Peter KÃ¶nig

List of Publications by Year
in descending order

277 papers	22,452 citations	19657 61 h-index	9861 141 g-index
375 all docs	375 docs citations	375 times ranked	12890 citing authors

#	Article	IF	Citations
1	Multisensory Proximity and Transition Cues for Improving Target Awareness in Narrow Field of View Augmented Reality Displays. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 1342-1362.	4.4	5
2	Cooperative Behavior Evokes Interbrain Synchrony in the Prefrontal and Temporoparietal Cortex: A Systematic Review and Meta-Analysis of fNIRS Hyperscanning Studies. ENeuro, 2022, 9, ENEURO.0268-21.2022.	1.9	34
3	Talking Cars, Doubtful Usersâ€"A Population Study in Virtual Reality. IEEE Transactions on Human-Machine Systems, 2022, 52, 602-612.	3.5	3
4	Finding landmarks - An investigation of viewing behavior during spatial navigation in VR using a graph-theoretical analysis approach. PLoS Computational Biology, 2022, 18, e1009485.	3.2	7
5	Learning sparse and meaningful representations through embodiment. Neural Networks, 2021, 134, 23-41.	5.9	3
6	Westdrive X LoopAR: An Open-Access Virtual Reality Project in Unity for Evaluating User Interaction Methods during Takeover Requests. Sensors, 2021, 21, 1879.	3.8	6
7	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. Frontiers in Psychology, 2021, 12, 604393.	2.1	3
8	Embodied Spatial Knowledge Acquisition in Immersive Virtual Reality: Comparison to Map Exploration. Frontiers in Virtual Reality, 2021, 2, .	3.7	6
9	#EEGManyLabs: Investigating the replicability of influential EEG experiments. Cortex, 2021, 144, 213-229.	2.4	52
10	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. Sensors, 2021, 21, 3145.	3.8	7
11	Coordinating With a Robot Partner Affects Neural Processing Related to Action Monitoring. Frontiers in Neurorobotics, 2021, 15, 686010.	2.8	4
12	Spike-timing-dependent plasticity can account for connectivity aftereffects of dual-site transcranial alternating current stimulation. NeuroImage, 2021, 237, 118179.	4.2	22
13	Interpersonal coordination in joint multiple object tracking.. Journal of Experimental Psychology: Human Perception and Performance, 2021, 47, 1166-1181.	0.9	1
14	Impact of a Vibrotactile Belt on Emotionally Challenging Everyday Situations of the Blind. Sensors, 2021, 21, 7384.	3.8	4
15	Biologically Inspired Deep Learning Model for Efficient Foveal-Peripheral Vision. Frontiers in Computational Neuroscience, 2021, 15, 746204.	2.1	2
16	Mutual Exclusivity in Pragmatic Agents. Cognitive Science, 2021, 46, e13069.	1.7	0
17	Neurophysiological correlates of collective perceptual decisionâ€making. European Journal of Neuroscience, 2020, 51, 1676-1696.	2.6	2
18	No Evidence for a Role of Spatially Modulated Î±-Band Activity in Tactile Remapping and Short-Latency, Overt Orienting Behavior. Journal of Neuroscience, 2020, 40, 9088-9102.	3.6	12

#	ARTICLE	IF	CITATIONS
19	Global visual salience of competing stimuli. Journal of Vision, 2020, 20, 27.	0.3	2
20	Hyperscanning: A Valid Method to Study Neural Inter-brain Underpinnings of Social Interaction. Frontiers in Human Neuroscience, 2020, 14, 39.	2.0	233
21	Project Westdrive: Unity City With Self-Driving Cars and Pedestrians for Virtual Reality Studies. Frontiers in ICT, 2020, 7, .	3.6	4
22	Dyadic and triadic search: Benefits, costs, and predictors of group performance. Attention, Perception, and Psychophysics, 2020, 82, 2415-2433.	1.3	9
23	Decoding Task From Oculomotor Behavior In Virtual Reality. , 2020, , .		6
24	Faces strongly attract early fixations in naturally sampled real-world stimulus materials. , 2020, , .		2
25	A quantitative analysis of the taxonomy of artistic styles. Journal of Eye Movement Research, 2020, 13, .	0.8	1
26	Learning of Spatial Properties of a Large-Scale Virtual City With an Interactive Map. Frontiers in Human Neuroscience, 2019, 13, 240.	2.0	15
27	How does the method change what we measure? Comparing virtual reality and text-based surveys for the assessment of moral decisions in traffic dilemmas. PLoS ONE, 2019, 14, e0223108.	2.5	12
28	Moral Judgements on the Actions of Self-Driving Cars and Human Drivers in Dilemma Situations From Different Perspectives. Frontiers in Psychology, 2019, 10, 2415.	2.1	35
29	Novel ERP Evidence for Processing Differences Between Negative and Positive Polarity Items in German. Frontiers in Psychology, 2019, 10, 376.	2.1	6
30	The Social Situation Affects How We Process Feedback About Our Actions. Frontiers in Psychology, 2019, 10, 361.	2.1	12
31	Long-range functional coupling predicts performance: Oscillatory EEG networks in multisensory processing. NeuroImage, 2019, 196, 114-125.	4.2	23
32	Enhancing Traffic Scene Predictions with Generative Adversarial Networks. , 2019, , .		1
33	Probing neural networks for dynamic switches of communication pathways. PLoS Computational Biology, 2019, 15, e1007551.	3.2	7
34	Are allocentric spatial reference frames compatible with theories of Enactivism?. Psychological Research, 2019, 83, 498-513.	1.7	12
35	Human Decisions in Moral Dilemmas are Largely Described by Utilitarianism: Virtual Car Driving Study Provides Guidelines for Autonomous Driving Vehicles. Science and Engineering Ethics, 2019, 25, 399-418.	2.9	85
36	Eye tracking in virtual reality. Journal of Eye Movement Research, 2019, 12, .	0.8	173

