0.4	13
301	Using semantic content as cues for better scanpath prediction. , 2008, , .		13
302	Visual Awareness and the Thalmic Intralaminar Nuclei. Consciousness and Cognition, 1995, 4, 163-166.	0.8	12
303	Compact real-time 2D gradient-based analog VLSI motion sensor. , 1998, 3410, 98.		12
304	The neurobiology of consciousness. , 2010, , 24-46.		12
305	Attention and consciousness. Scholarpedia Journal, 2008, 3, 4173.	0.3	12
306	AN ANALOG VLSI INPLEMENTATION OF A VISUAL INTERNEURON: ENHANCED SENSORY PROCESSING THROUGH BIOPHYSICAL MODELING. International Journal of Neural Systems, 1999, 09, 391-395.	3.2	11

#	Article	IF	Citations
307	Adaptation supports short-term memory in a visual change detection task. PLoS Computational Biology, 2021, 17, e1009246.	1.5	11
308	Finding Free Will. Scientific American Mind, 2012, 23, 22-27.	0.0	10
309	A Biological Imitation Game. Cell, 2015, 163, 277-280.	13.5	10
310	Human visual object categorization can be described by models with low memory capacity. Vision Research, 2003, 43, 2265-2280.	0.7	9
311	Learning visual saliency. , 2011, , .		9
312	Figure-ground segregation using an analog VLSI chip. IEEE Micro, 1992, 12, 46-57.	1.8	8
313	Switching binding states. Visual Cognition, 2001, 8, 623-636.	0.9	8
314	Biophysics of Extracellular Spikes. , 2013, , 15-36.		8
315	The unimodal distribution of subâ€“threshold, ongoing activity in cortical networks. Frontiers in Neural Circuits, 2013, 7, 116.	1.4	8
316	Comprehensive cellularâ€resolution atlas of the adult human brain. Journal of Comparative Neurology, 2016, 524, Spc1.	0.9	8
317	Keep it in Mind. Scientific American Mind, 2014, 25, 26-29.	0.0	7
318	Computing Motion Using Resistive Networks. , 1988, 0882, 108.		6
319	Generation of Direction Selectivity by Isotropic Intracortical Connections. Neural Computation, 1992, 4, 332-340.	1.3	6
320	A quantitative model relating visual neuronal activity to psychophysical thresholds. Neurocomputing, 1999, 26-27, 743-748.	3.5	6
321	Controlling the Focus of Visual Selective Attention. Physics of Neural Networks, 2002, , 247-276.	0.1	6
322	Qualia. Current Biology, 2004, 14, R496.	1.8	6
323	Improving peer review with CARMA. Learned Publishing, 2007, 20, 173-176.	0.8	6
324	Response to Mole: Subjects can attend to completely invisible objects. Trends in Cognitive Sciences, 2008, 12, 44-45.	4.0	6

#	Article	IF	Citations
325	Visual Rivalry Without Spatial Conflict. Psychological Science, 2012, 23, 410-418.	1.8	6
326	The Brain of Buddha. Scientific American Mind, 2013, 24, 28-31.	0.0	6
327	Quantification and classification of neuronal responses in kernel-smoothed peristimulus time histograms. Journal of Neurophysiology, 2015, 113, 1260-1274.	0.9	6
328	A motion illusion reveals the temporally discrete nature of visual awareness. , 2010, , 521-535.		6
329	<title>Analog VLSI motion projects at Caltech</title>. , 1996, , .		5
330	Adaptation of Current Signals with Floating-Gate Circuits. Analog Integrated Circuits and Signal Processing, 2002, 30, 137-147.	0.9	5
331	Special report : Can we copy the brain? - Can we quantify machine consciousness?. IEEE Spectrum, 2017, 54, 64-69.	0.5	5
332	Measuring Stimulus-Evoked Neurophysiological Differentiation in Distinct Populations of Neurons in Mouse Visual Cortex. ENeuro, 2022, 9, ENEURO.0280-21.2021.	0.9	5
333	A neuronal correlate of consciousness?. Current Biology, 1996, 6, 492.	1.8	4
334	A Learning Rule for Local Synaptic Interactions Between Excitation and Shunting Inhibition. Neural Computation, 2004, 16, 2507-2532.	1.3	4
335	Probing the Unconscious Mind. Scientific American Mind, 2011, 22, 20-21.	0.0	4
336	The Neuroscience of Consciousness. , 2013, , 1091-1103.		4
337	Spike-timing control by dendritic plateau potentials in the presence of synaptic barrages. Frontiers in Computational Neuroscience, 2014, 8, 89.	1.2	4
338	Visual statistical learning produces implicit and explicit knowledge about temporal order information and scene chunks: Evidence from direct and indirect measures. Visual Cognition, 2016, 24, 155-172.	0.9	4
339	Reevaluating excess success in psychological science. Psychonomic Bulletin and Review, 2016, 23, 1602-1606.	1.4	4
340	News and Views Feature. Nature, 1997, 385, 210-210.	13.7	3
341	Spatial aspects of object formation revealed by a new illusion, shine-through [Vision Resarch 41 (2001) 2325â€“2335]. Vision Research, 2002, 42, 271.	0.7	3
342	What Is It Like to Be a Bee?. Scientific American Mind, 2008, 19, 18-19.	0.0	3

