Roland W Fleming

List of Publications by Year
in descending order

156 papers	3,338 citations	218381 26 h-index	174990 52 g-index
170 all docs	170 docs citations	170 times ranked	1321 citing authors

#	Article	IF	Citations
1	Deep neural models for color classification and color constancy. Journal of Vision, 2022, 22, 17.	0.1	10
2	Distinguishing mirror from glass: A â€œbig dataâ€•approach to material perception. Journal of Vision, 2022, 22, 4.	0.1	14
3	Visual perception: Colour brings shape into stark relief. Current Biology, 2022, 32, R272-R273.	1.8	1
4	Scale ambiguities in material recognition. IScience, 2022, 25, 103970.	1.9	3
5	Superordinate Categorization Based on the Perceptual Organization of Parts. Brain Sciences, 2022, 12, 667.	1.1	1
6	Identifying specular highlights: Insights from deep learning. Journal of Vision, 2022, 22, 6.	0.1	2
7	Learning About the World by Learning About Images. Current Directions in Psychological Science, 2021, 30, 120-128.	2.8	13
8	Friction is preferred over grasp configuration in precision grip grasping. Journal of Neurophysiology, 2021, 125, 1330-1338.	0.9	8
9	Unsupervised learning predicts human perception and misperception of gloss. Nature Human Behaviour, 2021, 5, 1402-1417.	6.2	42
10	An image-computable model of human visual shape similarity. PLoS Computational Biology, 2021, 17, e1008981.	1.5	16
11	â€˜Distinctivenessâ€™ of parts in novel objects. Journal of Vision, 2021, 21, 2236.	0.1	0
12	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
13	The mental representation of materials distilled from >1.5 million similarity judgements. Journal of Vision, 2021, 21, 1981.	0.1	0
14	Material recognition and the role of assumed viewing distance. Journal of Vision, 2021, 21, 1936.	0.1	0
15	Learning to see material from motion by predicting videos. Journal of Vision, 2021, 21, 1993.	0.1	1
16	Modelling local and global explanations for shape aftereffects with naturalistic novel stimuli. Journal of Vision, 2021, 21, 2601.	0.1	0
17	Evolving visual representations from noise. Journal of Vision, 2021, 21, 2544.	0.1	0
18	Human judgments of relative 3D pose of novel complex objects. Journal of Vision, 2021, 21, 2873.	0.1	0

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19	Probing human 3D shape perception with novel, but natural stimuli. Journal of Vision, 2021, 21, 2966.	0.1	0
20	Material perception for philosophers. Philosophy Compass, 2021, 16, e12777.	0.7	1
21	Visual Prediction of Bounce Trajectories. Journal of Vision, 2021, 21, 2492.	0.1	0
22	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
23	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
24	Gloss perception: Searching for a deep neural network that behaves like humans. Journal of Vision, 2021, 21, 14.	0.1	14
25	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
26	Predicting precision grip grasp locations on three-dimensional objects. PLoS Computational Biology, 2020, 16, e1008081.	1.5	25
27	Visually inferring elasticity from the motion trajectory of bouncing cubes. Journal of Vision, 2020, 20, 6.	0.1	8
28	Visual perception of liquids: Insights from deep neural networks. PLoS Computational Biology, 2020, 16, e1008018.	1.5	11
29	The Veiled Virgin 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
30	Softness and weight from shape: Material properties inferred from local shape features. Journal of Vision, 2020, 20, 2.	0.1	6
31	A dataset for evaluating one-shot categorization of novel object classes. Data in Brief, 2020, 29, 105302.	0.5	1
32	Color consistency in the appearance of bleached fabrics. Journal of Vision, 2020, 20, 11.	0.1	5
33	Humans Can Visually Judge Grasp Quality and Refine Their Judgments Through Visual and Haptic Feedback. Frontiers in Neuroscience, 2020, 14, 591898.	1.4	9
34	The role of semantics in the perceptual organization of shape. Scientific Reports, 2020, 10, 22141.	1.6	2
35	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
36	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0

