Martin S Banks

List of Publications by Year
in descending order

89 papers	12,952 citations	36303 51 h-index	51608 86 g-index
90 all docs	90 docs citations	90 times ranked	6442 citing authors

#	Article	IF	Citations
1	Crossedâ€“uncrossed projections from primate retina are adapted to disparities of natural scenes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
2	The blur horopter: Retinal conjugate surface in binocular viewing. Journal of Vision, 2021, 21, 8.	0.3	4
3	Solving Parallax Error for 3D Eye Tracking. , 2021, , .		5
4	Integrating High Fidelity Eye, Head and World Tracking in a Wearable Device. , 2021, , .		0
5	Optics and neural adaptation jointly limit human stereovision. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	3
6	Binocular Eye Movements Are Adapted to the Natural Environment. Journal of Neuroscience, 2019, 39, 2877-2888.	3.6	46
7	Visible Artifacts and Limitations in Stereoscopic 3D Displays. Information Display, 2017, 33, 12-17.	0.2	4
8	Accommodation and comfort in head-mounted displays. ACM Transactions on Graphics, 2017, 36, 1-11.	7.2	85
9	The natural statistics of blur. Journal of Vision, 2016, 16, 23.	0.3	29
10	Blur and the perception of depth at occlusions. Journal of Vision, 2016, 16, 17.	0.3	37
11	Stereoscopic depth constancy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150253.	4.0	14
12	Dynamic lens and monovision 3D displays to improve viewer comfort. Optics Express, 2016, 24, 11808.	3.4	59
13	3D Displays. Annual Review of Vision Science, 2016, 2, 397-435.	4.4	47
14	Stereopsis is adaptive for the natural environment. Science Advances, 2015, 1, .	10.3	92
15	Stereoscopic 3D display technique using spatiotemporal interlacing has improved spatial and temporal properties. Optics Express, 2015, 23, 9252.	3.4	9
16	Why do animal eyes have pupils of different shapes?. Science Advances, 2015, 1, e1500391.	10.3	136
17	Optimal presentation of imagery with focus cues on multi-plane displays. ACM Transactions on Graphics, 2015, 34, 1-12.	7.2	87
18	Motion artifacts on 240-Hz OLED stereoscopic 3D displays. Journal of the Society for Information Display, 2014, 22, 393-403.	2.1	8

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19	240â€‰Hz OLED technology properties that can enable improved image quality. Journal of the Society for Information Display, 2014, 22, 346-356.	2.1	13
20	Camera Focal Length and the Perception of Pictures. Ecological Psychology, 2014, 26, 30-46.	1.1	19
21	Stereoscopic 3D display with color interlacing improves perceived depth. Optics Express, 2014, 22, 31924.	3.4	7
22	The Limits of Human Stereopsis in Space and Time. Journal of Neuroscience, 2014, 34, 1397-1408.	3.6	54
23	The rate of change of vergenceâ€"accommodation conflict affects visual discomfort. Vision Research, 2014, 105, 159-165.	1.4	59
24	The venetian-blind effect: a preference for zero disparity or zero slant?. Frontiers in Psychology, 2013, 4, 836.	2.1	4
25	Visual discomfort with stereo 3D displays when the head is not upright. Proceedings of SPIE, 2012, 8288, 828814.	0.8	12
26	The perceptual basis of common photographic practice. Journal of Vision, 2012, 12, 8-8.	0.3	47
27	65.1: Effective Spatial Resolution of Temporally and Spatially Interlaced Stereo 3D Televisions. Digest of Technical Papers SID International Symposium, 2012, 43, 879-882.	0.3	9
28	Blur and Disparity Are Complementary Cues to Depth. Current Biology, 2012, 22, 426-431.	3.9	128
29	Creating effective focus cues in multi-plane 3D displays. Optics Express, 2011, 19, 20940.	3.4	82
30	Temporal presentation protocols in stereoscopic displays: Flicker visibility, perceived motion, and perceived depth. Journal of the Society for Information Display, 2011, 19, 271-297.	2.1	53
31	The zone of comfort: Predicting visual discomfort with stereo displays. Journal of Vision, 2011, 11, 11-11.	0.3	472
32	The vertical horopter is not adaptable, but it may be adaptive. Journal of Vision, 2011, 11, 20-20.	0.3	35
33	Human Stereopsis Is Not Limited by the Optics of the Well-Focused Eye. Journal of Neuroscience, 2011, 31, 9814-9818.	3.6	14
34	Using blur to affect perceived distance and size. ACM Transactions on Graphics, 2010, 29, 1-16.	7.2	113
35	Visualâ€"Haptic Adaptation Is Determined by Relative Reliability. Journal of Neuroscience, 2010, 30, 7714-7721.	3.6	80
36	Vestibular Heading Discrimination and Sensitivity to Linear Acceleration in Head and World Coordinates. Journal of Neuroscience, 2010, 30, 9084-9094.	3.6	140