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37	Learning robust visual representations using data augmentation invariance. , 2019, , .		4
38	A new comprehensive eye-tracking test battery concurrently evaluating the Pupil Labs glasses and the EyeLink 1000. PeerJ, 2019, 7, e7086.	2.0	75
39	Saliency and the population receptive field model to identify images from brain activity. Journal of Vision, 2019, 19, 44.	0.3	0
40	Learning Representational Invariance Instead of Categorization. , 2019, , .		0
41	Embodied cognition. , 2018, , .		3
42	Using multimedia information and communication technology (ICT) to provide added value to reminiscence therapy for people with dementia. Zeitschrift Fur Gerontologie Und Geriatrie, 2018, 51, 9-15.	1.8	27
43	The World as an External Memory: The Price of Saccades in a Sensorimotor Task. Frontiers in Behavioral Neuroscience, 2018, 12, 253.	2.0	10
44	Natural visual behavior in individuals with peripheral visual-field loss. Journal of Vision, 2018, 18, 10.	0.3	5
45	Probing the temporal dynamics of the explorationâ€“exploitation dilemma of eye movements. Journal of Vision, 2018, 18, 6.	0.3	16
46	Group benefits in joint perceptual tasksâ€”a review. Annals of the New York Academy of Sciences, 2018, 1426, 166-178.	3.8	19
47	Entorhinal cortex receptive fields are modulated by spatial attention, even without movement. ELife, 2018, 7, .	6.0	36
48	Novel endoscope with increased depth of field for imaging human nasal tissue by microscopic optical coherence tomography. Biomedical Optics Express, 2018, 9, 636.	2.9	28
49	Let's Move It Together: A Review of Group Benefits in Joint Object Control. Frontiers in Psychology, 2018, 9, 918.	2.1	11
50	Autonomous Vehicles Require Socio-Political Acceptanceâ€”An Empirical and Philosophical Perspective on the Problem of Moral Decision Making. Frontiers in Behavioral Neuroscience, 2018, 12, 31.	2.0	54
51	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. Frontiers in Behavioral Neuroscience, 2018, 12, 128.	2.0	1
52	Interindividual differences among native right-to-left readers and native left-to-right readers during free viewing task. Visual Cognition, 2018, 26, 430-441.	1.6	5
53	Performance similarities predict collective benefits in dyadic and triadic joint visual search. PLoS ONE, 2018, 13, e0191179.	2.5	19
54	Further Advantages of Data Augmentation on Convolutional Neural Networks. Lecture Notes in Computer Science, 2018, , 95-103.	1.3	38

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55	Deep neural networks trained with heavier data augmentation learn features closer to representations in hIT. , 2018, , .		1
56	An extensive dataset of eye movements during viewing of complex images. Scientific Data, 2017, 4, 160126.	5.3	33
57	Differential Contribution of Low- and High-level Image Content to Eye Movements in Monkeys and Humans. Cerebral Cortex, 2017, 27, 279-293.	2.9	3
58	Multimodal integration, attention and sensory augmentation?. , 2017, , .		0
59	Exploration and Exploitation in Natural Viewing Behavior. Scientific Reports, 2017, 7, 2311.	3.3	25
60	Auditory Stimulus Detection Partially Depends on Visuospatial Attentional Resources. I-Perception, 2017, 8, 204166951668802.	1.4	14
61	Improving imaging of the air-liquid interface in living mice by aberration-corrected optical coherence tomography (mOCT) (Conference Presentation). , 2017, , .		0
62	Restricted vision increases sensorimotor cortex involvement in human walking. Journal of Neurophysiology, 2017, 118, 1943-1951.	1.8	54
63	EEG correlates of sensorimotor processing: independent components involved in sensory and motor processing. Scientific Reports, 2017, 7, 4461.	3.3	38
64	OLED microdisplays in near-to-eye applications: challenges and solutions. Proceedings of SPIE, 2017, , .	0.8	5
65	Representational Dynamics of Facial Viewpoint Encoding. Journal of Cognitive Neuroscience, 2017, 29, 637-651.	2.3	26
66	Dual task based cognitive stress induction and its influence on path integration. , 2017, , .		3
67	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. Frontiers in Psychology, 2017, 8, 669.	2.1	22
68	Can Limitations of Visuospatial Attention Be Circumvented? A Review. Frontiers in Psychology, 2017, 8, 1896.	2.1	10
69	Using Virtual Reality to Assess Ethical Decisions in Road Traffic Scenarios: Applicability of Value-of-Life-Based Models and Influences of Time Pressure. Frontiers in Behavioral Neuroscience, 2017, 11, 122.	2.0	70
70	Systems, Subjects, Sessions: To What Extent Do These Factors Influence EEG Data?. Frontiers in Human Neuroscience, 2017, 11, 150.	2.0	76
71	Independent Component Analysis and Source Localization on Mobile EEG Data Can Identify Increased Levels of Acute Stress. Frontiers in Human Neuroscience, 2017, 11, 310.	2.0	15
72	A Channel Rejection Method for Attenuating Motion-Related Artifacts in EEG Recordings during Walking. Frontiers in Neuroscience, 2017, 11, 225.	2.8	41

