Peter Knig

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

275	18,107	57	131
papers	citations	h-index	g-index
375 ext. papers	20,598 ext. citations	4.3 avg, IF	6.65 L-index

#	Paper	IF	Citations
275	Cooperative behavior evokes inter-brain synchrony in the prefrontal and temporoparietal cortex: A systematic review and meta-analysis of fNIRS hyperscanning studies <i>ENeuro</i> , 2022 ,	3.9	1
274	Talking Cars, Doubtful Users Population Study in Virtual Reality. <i>IEEE Transactions on Human-Machine Systems</i> , 2022 , 1-11	4.1	1
273	Biologically Inspired Deep Learning Model for Efficient Foveal-Peripheral Vision. <i>Frontiers in Computational Neuroscience</i> , 2021 , 15, 746204	3.5	
272	Mutual Exclusivity in Pragmatic Agents Cognitive Science, 2021, 46, e13069	2.2	
271	Interpersonal coordination in joint multiple object tracking. <i>Journal of Experimental Psychology:</i> Human Perception and Performance, 2021 , 47, 1166-1181	2.6	
270	Westdrive X LoopAR: An Open-Access Virtual Reality Project in Unity for Evaluating User Interaction Methods during Takeover Requests. <i>Sensors</i> , 2021 , 21,	3.8	2
269	Let Me Make You Happy, and I'll Tell You How You Look Around: Using an Approach-Avoidance Task as an Embodied Emotion Prime in a Free-Viewing Task. <i>Frontiers in Psychology</i> , 2021 , 12, 604393	3.4	1
268	#EEGManyLabs: Investigating the replicability of influential EEG experiments. <i>Cortex</i> , 2021 , 144, 213-22	2 9 .8	10
267	An Evaluation of Motion Trackers with Virtual Reality Sensor Technology in Comparison to a Marker-Based Motion Capture System Based on Joint Angles for Ergonomic Risk Assessment. <i>Sensors</i> , 2021 , 21,	3.8	2
266	Learning sparse and meaningful representations through embodiment. <i>Neural Networks</i> , 2021 , 134, 23	-4 511	1
265	Multisensory Proximity and Transition Cues for Improving Target Awareness in Narrow Field of View Augmented Reality Displays. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2021 , PP,	4	2
264	Coordinating With a Robot Partner Affects Neural Processing Related to Action Monitoring. <i>Frontiers in Neurorobotics</i> , 2021 , 15, 686010	3.4	1
263	Spike-timing-dependent plasticity can account for connectivity aftereffects of dual-site transcranial alternating current stimulation. <i>NeuroImage</i> , 2021 , 237, 118179	7.9	3
262	Hyperscanning: A Valid Method to Study Neural Inter-brain Underpinnings of Social Interaction. <i>Frontiers in Human Neuroscience</i> , 2020 , 14, 39	3.3	82
261	Project Westdrive: Unity City With Self-Driving Cars and Pedestrians for Virtual Reality Studies. <i>Frontiers in ICT</i> , 2020 , 7,	3.6	3
260	Dyadic and triadic search: Benefits, costs, and predictors of group performance. <i>Attention, Perception, and Psychophysics</i> , 2020 , 82, 2415-2433	2	6
259	Decoding Task From Oculomotor Behavior In Virtual Reality 2020,		2

(2019-2020)

258	No Evidence for a Role of Spatially Modulated Band Activity in Tactile Remapping and Short-Latency, Overt Orienting Behavior. <i>Journal of Neuroscience</i> , 2020 , 40, 9088-9102	6.6	1	
257	Global visual salience of competing stimuli. <i>Journal of Vision</i> , 2020 , 20, 27	0.4	0	
256	Neurophysiological correlates of collective perceptual decision-making. <i>European Journal of Neuroscience</i> , 2020 , 51, 1676-1696	3.5	1	
255	Novel ERP Evidence for Processing Differences Between Negative and Positive Polarity Items in German. <i>Frontiers in Psychology</i> , 2019 , 10, 376	3.4	5	
254	The Social Situation Affects How We Process Feedback About Our Actions. <i>Frontiers in Psychology</i> , 2019 , 10, 361	3.4	6	
253	Long-range functional coupling predicts performance: Oscillatory EEG networks in multisensory processing. <i>NeuroImage</i> , 2019 , 196, 114-125	7.9	15	
252	Learning of Spatial Properties of a Large-Scale Virtual City With an Interactive Map. <i>Frontiers in Human Neuroscience</i> , 2019 , 13, 240	3.3	8	
251	How does the method change what we measure? Comparing virtual reality and text-based surveys for the assessment of moral decisions in traffic dilemmas. <i>PLoS ONE</i> , 2019 , 14, e0223108	3.7	6	
250	Moral Judgements on the Actions of Self-Driving Cars and Human Drivers in Dilemma Situations From Different Perspectives. <i>Frontiers in Psychology</i> , 2019 , 10, 2415	3.4	18	
249	Eye Tracking in Virtual Reality. Journal of Eye Movement Research, 2019, 12,	1.7	66	
248	Learning robust visual representations using data augmentation invariance 2019,		2	
247	A new comprehensive eye-tracking test battery concurrently evaluating the Pupil Labs glasses and the EyeLink 1000. <i>PeerJ</i> , 2019 , 7, e7086	3.1	31	
246	The Effectiveness of Multimodal Sensory Feedback on VR Users Behavior in an L-Collision Problem. <i>Lecture Notes in Mechanical Engineering</i> , 2019 , 381-389	0.4		
245	Saliency and the population receptive field model to identify images from brain activity. <i>Journal of Vision</i> , 2019 , 19, 44	0.4		
244	Enhancing Traffic Scene Predictions with Generative Adversarial Networks 2019,		1	
243	Probing neural networks for dynamic switches of communication pathways. <i>PLoS Computational Biology</i> , 2019 , 15, e1007551	5	4	
242	Are allocentric spatial reference frames compatible with theories of Enactivism?. <i>Psychological Research</i> , 2019 , 83, 498-513	2.5	5	
241	Human Decisions in Moral Dilemmas are Largely Described by Utilitarianism: Virtual Car Driving Study Provides Guidelines for Autonomous Driving Vehicles. <i>Science and Engineering Ethics</i> , 2019 , 25, 399-418	3.1	45	