#	Article	IF	Citations
343	The Will to Power. Scientific American Mind, 2009, 20, 20-21.	0.0	3
344	The Conscious Infant. Scientific American Mind, 2013, 24, 24-25.	0.0	3
345	Selective Attention as an Optimal Computational Strategy. , 2005, , 18-23.		3
346	Neuroscience in 2064: A Look at the Last Century. , 2015, , 255-270.		3
347	IIT, half masked and half disfigured. Behavioral and Brain Sciences, 2022, 45, e60.	0.4	3
348	The Unconscious Homunculus: Response to the Commentaries by Francis Crick and Christof Koch. Neuropsychoanalysis, 2000, 2, 48-59.	0.1	2
349	Chapter 3 Visual attention and visual awareness. Handbook of Clinical Neurophysiology, 2005, , 65-83.	0.0	2
350	Not all information is created equal. Cognitive Neuroscience, 2011, 2, 120-121.	0.6	2
351	Advances in Learning Visual Saliency: From Image Primitives to Semantic Contents. , 2014, , 335-360.		2
352	Without a Thought. Scientific American Mind, 2015, 26, 25-26.	0.0	2
353	Hot or not. Nature Human Behaviour, 2020, 4, 991-992.	6.2	2
354	On the Optimality of Spatial Attention for Object Detection. Lecture Notes in Computer Science, 2009, , 1-14.	1.0	2
355	What Are the Neuronal Correlates of Consciousness?. , 2006, , 474-490.		2
356	Computing Motion in the Presence of Discontinuities: Algorithm and Analog Networks. , 1989, , 101-110.		2
357	What's in the termconnectionist?. Behavioral and Brain Sciences, 1986, 9, 100-101.	0.4	1
358	Dream States. Scientific American Mind, 2010, 21, 16-17.	0.0	1
359	Think Different. Scientific American Mind, 2011, 21, 16-17.	0.0	1
360	Cracking the Retinal Code. Scientific American Mind, 2012, 23, 20-21.	0.0	1

#	Article	IF	Citations
361	Safely Switching Consciousness Off and On Again. Scientific American Mind, 2012, 23, 24-25.	0.0	1
362	Does My Smartphone Really Love Me?. Scientific American Mind, 2014, 25, 26-29.	0.0	1
363	A reply to Barrett (2016). Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150452.	1.8	1
364	Sleep without End. Scientific American Mind, 2016, 27, 22-25.	0.0	1
365	The Footprints of Consciousness. Scientific American Mind, 2017, 28, 52-59.	0.0	1
366	Building Atlases Of The Brain. , 2015, , 3-16.		1
367	Mathematical aspects of Hodgkin-Huxley neural theory. Trends in Neurosciences, 1988, 11, 284-285.	4.2	0
368	Floating-Gate Circuits for Adaptation of Saccadic Eye Movement Accuracy. Analog Integrated Circuits and Signal Processing, 1997, 13, 69-78.	0.9	0
369	Reply to HupÃ© et al. : The predictive correlation of pupil dilation and relative dominance durations in rivalry is not a statistical artifact. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, .	3.3	0
370	The neurobiology of consciousness: What do we know and how can we discover more?. Neuroscience Research, 2009, 65, S1.	1.0	0
371	Two Roads Less Travelled by Psychoanalysis. Neuropsychoanalysis, 2011, 13, 48-50.	0.1	0
372	This Is Your Brain on Drugs. Scientific American Mind, 2012, 23, 18-19.	0.0	0
373	Extracellular field signatures of CA1 spiking cell assemblies during sharp wave-ripple complexes. BMC Neuroscience, 2013, 14, .	0.8	0
374	Exploring cortex in a high-throughput manner by building brain observatories. BMC Neuroscience, 2014, 15, .	0.8	0
375	The computational properties of a simplified cortical column model. BMC Neuroscience, 2014, 15, .	0.8	0
376	Visual Importance of Marketing Stimuli: Insights from Visual and Computational Neuroscience. SSRN Electronic Journal, 0, , .	0.4	0
377	When Computers Surpass Us. Scientific American Mind, 2015, 26, 26-29.	0.0	0
378	Walking the open science walk. Science, 2016, 351, 927-927.	6.0	0

#	Article	IF	Citations
379	Contacting Stranded Minds. Scientific American Mind, 2017, 28, 20-23.	0.0	0
380	Christof Koch. Current Biology, 2018, 28, R141-R142.	1.8	0
381	Paul G. Allen (1953â€“2018). Nature, 2018, 563, 474-474.	13.7	0
382	Jenseits des primÃren visuellen Cortex. , 2005, , 145-165.		0
383	Ãœber Zeit und Bewusstsein. , 2005, , 271-292.		0
384	Aufmerksamkeit und Bewusstsein. , 2005, , 167-187.		0
385	Ein Entwurf des Bewusstseins. , 2005, , 333-345.		0
386	Attention, Selective Visual. , 1988, , 11-12.		0
387	Models for the Neuronal Implementation of Selective Visual Attention Based on the Temporal Structure of Neural Signals. , 1994, , 295-309.		0
388	h-channels Contribute to Divergent Electrophysiological Properties of Supragranular Pyramidal Neurons in Human Versus Mouse Cerebral Cortex. SSRN Electronic Journal, 0, , .	0.4	0