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73	Memory-guided attention during active viewing of edited dynamic scenes. Journal of Vision, 2017, 17, 12.	0.3	7
74	Is Attentional Resource Allocation Across Sensory Modalities Task-Dependent?. Advances in Cognitive Psychology, 2017, 13, 83-96.	0.5	89
75	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
76	Humans treat unreliable filled-in percepts as more real than veridical ones. ELife, 2017, 6, .	6.0	23
77	Visual Analytics of Gaze Data with Standard Multimedia Player. Journal of Eye Movement Research, 2017, 10, .	0.8	2
78	The dynamic effect of reading direction habit on spatial asymmetry of image perception. Journal of Vision, 2016, 16, 8.	0.3	26
79	STN-DBS Reduces Saccadic Hypometria but Not Visuospatial Bias in Parkinson's Disease Patients. Frontiers in Behavioral Neuroscience, 2016, 10, 85.	2.0	12
80	Bayesian Alternation during Tactile Augmentation. Frontiers in Behavioral Neuroscience, 2016, 10, 187.	2.0	14
81	Proposing Metrics for Benchmarking Novel EEG Technologies Towards Real-World Measurements. Frontiers in Human Neuroscience, 2016, 10, 188.	2.0	82
82	Attentional Resource Allocation in Visuotactile Processing Depends on the Task, But Optimal Visuotactile Integration Does Not Depend on Attentional Resources. Frontiers in Integrative Neuroscience, 2016, 10, 13.	2.1	31
83	Pupil Sizes Scale with Attentional Load and Task Experience in a Multiple Object Tracking Task. PLoS ONE, 2016, 11, e0168087.	2.5	62
84	Usability of EEG Systems. , 2016, , .		7
85	Extensive training leads to temporal and spatial shifts of cortical activity underlying visual category selectivity. NeuroImage, 2016, 134, 22-34.	4.2	9
86	Melanopsin Variants as Intrinsic Optogenetic On and Off Switches for Transient versus Sustained Activation of G Protein Pathways. Current Biology, 2016, 26, 1206-1212.	3.9	60
87	Learning a new sense by sensory augmentation. , 2016, , .		1
88	Induction and separation of motion artifacts in EEG data using a mobile phantom head device. Journal of Neural Engineering, 2016, 13, 036014.	3.5	94
89	Population performance of Moringa peregrina (Forssk.) Fiori (Moringaceae) at Sinai Peninsula, Egypt in the last decades: Consequences for its conservation. Journal for Nature Conservation, 2016, 34, 65-74.	1.8	4
90	Spectral fingerprints of largeâ€scale cortical dynamics during ambiguous motion perception. Human Brain Mapping, 2016, 37, 4099-4111.	3.6	25

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91	Oscillatory activity in auditory cortex reflects the perceptual level of audio-tactile integration. Scientific Reports, 2016, 6, 33693.	3.3	5
92	Oscillatory brain activity during multisensory attention reflects activation, disinhibition, and cognitive control. Scientific Reports, 2016, 6, 32775.	3.3	68
93	Spectral Signatures of Saccade Target Selection. Brain Topography, 2016, 29, 130-148.	1.8	5
94	Multisensory teamwork: using a tactile or an auditory display to exchange gaze information improves performance in joint visual search. Ergonomics, 2016, 59, 781-795.	2.1	37
95	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. PLoS Computational Biology, 2016, 12, e1005025.	3.2	90
96	Learning New Sensorimotor Contingencies: Effects of Long-Term Use of Sensory Augmentation on the Brain and Conscious Perception. PLoS ONE, 2016, 11, e0166647.	2.5	41
97	Eye movements as a window to cognitive processes. Journal of Eye Movement Research, 2016, 9, .	0.8	29
98	Hand Washing Induces a Clean Slate Effect in Moral Judgments: A Pupillometry and Eye-Tracking Study. Scientific Reports, 2015, 5, 10471.	3.3	23
99	Cultural background shapes spatial reference frame proclivity. Scientific Reports, 2015, 5, 11426.	3.3	45
100	A closer look at the apparent correlation of structural and functional connectivity in excitable neural networks. Scientific Reports, 2015, 5, 7870.	3.3	41
101	Irrelevant tactile stimulation biases visual exploration in external coordinates. Scientific Reports, 2015, 5, 10664.	3.3	12
102	Visual homeostatic processing in V1: when probability meets dynamics. Frontiers in Systems Neuroscience, 2015, 9, 6.	2.5	2
103	Crossmodal Integration Improves Sensory Detection Thresholds in the Ferret. PLoS ONE, 2015, 10, e0124952.	2.5	16
104	Audition and vision share spatial attentional resources, yet attentional load does not disrupt audiovisual integration. Frontiers in Psychology, 2015, 6, 1084.	2.1	48
105	Vision and Haptics Share Spatial Attentional Resources and Visuotactile Integration Is Not Affected by High Attentional Load. Multisensory Research, 2015, 28, 371-392.	1.1	33
106	The Occipital Face Area Is Causally Involved in Facial Viewpoint Perception. Journal of Neuroscience, 2015, 35, 16398-16403.	3.6	15
107	Feeling good, searching the bad: Positive priming increases attention and memory for negative stimuli on webpages. Computers in Human Behavior, 2015, 53, 332-343.	8.5	55
108	Oscillatory signatures of crossmodal congruence effects: An EEG investigation employing a visuotactile pattern matching paradigm. NeuroImage, 2015, 116, 177-186.	4.2	33