240	Embodied cognition 2018 ,		2
239	Novel endoscope with increased depth of field for imaging human nasal tissue by microscopic optical coherence tomography. <i>Biomedical Optics Express</i> , 2018 , 9, 636-647	3.5	17
238	Let's Move It Together: A Review of Group Benefits in Joint Object Control. <i>Frontiers in Psychology</i> , 2018 , 9, 918	3.4	6
237	Autonomous Vehicles Require Socio-Political Acceptance-An Empirical and Philosophical Perspective on the Problem of Moral Decision Making. <i>Frontiers in Behavioral Neuroscience</i> , 2018 , 12, 31	3.5	30
236	Response: Commentary: Using Virtual Reality to Assess Ethical Decisions in Road Traffic Scenarios: Applicability of Value-of-Life-Based Models and Influences of Time Pressure. <i>Frontiers in Behavioral Neuroscience</i> , 2018 , 12, 128	3.5	1
235	Interindividual differences among native right-to-left readers and native left-to-right readers during free viewing task. <i>Visual Cognition</i> , 2018 , 26, 430-441	1.8	3
234	Performance similarities predict collective benefits in dyadic and triadic joint visual search. <i>PLoS ONE</i> , 2018 , 13, e0191179	3.7	12
233	Further Advantages of Data Augmentation on Convolutional Neural Networks. <i>Lecture Notes in Computer Science</i> , 2018 , 95-103	0.9	18
232	Using multimedia information and communication technology (ICT) to provide added value to reminiscence therapy for people with dementia: Lessons learned from three field studies. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2018 , 51, 9-15	2.7	21
231	The World as an External Memory: The Price of Saccades in a Sensorimotor Task. <i>Frontiers in Behavioral Neuroscience</i> , 2018 , 12, 253	3.5	3
230	Natural visual behavior in individuals with peripheral visual-field loss. <i>Journal of Vision</i> , 2018 , 18, 10	0.4	2
229	Probing the temporal dynamics of the exploration-exploitation dilemma of eye movements. <i>Journal of Vision</i> , 2018 , 18, 6	0.4	8
228	Group benefits in joint perceptual tasks-a review. <i>Annals of the New York Academy of Sciences</i> , 2018 , 1426, 166	6.5	12
227	Entorhinal cortex receptive fields are modulated by spatial attention, even without movement. <i>ELife</i> , 2018 , 7,	8.9	23
226	An extensive dataset of eye movements during viewing of complex images. Scientific Data, 2017, 4, 16	0182.6	20
225	Differential Contribution of Low- and High-level Image Content to Eye Movements in Monkeys and Humans. <i>Cerebral Cortex</i> , 2017 , 27, 279-293	5.1	3
224	Exploration and Exploitation in Natural Viewing Behavior. Scientific Reports, 2017, 7, 2311	4.9	16
223	Memory-guided attention during active viewing of edited dynamic scenes. <i>Journal of Vision</i> , 2017 , 17, 12	0.4	6

(2016-2017)

