Roland W Fleming

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Real-world illumination and the perception of surface reflectance properties. Journal of Vision, 2003, 3, 3.	0.1	351
2	Specular reflections and the perception of shape. Journal of Vision, 2004, 4, 10.	0.1	249
3	Visual perception of materials and their properties. Vision Research, 2014, 94, 62-75.	0.7	229
4	Low-Level Image Cues in the Perception of Translucent Materials. ACM Transactions on Applied Perception, 2005, 2, 346-382.	1.2	158
5	Image-based material editing. ACM Transactions on Graphics, 2006, 25, 654-663.	4.9	156
6	Do HDR displays support LDR content?. ACM Transactions on Graphics, 2007, 26, 38.	4.9	144
7	Perceptual qualities and material classes. Journal of Vision, 2013, 13, 9-9.	0.1	108
8	Visual Motion and the Perception of Surface Material. Current Biology, 2011, 21, 2010-2016.	1.8	106
9	The Interpolation of Object and Surface Structure. Cognitive Psychology, 2002, 44, 148-190.	0.9	92
10	Visual Perception of Thick Transparent Materials. Psychological Science, 2011, 22, 812-820.	1.8	89
11	Material Perception. Annual Review of Vision Science, 2017, 3, 365-388.	2.3	82
12	Evaluation of reverse tone mapping through varying exposure conditions. ACM Transactions on Graphics, 2009, 28, 1-8.	4.9	78
13	Seeing liquids from visual motion. Vision Research, 2015, 109, 125-138.	0.7	66
14	Do HDR displays support LDR content?. , 2007, , .		56
15	Estimation of 3D shape from image orientations. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20438-20443.	3.3	54
16	Categorizing art: Comparing humans and computers. Computers and Graphics, 2009, 33, 484-495.	1.4	48
17	Seeing liquids from static snapshots. Vision Research, 2015, 115, 163-174.	0.7	47
18	Visual Features in the Perception of Liquids. Current Biology, 2018, 28, 452-458.e4.	1.8	45

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19	Learning to see stuff. Current Opinion in Behavioral Sciences, 2019, 30, 100-108.	2.0	45
20	Shape, motion, and optical cues to stiffness of elastic objects. Journal of Vision, 2017, 17, 20.	0.1	44
21	Inferring the stiffness of unfamiliar objects from optical, shape, and motion cues. Journal of Vision, 2017, 17, 18.	0.1	42
22	Unsupervised learning predicts human perception and misperception of gloss. Nature Human Behaviour, 2021, 5, 1402-1417.	6.2	42
23	Effects of material properties and object orientation on precision grip kinematics. Experimental Brain Research, 2016, 234, 2253-2265.	0.7	38
24	Human Perception: Visual Heuristics in the Perception ofÂGlossiness. Current Biology, 2012, 22, R865-R866.	1.8	33
25	Specular reflections and the estimation of shape from binocular disparity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2413-2418.	3.3	33
26	Visual perception of shape altered by inferred causal history. Scientific Reports, 2016, 6, 36245.	1.6	33
27	Eye and pointer coordination in search and selection tasks. , 2010, , .		32
28	Image-based material editing. , 2006, , .		31
29	Influence of optical material properties on the perception of liquids. Journal of Vision, 2016, 16, 12.	0.1	28
30	Distortion in 3D shape estimation with changes in illumination. , 2007, , .		26
31	Perception of material properties. Vision Research, 2015, 115, 157-162.	0.7	26
32	Bent out of shape: The visual inference of non-rigid shape transformations applied to objects. Vision Research, 2016, 126, 330-346.	0.7	26
33	Predicting precision grip grasp locations on three-dimensional objects. PLoS Computational Biology, 2020, 16, e1008081.	1.5	25
34	Visual perception of the physical stability of asymmetric three-dimensional objects. Journal of Vision, 2013, 13, 12-12.	0.1	23
35	Visual perception of materials: The science of stuff. Vision Research, 2015, 109, 123-124.	0.7	23
36	Perceived Object Stability Depends on Multisensory Estimates of Gravity. PLoS ONE, 2011, 6, e19289.	1.1	21