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109	Effects of contextual information and stimulus ambiguity on overt visual sampling behavior. Vision Research, 2015, 110, 76-86.	1.4	16
110	Predictions of Visual Content across Eye Movements and Their Modulation by Inferred Information. Journal of Neuroscience, 2015, 35, 7403-7413.	3.6	39
111	Primary Visual Cortex Represents the Difference Between Past and Present. Cerebral Cortex, 2015, 25, 1427-1440.	2.9	21
112	Phase synchrony facilitates binding and segmentation of natural images in a coupled neural oscillator network. Frontiers in Computational Neuroscience, 2014, 7, 195.	2.1	12
113	Kinesthetic and vestibular information modulate alpha activity during spatial navigation: a mobile EEG study. Frontiers in Human Neuroscience, 2014, 8, 71.	2.0	90
114	Real and implied motion at the center of gaze. Journal of Vision, 2014, 14, 2-2.	0.3	20
115	Spatial biases in viewing behavior. Journal of Vision, 2014, 14, 20-20.	0.3	79
116	The experience of new sensorimotor contingencies by sensory augmentation. Consciousness and Cognition, 2014, 28, 47-63.	1.5	58
117	The Contributions of Image Content and Behavioral Relevancy to Overt Attention. PLoS ONE, 2014, 9, e93254.	2.5	39
118	Where's the action? The pragmatic turn in cognitive science. Trends in Cognitive Sciences, 2013, 17, 202-209.	7.8	326
119	Saccadic Momentum and Facilitation of Return Saccades Contribute to an Optimal Foraging Strategy. PLoS Computational Biology, 2013, 9, e1002871.	3.2	57
120	Subcortical human face processing? Evidence from masked priming.. Journal of Experimental Psychology: Human Perception and Performance, 2013, 39, 989-1002.	0.9	22
121	Predictions in the light of your own action repertoire as a general computational principle. Behavioral and Brain Sciences, 2013, 36, 219-220.	0.7	10
122	Dissociation between saliency signals and activity in early visual cortex. Journal of Vision, 2013, 13, 6-6.	0.3	10
123	Emotions' Impact on Viewing Behavior under Natural Conditions. PLoS ONE, 2013, 8, e52737.	2.5	39
124	Space-Valence Priming with Subliminal and Supraliminal Words. Frontiers in Psychology, 2013, 4, 81.	2.1	25
125	Different strategies for spatial updating in yaw and pitch path integration. Frontiers in Behavioral Neuroscience, 2013, 7, 5.	2.0	25
126	Cortical long-range interactions embed statistical knowledge of natural sensory input: a voltage-sensitive dye imaging study. F1000Research, 2013, 2, 51.	1.6	12

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127	Prevalence of Selectivity for Mirror-Symmetric Views of Faces in the Ventral and Dorsal Visual Pathways. Journal of Neuroscience, 2012, 32, 11763-11772.	3.6	66
128	Combining EEG and eye tracking: Identification, characterization and correction of eye movement artifacts in electroencephalographic data. Biomedizinische Technik, 2012, 57, .	0.8	1
129	Unmasking the contribution of low-level features to the guidance of attention. Neuropsychologia, 2012, 50, 3478-3487.	1.6	20
130	The saccadic spike artifact in MEG. NeuroImage, 2012, 59, 1657-1667.	4.2	112
131	Sensory Augmentation for the Blind. Frontiers in Human Neuroscience, 2012, 6, 37.	2.0	61
132	Combining EEG and eye tracking: identification, characterization, and correction of eye movement artifacts in electroencephalographic data. Frontiers in Human Neuroscience, 2012, 6, 278.	2.0	253
133	Emotions and personality traits as high-level factors in visual attention: a review. Frontiers in Human Neuroscience, 2012, 6, 321.	2.0	55
134	Learning and Adaptation of Sensorimotor Contingencies: Prism-Adaptation, a Case Study. Lecture Notes in Computer Science, 2012, , 341-350.	1.3	1
135	Independent encoding of grating motion across stationary feature maps in primary visual cortex visualized with voltage-sensitive dye imaging. NeuroImage, 2011, 55, 1763-1770.	4.2	31
136	Natural Scene Evoked Population Dynamics across Cat Primary Visual Cortex Captured with Voltage-Sensitive Dye Imaging. Cerebral Cortex, 2011, 21, 2542-2554.	2.9	21
137	Sensitivity of different measures of the visibility of masked primes: Influences of primeâ€“response and primeâ€“target relations. Consciousness and Cognition, 2011, 20, 1473-1488.	1.5	4
138	Beyond Correlation: Do Color Features Influence Attention in Rainforest?. Frontiers in Human Neuroscience, 2011, 5, 36.	2.0	19
139	Overt Attention and Context Factors: The Impact of Repeated Presentations, Image Type, and Individual Motivation. PLoS ONE, 2011, 6, e21719.	2.5	66
140	Overt Visual Attention as a Causal Factor of Perceptual Awareness. PLoS ONE, 2011, 6, e22614.	2.5	34
141	Viewing behavior and the impact of low-level image properties across repeated presentations of complex scenes. Journal of Vision, 2011, 11, 26-26.	0.3	31
142	Integrative Processing of Perception and Reward in an Auditory Localization Paradigm. Experimental Psychology, 2011, 58, 217-226.	0.7	5
143	Measures and Limits of Models of Fixation Selection. PLoS ONE, 2011, 6, e24038.	2.5	51
144	Testing the theory of embodied cognition with subliminal words. Cognition, 2010, 116, 303-320.	2.2	45