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37	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
38	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
39	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
40	Visual perception of liquids: Insights from deep neural networks. , 2020, 16, e1008018.		0
41	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
42	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
43	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
44	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
45	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
46	Predicting precision grip grasp locations on three-dimensional objects. , 2020, 16, e1008081.		0
47	Integration of prior knowledge during haptic exploration depends on information type. Journal of Vision, 2019, 19, 20.	0.1	17
48	Learning to see stuff. Current Opinion in Behavioral Sciences, 2019, 30, 100-108.	2.0	45
49	One-shot categorization of novel object classes in humans. Vision Research, 2019, 165, 98-108.	0.7	16
50	Visual perception of shape-transforming processes: â€˜Shape Scissionâ€™. Cognition, 2019, 189, 167-180.	1.1	18
51	The material-weight illusion disappears or inverts in objects made of two materials. Journal of Neurophysiology, 2019, 121, 996-1010.	0.9	7
52	Object Visibility, Not Energy Expenditure, Accounts For Spatial Biases in Human Grasp Selection. I-Perception, 2019, 10, 204166951982760.	0.8	10
53	Getting â€œfumperedâ€: Classifying objects by what has been done to them. Journal of Vision, 2019, 19, 15.	0.1	16
54	Color Constancy in Deep Neural Networks. Journal of Vision, 2019, 19, 298.	0.1	2

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55	Visual Features of Non-Rigid Objects. Journal of Vision, 2019, 19, 91.	0.1	0
56	Sensitivity to gloss. Journal of Vision, 2019, 19, 251c.	0.1	0
57	Visual Judgements of Grasp Optimality. Journal of Vision, 2019, 19, 173b.	0.1	0
58	Predicting Human Perception of Glossy Highlights using Neural Networks. Journal of Vision, 2019, 19, 297b.	0.1	1
59	Hereâ€™s a novel object: draw variants from the same class.. Journal of Vision, 2019, 19, 59.	0.1	0
60	An image computable model of visual shape similarity. Journal of Vision, 2019, 19, 37c.	0.1	1
61	Unsupervised Neural Networks Learn Idiosyncrasies of Human Gloss Perception. Journal of Vision, 2019, 19, 213.	0.1	0
62	Which brain areas are responsible for which aspects of grasping?. Journal of Vision, 2019, 19, 110b.	0.1	2
63	Inferring transformations from shape features. Journal of Vision, 2019, 19, 240a.	0.1	0
64	Visual perception of liquids: insights from deep neural networks. Journal of Vision, 2019, 19, 242b.	0.1	0
65	Visual Features in the Perception of Liquids. Current Biology, 2018, 28, 452-458.e4.	1.8	45
66	Identifying shape transformations from photographs of real objects. PLoS ONE, 2018, 13, e0202115.	1.1	13
67	The Sequential-Weight Illusion. I-Perception, 2018, 9, 204166951879027.	0.8	16
68	Colour, contours, shading and shape: flow interactions reveal anchor neighbourhoods. Interface Focus, 2018, 8, 20180019.	1.5	21
69	Distinguishing Mirror from Glass. Journal of Vision, 2018, 18, 227.	0.1	2
70	Influence of Different Types of Prior Knowledge on Haptic Exploration of Soft Objects. Lecture Notes in Computer Science, 2018, , 413-424.	1.0	0
71	Hue Flows and Shading Flows: emergent properties from their interaction. Journal of Vision, 2018, 18, 222.	0.1	0
72	One shot learning of novel object classes. Journal of Vision, 2018, 18, 556.	0.1	0

