Jan J Koenderink

List of Publications by Year in descending order

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41344 26613 12,848 189 49 107 citations h-index g-index papers 193 193 193 5416 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Perception of the Potential for Interaction in Social Scenes. I-Perception, 2021, 12, 204166952110402.	1.4	4
2	Osculating Paraboloids., 2021,, 933-939.		0
3	Affective Responses to Image Color Combinations. Art and Perception, 2021, 9, 1-60.	0.5	0
4	Looking behavior and potential human interactions during locomotion. Journal of Vision, 2020, 20, 5.	0.3	15
5	Mind, rationality, and cognition: An interdisciplinary debate. Psychonomic Bulletin and Review, 2018, 25, 793-826.	2.8	48
6	Geometry of Pictorial Relief. Annual Review of Vision Science, 2018, 4, 451-474.	4.4	6
7	Estimating the Illumination Direction From Three-Dimensional Texture of Brownian Surfaces. I-Perception, 2017, 8, 204166951770194.	1.4	2
8	Chromatic Dimensions Earthy, Watery, Airy, and Fiery. Perception, 2015, 44, 1153-1178.	1.2	10
9	Texture, illumination, and material perception. , 2015, , .		2
10	Osculating Paraboloids. , 2014, , 575-580.		0
11	Depth in Box Spaces. Seeing and Perceiving, 2012, 25, 339-349.	0.3	13
12	Shading, a View from the Inside. Seeing and Perceiving, 2012, 25, 303-338.	0.3	13
13	Interaction of Depth Probes and Style of Depiction. I-Perception, 2012, 3, 528-540.	1.4	3
14	Awareness of the Light Field: The Case of Deformation. I-Perception, 2012, 3, 467-480.	1.4	17
15	Geometry of imaginary spaces. Journal of Physiology (Paris), 2012, 106, 173-182.	2.1	12
16	Light fields and shape from shading. Journal of Vision, 2011, 11, 21-21.	0.3	21
17	Cast Shadows in Wide Perspective. Perception, 2011, 40, 938-948.	1.2	4
18	Space perception in pictures. Proceedings of SPIE, 2011, , .	0.8	5

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19	Depth. I-Perception, 2011, 2, 541-564.	1.4	35
20	Pictorial Depth Probed through Relative Sizes. I-Perception, 2011, 2, 992-1013.	1.4	6
21	Measuring 3D Point Configurations in Pictorial Space. I-Perception, 2011, 2, 77-111.	1.4	16
22	Aging and the haptic perception of 3D surface shape. Attention, Perception, and Psychophysics, 2011, 73, 908-918.	1.3	36
23	Does monocular visual space contain planes?. Acta Psychologica, 2010, 134, 40-47.	1.5	19
24	Illuminance Flow Estimation by Regression. International Journal of Computer Vision, 2010, 90, 304-312.	15.6	0
25	The Shading Cue in Context. I-Perception, 2010, 1, 159-177.	1.4	27
26	The prior statistics of object colors. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 206.	1.5	15
27	Wide distribution of external local sign in the normal population. Psychological Research, 2009, 73, 14-22.	1.7	31
28	Haptic perception disambiguates visual perception of 3D shape. Experimental Brain Research, 2009, 193, 639-644.	1.5	24
29	Representing the light field in finite three-dimensional spaces from sparse discrete samples. Applied Optics, 2009, 48, 450.	2.1	31
30	Structure of light fields in natural scenes. Applied Optics, 2009, 48, 5386.	2.1	36
31	Exocentric pointing in depth. Vision Research, 2008, 48, 716-723.	1.4	21
32	Shape, Surface Roughness and Human Perception. , 2008, , 197-222.		9
33	Spatial properties of light fields in natural scenes. , 2007, , .		5
34	The Visual Light Field. Perception, 2007, 36, 1595-1610.	1.2	74
35	Effects of Context on a Visual 3-D Pointing Task. Perception, 2007, 36, 75-90.	1.2	8
36	Ambiguity in Pictorial Depth. Perception, 2007, 36, 1290-1304.	1.2	6