222	Is Attentional Resource Allocation Across Sensory Modalities Task-Dependent?. <i>Advances in Cognitive Psychology</i> , 2017 , 13, 83-96	1	62	
221	Auditory Stimulus Detection Partially Depends on Visuospatial Attentional Resources. <i>I-Perception</i> , 2017 , 8, 2041669516688026	1.2	9	
220	Restricted vision increases sensorimotor cortex involvement in human walking. <i>Journal of Neurophysiology</i> , 2017 , 118, 1943-1951	3.2	35	
219	EEG correlates of sensorimotor processing: independent components involved in sensory and motor processing. <i>Scientific Reports</i> , 2017 , 7, 4461	4.9	22	
218	OLED microdisplays in near-to-eye applications: challenges and solutions 2017,		3	
217	Representational Dynamics of Facial Viewpoint Encoding. <i>Journal of Cognitive Neuroscience</i> , 2017 , 29, 637-651	3.1	19	
216	Dual task based cognitive stress induction and its influence on path integration 2017,		2	
215	Two Trackers Are Better than One: Information about the Co-actor's Actions and Performance Scores Contribute to the Collective Benefit in a Joint Visuospatial Task. <i>Frontiers in Psychology</i> , 2017 , 8, 669	3.4	14	
214	Can Limitations of Visuospatial Attention Be Circumvented? A Review. <i>Frontiers in Psychology</i> , 2017 , 8, 1896	3.4	7	
213	Using Virtual Reality to Assess Ethical Decisions in Road Traffic Scenarios: Applicability of Value-of-Life-Based Models and Influences of Time Pressure. <i>Frontiers in Behavioral Neuroscience</i> , 2017 , 11, 122	3.5	42	
212	Systems, Subjects, Sessions: To What Extent Do These Factors Influence EEG Data?. <i>Frontiers in Human Neuroscience</i> , 2017 , 11, 150	3.3	59	
211	Independent Component Analysis and Source Localization on Mobile EEG Data Can Identify Increased Levels of Acute Stress. <i>Frontiers in Human Neuroscience</i> , 2017 , 11, 310	3.3	8	
210	A Channel Rejection Method for Attenuating Motion-Related Artifacts in EEG Recordings during Walking. <i>Frontiers in Neuroscience</i> , 2017 , 11, 225	5.1	31	
209	Exploratory Multimodal Data Analysis with Standard Multimedia Player - Multimedia Containers: A Feasible Solution to Make Multimodal Research Data Accessible to the Broad Audience 2017 ,		4	
208	Humans treat unreliable filled-in percepts as more real than veridical ones. <i>ELife</i> , 2017 , 6,	8.9	17	
207	Visual Analytics of Gaze Data with Standard Multimedia Players. <i>Journal of Eye Movement Research</i> , 2017 , 10,	1.7	1	
206	Population performance of Moringa peregrina (Forssk.) Fiori (Moringaceae) at Sinai Peninsula, Egypt in the last decades: Consequences for its conservation. <i>Journal for Nature Conservation</i> , 2016 , 34, 65-74	2.3	3	
205	Spectral fingerprints of large-scale cortical dynamics during ambiguous motion perception. <i>Human Brain Mapping</i> , 2016 , 37, 4099-4111	5.9	17	

204	Oscillatory activity in auditory cortex reflects the perceptual level of audio-tactile integration. <i>Scientific Reports</i> , 2016 , 6, 33693	4.9	4
203	Oscillatory brain activity during multisensory attention reflects activation, disinhibition, and cognitive control. <i>Scientific Reports</i> , 2016 , 6, 32775	4.9	43
202	Spectral Signatures of Saccade Target Selection. <i>Brain Topography</i> , 2016 , 29, 130-48	4.3	3
201	Multisensory teamwork: using a tactile or an auditory display to exchange gaze information improves performance in joint visual search. <i>Ergonomics</i> , 2016 , 59, 781-95	2.9	29
200	Modeling of Large-Scale Functional Brain Networks Based on Structural Connectivity from DTI: Comparison with EEG Derived Phase Coupling Networks and Evaluation of Alternative Methods along the Modeling Path. <i>PLoS Computational Biology</i> , 2016 , 12, e1005025	5	62
199	Learning New Sensorimotor Contingencies: Effects of Long-Term Use of Sensory Augmentation on the Brain and Conscious Perception. <i>PLoS ONE</i> , 2016 , 11, e0166647	3.7	25
198	Eye movements as a window to cognitive processes. Journal of Eye Movement Research, 2016, 9,	1.7	13
197	The dynamic effect of reading direction habit on spatial asymmetry of image perception. <i>Journal of Vision</i> , 2016 , 16, 8	0.4	18
196	STN-DBS Reduces Saccadic Hypometria but Not Visuospatial Bias in Parkinson's Disease Patients. <i>Frontiers in Behavioral Neuroscience</i> , 2016 , 10, 85	3.5	9
195	Bayesian Alternation during Tactile Augmentation. Frontiers in Behavioral Neuroscience, 2016, 10, 187	3.5	8
194	Proposing Metrics for Benchmarking Novel EEG Technologies Towards Real-World Measurements. <i>Frontiers in Human Neuroscience</i> , 2016 , 10, 188	3.3	63
193	Attentional Resource Allocation in Visuotactile Processing Depends on the Task, But Optimal Visuotactile Integration Does Not Depend on Attentional Resources. <i>Frontiers in Integrative Neuroscience</i> , 2016 , 10, 13	3.2	25
192	Pupil Sizes Scale with Attentional Load and Task Experience in a Multiple Object Tracking Task. <i>PLoS ONE</i> , 2016 , 11, e0168087	3.7	43
191	Usability of EEG Systems 2016 ,		6
190	Extensive training leads to temporal and spatial shifts of cortical activity underlying visual category selectivity. <i>NeuroImage</i> , 2016 , 134, 22-34	7.9	8
189	Melanopsin Variants as Intrinsic Optogenetic On and Off Switches for Transient versus Sustained Activation of G Protein Pathways. <i>Current Biology</i> , 2016 , 26, 1206-12	6.3	40
188	Induction and separation of motion artifacts in EEG data using a mobile phantom head device. <i>Journal of Neural Engineering</i> , 2016 , 13, 036014	5	72
187	Feeling good, searching the bad: Positive priming increases attention and memory for negative stimuli on webpages. <i>Computers in Human Behavior</i> , 2015 , 53, 332-343	7.7	42

(2014-2015)