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37	Perception of physical stability and center of mass of 3-D objects. Journal of Vision, 2015, 15, 13-13.	0.1	21
38	Colour, contours, shading and shape: flow interactions reveal anchor neighbourhoods. Interface Focus, 2018, 8, 20180019.	1.5	21
39	Perceiving translucent materials. , 2004, , .		20
40	Evaluation of reverse tone mapping through varying exposure conditions. , 2009, , .		20
41	Visual perception of complex shape-transforming processes. Cognitive Psychology, 2016, 90, 48-70.	0.9	20
42	Perception of Visual Artifacts in Imageâ€Based Rendering of FaÃ§ades. Computer Graphics Forum, 2011, 30, 1241-1250.	1.8	19
43	Visual perception of shape-transforming processes: â€˜Shape Scissionâ€™. Cognition, 2019, 189, 167-180.	1.1	18
44	Perception and prediction of simple object interactions. , 2007, , .		17
45	Integration of prior knowledge during haptic exploration depends on information type. Journal of Vision, 2019, 19, 20.	0.1	17
46	Sketching shiny surfaces. ACM Transactions on Applied Perception, 2006, 3, 262-285.	1.2	16
47	Perception of shape and space across rigid transformations. Vision Research, 2016, 126, 318-329.	0.7	16
48	The Sequential-Weight Illusion. I-Perception, 2018, 9, 204166951879027.	0.8	16
49	One-shot categorization of novel object classes in humans. Vision Research, 2019, 165, 98-108.	0.7	16
50	Getting â€œfumperedâ€: Classifying objects by what has been done to them. Journal of Vision, 2019, 19, 15.	0.1	16
51	An image-computable model of human visual shape similarity. PLoS Computational Biology, 2021, 17, e1008981.	1.5	16
52	Concavities, negative parts, and the perception that shapes are complete. Journal of Vision, 2013, 13, 3-3.	0.1	14
53	The perception of hazy gloss. Journal of Vision, 2017, 17, 19.	0.1	14
54	Gloss perception: Searching for a deep neural network that behaves like humans. Journal of Vision, 2021, 21, 14.	0.1	14

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55	Distinguishing mirror from glass: A â€œbig dataâ€•approach to material perception. Journal of Vision, 2022, 22, 4.	0.1	14
56	Surface flows for image-based shading design. ACM Transactions on Graphics, 2012, 31, 1-9.	4.9	13
57	Haptic Categorical Perception of Shape. PLoS ONE, 2012, 7, e43062.	1.1	13
58	Identifying shape transformations from photographs of real objects. PLoS ONE, 2018, 13, e0202115.	1.1	13
59	Learning About the World by Learning About Images. Current Directions in Psychological Science, 2021, 30, 120-128.	2.8	13
60	Effects of surface reflectance and 3D shape on perceived rotation axis. Journal of Vision, 2013, 13, 8-8.	0.1	11
61	Visual perception of liquids: Insights from deep neural networks. PLoS Computational Biology, 2020, 16, e1008018.	1.5	11
62	Key characteristics of specular stereo. Journal of Vision, 2014, 14, 14-14.	0.1	10
63	MatMix 1.0: Using optical mixing to probe visual material perception. Journal of Vision, 2016, 16, 11.	0.1	10
64	Differential processing of binocular and monocular gloss cues in human visual cortex. Journal of Neurophysiology, 2016, 115, 2779-2790.	0.9	10
65	â€˜Proto-rivalryâ€™: how the binocular brain identifies gloss. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160383.	1.2	10
66	Perceiving animacy from shape. Journal of Vision, 2017, 17, 10.	0.1	10
67	Object Visibility, Not Energy Expenditure, Accounts For Spatial Biases in Human Grasp Selection. I-Perception, 2019, 10, 204166951982760.	0.8	10
68	Deep neural models for color classification and color constancy. Journal of Vision, 2022, 22, 17.	0.1	10
69	The <i>Veiled Virgin</i> illustrates visual segmentation of shape by cause. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11735-11743.	3.3	9
70	Humans Can Visually Judge Grasp Quality and Refine Their Judgments Through Visual and Haptic Feedback. Frontiers in Neuroscience, 2020, 14, 591898.	1.4	9
71	Visually inferring elasticity from the motion trajectory of bouncing cubes. Journal of Vision, 2020, 20, 6.	0.1	8
72	Friction is preferred over grasp configuration in precision grip grasping. Journal of Neurophysiology, 2021, 125, 1330-1338.	0.9	8