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37	Natural-Scene Statistics Predict How the Figureâ€"Ground Cue of Convexity Affects Human Depth Perception. Journal of Neuroscience, 2010, 30, 7269-7280.	3.6	116
38	Limits of stereopsis explained by local cross-correlation. Journal of Vision, 2009, 9, 8-8.	0.3	70
39	Temporal mechanisms of multimodal binding. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1761-1769.	2.6	47
40	Auditory dominance over vision in the perception of interval duration. Experimental Brain Research, 2009, 198, 49-57.	1.5	202
41	High-speed switchable lens enables the development of a volumetric stereoscopic display. Optics Express, 2009, 17, 15716.	3.4	233
42	Perception of 3-D Layout in Stereo Displays. Information Display, 2009, 25, 12-16.	0.2	9
43	Vergenceâ€"accommodation conflicts hinder visual performance and cause visual fatigue. Journal of Vision, 2008, 8, 33.	0.3	1,201
44	Misperceptions in stereoscopic displays. , 2008, 2008, 23-32.		72
45	The surface of the empirical horopter. Journal of Vision, 2008, 8, 7.	0.3	46
46	Consequences of Incorrect Focus Cues in Stereo Displays. Journal of the Society for Information Display, 2008, 24, 7.	2.1	4
47	A Bayesian model of the disambiguation of gravitoinertial force by visual cues. Experimental Brain Research, 2007, 179, 263-290.	1.5	214
48	Why pictures look right when viewed from the wrong place. Nature Neuroscience, 2005, 8, 1401-1410.	14.8	142
49	Focus cues affect perceived depth. Journal of Vision, 2005, 5, 7.	0.3	250
50	Optimal Compensation for Changes in Task-Relevant Movement Variability. Journal of Neuroscience, 2005, 25, 7169-7178.	3.6	156
51	A stereo display prototype with multiple focal distances. ACM Transactions on Graphics, 2004, 23, 804-813.	7.2	257
52	Why Is Spatial Stereoresolution So Low?. Journal of Neuroscience, 2004, 24, 2077-2089.	3.6	147
53	Neuroscience: What You See and Hear Is What You Get. Current Biology, 2004, 14, R236-R238.	3.9	6
54	Relative image size, not eye position, determines eye dominance switches. Vision Research, 2004, 44, 229-234.	1.4	32