186	Oscillatory signatures of crossmodal congruence effects: An EEG investigation employing a visuotactile pattern matching paradigm. <i>NeuroImage</i> , 2015 , 116, 177-86	7.9	22	
185	Effects of contextual information and stimulus ambiguity on overt visual sampling behavior. <i>Vision Research</i> , 2015 , 110, 76-86	2.1	12	
184	Predictions of Visual Content across Eye Movements and Their Modulation by Inferred Information. <i>Journal of Neuroscience</i> , 2015 , 35, 7403-13	6.6	27	
183	Primary visual cortex represents the difference between past and present. <i>Cerebral Cortex</i> , 2015 , 25, 1427-40	5.1	15	
182	Hand washing induces a clean slate effect in moral judgments: a pupillometry and eye-tracking study. <i>Scientific Reports</i> , 2015 , 5, 10471	4.9	18	
181	Cultural background shapes spatial reference frame proclivity. Scientific Reports, 2015, 5, 11426	4.9	36	
180	A closer look at the apparent correlation of structural and functional connectivity in excitable neural networks. <i>Scientific Reports</i> , 2015 , 5, 7870	4.9	35	
179	Irrelevant tactile stimulation biases visual exploration in external coordinates. <i>Scientific Reports</i> , 2015 , 5, 10664	4.9	8	
178	Visual homeostatic processing in V1: when probability meets dynamics. <i>Frontiers in Systems Neuroscience</i> , 2015 , 9, 6	3.5	2	
177	Crossmodal integration improves sensory detection thresholds in the ferret. <i>PLoS ONE</i> , 2015 , 10, e0124	9,572	12	
176	Audition and vision share spatial attentional resources, yet attentional load does not disrupt audiovisual integration. <i>Frontiers in Psychology</i> , 2015 , 6, 1084	3.4	34	
175	Vision and Haptics Share Spatial Attentional Resources and Visuotactile Integration Is Not Affected by High Attentional Load. <i>Multisensory Research</i> , 2015 , 28, 371-92	1.9	29	
174	The Occipital Face Area Is Causally Involved in Facial Viewpoint Perception. <i>Journal of Neuroscience</i> , 2015 , 35, 16398-403	6.6	15	
173	Kinesthetic and vestibular information modulate alpha activity during spatial navigation: a mobile EEG study. <i>Frontiers in Human Neuroscience</i> , 2014 , 8, 71	3.3	64	
172	Real and implied motion at the center of gaze. Journal of Vision, 2014, 14,	0.4	10	
171	Spatial biases in viewing behavior. <i>Journal of Vision</i> , 2014 , 14,	0.4	52	
170	The experience of new sensorimotor contingencies by sensory augmentation. <i>Consciousness and Cognition</i> , 2014 , 28, 47-63	2.6	39	
169	The contributions of image content and behavioral relevancy to overt attention. <i>PLoS ONE</i> , 2014 , 9, e93	35 /4	28	

168	Phase synchrony facilitates binding and segmentation of natural images in a coupled neural oscillator network. <i>Frontiers in Computational Neuroscience</i> , 2013 , 7, 195	3.5	9
167	Where's the action? The pragmatic turn in cognitive science. <i>Trends in Cognitive Sciences</i> , 2013 , 17, 202	-914	258
166	Saccadic momentum and facilitation of return saccades contribute to an optimal foraging strategy. <i>PLoS Computational Biology</i> , 2013 , 9, e1002871	5	37
165	Subcortical human face processing? Evidence from masked priming. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2013 , 39, 989-1002	2.6	20
164	Predictions in the light of your own action repertoire as a general computational principle. <i>Behavioral and Brain Sciences</i> , 2013 , 36, 219-20	0.9	10
163	Dissociation between saliency signals and activity in early visual cortex. Journal of Vision, 2013, 13,	0.4	9
162	Emotions' impact on viewing behavior under natural conditions. <i>PLoS ONE</i> , 2013 , 8, e52737	3.7	33
161	Space-valence priming with subliminal and supraliminal words. Frontiers in Psychology, 2013, 4, 81	3.4	21
160	Different strategies for spatial updating in yaw and pitch path integration. <i>Frontiers in Behavioral Neuroscience</i> , 2013 , 7, 5	3.5	18
159	Cortical long-range interactions embed statistical knowledge of natural sensory input: a voltage-sensitive dye imaging study. <i>F1000Research</i> , 2013 , 2, 51	3.6	9
158	Unmasking the contribution of low-level features to the guidance of attention. <i>Neuropsychologia</i> , 2012 , 50, 3478-87	3.2	19
157	The saccadic spike artifact in MEG. <i>Neurolmage</i> , 2012 , 59, 1657-67	7.9	87
156	Sensory augmentation for the blind. Frontiers in Human Neuroscience, 2012, 6, 37	3.3	51
155	Combining EEG and eye tracking: identification, characterization, and correction of eye movement artifacts in electroencephalographic data. <i>Frontiers in Human Neuroscience</i> , 2012 , 6, 278	3.3	174
154	Emotions and personality traits as high-level factors in visual attention: a review. <i>Frontiers in Human Neuroscience</i> , 2012 , 6, 321	3.3	34
153	Prevalence of selectivity for mirror-symmetric views of faces in the ventral and dorsal visual pathways. <i>Journal of Neuroscience</i> , 2012 , 32, 11763-72	6.6	57
152	Combining EEG and eye tracking: Identification, characterization and correction of eye movement artifacts in electroencephalographic data. <i>Biomedizinische Technik</i> , 2012 , 57,	1.3	1
151	Learning and Adaptation of Sensorimotor Contingencies: Prism-Adaptation, a Case Study. <i>Lecture Notes in Computer Science</i> , 2012 , 341-350	0.9	1

