Miguel P Eckstein

List of Publications by Year
in descending order

101	3,932	156536	139680
papers	citations	32 h-index	61 g-index

103	103	103	2969
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gaze-cued shifts of attention and microsaccades are sustained for whole bodies but are transient for body parts. Psychonomic Bulletin and Review, 2022, 29, 1854-1878.	1.4	4
2	EEG signatures of contextual influences on visual search with real scenes. Experimental Brain Research, 2021, 239, 797-809.	0.7	3
3	Comparative observer effects in 2D and 3D localization tasks. Journal of Medical Imaging, 2021, 8, 041206.	0.8	2
4	Under-exploration of Three-Dimensional Images Leads to Search Errors for Small Salient Targets. Current Biology, 2021, 31, 1099-1106.e5.	1.8	14
5	The transverse occipital sulcus and intraparietal sulcus show neural selectivity to object-scene size relationships. Communications Biology, 2021, 4, 768.	2.0	6
6	Peripheral facial features guiding eye movements and reducing fixational variability. Journal of Vision, 2021, 21, 7.	0.1	5
7	Medical image quality metrics for foveated model observers. Journal of Medical Imaging, 2021, 8, 041209.	0.8	1
8	Neuronal Population Tuning Statistics to Target and Cues for a feed-Forward Convolutional Neural Network that Learns to Covertly Attend. Journal of Vision, 2021, 21, 2885.	0.1	0
9	The preferred fixation location on the face modulates the locus of the Composite Face Effect. Journal of Vision, 2021, 21, 2534.	0.1	0
10	Guiding search in 3D volumes with 2D synthesized images. Journal of Vision, 2021, 21, 2919.	0.1	0
11	Sustained orienting of attention and microsaccades with dynamic social cues require the joint presence of heads and bodies. Journal of Vision, 2021, 21, 1837.	0.1	0
12	Eye movement strategies in face ethnicity categorization vs. face identification tasks. Vision Research, 2021, 186, 59-70.	0.7	4
13	Benefits of Independent Double Reading in Digital Mammography. Academic Radiology, 2019, 26, 717-723.	1.3	19
14	Evolution of decision weights and eye movements through learning in visual search. Journal of Vision, 2019, 19, 26b.	0.1	0
15	Looking at the preferred point of fixation mediates the composite face effect. Journal of Vision, 2019, 19, 216.	0.1	0
16	Classification images for localization performance in rampâ€spectrum noise. Medical Physics, 2018, 45, 1970-1984.	1.6	10
17	Introduction to Special Issue on Perceptual Learning. Vision Research, 2018, 152, 1-2.	0.7	0
18	Retinal-specific category learning. Nature Human Behaviour, 2018, 2, 500-506.	6.2	15

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19	The unique face-centered human strategy to search for people in the wild. Journal of Vision, 2018, 18, 520.	0.1	0
20	Dissociations in ideal and human observer visual search in 3D images. Journal of Vision, 2018, 18, 131.	0.1	0
21	Neural representation of object-scene scale consistency. Journal of Vision, 2018, 18, 1243.	0.1	0
22	Peripheral cues guiding the first eye movement to faces. Journal of Vision, 2018, 18, 233.	0.1	0
23	Disrupting features in faces: Configural representations or interaction with foveated vision?. Journal of Vision, 2018, 18, 354.	0.1	0
24	A foveated object detector that misses giant and misplaced targets in scenes. Journal of Vision, 2018, 18, 3.	0.1	6
25	The wisdom of crowds for visual search. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4306-E4315.	3.3	9
26	Domain Specificity of Oculomotor Learning after Changes in Sensory Processing. Journal of Neuroscience, 2017, 37, 11469-11484.	1.7	12
27	Humans, but Not Deep Neural Networks, Often Miss Giant Targets in Scenes. Current Biology, 2017, 27, 2827-2832.e3.	1.8	53
28	Probabilistic Computations for Attention, Eye Movements, and Search. Annual Review of Vision Science, 2017, 3, 319-342.	2.3	32
29	Object detection through search with a foveated visual system. PLoS Computational Biology, 2017, 13, e1005743.	1.5	48
30	Temporal and peripheral extraction of contextual cues from scenes during visual search. Journal of Vision, 2017, 17, 16.	0.1	8
31	Beyond scene gist: Objects guide search more than scene background.. Journal of Experimental Psychology: Human Perception and Performance, 2017, 43, 1177-1193.	0.7	25
32	Peripheral Representations Enhance Dense Clutter Metrics in Free Search. Journal of Vision, 2017, 17, 219.	0.1	1
33	Initial fixation to faces during gender identification is optimized for natural statistics of expressions. Journal of Vision, 2017, 17, 251.	0.1	0
34	Fixation sequence consistency during face identification. Journal of Vision, 2016, 16, 69.	0.1	1
35	The Influence of Visual Clutter on Search Guidance with Complex Scenes. Journal of Vision, 2016, 16, 1320.	0.1	0
36	Scene Context Leads to Inattentional Scale Blindness during Search. Journal of Vision, 2016, 16, 1297.	0.1	0