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37	Shape from Shading from Images Rendered with Various Surface Types and Light Fields. Perception, 2007, 36, 1191-1213.	1.2	31
38	Haptic parallelity perception on the frontoparallel plane: The involvement of reference frames. Perception & Psychophysics, 2007, 69, 276-286.	2.3	27
39	Matching illumination of solid objects. Perception & Psychophysics, 2007, 69, 459-468.	2.3	35
40	Perception of illuminance flow in the case of anisotropic rough surfaces. Perception & Psychophysics, 2007, 69, 895-903.	2.3	12
41	Perception of Illumination Direction in Images of 3-D Convex Objects: Influence of Surface Materials and Light Fields. Perception, 2006, 35, 625-645.	1.2	21
42	Shape-from-shading for matte and glossy objects. Acta Psychologica, 2006, 121, 297-316.	1.5	30
43	Horizontal–vertical anisotropy in visual space. Acta Psychologica, 2006, 123, 219-239.	1.5	11
44	The Influence of Illumination Direction on the Pictorial Reliefs of Lambertian Surfaces. Perception, 2005, 34, 275-287.	1.2	24
45	Pictorial relief for equiluminant images. , 2005, , .		2
46	Reflectance from locally glossy thoroughly pitted surfaces. Computer Vision and Image Understanding, 2005, 98, 211-222.	4.7	16
47	Visual space under free viewing conditions. Perception & Psychophysics, 2005, 67, 1177-1189.	2.3	17
48	Bidirectional Texture Contrast Function. International Journal of Computer Vision, 2005, 62, 17-34.	15.6	9
49	Intermanual and intramanual tactual grating discrimination. Experimental Brain Research, 2005, 163, 123-127.	1.5	7
50	Bidirectional Texture Contrast Function. International Journal of Computer Vision, 2005, 62, 17-34.	15.6	36
51	Ecological Optics and the Creative Eye. , 2005, , 271-304.		2
52	Haptic Detection of Sine-Wave Gratings. Perception, 2005, 34, 869-885.	1.2	10
53	The Perception of Doubly Curved Surfaces From Anisotropic Textures. Psychological Science, 2004, 15, 40-46.	3.3	46
54	Pointing out of the Picture. Perception, 2004, 33, 513-530.	1.2	68

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55	Light Direction from Shad(ow)ed Random Gaussian Surfaces. Perception, 2004, 33, 1405-1420.	1.2	36
56	Perceptual representation of visible surfaces. Perception & Psychophysics, 2003, 65, 747-762.	2.3	33
57	Exocentric pointing to opposite targets. Acta Psychologica, 2003, 112, 71-87.	1.5	25
58	The metrics of visual and haptic space based on parallelity judgements. Journal of Mathematical Psychology, 2003, 47, 278-291.	1.8	60
59	Illumination direction from texture shading. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 987.	1.5	42
60	Irradiation direction from texture. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 1875.	1.5	39
61	Detection of Amplitude Modulation and Frequency Modulation in Tactual Gratings: A Critical Bandwidth for Active Touch. Perception, 2003, 32, 1259-1271.	1.2	9
62	Perception of Surface Reflectance of 3-D Geometrical Shapes: Influence of the Lighting Mode. Perception, 2003, 32, 1311-1324.	1.2	7
63	Illuminance Flow. Lecture Notes in Computer Science, 2003, , 90-97.	1.3	6
64	Perspectives on Colour Space. , 2003, , 1-63.		12
65	Schopenhauer's "Parts of Daylight―In The Light of Modern Colorimetry. , 2003, , 251-266.		1
66	Bidirectional reflectance distribution function of specular surfaces with hemispherical pits. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2002, 19, 2456.	1.5	25
67	Large-Scale Visual Frontoparallels under Full-Cue Conditions. Perception, 2002, 31, 1467-1475.	1.2	33
68	Scale invariance in near space: pointing under influence of context. Acta Psychologica, 2002, 110, 63-81.	1.5	10
69	Haptic discrimination of stimuli varying in amplitude and width. Experimental Brain Research, 2002, 146, 32-37.	1.5	18
70	Pappus in optical space. Perception & Psychophysics, 2002, 64, 380-391.	2.3	40
71	Frequency discrimination between and within line gratings by dynamic touch. Perception & Psychophysics, 2002, 64, 969-980.	2.3	21
72	Bidirectional Texture Contrast Function. Lecture Notes in Computer Science, 2002, , 808-822.	1.3	9