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145	Getting realâ€"sensory processing of natural stimuli. Current Opinion in Neurobiology, 2010, 20, 389-395.	4.2	29
146	Developmental Changes in Natural Viewing Behavior: Bottom-Up and Top-Down Differences between Children, Young Adults and Older Adults. Frontiers in Psychology, 2010, 1, 207.	2.1	78
147	Unsupervised learning of reflexive and action-based affordances to model adaptive navigational behavior. Frontiers in Neurorobotics, 2010, 4, 2.	2.8	5
148	Influence of Low-Level Stimulus Features, Task Dependent Factors, and Spatial Biases on Overt Visual Attention. PLoS Computational Biology, 2010, 6, e1000791.	3.2	51
149	Involving Motor Capabilities in the Formation of Sensory Space Representations. PLoS ONE, 2010, 5, e10377.	2.5	6
150	Investigating task-dependent top-down effects on overt visual attention. Journal of Vision, 2010, 10, 1-14.	0.3	57
151	Perceptual learning of parametric face categories leads to the integration of high-level class-based information but not to high-level pop-out. Journal of Vision, 2010, 10, 20-20.	0.3	3
152	Influence of disparity on fixation and saccades in free viewing of natural scenes. Journal of Vision, 2009, 9, 29-29.	0.3	104
153	Gaze allocation in natural stimuli: Comparing free exploration to head-fixed viewing conditions. Visual Cognition, 2009, 17, 1132-1158.	1.6	86
154	Neural network realization of sensorimotor space organization using predictability and decorrelation. BMC Neuroscience, 2009, 10, .	1.9	0
155	Effects of luminance contrast and its modifications on fixation behavior during free viewing of images from different categories. Vision Research, 2009, 49, 1541-1553.	1.4	42
156	Visual stimulus locking of EEG is modulated by temporal congruency of auditory stimuli. Experimental Brain Research, 2009, 198, 137-151.	1.5	25
157	Eyeâ€"Head Coordination during Free Exploration in Human and Cat. Annals of the New York Academy of Sciences, 2009, 1164, 353-366.	3.8	24
158	Distinct Roles for Eye and Head Movements in Selecting Salient Image Parts during Natural Exploration. Annals of the New York Academy of Sciences, 2009, 1164, 188-193.	3.8	15
159	Saliency on a natural scene background: Effects of color and luminance contrast add linearly. Attention, Perception, and Psychophysics, 2009, 71, 1337-1352.	1.3	34
160	Proton Transfer in Carbonic Anhydrase Is Controlled by Electrostatics Rather than the Orientation of the Acceptor. Biochemistry, 2008, 47, 2369-2378.	2.5	79
161	What's color got to do with it? The influence of color on visual attention in different categories. Journal of Vision, 2008, 8, 6-6.	0.3	60
162	Salient features in gaze-aligned recordings of human visual input during free exploration of natural environments. Journal of Vision, 2008, 8, 12-12.	0.3	53