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37	Eye movements during challenging cultural group identification of faces. Journal of Vision, 2016, 16, 70.	0.1	0
38	Multimodal neuroimaging evidence linking memory and attention systems during visual search cued by context. Annals of the New York Academy of Sciences, 2015, 1339, 176-189.	1.8	18
39	Computational models of visual attention. Vision Research, 2015, 116, 93-94.	0.7	10
40	Derivation of an Observer Model Adapted to Irregular Signals Based on Convolution Channels. IEEE Transactions on Medical Imaging, 2015, 34, 1428-1435.	5.4	12
41	Optimal and human eye movements to clustered low value cues to increase decision rewards during search. Vision Research, 2015, 113, 137-154.	0.7	23
42	Scene context reduces distractor set-size effects during search. Journal of Vision, 2015, 15, 55.	0.1	0
43	Independent Contributions of Multiple Types of Scene Context on Eye Movement Guidance and Visual Search Performance. Journal of Vision, 2015, 15, 756.	0.1	0
44	Optimal point of fixation to faces for vision with a simulated central scotoma. Journal of Vision, 2015, 15, 933.	0.1	1
45	Greater benefits of collective integration in visual search. Journal of Vision, 2015, 15, 468.	0.1	0
46	Isolating the Neural Mechanisms of Interference during Continuous Multisensory Dual-task Performance. Journal of Cognitive Neuroscience, 2014, 26, 476-489.	1.1	16
47	Observer efficiency in free-localization tasks with correlated noise. Frontiers in Psychology, 2014, 5, 345.	1.1	17
48	Single-Trial Classification of Event-Related Potentials in Rapid Serial Visual Presentation Tasks Using Supervised Spatial Filtering. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 2030-2042.	7.2	94
49	Foveal analysis and peripheral selection during active visual sampling. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E291-9.	3.3	54
50	Learning optimal eye movements to unusual faces. Vision Research, 2014, 99, 57-68.	0.7	16
51	Attentional modulation: Target selection, active search and cognitive processing. Vision Research, 2013, 85, 1-4.	0.7	2
52	Rethinking human visual attention: Spatial cueing effects and optimality of decisions by honeybees, monkeys and humans. Vision Research, 2013, 85, 5-19.	0.7	50
53	Neural Representations of Contextual Guidance in Visual Search of Real-World Scenes. Journal of Neuroscience, 2013, 33, 7846-7855.	1.7	60
54	Estimating the Relative Utility of Screening Mammography. Medical Decision Making, 2013, 33, 510-520.	1.2	15

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55	Feature-Independent Neural Coding of Target Detection during Search of Natural Scenes. Journal of Neuroscience, 2012, 32, 9499-9510.	1.7	16
56	Looking just below the eyes is optimal across face recognition tasks. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3314-23.	3.3	245
57	Neural decoding of collective wisdom with multi-brain computing. NeuroImage, 2012, 59, 94-108.	2.1	62
58	Vision Research special issue on â€œVisual attentionâ€• Vision Research, 2012, 74, 1.	0.7	1
59	Impact of target probability on single-trial EEG target detection in a difficult rapid serial visual presentation task. , 2011, 2011, 6381-4.		16
60	Object co-occurrence serves as a contextual cue to guide and facilitate visual search in a natural viewing environment. Journal of Vision, 2011, 11, 9-9.	0.1	83
61	Visual search: A retrospective. Journal of Vision, 2011, 11, 14-14.	0.1	332
62	Learning motion: Human vs. optimal Bayesian learner. Vision Research, 2010, 50, 460-472.	0.7	4
63	An Equivalent Relative Utility Metric for Evaluating Screening Mammography. Medical Decision Making, 2010, 30, 113-122.	1.2	19
64	Evolution and Optimality of Similar Neural Mechanisms for Perception and Action during Search. PLoS Computational Biology, 2010, 6, e1000930.	1.5	18
65	Predicting variations of perceptual performance across individuals from neural activity using pattern classifiers. NeuroImage, 2010, 51, 1425-1437.	2.1	69
66	Virtual evolution for visual search in natural images results in behavioral receptive fields with inhibitory surrounds. Visual Neuroscience, 2009, 26, 93-108.	0.5	7
67	Gaze control and memory for objects while walking in a real world environment. Visual Cognition, 2009, 17, 1159-1184.	0.9	19
68	The surprisingly high human efficiency at learning to recognize faces. Vision Research, 2009, 49, 301-314.	0.7	8
69	Statistical decision theory to relate neurons to behavior in the study of covert visual attention. Vision Research, 2009, 49, 1097-1128.	0.7	67
70	Mammographic texture synthesis: second-generation clustered lumpy backgrounds using a genetic algorithm. Optics Express, 2008, 16, 7595.	1.7	37
71	73.1: Invited Paper: Modeling the Effect of Image Noise on Perceptual Decisions. Digest of Technical Papers SID International Symposium, 2008, 39, 1127.	0.1	0
72	Similar Neural Representations of the Target for Saccades and Perception during Search. Journal of Neuroscience, 2007, 27, 1266-1270.	1.7	49