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73	Comment on Visual acuity by Christopher L. Andreadis. Visual Impairment Research, 2001, 3, 59-65.	0.2	O
74	<title>Pictorial space correspondence in photographs of an object in different poses</title> ., 2001, 4299, 321.		1
75	Ambiguity and the â€~Mental Eye' in Pictorial Relief. Perception, 2001, 30, 431-448.	1.2	138
76	Amplitude and Spatial-Period Discrimination in Sinusoidal Gratings by Dynamic Touch. Perception, 2001, 30, 1263-1274.	1.2	45
77	The combined influence of binocular disparity and shading on pictorial shape. Perception & Psychophysics, 2001, 63, 1038-1047.	2.3	21
78	Haptic after-effect of successively touched curved surfaces. Acta Psychologica, 2001, 106, 247-263.	1.5	14
79	On the role of external reference frames on visual judgements of parallelity. Acta Psychologica, 2001, 108, 283-302.	1.5	32
80	On the Affine Structure of Perceptual Space. Psychological Science, 2001, 12, 191-196.	3.3	67
81	Large Systematic Deviations in Visual Parallelism. Perception, 2000, 29, 1467-1482.	1.2	49
82	<title>Directing the mental eye in pictorial perception</title> ., 2000, 3959, 2.		2
83	Specularities on Surfaces with Tangential Hairs or Grooves. Computer Vision and Image Understanding, 2000, 78, 320-335.	4.7	18
84	Blur and Disorder. Journal of Visual Communication and Image Representation, 2000, 11, 237-244.	2.8	9
85	Direct Measurement of the Curvature of Visual Space. Perception, 2000, 29, 69-79.	1.2	111
86	Motion detection from photopic to low scotopic luminance levels. Vision Research, 2000, 40, 187-199.	1.4	24
87	Compression of visual space in natural scenes and in their photographic counterparts. Perception & Psychophysics, 1999, 61, 1269-1286.	2.3	42
88	Similar mechanisms underlie curvature comparison by static and dynamic touch. Perception & Psychophysics, 1999, 61, 874-894.	2.3	90
89	Using motor tasks to quantitatively judge 3-D surface curvatures. Perception & Psychophysics, 1999, 61, 1116-1139.	2.3	1
90	Texture histograms as a function of irradiation and viewing direction. International Journal of Computer Vision, 1999, 31, 169-184.	15.6	55

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91	Bidirectional Reflection Distribution Function of Thoroughly Pitted Surfaces. International Journal of Computer Vision, 1999, 31, 129-144.	15.6	105
92	The Structure of Locally Orderless Images. International Journal of Computer Vision, 1999, 31, 159-168.	15.6	96
93	Influence of shape on haptic curvature perception. Acta Psychologica, 1999, 100, 267-289.	1.5	17
94	Reflectance and texture of real-world surfaces. ACM Transactions on Graphics, 1999, 18, 1-34.	7.2	1,065
95	Surface roughness from highlight structure. Applied Optics, 1999, 38, 2886.	2.1	16
96	Virtual Psychophysics. Perception, 1999, 28, 669-674.	1.2	12
97	Haptic Perception of Spatial Relations. Perception, 1999, 28, 781-795.	1.2	127
98	Diffuse and Specular Reflectance from Rough Surfaces. Applied Optics, 1998, 37, 130.	2.1	159
99	Optical properties (bidirectional reflection distribution functions) of velvet. Applied Optics, 1998, 37, 5974.	2.1	79
100	The Structure of Relief. Advances in Imaging and Electron Physics, 1998, , 65-150.	0.2	21
101	Anisotropy in Haptic Curvature and Shape Perception. Perception, 1998, 27, 573-589.	1.2	14
102	The Influence of Stimulus Tilt on Haptic Curvature Matching and Discrimination by Dynamic Touch. Perception, 1998, 27, 869-880.	1.2	11
103	Locating the singular point in first-order optical flow fields Journal of Experimental Psychology: Human Perception and Performance, 1998, 24, 1415-1430.	0.9	9
104	Pictorial relief. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1998, 356, 1071-1086.	3.4	52
105	Investigation into the Origin of the Haptic Aftereffect of Curved Surfaces. Perception, 1997, 26, 101-117.	1.2	20
106	Large Scale Differences between Haptic and Visual Judgments of Curvature. Perception, 1997, 26, 313-320.	1.2	10
107	Effects of Texture, Illumination, and Surface Reflectance on Stereoscopic Shape Perception. Perception, 1997, 26, 807-822.	1.2	67
108	Perceptual localization of surface position Journal of Experimental Psychology: Human Perception and Performance, 1997, 23, 1481-1492.	0.9	16