(2009-2011)

150	Independent encoding of grating motion across stationary feature maps in primary visual cortex visualized with voltage-sensitive dye imaging. <i>NeuroImage</i> , 2011 , 55, 1763-70	7.9	26
149	Natural scene evoked population dynamics across cat primary visual cortex captured with voltage-sensitive dye imaging. <i>Cerebral Cortex</i> , 2011 , 21, 2542-54	5.1	19
148	Sensitivity of different measures of the visibility of masked primes: influences of prime-response and prime-target relations. <i>Consciousness and Cognition</i> , 2011 , 20, 1473-88	2.6	3
147	Beyond correlation: do color features influence attention in rainforest?. <i>Frontiers in Human Neuroscience</i> , 2011 , 5, 36	3.3	16
146	Overt attention and context factors: the impact of repeated presentations, image type, and individual motivation. <i>PLoS ONE</i> , 2011 , 6, e21719	3.7	50
145	Overt visual attention as a causal factor of perceptual awareness. <i>PLoS ONE</i> , 2011 , 6, e22614	3.7	26
144	Viewing behavior and the impact of low-level image properties across repeated presentations of complex scenes. <i>Journal of Vision</i> , 2011 , 11, 26	0.4	21
143	Measures and limits of models of fixation selection. <i>PLoS ONE</i> , 2011 , 6, e24038	3.7	33
142	Integrative processing of perception and reward in an auditory localization paradigm. <i>Experimental Psychology</i> , 2011 , 58, 217-26	1.5	5
141	Developmental Changes in Natural Viewing Behavior: Bottom-Up and Top-Down Differences between Children, Young Adults and Older Adults. <i>Frontiers in Psychology</i> , 2010 , 1, 207	3.4	56
140	Unsupervised learning of reflexive and action-based affordances to model adaptive navigational behavior. <i>Frontiers in Neurorobotics</i> , 2010 , 4, 2	3.4	5
139	Influence of low-level stimulus features, task dependent factors, and spatial biases on overt visual attention. <i>PLoS Computational Biology</i> , 2010 , 6, e1000791	5	37
138	Involving motor capabilities in the formation of sensory space representations. <i>PLoS ONE</i> , 2010 , 5, e103	3 <i>37</i> 7	4
137	Investigating task-dependent top-down effects on overt visual attention. <i>Journal of Vision</i> , 2010 , 10, 15.1-14	0.4	42
136	Perceptual learning of parametric face categories leads to the integration of high-level class-based information but not to high-level pop-out. <i>Journal of Vision</i> , 2010 , 10, 20	0.4	3
135	Testing the theory of embodied cognition with subliminal words. <i>Cognition</i> , 2010 , 116, 303-20	3.5	42
134	Getting real-sensory processing of natural stimuli. Current Opinion in Neurobiology, 2010 , 20, 389-95	7.6	23
133	Influence of disparity on fixation and saccades in free viewing of natural scenes. <i>Journal of Vision</i> , 2009 , 9, 29.1-19	0.4	76

132	Gaze allocation in natural stimuli: Comparing free exploration to head-fixed viewing conditions. <i>Visual Cognition</i> , 2009 , 17, 1132-1158	1.8	63
131	Effects of luminance contrast and its modifications on fixation behavior during free viewing of images from different categories. <i>Vision Research</i> , 2009 , 49, 1541-53	2.1	36
130	Visual stimulus locking of EEG is modulated by temporal congruency of auditory stimuli. Experimental Brain Research, 2009 , 198, 137-51	2.3	23
129	Eye-head coordination during free exploration in human and cat. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1164, 353-66	6.5	18
128	Distinct roles for eye and head movements in selecting salient image parts during natural exploration. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1164, 188-93	6.5	11
127	Saliency on a natural scene background: effects of color and luminance contrast add linearly. <i>Attention, Perception, and Psychophysics</i> , 2009 , 71, 1337-52	2	21
126	The JAMF Attention Modelling Framework. Lecture Notes in Computer Science, 2009, 153-165	0.9	2
125	Proton transfer in carbonic anhydrase is controlled by electrostatics rather than the orientation of the acceptor. <i>Biochemistry</i> , 2008 , 47, 2369-78	3.2	76
124	What's color got to do with it? The influence of color on visual attention in different categories. <i>Journal of Vision</i> , 2008 , 8, 6.1-17	0.4	37
123	Salient features in gaze-aligned recordings of human visual input during free exploration of natural environments. <i>Journal of Vision</i> , 2008 , 8, 12.1-17	0.4	35
122	Audio-visual integration during overt visual attention. Journal of Eye Movement Research, 2008, 1,	1.7	7
121	Integrating audiovisual information for the control of overt attention. <i>Journal of Vision</i> , 2007 , 7, 11.1-16	io.4	32
120	The role of first- and second-order stimulus features for human overt attention. <i>Perception & Psychophysics</i> , 2007 , 69, 153-61		27
119	The three-dimensional structure of in vitro reconstituted Xenopus laevis chromosomes by EM tomography. <i>Chromosoma</i> , 2007 , 116, 349-72	2.8	40
118	Dynamical features of higher-order correlation events: impact on cortical cells. <i>Cognitive Neurodynamics</i> , 2007 , 1, 53-69	4.2	8
117	Modulation of synchrony without changes in firing rates. <i>Cognitive Neurodynamics</i> , 2007 , 1, 225-35	4.2	19
116	Dynamical features of higher-order correlation events: impact on cortical cells. <i>Cognitive Neurodynamics</i> , 2007 , 1, 273	4.2	
115	Human eye-head co-ordination in natural exploration. <i>Network: Computation in Neural Systems</i> , 2007 , 18, 267-97	0.7	68