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163	Audio-visual integration during overt visual attention. Journal of Eye Movement Research, 2008, 1, .	0.8	14
164	Human eye-head co-ordination in natural exploration. Network: Computation in Neural Systems, 2007, 18, 267-297.	3.6	83
165	Saccade-related activity in areas 18 and 21a of cats freely viewing complex scenes. NeuroReport, 2007, 18, 401-404.	1.2	5
166	Integrating audiovisual information for the control of overt attention. Journal of Vision, 2007, 7, 11.	0.3	44
167	The role of first- and second-order stimulus features for human overt attention. Perception & Psychophysics, 2007, 69, 153-161.	2.3	29
168	The three-dimensional structure of in vitro reconstituted Xenopus laevis chromosomes by EM tomography. Chromosoma, 2007, 116, 349-372.	2.2	49
169	Dynamical features of higher-order correlation events: impact on cortical cells. Cognitive Neurodynamics, 2007, 1, 53-69.	4.0	8
170	Modulation of synchrony without changes in firing rates. Cognitive Neurodynamics, 2007, 1, 225-235.	4.0	20
171	Dynamical features of higher-order correlation events: impact on cortical cells. Cognitive Neurodynamics, 2007, 1, 273-273.	4.0	2
172	Auditory Gist Perception: An Alternative to Attentional Selection of Auditory Streams?. Lecture Notes in Computer Science, 2007, , 399-416.	1.3	17
173	Texture Signals in Whisker Vibrations. Journal of Neurophysiology, 2006, 95, 1792-1799.	1.8	103
174	Development of Effective Quantum Mechanical/Molecular Mechanical (QM/MM) Methods for Complex Biological Processes. Journal of Physical Chemistry B, 2006, 110, 6458-6469.	2.6	290
175	The relation of phase noise and luminance contrast to overt attention in complex visual stimuli. Journal of Vision, 2006, 6, 1-1.	0.3	35
176	A Model of the Ventral Visual System Based on Temporal Stability and Local Memory. PLoS Biology, 2006, 4, e120.	5.6	110
177	Feature selectivity in area 21a of the cat. NeuroReport, 2006, 17, 809-812.	1.2	4
178	Symbols as Self-emergent Entities in an Optimization Process of Feature Extraction and Predictions. Biological Cybernetics, 2006, 94, 325-334.	1.3	67
179	Differences of monkey and human overt attention under natural conditions. Vision Research, 2006, 46, 1194-1209.	1.4	68
180	Use of surface affinity enrichment and cryo-embedding to prepare in vitro reconstituted mitotic chromosomes for EM tomography. Ultramicroscopy, 2005, 103, 261-274.	1.9	2

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181	Learning viewpoint invariant object representations using a temporal coherence principle. Biological Cybernetics, 2005, 93, 79-90.	1.3	44
182	Learning of somatosensory representations for texture discrimination using a temporal coherence principle. Network: Computation in Neural Systems, 2005, 16, 223-238.	3.6	7
183	Neuroengineering---a renaissance in brain science: Tutorial Series from the 3rd Neuro-IT and Neuroengineering Summer School. Journal of Neural Engineering, 2005, 2, 3 p following inner cover.	3.5	0
184	Beyond sensory substitutionâ€"learning the sixth sense. Journal of Neural Engineering, 2005, 2, R13-R26.	3.5	165
185	Decoding a Temporal Population Code. Neural Computation, 2004, 16, 2079-2100.	2.2	15
186	High-order events in cortical networks: A lower bound. Physical Review E, 2004, 70, 051909.	2.1	6
187	Involving the motor system in decision making. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, S50-2.	2.6	13
188	Effects of Training on Neuronal Activity and Interactions in Primary and Higher Visual Cortices in the Alert Cat. Journal of Neuroscience, 2004, 24, 1627-1636.	3.6	24
189	A Comparison of Hemodynamic and Neural Responses in Cat Visual Cortex Using Complex Stimuli. Cerebral Cortex, 2004, 14, 881-891.	2.9	98
190	Two-State Membrane Potential Fluctuations Driven by Weak Pairwise Correlations. Neural Computation, 2004, 16, 2351-2378.	2.2	12
191	Directed interactions between visual areas and their role in processing image structure and expectancy. European Journal of Neuroscience, 2004, 20, 1391-1401.	2.6	20
192	Are switches in perception of the Necker cube related to eye position?. European Journal of Neuroscience, 2004, 20, 2811-2818.	2.6	61
193	Stimulus locking and feature selectivity prevail in complementary frequency ranges of V1 local field potentials. European Journal of Neuroscience, 2004, 19, 485-489.	2.6	64
194	Processing of complex stimuli and natural scenes in the visual cortex. Current Opinion in Neurobiology, 2004, 14, 468-473.	4.2	113
195	The world from a cat?s perspective ? statistics of natural videos. Biological Cybernetics, 2004, 90, 41-50.	1.3	138
196	Interactions between eye movement systems in cats and humans. Experimental Brain Research, 2004, 157, 215-24.	1.5	15
197	How Are Complex Cell Properties Adapted to the Statistics of Natural Stimuli?. Journal of Neurophysiology, 2004, 91, 206-212.	1.8	120
198	Temporal correlations of orientations in natural scenes. Neurocomputing, 2003, 52-54, 117-123.	5.9	33