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109	Local image operators and iconic structure. Lecture Notes in Computer Science, 1997, , 66-93.	1.3	8
110	Light Source Dependence in Shape from Shading. Vision Research, 1997, 37, 1441-1449.	1.4	35
111	The Generic Bilinear Calibration-Estimation Problem. International Journal of Computer Vision, 1997, 23, 217-234.	15.6	47
112	Correspondence in pictorial space. Perception & Psychophysics, 1997, 59, 813-827.	2.3	13
113	The visual contour in depth. Perception & Psychophysics, 1997, 59, 828-838.	2.3	17
114	Detection of spatial discontinuities in first-order optical flow fields. Perception & Psychophysics, 1997, 59, 567-579.	2.3	0
115	Haptic curvature discrimination at several regions of the hand. Perception & Psychophysics, 1997, 59, 1225-1240.	2.3	56
116	Monocular discrimination of rigidly and nonrigidly moving objects. Perception & Psychophysics, 1997, 59, 1266-1279.	2.3	8
117	Image Structure. Informatik Aktuell, 1997, , 3-35.	0.6	4
118	Detection of divergence in optical flow fields. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 227.	1.5	8
119	Illuminance texture due to surface mesostructure. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 452.	1.5	71
120	Detection of first-order structure in optic flow fields. Vision Research, 1996, 36, 259-270.	1.4	24
121	Simulating the Detection of First-order Optical Flow Components. Vision Research, 1996, 36, 3539-3547.	1.4	4
122	Haptic Aftereffect of Curved Surfaces. Perception, 1996, 25, 109-119.	1.2	54
123	Perturbation Study of Shading in Pictures. Perception, 1996, 25, 1009-1026.	1.2	52
124	Surface Gradients, Contours and the Perception of Surface Attitude in Images of Complex Scenes. Perception, 1996, 25, 701-713.	1.2	21
125	Haptic Unilateral and Bilateral Discrimination of Curved Surfaces. Perception, 1996, 25, 739-749.	1.2	38
126	Effects of changing viewing conditions on the perceived structure of smoothly curved surfaces Journal of Experimental Psychology: Human Perception and Performance, 1996, 22, 695-706.	0.9	51

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127	Surface range and attitude probing in stereoscopically presented dynamic scenes Journal of Experimental Psychology: Human Perception and Performance, 1996, 22, 869-878.	0.9	26
128	Detection of the sign of expansion as a function of field size and eccentricity. Perception & Psychophysics, 1996, 58, 401-408.	2.3	6
129	Structure from motion: A tolerance analysis. Perception & Psychophysics, 1996, 58, 449-459.	2.3	11
130	Pictorial surface attitude and local depth comparisons. Perception & Psychophysics, 1996, 58, 163-173.	2.3	87
131	Shape constancy in pictorial relief. Lecture Notes in Computer Science, 1996, , 149-164.	1.3	2
132	Shape Constancy in Pictorial Relief. Perception, 1996, 25, 155-164.	1.2	69
133	Depth Relief. Perception, 1995, 24, 115-126.	1.2	47
134	Relief: pictorial and otherwise. Image and Vision Computing, 1995, 13, 321-334.	4.5	81
135	Discrimination of geometric angle in the fronto-parallel plane. Spatial Vision, 1994, 8, 309-328.	1.4	28
136	Two-plus-one-dimensional differential geometry. Pattern Recognition Letters, 1994, 15, 439-443.	4.2	67
137	Detection of temporal order of noise-like luminance functions. Perception & Psychophysics, 1994, 55, 28-41.	2.3	3
138	Haptic identification of curved surfaces. Perception & Psychophysics, 1994, 56, 53-61.	2.3	39
139	Detection of vorticity in optical flow fields. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 48.	1.5	8
140	Extraction of optical velocity by use of multi-input Reichardt detectors. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 1222.	1.5	15
141	Influence of surface attitude and curvature scaling on discrimination of binocularly presented curved surfaces. Vision Research, 1994, 34, 2409-2423.	1.4	14
142	On So-Called Paradoxical Monocular Stereoscopy. Perception, 1994, 23, 583-594.	1.2	119
143	Haptic Discrimination of Doubly Curved Surfaces. Perception, 1994, 23, 1483-1490.	1,2	25
144	Images: Regular Tempered Distributions. , 1994, , 651-659.		10

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145	Estimating local shape from shading in the presence of global shading. Perception & Psychophysics, 1993, 54, 334-342.	2.3	26
146	Shape from stereo: A systematic approach using quadratic surfaces. Perception & Psychophysics, 1993, 53, 71-80.	2.3	36
147	Perception of local shape from shading. Perception & Psychophysics, 1993, 54, 145-156.	2.3	88
148	Illuminance critical points on generic smooth surfaces. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 844.	1.5	16
149	Estimating the gradient direction of a luminance ramp. Vision Research, 1993, 33, 1639-1643.	1.4	7
150	<title>Local features of smooth shapes: ridges and courses</title> ., 1993,,.		52
151	Visual Size Invariance Does Not Apply to Geometric Angle and Speed of Rotation. Perception, 1993, 22, 177-184.	1.2	20
152	Second-order optic flow. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1992, 9, 530.	1.5	50
153	Discrimination thresholds for channel-coded systems. Biological Cybernetics, 1992, 66, 543-551.	1.3	165
154	Receptive field assembly pattern specificity. Journal of Visual Communication and Image Representation, 1992, 3, 1-12.	2.8	29
155	Scale and the differential structure of images. Image and Vision Computing, 1992, 10, 376-388.	4.5	325
156	Surface shape and curvature scales. Image and Vision Computing, 1992, 10, 557-564.	4.5	980
157	Surface perception in pictures. Perception & Psychophysics, 1992, 52, 487-496.	2.3	228
158	Affine structure from motion. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1991, 8, 377.	1.5	717
159	Scale space: Its natural operators and differential invariants. Lecture Notes in Computer Science, 1991, , 239-255.	1.3	64
160	The brain a geometry engine. Psychological Research, 1990, 52, 122-127.	1.7	127
161	RECEPTIVE FIELD TAXONOMY., 1990,, 295-301.		4
162	Design Principles for a Front-End Visual System. , 1989, , 111-118.		1

