Gunnar Blohm

List of Publications by Year in descending order

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78 papers	1,928 citations	257450 24 h-index	315739 38 g-index
88 all docs	88 docs citations	88 times ranked	1658 citing authors

#	Article	IF	Citations
1	What Triggers Catch-Up Saccades During Visual Tracking?. Journal of Neurophysiology, 2002, 87, 1646-1650.	1.8	149
2	Multi-Class Motor Imagery EEG Decoding for Brain-Computer Interfaces. Frontiers in Neuroscience, 2012, 6, 151.	2.8	107
3	Decoding the Cortical Transformations for Visually Guided Reaching in 3D Space. Cerebral Cortex, 2009, 19, 1372-1393.	2.9	102
4	Kalman Filtering Naturally Accounts for Visually Guided and Predictive Smooth Pursuit Dynamics. Journal of Neuroscience, 2013, 33, 17301-17313.	3.6	97
5	Computations for geometrically accurate visually guided reaching in 3-D space. Journal of Vision, 2007, 7, 4.	0.3	68
6	Multisensory integration in orienting behavior: Pupil size, microsaccades, and saccades. Biological Psychology, 2017, 129, 36-44.	2.2	66
7	Multi-Sensory Weights Depend on Contextual Noise in Reference Frame Transformations. Frontiers in Human Neuroscience, 2010, 4, 221.	2.0	56
8	Direct Evidence for a Position Input to the Smooth Pursuit System. Journal of Neurophysiology, 2005, 94, 712-721.	1.8	54
9	On the neural implementation of the speed-accuracy trade-off. Frontiers in Neuroscience, 2014, 8, 236.	2.8	49
10	Processing of Retinal and Extraretinal Signals for Memory-Guided Saccades During Smooth Pursuit. Journal of Neurophysiology, 2005, 93, 1510-1522.	1.8	48
11	Proprioceptive Guidance of Saccades in Eyeâ€"Hand Coordination. Journal of Neurophysiology, 2006, 96, 1464-1477.	1.8	44
12	3D kinematics using dual quaternions: theory and applications in neuroscience. Frontiers in Behavioral Neuroscience, 2013, 7, 7.	2.0	42
13	The default allocation of attention is broadly ahead of smooth pursuit. Journal of Vision, 2010, 10, 7-7.	0.3	37
14	Integration of egocentric and allocentric information during memory-guided reaching to images of a natural environment. Frontiers in Human Neuroscience, 2014, 8, 636.	2.0	37
15	Influence of initial hand and target position on reach errors in optic ataxic and normal subjects. Journal of Vision, 2007, 7, 8.	0.3	36
16	Hierarchical control of two-dimensional gaze saccades. Journal of Computational Neuroscience, 2014, 36, 355-382.	1.0	36
17	MoVi: A large multi-purpose human motion and video dataset. PLoS ONE, 2021, 16, e0253157.	2.5	35
18	Interaction Between Smooth Anticipation and Saccades During Ocular Orientation in Darkness. Journal of Neurophysiology, 2003, 89, 1423-1433.	1.8	34