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73	Flow-guided warping for image-based shape manipulation. ACM Transactions on Graphics, 2016, 35, 1-12.	4.9	7
74	The material-weight illusion disappears or inverts in objects made of two materials. Journal of Neurophysiology, 2019, 121, 996-1010.	0.9	7
75	Scaling and discriminability of perceived gloss. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2021, 38, 203.	0.8	7
76	Softness and weight from shape: Material properties inferred from local shape features. Journal of Vision, 2020, 20, 2.	0.1	6
77	Visual perception of 3D shape. , 2009, , .		5
78	Color consistency in the appearance of bleached fabrics. Journal of Vision, 2020, 20, 11.	0.1	5
79	Confessions of a reluctant photorealist. Journal of Vision, 2016, 16, 3.	0.1	4
80	Extracting and depicting the 3D shape of specular surfaces. , 2005, , .		3
81	Image-based material editing. , 2005, , .		3
82	Scale ambiguities in material recognition. IScience, 2022, 25, 103970.	1.9	3
83	Effects of visual and visual-haptic perception of material rigidity on reaching and grasping in the course of development. Acta Psychologica, 2021, 221, 103457.	0.7	3
84	Visual Development: Learning Not to See. Current Biology, 2015, 25, R1166-R1168.	1.8	2
85	Predicting shape variations from single exemplars. Journal of Vision, 2015, 15, 1126.	0.1	2
86	Distinguishing between texture and shading flows for 3D shape estimation. Journal of Vision, 2015, 15, 965.	0.1	2
87	Distinguishing Mirror from Glass. Journal of Vision, 2018, 18, 227.	0.1	2
88	Color Constancy in Deep Neural Networks. Journal of Vision, 2019, 19, 298.	0.1	2
89	Brain processing of gloss information with 2D and 3D depth cues. Journal of Vision, 2015, 15, 818.	0.1	2
90	Which brain areas are responsible for which aspects of grasping?. Journal of Vision, 2019, 19, 110b.	0.1	2

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91	The role of semantics in the perceptual organization of shape. Scientific Reports, 2020, 10, 22141.	1.6	2
92	Identifying specular highlights: Insights from deep learning. Journal of Vision, 2022, 22, 6.	0.1	2
93	Measuring unrestrained gaze on wall-sized displays. , 2010, , .		1
94	Visual Perception: Bizarre Contours Go Against the Odds. Current Biology, 2011, 21, R259-R261.	1.8	1
95	A dataset for evaluating one-shot categorization of novel object classes. Data in Brief, 2020, 29, 105302.	0.5	1
96	Learning to see material from motion by predicting videos. Journal of Vision, 2021, 21, 1993.	0.1	1
97	Material perception for philosophers. Philosophy Compass, 2021, 16, e12777.	0.7	1
98	The influence of optical material appearance on the perception of liquids and their properties. Journal of Vision, 2015, 15, 936.	0.1	1
99	Sum-of-Superellipses â€“ A Low Parameter Model for Amplitude Spectra of Natural Images. Lecture Notes in Computer Science, 2011, , 128-138.	1.0	1
100	Modulation of the Material-Weight Illusion in objects made of more than one material. Journal of Vision, 2015, 15, 1156.	0.1	1
101	Cues Underlying Liquid Constancy. Journal of Vision, 2016, 16, 946.	0.1	1
102	Effects of shape transformations on perceived similarity. Journal of Vision, 2017, 17, 1383.	0.1	1
103	The Veiled Virgin Project: Causal layering of 3D shape. Journal of Vision, 2017, 17, 406.	0.1	1
104	Predicting Human Perception of Glossy Highlights using Neural Networks. Journal of Vision, 2019, 19, 297b.	0.1	1
105	An image computable model of visual shape similarity. Journal of Vision, 2019, 19, 37c.	0.1	1
106	Visual perception: Colour brings shape into stark relief. Current Biology, 2022, 32, R272-R273.	1.8	1
107	Superordinate Categorization Based on the Perceptual Organization of Parts. Brain Sciences, 2022, 12, 667.	1.1	1
108	â€˜Distinctivenessâ€™ of parts in novel objects. Journal of Vision, 2021, 21, 2236.	0.1	0