#	Article	IF	Citations
199	Does luminance-contrast contribute to a saliency map for overt visual attention?. European Journal of Neuroscience, 2003, 17, 1089-1097.	2.6	185
200	On the Choice of a Sparse Prior. Reviews in the Neurosciences, 2003, 14, 53-62.	2.9	8
201	Cats can detect repeated noise stimuli. Neuroscience Letters, 2003, 346, 45-48.	2.1	7
202	Invariant representations of visual patterns in a temporal population code. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 324-329.	7.1	75
203	Properties of a Temporal Population Cod. Reviews in the Neurosciences, 2003, 14, 21-33.	2.9	7
204	Learning Distinct and Complementary Feature Selectivities from Natural Colour Videos. Reviews in the Neurosciences, 2003, 14, 43-52.	2.9	4
205	Internet-Enabled Interactive Multimedia Asthma Education Program: A Randomized Trial. Pediatrics, 2003, 111, 503-510.	2.1	255
206	Existence of high-order correlations in cortical activity. Physical Review E, 2003, 68, 041905.	2.1	4
207	Learning the Nonlinearity of Neurons from Natural Visual Stimuli. Neural Computation, 2003, 15, 1751-1759.	2.2	23
208	Sparse Spectrotemporal Coding of Sounds. Eurasip Journal on Advances in Signal Processing, 2003, 2003, 1.	1.7	45
209	Responses to Natural Scenes in Cat V1. Journal of Neurophysiology, 2003, 90, 1910-1920.	1.8	115
210	A Functional Gamma-Band Defined by Stimulus-Dependent Synchronization in Area 18 of Awake Behaving Cats. Journal of Neuroscience, 2003, 23, 4251-4260.	3.6	140
211	NEUROSCIENCE: Neurons in Action. Science, 2002, 296, 1817-1818.	12.6	10
212	Learning sensory maps with real-world stimuli in real time using a biophysically realistic learning rule. IEEE Transactions on Neural Networks, 2002, 13, 619-632.	4.2	12
213	Invariant encoding of spatial stimulus topology in the temporal domain. Neurocomputing, 2002, 44-46, 703-708.	5.9	2
214	Learning the invariance properties of complex cells from their responses to natural stimuli. European Journal of Neuroscience, 2002, 15, 475-486.	2.6	72
215	Learning Multiple Feature Representations from Natural Image Sequences. Lecture Notes in Computer Science, 2002, , 21-26.	1.3	3
216	Neurons with Two Sites of Synaptic Integration Learn Invariant Representations. Neural Computation, 2001, 13, 2823-2849.	2.2	15

#	Article	IF	Citations
217	Mechanisms to synchronize neuronal activity. Biological Cybernetics, 2001, 84, 153-172.	1.3	36
218	Non-contact eye-tracking on cats. Journal of Neuroscience Methods, 2001, 110, 103-111.	2.5	16
219	Efficient evaluation of serial sections by iterative Gabor matching. Journal of Neuroscience Methods, 2001, 111, 141-150.	2.5	7
220	Supervised and unsupervised learning with two sites of synaptic integration. Journal of Computational Neuroscience, 2001, 11, 207-215.	1.0	64
221	Learning in a neural network model in real time using real world stimuli. Neurocomputing, 2001, 38-40, 859-865.	5.9	1
222	Extracting Slow Subspaces from Natural Videos Leads to Complex Cells. Lecture Notes in Computer Science, 2001, , 1075-1080.	1.3	33
223	Learning with two sites of synaptic integration. Network: Computation in Neural Systems, 2000, 11, 25-39.	3.6	58
224	Bi-directional interactions between visual areas in the awake behaving cat. NeuroReport, 2000, 11, 689-692.	1.2	38
225	A learning rule for dynamic recruitment and decorrelation. Neural Networks, 2000, 13, 1-9.	5.9	22
226	A spike based learning rule for generation of invariant representations. Journal of Physiology (Paris), 2000, 94, 539-548.	2.1	5
227	Integrating top-down and bottom-up sensory processing by somato-dendritic interactions. Journal of Computational Neuroscience, 2000, 8, 161-173.	1.0	106
228	Top-down processing mediated by interareal synchronization. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 14748-14753.	7.1	651
229	Local and Global Gating of Synaptic Plasticity. Neural Computation, 2000, 12, 519-529.	2.2	21
230	The effects of cromolyn sodium and nedocromil sodium in early asthma prevention. Journal of Allergy and Clinical Immunology, 2000, 105, S575-S581.	2.9	14
231	Learning with two sites of synaptic integration. Network: Computation in Neural Systems, 2000, 11, 25-39.	3.6	10
232	On the directionality of cortical interactions studied by structural analysis of electrophysiological recordings. Biological Cybernetics, 1999, 81, 199-210.	1.3	130
233	Temporal Binding, Binocular Rivalry, and Consciousness. Consciousness and Cognition, 1999, 8, 128-151.	1.5	411
234	Does Time Help to Understand Consciousness?. Consciousness and Cognition, 1999, 8, 260-268.	1.5	13