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19	Intrinsic Reference Frames of Superior Colliculus Visuomotor Receptive Fields during Head-Unrestrained Gaze Shifts. Journal of Neuroscience, 2011, 31, 18313-18326.	3.6	34
20	A New Method for EEG-Based Concealed Information Test. IEEE Transactions on Information Forensics and Security, 2013, 8, 520-527.	6.9	34
21	Weighted integration of short-term memory and sensory signals in the oculomotor system. Journal of Vision, 2018, 18, 16.	0.3	34
22	Catch-up saccades in head-unrestrained conditions reveal that saccade amplitude is corrected using an internal model of target movement. Journal of Vision, 2014, 14, 12-12.	0.3	33
23	Depth estimation from retinal disparity requires eye and head orientation signals. Journal of Vision, 2008, 8, 3-3.	0.3	29
24	Allocentric information is used for memory-guided reaching in depth: A virtual reality study. Vision Research, 2016, 129, 13-24.	1.4	29
25	Differential Influence of Attention on Gaze and Head Movements. Journal of Neurophysiology, 2009, 101, 198-206.	1.8	27
26	Saccade execution suppresses discrimination at distractor locations rather than enhancing the saccade goal location. European Journal of Neuroscience, 2015, 41, 1624-1634.	2.6	27
27	Fields of Gain in the Brain. Neuron, 2009, 64, 598-600.	8.1	26
28	Influence of Saccade Efference Copy on the Spatiotemporal Properties of Remapping: A Neural Network Study. Journal of Neurophysiology, 2010, 103, 117-139.	1.8	25
29	Temporal Evolution of Target Representation, Movement Direction Planning, and Reach Execution in Occipitalâ€"Parietalâ€"Frontal Cortex: An fMRI Study. Cerebral Cortex, 2017, 27, 5242-5260.	2.9	23
30	Visuomotor Velocity Transformations for Smooth Pursuit Eye Movements. Journal of Neurophysiology, 2010, 104, 2103-2115.	1.8	22
31	Predicting Cognitive Function from Clinical Measures of Physical Function and Health Status in Older Adults. PLoS ONE, 2015, 10, e0119075.	2.5	22
32	Anti-saccades predict cognitive functions in older adults and patients with Parkinsonâ€™s disease. PLoS ONE, 2018, 13, e0207589.	2.5	21
33	A model that integrates eye velocity commands to keep track of smooth eye displacements. Journal of Computational Neuroscience, 2006, 21, 51-70.	1.0	19
34	Head roll influences perceived hand position. Journal of Vision, 2011, 11, 3-3.	0.3	18
35	Contextual factors determine the use of allocentric information for reaching in a naturalistic scene. Journal of Vision, 2015, 15, 24.	0.3	18
36	Scene Configuration and Object Reliability Affect the Use of Allocentric Information for Memory-Guided Reaching. Frontiers in Neuroscience, 2017, 11, 204.	2.8	17

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37	Smooth anticipatory eye movements alter the memorized position of flashed targets. Journal of Vision, 2003, 3, 10.	0.3	16
38	Ten Simple Rules for Organizing and Running a Successful Intensive Two-Week Course. Neural Computation, 2019, 31, 1-7.	2.2	16
39	Target motion direction influence on tracking performance and head tracking strategies in head-unrestrained conditions. Journal of Vision, 2012, 12, 23-23.	0.3	15
40	Separate Ca2+ Sources Are Buffered by Distinct Ca2+ Handling Systems in Aplysia Neuroendocrine Cells. Journal of Neuroscience, 2013, 33, 6476-6491.	3.6	15
41	Neural correlate of spatial (misâ€)localization during smooth eye movements. European Journal of Neuroscience, 2016, 44, 1846-1855.	2.6	15
42	Simulating the Cortical 3D Visuomotor Transformation of Reach Depth. PLoS ONE, 2012, 7, e41241.	2.5	15
43	Saccadic Compensation for Smooth Eye and Head Movements During Head-Unrestrained Two-Dimensional Tracking. Journal of Neurophysiology, 2010, 103, 543-556.	1.8	14
44	Adaptive cluster analysis approach for functional localization using magnetoencephalography. Frontiers in Neuroscience, 2013, 7, 73.	2.8	14
45	Quantifying effects of stochasticity in reference frame transformations on posterior distributions. Frontiers in Computational Neuroscience, 2015, 9, 82.	2.1	14
46	Learned rather than online relative weighting of visual-proprioceptive sensory cues. Journal of Neurophysiology, 2018, 119, 1981-1992.	1.8	14
47	Vibrotactile information improves proprioceptive reaching target localization. PLoS ONE, 2018, 13, e0199627.	2.5	14
48	Neuromatch Academy: Teaching Computational Neuroscience with Global Accessibility. Trends in Cognitive Sciences, 2021, 25, 535-538.	7.8	14
49	Calcium-Dependent Calcium Decay Explains STDP in a Dynamic Model of Hippocampal Synapses. PLoS ONE, 2014, 9, e86248.	2.5	14
50	A How-to-Model Guide for Neuroscience. ENeuro, 2020, 7, ENEURO.0352-19.2019.	1.9	14
51	Neck muscle spindle noise biases reaches in a multisensory integration task. Journal of Neurophysiology, 2018, 120, 893-909.	1.8	13
52	Causal evidence for posterior parietal cortex involvement in visual-to-motor transformations of reach targets. Cortex, 2013, 49, 2439-2448.	2.4	12
53	Accounting for direction and speed of eye motion in planning visually guided manual tracking. Journal of Neurophysiology, 2013, 110, 1945-1957.	1.8	11
54	Neural dynamics implement a flexible decision bound with a fixed firing rate for choice: a model-based hypothesis. Frontiers in Neuroscience, 2014, 8, 318.	2.8	11