(2004-2007)

114	Saccade-related activity in areas 18 and 21a of cats freely viewing complex scenes. <i>NeuroReport</i> , 2007 , 18, 401-4	1.7	4
113	Auditory Gist Perception: An Alternative to Attentional Selection of Auditory Streams?. <i>Lecture Notes in Computer Science</i> , 2007 , 399-416	0.9	11
112	Differences of monkey and human overt attention under natural conditions. <i>Vision Research</i> , 2006 , 46, 1194-209	2.1	62
111	Texture signals in whisker vibrations. <i>Journal of Neurophysiology</i> , 2006 , 95, 1792-9	3.2	89
110	Development of effective quantum mechanical/molecular mechanical (QM/MM) methods for complex biological processes. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 6458-69	3.4	274
109	The relation of phase noise and luminance contrast to overt attention in complex visual stimuli. <i>Journal of Vision</i> , 2006 , 6, 1148-58	0.4	21
108	A model of the ventral visual system based on temporal stability and local memory. <i>PLoS Biology</i> , 2006 , 4, e120	9.7	85
107	Feature selectivity in area 21a of the cat. <i>NeuroReport</i> , 2006 , 17, 809-12	1.7	4
106	Symbols as self-emergent entities in an optimization process of feature extraction and predictions. <i>Biological Cybernetics</i> , 2006 , 94, 325-34	2.8	65
105	Beyond sensory substitutionlearning the sixth sense. <i>Journal of Neural Engineering</i> , 2005 , 2, R13-26	5	129
104	Use of surface affinity enrichment and cryo-embedding to prepare in vitro reconstituted mitotic chromosomes for EM tomography. <i>Ultramicroscopy</i> , 2005 , 103, 261-74	3.1	2
103	Learning viewpoint invariant object representations using a temporal coherence principle. <i>Biological Cybernetics</i> , 2005 , 93, 79-90	2.8	35
102	Learning of somatosensory representations for texture discrimination using a temporal coherence		7
	principle. <i>Network: Computation in Neural Systems</i> , 2005 , 16, 223-38	0.7	7
101	principle. <i>Network: Computation in Neural Systems</i> , 2005 , 16, 223-38 Decoding a temporal population code. <i>Neural Computation</i> , 2004 , 16, 2079-100	2.9	13
101			•
	Decoding a temporal population code. <i>Neural Computation</i> , 2004 , 16, 2079-100	2.9	13
100	Decoding a temporal population code. <i>Neural Computation</i> , 2004 , 16, 2079-100 High-order events in cortical networks: a lower bound. <i>Physical Review E</i> , 2004 , 70, 051909 Involving the motor system in decision making. <i>Proceedings of the Royal Society B: Biological</i>	2.9	13

96	Two-state membrane potential fluctuations driven by weak pairwise correlations. <i>Neural Computation</i> , 2004 , 16, 2351-78	2.9	12
95	Directed interactions between visual areas and their role in processing image structure and expectancy. <i>European Journal of Neuroscience</i> , 2004 , 20, 1391-401	3.5	18
94	Are switches in perception of the Necker cube related to eye position?. <i>European Journal of Neuroscience</i> , 2004 , 20, 2811-8	3.5	46
93	Stimulus locking and feature selectivity prevail in complementary frequency ranges of V1 local field potentials. <i>European Journal of Neuroscience</i> , 2004 , 19, 485-9	3.5	55
92	Processing of complex stimuli and natural scenes in the visual cortex. <i>Current Opinion in Neurobiology</i> , 2004 , 14, 468-73	7.6	72
91	The world from a cat's perspectivestatistics of natural videos. <i>Biological Cybernetics</i> , 2004 , 90, 41-50	2.8	116
90	Interactions between eye movement systems in cats and humans. <i>Experimental Brain Research</i> , 2004 , 157, 215-24	2.3	13
89	How are complex cell properties adapted to the statistics of natural stimuli?. <i>Journal of Neurophysiology</i> , 2004 , 91, 206-12	3.2	101
88	Learning the nonlinearity of neurons from natural visual stimuli. <i>Neural Computation</i> , 2003 , 15, 1751-9	2.9	19
87	Sparse Spectrotemporal Coding of Sounds. <i>Eurasip Journal on Advances in Signal Processing</i> , 2003 , 2003, 1	1.9	41
86	Responses to natural scenes in cat V1. Journal of Neurophysiology, 2003, 90, 1910-20	3.2	93
85	A functional gamma-band defined by stimulus-dependent synchronization in area 18 of awake behaving cats. <i>Journal of Neuroscience</i> , 2003 , 23, 4251-60	6.6	126
84	Temporal correlations of orientations in natural scenes. <i>Neurocomputing</i> , 2003 , 52-54, 117-123	5.4	26
83	Does luminance-contrast contribute to a saliency map for overt visual attention?. <i>European Journal of Neuroscience</i> , 2003 , 17, 1089-97	3.5	136
82	On the choice of a sparse prior. <i>Reviews in the Neurosciences</i> , 2003 , 14, 53-62	4.7	6
81	Cats can detect repeated noise stimuli. <i>Neuroscience Letters</i> , 2003 , 346, 45-8	3.3	7
80	Invariant representations of visual patterns in a temporal population code. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 324-9	11.5	70
79	Properties of a temporal population code. <i>Reviews in the Neurosciences</i> , 2003 , 14, 21-33	4.7	6