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163	Two-dimensional curvature operators. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1988, 5, 1136.	1.5	114
164	Contrast discrimination: Invariant to spatial parameters. Vision Research, 1988, 28, 811-818.	1.4	7
165	Image Structure. , 1988, , 67-104.		6
166	Inferring three-dimensional shapes from two-dimensional silhouettes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1987, 4, 1168.	1.5	80
167	Optic flow. Vision Research, 1986, 26, 161-179.	1.4	746
168	An Image Description for Object Definition, Based on Extremal Regions in the Stack., 1986,, 24-37.		16
169	Some Aspects of Mr Image Processing and Display: Simulation Studies, Multiresolution Segmentation, and Adaptive Histogram Equalization., 1986,, 38-61.		0
170	Perception of Movement and Correlation in Stroboscopically Presented Noise Patterns. Perception, 1985, 14, 209-224.	1.2	46
171	Spatial and temporal parameters of motion detection in the peripheral visual field. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1985, 2, 252.	1.5	56
172	Detection of light and flicker at low luminance levels in the human peripheral visual system II A mechanistic model. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1985, 2, 408.	1.5	0
173	What Does the Occluding Contour Tell Us about Solid Shape?. Perception, 1984, 13, 321-330.	1.2	417
174	Simultaneous order in nervous nets from a functional standpoint. Biological Cybernetics, 1984, 50, 35-41.	1.3	84
175	The structure of images. Biological Cybernetics, 1984, 50, 363-370.	1.3	2,104
176	Spatiotemporal integration in the detection of coherent motion. Vision Research, 1984, 24, 47-53.	1.4	84
177	Detection of light and flicker at low luminance levels in the human peripheral visual system I Psychophysical experiments. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1984, 1, 764.	1.5	4
178	Parcellation: A reflection of the structure of the animal's world. Behavioral and Brain Sciences, 1984, 7, 343-344.	0.7	1
179	Optimum flux-detection in the absence of a priori knowledge about the signal. Biological Cybernetics, 1983, 48, 61-68.	1.3	3
180	The structure of the human motion detection system. IEEE Transactions on Systems, Man, and Cybernetics, 1983, SMC-13, 916-922.	0.9	22

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181	Sensitivity to spatiotemporal colour contrast in the peripheral visual field. Vision Research, 1983, 23, 1-11.	1.4	132
182	The Shape of Smooth Objects and the Way Contours End. Perception, 1982, 11, 129-137.	1.2	233
183	Different concepts of â€~â€~ray'' in optics: link between resolving power and radiometry. American Journal of Physics, 1982, 50, 1012-1015.	0.7	5
184	Sensitivity to spatiotemporal combined luminance and chromaticity contrast. Journal of the Optical Society of America, 1981, 71, 453.	1.2	154
185	Influence of the target size on the detection threshold for luminance and chromaticity contrast. Journal of the Optical Society of America, 1980, 70, 1116.	1.2	34
186	Spatiotemporal contrast detection threshold surface is bimodal. Optics Letters, 1979, 4, 32.	3.3	58
187	Perimetry of contrast detection thresholds of moving spatial sine wave patterns I The near peripheral visual field (eccentricity 0°–8°). Journal of the Optical Society of America, 1978, 68, 845.	1.2	133
188	Perimetry of contrast detection thresholds of moving spatial sine wave patterns II The far peripheral visual field (eccentricity 0°–50°). Journal of the Optical Society of America, 1978, 68, 850.	1.2	76
189	Perimetry of contrast detection thresholds of moving spatial sine wave patterns III The target extent as a sensitivity controlling parameter. Journal of the Optical Society of America, 1978, 68, 854.	1.2	102