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109	Stability versus natural hand pose: Humans sacrifice their usual grasp configuration to choose stable grasp locations. Journal of Vision, 2021, 21, 2360.	0.1	0
110	The mental representation of materials distilled from >1.5 million similarity judgements. Journal of Vision, 2021, 21, 1981.	0.1	0
111	Material recognition and the role of assumed viewing distance. Journal of Vision, 2021, 21, 1936.	0.1	0
112	Modelling local and global explanations for shape aftereffects with naturalistic novel stimuli. Journal of Vision, 2021, 21, 2601.	0.1	0
113	Evolving visual representations from noise. Journal of Vision, 2021, 21, 2544.	0.1	0
114	Human judgments of relative 3D pose of novel complex objects. Journal of Vision, 2021, 21, 2873.	0.1	0
115	Probing human 3D shape perception with novel, but natural stimuli. Journal of Vision, 2021, 21, 2966.	0.1	0
116	Visual Prediction of Bounce Trajectories. Journal of Vision, 2021, 21, 2492.	0.1	0
117	Representation of shape and space when objects undergo transformations. Journal of Vision, 2015, 15, 1028.	0.1	0
118	How perceived causality influences perceived symmetry. Journal of Vision, 2015, 15, 1025.	0.1	0
119	Visual cues to stiffness of elastic objects. Journal of Vision, 2016, 16, 637.	0.1	0
120	Psychophysical evaluation of a novel visual noise metric for renderings. Journal of Vision, 2016, 16, 965.	0.1	0
121	Specular kurtosis and the perception of hazy gloss. Journal of Vision, 2016, 16, 942.	0.1	0
122	Perceiving Biological Growth and Other Non-Rigid Transformations. Journal of Vision, 2016, 16, 949.	0.1	0
123	You break it, you buy it â€“ effect of object shape on grasp locations. Journal of Vision, 2017, 17, 465.	0.1	0
124	Visual perception of elastic behavior of bouncing objects. Journal of Vision, 2017, 17, 225.	0.1	0
125	Inferring the deformation of unfamiliar objects. Journal of Vision, 2017, 17, 315.	0.1	0
126	Viscosity constancy across contexts. Journal of Vision, 2017, 17, 762.	0.1	0

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127	Probing perceptual gloss space with physical surfaces. Journal of Vision, 2017, 17, 766.	0.1	0
128	Visually predicting the future states of pouring liquids. Journal of Vision, 2017, 17, 761.	0.1	0
129	Influence of Different Types of Prior Knowledge on Haptic Exploration of Soft Objects. Lecture Notes in Computer Science, 2018, , 413-424.	1.0	0
130	Hue Flows and Shading Flows: emergent properties from their interaction. Journal of Vision, 2018, 18, 222.	0.1	0
131	One shot learning of novel object classes. Journal of Vision, 2018, 18, 556.	0.1	0
132	Shape scission: causal segmentation of shape. Journal of Vision, 2018, 18, 1054.	0.1	0
133	The Sequential-Weight Illusion. Journal of Vision, 2018, 18, 93.	0.1	0
134	Visual Perception of Deformable Materials. Journal of Vision, 2018, 18, 226.	0.1	0
135	Predicting how we grasp arbitrary objects. Journal of Vision, 2018, 18, 179.	0.1	0
136	Distinguishing Glossy from Matte Textured Materials. Journal of Vision, 2018, 18, 888.	0.1	0
137	Visual Features of Non-Rigid Objects. Journal of Vision, 2019, 19, 91.	0.1	0
138	Sensitivity to gloss. Journal of Vision, 2019, 19, 251c.	0.1	0
139	Visual Judgements of Grasp Optimality. Journal of Vision, 2019, 19, 173b.	0.1	0
140	Hereâ€™s a novel object: draw variants from the same class.. Journal of Vision, 2019, 19, 59.	0.1	0
141	Unsupervised Neural Networks Learn Idiosyncrasies of Human Gloss Perception. Journal of Vision, 2019, 19, 213.	0.1	0
142	Inferring transformations from shape features. Journal of Vision, 2019, 19, 240a.	0.1	0
143	Visual perception of liquids: insights from deep neural networks. Journal of Vision, 2019, 19, 242b.	0.1	0
144	Searching for Strangely Shaped Cookies â€“ Is Taking a Bite Out of a Cookie Similar to Occluding Part of It?. Perception, 2021, 50, 140-153.	0.5	0

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145	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
146	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
147	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
148	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
149	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
150	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
151	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
152	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
153	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
154	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
155	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
156	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0