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78	Learning distinct and complementary feature selectivities from natural colour videos. <i>Reviews in the Neurosciences</i> , 2003 , 14, 43-52	4.7	4	
77	Internet-enabled interactive multimedia asthma education program: a randomized trial. <i>Pediatrics</i> , 2003 , 111, 503-10	7.4	211	
76	Existence of high-order correlations in cortical activity. <i>Physical Review E</i> , 2003 , 68, 041905	2.4	4	
75	Optimal Coding for Naturally Occurring Whisker Deflections. <i>Lecture Notes in Computer Science</i> , 2003 , 805-812	0.9	2	
74	Invariant encoding of spatial stimulus topology in the temporal domain. <i>Neurocomputing</i> , 2002 , 44-46, 703-708	5.4	2	
73	Learning the invariance properties of complex cells from their responses to natural stimuli. <i>European Journal of Neuroscience</i> , 2002 , 15, 475-86	3.5	54	
72	Neuroscience. Neurons in action. <i>Science</i> , 2002 , 296, 1817-8	33.3	8	
71	Learning sensory maps with real-world stimuli in real time using a biophysically realistic learning rule. <i>IEEE Transactions on Neural Networks</i> , 2002 , 13, 619-32		11	
70	Learning Multiple Feature Representations from Natural Image Sequences. <i>Lecture Notes in Computer Science</i> , 2002 , 21-26	0.9		
69	Mechanisms to synchronize neuronal activity. <i>Biological Cybernetics</i> , 2001 , 84, 153-72	2.8	31	
68	Non-contact eye-tracking on cats. <i>Journal of Neuroscience Methods</i> , 2001 , 110, 103-11	3	13	
67	Efficient evaluation of serial sections by iterative Gabor matching. <i>Journal of Neuroscience Methods</i> , 2001 , 111, 141-50	3	7	
66	Supervised and unsupervised learning with two sites of synaptic integration. <i>Journal of Computational Neuroscience</i> , 2001 , 11, 207-15	1.4	44	
65	Learning in a neural network model in real time using real world stimuli. <i>Neurocomputing</i> , 2001 , 38-40, 859-865	5.4	1	
64	Neurons with two sites of synaptic integration learn invariant representations. <i>Neural Computation</i> , 2001 , 13, 2823-49	2.9	13	
63	Extracting Slow Subspaces from Natural Videos Leads to Complex Cells. <i>Lecture Notes in Computer Science</i> , 2001 , 1075-1080	0.9	20	
62	Learning with two sites of synaptic integration. Network: Computation in Neural Systems, 2000, 11, 25-3	8 9 0.7	46	
61	Bi-directional interactions between visual areas in the awake behaving cat. <i>NeuroReport</i> , 2000 , 11, 689-	-9 2 .7	33	

60	A learning rule for dynamic recruitment and decorrelation. <i>Neural Networks</i> , 2000 , 13, 1-9	9.1	20
59	A spike based learning rule for generation of invariant representations. <i>Journal of Physiology (Paris)</i> , 2000 , 94, 539-48		4
58	Integrating top-down and bottom-up sensory processing by somato-dendritic interactions. <i>Journal of Computational Neuroscience</i> , 2000 , 8, 161-73	1.4	90
57	Top-down processing mediated by interareal synchronization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 14748-53	11.5	585
56	Local and global gating of synaptic plasticity. Neural Computation, 2000, 12, 519-29	2.9	20
55	The effects of cromolyn sodium and nedocromil sodium in early asthma prevention. <i>Journal of Allergy and Clinical Immunology</i> , 2000 , 105, S575-81	11.5	10
54	On the directionality of cortical interactions studied by structural analysis of electrophysiological recordings. <i>Biological Cybernetics</i> , 1999 , 81, 199-210	2.8	115
53	Temporal binding, binocular rivalry, and consciousness. <i>Consciousness and Cognition</i> , 1999 , 8, 128-51	2.6	348
52	Does time help to understand consciousness?. Consciousness and Cognition, 1999, 8, 260-8	2.6	11
51	On the role of biophysical properties of cortical neurons in binding and segmentation of visual scenes. <i>Neural Computation</i> , 1999 , 11, 1113-38	2.9	18
50	The influence of inhaled corticosteroids on bone mineral density in asthmatic children. <i>Clinical and Experimental Allergy</i> , 1998 , 28, 1039-42	4.1	1
49	Group Report: Representations in Natural and Artificial Systems. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1998 , 53, 738-751	1.7	1
48	Active sensingclosing multiple loops. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1998 , 53, 542-9	1.7	18
47	Paradigm Shifts in the Neurobiology of Perception 1998 , 178-192		
46	Synchronization of oscillatory responses in visual cortex correlates with perception in interocular rivalry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997 , 94, 12699-	- 70 45	376
45	Internal context and top-down processing. <i>Behavioral and Brain Sciences</i> , 1997 , 20, 691-692	0.9	1
44	Visuomotor integration is associated with zero time-lag synchronization among cortical areas. <i>Nature</i> , 1997 , 385, 157-61	50.4	944
43	Evidence for benefits of early intervention with non-steroidal drugs in asthma. <i>Pediatric Pulmonology</i> , 1997 , 24, 34-39	3.5	3