#	Article	IF	Citations
235	On the Role of Biophysical Properties of Cortical Neurons in Binding and Segmentation of Visual Scenes. Neural Computation, 1999, 11, 1113-1138.	2.2	23
236	The influence of inhaled corticosteroids on bone mineral density in asthmatic children. Clinical and Experimental Allergy, 1998, 28, 1039-1042.	2.9	4
237	Group Report: Representations in Natural and Artificial Systems. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1998, 53, 738-751.	1.4	1
238	Active Sensing -Closing Multiple Loops. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1998, 53, 542-549.	1.4	24
239	Paradigm Shifts in the Neurobiology of Perception. , 1998, , 178-192.		1
240	Synchronization of oscillatory responses in visual cortex correlates with perception in interocular rivalry. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 12699-12704.	7.1	449
241	Internal context and top-down processing. Behavioral and Brain Sciences, 1997, 20, 691-692.	0.7	1
242	Visuomotor integration is associated with zero time-lag synchronization among cortical areas. Nature, 1997, 385, 157-161.	27.8	1,075
243	Evidence for benefits of early intervention with non-steroidal drugs in asthma. Pediatric Pulmonology, 1997, 24, 34-39.	2.0	3
244	Neurophysiological Relevance of Time. , 1997, , 133-157.		36
245	Integrator or coincidence detector? The role of the cortical neuron revisited. Trends in Neurosciences, 1996, 19, 130-137.	8.6	621
246	Role of Reticular Activation in the Modulation of Intracortical Synchronization. Science, 1996, 272, 271-274.	12.6	564
247	Synchronization of neuronal responses in the optic tectum of awake pigeons. Visual Neuroscience, 1996, 13, 575-584.	1.0	33
248	The Role of Neuronal Synchronization in Response Selection: A Biologically Plausible Theory of Structured Representations in the Visual Cortex. Journal of Cognitive Neuroscience, 1996, 8, 603-625.	2.3	156
249	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, 290-294.	7.1	283
250	Correlated firing in sensory-motor systems. Current Opinion in Neurobiology, 1995, 5, 511-519.	4.2	124
251	How Precise is Neuronal Synchronization?. Neural Computation, 1995, 7, 469-485.	2.2	186
252	Binding by temporal structure in multiple feature domains of an oscillatory neuronal network. Biological Cybernetics, 1994, 70, 397-405.	1.3	174

#	Article	IF	Citations
253	A method for the quantification of synchrony and oscillatory properties of neuronal activity. Journal of Neuroscience Methods, 1994, 54, 31-37.	2.5	107
254	Reduced Synchronization in the Visual Cortex of Cats with Strabismic Amblyopia. European Journal of Neuroscience, 1994, 6, 1645-1655.	2.6	246
255	Oscillations and Synchrony in the Visual Cortex: Evidence for Their Functional Relevance. , 1994, , 99-114.		3
256	Squint Affects Synchronization of Oscillatory Responses in Cat Visual Cortex. European Journal of Neuroscience, 1993, 5, 501-508.	2.6	135
257	Alternating oscillatory and stochastic states in a network of spiking neurons. Network: Computation in Neural Systems, 1993, 4, 243-257.	3.6	54
258	Assembly Formation and Segregation by a Self-Organizing Neuronal Oscillator Model. , 1993, , 509-513.		1
259	Temporal Structure Can Solve the Binding Problem for Multiple Feature Domains. , 1993, , 503-507.		0
260	Stimulus-Dependent Assembly Formation of Oscillatory Responses: III. Learning. Neural Computation, 1992, 4, 666-681.	2.2	22
261	Synchronization of oscillatory neuronal responses in cat striate cortex: Temporal properties. Visual Neuroscience, 1992, 8, 337-347.	1.0	358
262	Temporal coding in the visual cortex: new vistas on integration in the nervous system. Trends in Neurosciences, 1992, 15, 218-226.	8.6	662
263	Why does the cortex oscillate?. Current Biology, 1992, 2, 332-334.	3.9	36
264	Mechanisms Underlying the Generation of Neuronal Oscillations in Cat Visual Cortex. , 1992, , 29-45.		14
265	Correlated Neuronal Firing: a Clue to the Integrative Functions of Cortex?. Perspectives in Neural Computing, 1992, , 125-139.	0.1	0
266	Stimulus-Dependent Assembly Formation of Oscillatory Responses: I. Synchronization. Neural Computation, 1991, 3, 155-166.	2.2	331
267	Direct physiological evidence for scene segmentation by temporal coding.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 9136-9140.	7.1	393
268	Interhemispheric synchronization of oscillatory neuronal responses in cat visual cortex. Science, 1991, 252, 1177-1179.	12.6	988
269	Synchronization of oscillatory neuronal responses between striate and extrastriate visual cortical areas of the cat.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 6048-6052.	7.1	474
270	Stimulus-Dependent Assembly Formation of Oscillatory Responses: II. Desynchronization. Neural Computation, 1991, 3, 167-178.	2.2	73

#	Article	IF	Citations
271	Stimulus-Dependent Neuronal Oscillations in Cat Visual Cortex: Inter-Columnar Interaction as Determined by Cross-Correlation Analysis. European Journal of Neuroscience, 1990, 2, 588-606.	2.6	443
272	Stimulus-Dependent Neuronal Oscillations in Cat Visual Cortex: Receptive Field Properties and Feature Dependence. European Journal of Neuroscience, 1990, 2, 607-619.	2.6	333
273	Formation of Cortical Cell Assemblies. Cold Spring Harbor Symposia on Quantitative Biology, 1990, 55, 939-952.	1.1	51
274	Oscillatory responses in cat visual cortex exhibit inter-columnar synchronization which reflects global stimulus properties. Nature, 1989, 338, 334-337.	27.8	4,087
275	On Riccati equations describing impedance relations for forward and backward excitation in the oneâ€dimensional cochlea model. Journal of the Acoustical Society of America, 1987, 81, 408-411.	1.1	3
276	Forward and reverse waves in the one-dimensional model of the cochlea. Hearing Research, 1986, 23, 1-7.	2.0	13
277	A Unifying Approach to High- and Low-Level Cognition. , 0, , .		3