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55	Evidence for a retinal velocity memory underlying the direction of anticipatory smooth pursuit eye movements. Journal of Neurophysiology, 2013, 110, 732-747.	1.8	10
56	Effects of a pretarget distractor on saccade reaction times across space and time in monkeys and humans. Journal of Vision, 2016, 16, 5.	0.3	10
57	Corrective response times in a coordinated eye-head-arm countermanding task. Journal of Neurophysiology, 2018, 119, 2036-2051.	1.8	10
58	Comparing limb proprioception and oculomotor signals during hand-guided saccades. Experimental Brain Research, 2007, 182, 189-198.	1.5	9
59	EEG-Based Perceived Tactile Location Prediction. IEEE Transactions on Autonomous Mental Development, 2015, 7, 342-348.	1.6	9
60	Predicted Position Error Triggers Catch-Up Saccades during Sustained Smooth Pursuit. ENeuro, 2020, 7, ENEURO.0196-18.2019.	1.9	8
61	Accurate planning of manual tracking requires a 3D visuomotor transformation of velocity signals. Journal of Vision, 2012, 12, 6-6.	0.3	7
62	Ca²⁺-induced uncoupling of<i>Aplysia</i>bag cell neurons. Journal of Neurophysiology, 2015, 113, 808-821.	1.8	7
63	Ca2+ removal by the plasma membrane Ca2+-ATPase influences the contribution of mitochondria to activity-dependent Ca2+ dynamics in Aplysia neuroendocrine cells. Journal of Neurophysiology, 2016, 115, 2615-2634.	1.8	7
64	Computations underlying the visuomotor transformation for smooth pursuit eye movements. Journal of Neurophysiology, 2015, 113, 1377-1399.	1.8	6
65	Saccade-induced changes in ocular torsion reveal predictive orientation perception. Journal of Vision, 2019, 19, 10.	0.3	5
66	Confidence in predicted position error explains saccadic decisions during pursuit. Journal of Neurophysiology, 2021, 125, 748-767.	1.8	4
67	Movement drift in optic ataxia reveals deficits in hand state estimation in oculocentric coordinates.. Journal of Experimental Psychology: Human Perception and Performance, 2021, 47, 635-647.	0.9	4
68	Transsaccadic memory of multiple spatially variant and invariant object features. Journal of Vision, 2018, 18, 6.	0.3	3
69	Effects of Local Gravity Compensation on Motor Control During Altered Environmental Gravity. Frontiers in Neural Circuits, 2021, 15, 750267.	2.8	3
70	Motor imagery helps updating internal models during microgravity exposure. Journal of Neurophysiology, 2022, , .	1.8	3
71	Effects of Simulated Microgravity and Hypergravity Conditions on Arm Movements in Normogravity. Frontiers in Neural Circuits, 2021, 15, 750176.	2.8	3
72	Effector-dependent stochastic reference frame transformations alter decision-making. Journal of Vision, 2022, 22, 1.	0.3	3

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73	Reaching around obstacles accounts for uncertainty in coordinate transformations. Journal of Neurophysiology, 2020, 123, 1920-1932.	1.8	2
74	Misperception of motion in depth originates from an incomplete transformation of retinal signals. Journal of Vision, 2019, 19, 21.	0.3	1
75	Strategic working memory performance may confound the interpretation of cumulative task statistics. Journal of Vision, 2018, 18, 685.	0.3	1
76	Hierarchical recruitment of competition alleviates working memory overload in a frontoparietal model. Journal of Vision, 2019, 19, 8.	0.3	0
77	Transforming retinal velocity into 3D motor coordinates for pursuit eye movements. IFMBE Proceedings, 2009, , 55-58.	0.3	0
78	Neuromatch Academy: a 3-week, online summer school in computational neuroscience. The Journal of Open Source Education, 2022, 5, 118.	0.4	0