42	Neurophysiological Relevance of Time 1997 , 133-157		14
41	Integrator or coincidence detector? The role of the cortical neuron revisited. <i>Trends in Neurosciences</i> , 1996 , 19, 130-7	13.3	537
40	Role of reticular activation in the modulation of intracortical synchronization. <i>Science</i> , 1996 , 272, 271-4	33.3	490
39	Synchronization of neuronal responses in the optic tectum of awake pigeons. <i>Visual Neuroscience</i> , 1996 , 13, 575-84	1.7	29
38	The role of neuronal synchronization in response selection: a biologically plausible theory of structured representations in the visual cortex. <i>Journal of Cognitive Neuroscience</i> , 1996 , 8, 603-25	3.1	143
37	Correlated firing in sensory-motor systems. <i>Current Opinion in Neurobiology</i> , 1995 , 5, 511-9	7.6	100
36	How precise is neuronal synchronization?. <i>Neural Computation</i> , 1995 , 7, 469-85	2.9	150
35	Relation between oscillatory activity and long-range synchronization in cat visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 290-4	11.5	240
34	Binding by temporal structure in multiple feature domains of an oscillatory neuronal network. <i>Biological Cybernetics</i> , 1994 , 70, 397-405	2.8	143
33	A method for the quantification of synchrony and oscillatory properties of neuronal activity. Journal of Neuroscience Methods, 1994 , 54, 31-7	3	99
32	Reduced synchronization in the visual cortex of cats with strabismic amblyopia. <i>European Journal of Neuroscience</i> , 1994 , 6, 1645-55	3.5	213
31	Oscillations and Synchrony in the Visual Cortex: Evidence for Their Functional Relevance 1994 , 99-114		3
30	Alternating oscillatory and stochastic states in a network of spiking neurons. <i>Network: Computation in Neural Systems</i> , 1993 , 4, 243-257	0.7	45
29	Squint affects synchronization of oscillatory responses in cat visual cortex. <i>European Journal of Neuroscience</i> , 1993 , 5, 501-8	3.5	121
28	Temporal Structure Can Solve the Binding Problem for Multiple Feature Domains 1993 , 503-507		
27	Assembly Formation and Segregation by a Self-Organizing Neuronal Oscillator Model 1993 , 509-513		1
26	Stimulus-Dependent Assembly Formation of Oscillatory Responses: III. Learning. <i>Neural Computation</i> , 1992 , 4, 666-681	2.9	19
25	Synchronization of oscillatory neuronal responses in cat striate cortex: temporal properties. <i>Visual Neuroscience</i> , 1992 , 8, 337-47	1.7	280

24	Temporal coding in the visual cortex: new vistas on integration in the nervous system. <i>Trends in Neurosciences</i> , 1992 , 15, 218-26	13.3	541
23	Why does the cortex oscillate?. <i>Current Biology</i> , 1992 , 2, 332-4	6.3	27
22	Correlated Neuronal Firing: a Clue to the Integrative Functions of Cortex?. <i>Perspectives in Neural Computing</i> , 1992 , 125-139		
21	Mechanisms Underlying the Generation of Neuronal Oscillations in Cat Visual Cortex 1992 , 29-45		12
20	Synchronization of oscillatory neuronal responses between striate and extrastriate visual cortical areas of the cat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991 , 88, 6048-52	11.5	414
19	Stimulus-Dependent Assembly Formation of Oscillatory Responses: II. Desynchronization. <i>Neural Computation</i> , 1991 , 3, 167-178	2.9	69
18	Stimulus-Dependent Assembly Formation of Oscillatory Responses: I. Synchronization. <i>Neural Computation</i> , 1991 , 3, 155-166	2.9	245
17	Direct physiological evidence for scene segmentation by temporal coding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991 , 88, 9136-40	11.5	344
16	Interhemispheric synchronization of oscillatory neuronal responses in cat visual cortex. <i>Science</i> , 1991 , 252, 1177-9	33.3	886
15	Stimulus-Dependent Neuronal Oscillations in Cat Visual Cortex: Inter-Columnar Interaction as Determined by Cross-Correlation Analysis. <i>European Journal of Neuroscience</i> , 1990 , 2, 588-606	3.5	410
14	Stimulus-Dependent Neuronal Oscillations in Cat Visual Cortex: Receptive Field Properties and Feature Dependence. <i>European Journal of Neuroscience</i> , 1990 , 2, 607-619	3.5	283
13	Formation of cortical cell assemblies. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 1990 , 55, 939	9-53	38
12	Oscillatory responses in cat visual cortex exhibit inter-columnar synchronization which reflects global stimulus properties. <i>Nature</i> , 1989 , 338, 334-7	50.4	3470
11	On Riccati equations describing impedance relations for forward and backward excitation in the one-dimensional cochlea model. <i>Journal of the Acoustical Society of America</i> , 1987 , 81, 408-11	2.2	3
10	Forward and reverse waves in the one-dimensional model of the cochlea. <i>Hearing Research</i> , 1986 , 23, 1-7	3.9	11
9	A Unifying Approach to High- and Low-Level Cognition		2
8	Towards a Framework for Ethical Decision Making in Automated Vehicles		3
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