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55	Viewing Geometry Determines How Vision and Haptics Combine in Size Perception. Current Biology, 2003, 13, 483-488.	3.9	138
56	Humans integrate visual and haptic information in a statistically optimal fashion. Nature, 2002, 415, 429-433.	27.8	3,906
57	Are corresponding points fixed?. Vision Research, 2001, 41, 2457-2473.	1.4	73
58	Adaptation to three-dimensional distortions in human vision. Nature Neuroscience, 2001, 4, 1063-1064.	14.8	78
59	Touch can change visual slant perception. Nature Neuroscience, 2000, 3, 69-73.	14.8	211
60	Extraretinal and retinal amplitude and phase errors during Filehne illusion and path perception. Perception & Psychophysics, 2000, 62, 900-909.	2.3	29
61	Horizontal and vertical disparity, eye position, and stereoscopic slant perception. Vision Research, 1999, 39, 1143-1170.	1.4	200
62	Estimator Reliability and Distance Scaling in Stereoscopic Slant Perception. Perception, 1999, 28, 217-242.	1.2	70
63	An analysis of binocular slant contrast. Perception, 1999, 28, 1121-1145.	1.2	23
64	Visual self-motion perception during head turns. Nature Neuroscience, 1998, 1, 732-737.	14.8	132
65	Extra-retinal and perspective cues cause the small range of the induced effect. Vision Research, 1998, 38, 187-194.	1.4	67
66	Perceived head-centric speed is affected by both extra-retinal and retinal errors. Vision Research, 1998, 38, 941-945.	1.4	93
67	Depth information and perceived self-motion during simulated gaze rotations. Vision Research, 1998, 38, 3129-3145.	1.4	54
68	Optical, receptoral, and retinal constraints on foveal and peripheral vision in the human neonate. Vision Research, 1998, 38, 3857-3870.	1.4	76
69	Ideal observer for heading judgments. Vision Research, 1996, 36, 471-490.	1.4	60
70	Estimating heading during real and simulated eye movements. Vision Research, 1996, 36, 431-443.	1.4	144
71	Gravitational acceleration as a cue for absolute size and distance?. Perception & Psychophysics, 1996, 58, 1066-1075.	2.3	132
72	Estimating heading during eye movements. Vision Research, 1994, 34, 3197-3214.	1.4	241

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73	Perceiving heading with different retinal regions and types of optic flow. Perception & Psychophysics, 1993, 53, 325-337.	2.3	171
74	Does chromatic sensitivity develop more slowly than luminance sensitivity?. Vision Research, 1993, 33, 2553-2562.	1.4	61
75	Gravity as a Monocular Cue for Perception of Absolute Distance and/or Absolute Size. Perception, 1992, 21, 69-76.	1.2	139
76	Temporal contrast sensitivity in human infants. Vision Research, 1992, 32, 1163-1168.	1.4	46
77	The effects of luminance on FPL and VEP acuity in human infants. Vision Research, 1992, 32, 2005-2012.	1.4	21
78	Scotopic visual efficiency: Constraints by optics, receptor properties, and rod pooling. Vision Research, 1992, 32, 645-656.	1.4	21
79	The perception of heading during eye movements. Nature, 1992, 360, 583-585.	27.8	315
80	The effects of contrast, spatial scale, and orientation on foveal and peripheral phase discrimination. Vision Research, 1991, 31, 1759-1786.	1.4	70
81	The physical limits of grating visibility. Vision Research, 1987, 27, 1915-1924.	1.4	188
82	Sensitivity loss in odd-symmetric mechanisms and phase anomalies in peripheral vision. Nature, 1987, 326, 873-876.	27.8	99
83	Infant Visual Preferences: A Review and New Theoretical Treatment. Advances in Child Development and Behavior, 1985, 19, 207-246.	1.3	63
84	The development of basic mechanisms of pattern vision: Spatial frequency channels. Journal of Experimental Child Psychology, 1985, 40, 501-527.	1.4	43
85	Infant pattern vision: A new approach based on the contrast sensitivity function. Journal of Experimental Child Psychology, 1981, 31, 1-45.	1.4	349
86	Infant Refraction and Accommodation. International Ophthalmology Clinics, 1980, 20, 205-232.	0.7	106
87	Depth of focus, eye size and visual acuity. Vision Research, 1980, 20, 827-835.	1.4	203
88	Contrast sensitivity function of the infant visual system. Vision Research, 1976, 16, 867-III.	1.4	66
89	The effect of head tilt on meridional differences in acuity: Implications for orientation constancy. Perception & Psychophysics, 1975, 17, 17-22.	2.3	39