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73	Evaluation of internal noise methods for Hotelling observer models. Medical Physics, 2007, 34, 3312-3322.	1.6	62
74	Semiautomatic Mammographic Parenchymal Patterns Classification Using Multiple Statistical Features. Academic Radiology, 2007, 14, 1486-1499.	1.3	30
75	Limited flexibility in the filter underlying saccadic targeting. Vision Research, 2007, 47, 280-288.	0.7	10
76	Attentional Cues in Real Scenes, Saccadic Targeting, and Bayesian Priors. Psychological Science, 2006, 17, 973-980.	1.8	159
77	The effect of nonlinear human visual system components on performance of a channelized Hotelling observer in structured backgrounds. IEEE Transactions on Medical Imaging, 2006, 25, 1348-1362.	5.4	42
78	Classification images of two right hemisphere patients: A window into the attentional mechanisms of spatial neglect. Brain Research, 2006, 1080, 26-52.	1.1	4
79	Task-based model/human observer evaluation of SPIHT wavelet compression with human visual system-based quantization1. Academic Radiology, 2005, 12, 324-336.	1.3	18
80	Signal detection theory applied to three visual search tasks â€" identification, yes/no detection and localization. Spatial Vision, 2004, 17, 295-325.	1.4	77
81	The time course of visual information accrual guiding eye movement decisions. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13086-13090.	3.3	103
82	Automated Optimization of JPEG 2000 Encoder Options Based on Model Observer Performance for Detecting Variable Signals in X-Ray Coronary Angiograms. IEEE Transactions on Medical Imaging, 2004, 23, 459-474.	5.4	36
83	Evaluation of JPEG 2000 Encoder Options: Human and Model Observer Detection of Variable Signals in X-Ray Coronary Angiograms. IEEE Transactions on Medical Imaging, 2004, 23, 613-632.	5.4	37
84	The footprints of visual attention during search with 100% valid and 100% invalid cues. Vision Research, 2004, 44, 1193-1207.	0.7	46
85	An ideal observer with channels versus feature-independent processing of spatial frequency and orientation in visual search performance. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 2197.	0.8	11
86	Automated computer evaluation and optimization of image compression of x-ray coronary angiograms for signal known exactly detection tasks. Optics Express, 2003, 11, 460.	1.7	89
87	Search for lesions in mammograms: Statistical characterization of observer responses. Medical Physics, 2003, 31, 24-36.	1.6	36
88	Optimal shifted estimates of human-observer templates in two-alternative forced-choice experiments. IEEE Transactions on Medical Imaging, 2002, 21, 429-440.	5.4	29
89	The footprints of visual attention in the Posner cueing paradigm revealed by classification images. Journal of Vision, 2002, 2, 3.	0.1	128
90	Classification images: A tool to analyze visual strategies. Journal of Vision, 2002, 2, i.	0.1	92

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91	Quantifying the Performance Limits of Human Saccadic Targeting during Visual Search. Perception, 2001, 30, 1389-1401.	0.5	52
92	Effects of luminance oscillations on simulated lightness discriminations. Perception & Psychophysics, 2001, 63, 1048-1062.	2.3	1
93	A signal detection model predicts the effects of set size on visual search accuracy for feature, conjunction, triple conjunction, and disjunction displays. Perception & Psychophysics, 2000, 62, 425-451.	2.3	272
94	Simulating coronary arteries in x-ray angiograms. Medical Physics, 2000, 27, 2438-2444.	1.6	11
95	Spatial covert attention increases contrast sensitivity across the CSF: support for signal enhancement. Vision Research, 2000, 40, 1203-1215.	0.7	417
96	Statistical texture synthesis of mammographic images with super-blob lumpy backgrounds. Optics Express, 1999, 4, 33.	1.7	113
97	Observer performance for JPEG vs Wavelet image compression of x-ray coronary angiograms. Optics Express, 1999, 5, 8.	1.7	16
98	The Lower Visual Search Efficiency for Conjunctions Is Due to Noise and not Serial Attentional Processing. Psychological Science, 1998, 9, 111-118.	1.8	230
99	Why Do Anatomic Backgrounds Reduce Lesion Detectability?. Investigative Radiology, 1998, 33, 203-208.	3.5	5
100	Role of knowledge in human visual temporal integration in spatiotemporal noise. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 1960.	0.8	32
101	Lesion detection in structured noise. Academic Radiology, 1995, 2, 249-253.	1.3	53