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73	Shape scission: causal segmentation of shape. Journal of Vision, 2018, 18, 1054.	0.1	0
74	The Sequential-Weight Illusion. Journal of Vision, 2018, 18, 93.	0.1	0
75	Visual Perception of Deformable Materials. Journal of Vision, 2018, 18, 226.	0.1	0
76	Predicting how we grasp arbitrary objects. Journal of Vision, 2018, 18, 179.	0.1	0
77	Distinguishing Glossy from Matte Textured Materials. Journal of Vision, 2018, 18, 888.	0.1	0
78	Material Perception. Annual Review of Vision Science, 2017, 3, 365-388.	2.3	82
79	Perceiving animacy from shape. Journal of Vision, 2017, 17, 10.	0.1	10
80	Shape, motion, and optical cues to stiffness of elastic objects. Journal of Vision, 2017, 17, 20.	0.1	44
81	The perception of hazy gloss. Journal of Vision, 2017, 17, 19.	0.1	14
82	Inferring the stiffness of unfamiliar objects from optical, shape, and motion cues. Journal of Vision, 2017, 17, 18.	0.1	42
83	You break it, you buy it â€“ effect of object shape on grasp locations. Journal of Vision, 2017, 17, 465.	0.1	0
84	Visual perception of elastic behavior of bouncing objects. Journal of Vision, 2017, 17, 225.	0.1	0
85	Inferring the deformation of unfamiliar objects. Journal of Vision, 2017, 17, 315.	0.1	0
86	Viscosity constancy across contexts. Journal of Vision, 2017, 17, 762.	0.1	0
87	Probing perceptual gloss space with physical surfaces. Journal of Vision, 2017, 17, 766.	0.1	0
88	Effects of shape transformations on perceived similarity. Journal of Vision, 2017, 17, 1383.	0.1	1
89	Visually predicting the future states of pouring liquids. Journal of Vision, 2017, 17, 761.	0.1	0
90	The Veiled Virgin Project: Causal layering of 3D shape. Journal of Vision, 2017, 17, 406.	0.1	1

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91	MatMix 1.0: Using optical mixing to probe visual material perception. Journal of Vision, 2016, 16, 11.	0.1	10
92	Influence of optical material properties on the perception of liquids. Journal of Vision, 2016, 16, 12.	0.1	28
93	Visual perception of complex shape-transforming processes. Cognitive Psychology, 2016, 90, 48-70.	0.9	20
94	Flow-guided warping for image-based shape manipulation. ACM Transactions on Graphics, 2016, 35, 1-12.	4.9	7
95	Differential processing of binocular and monocular gloss cues in human visual cortex. Journal of Neurophysiology, 2016, 115, 2779-2790.	0.9	10
96	Visual perception of shape altered by inferred causal history. Scientific Reports, 2016, 6, 36245.	1.6	33
97	â€˜Proto-rivalryâ€™: how the binocular brain identifies gloss. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160383.	1.2	10
98	Effects of material properties and object orientation on precision grip kinematics. Experimental Brain Research, 2016, 234, 2253-2265.	0.7	38
99	Perception of shape and space across rigid transformations. Vision Research, 2016, 126, 318-329.	0.7	16
100	Bent out of shape: The visual inference of non-rigid shape transformations applied to objects. Vision Research, 2016, 126, 330-346.	0.7	26
101	Visual cues to stiffness of elastic objects. Journal of Vision, 2016, 16, 637.	0.1	0
102	Psychophysical evaluation of a novel visual noise metric for renderings. Journal of Vision, 2016, 16, 965.	0.1	0
103	Cues Underlying Liquid Constancy. Journal of Vision, 2016, 16, 946.	0.1	1
104	Specular kurtosis and the perception of hazy gloss. Journal of Vision, 2016, 16, 942.	0.1	0
105	Confessions of a reluctant photorealist. Journal of Vision, 2016, 16, 3.	0.1	4
106	Perceiving Biological Growth and Other Non-Rigid Transformations. Journal of Vision, 2016, 16, 949.	0.1	0
107	Perception of physical stability and center of mass of 3-D objects. Journal of Vision, 2015, 15, 13-13.	0.1	21
108	Visual Development: Learning Not to See. Current Biology, 2015, 25, R1166-R1168.	1.8	2

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109	Seeing liquids from static snapshots. Vision Research, 2015, 115, 163-174.	0.7	47
110	Seeing liquids from visual motion. Vision Research, 2015, 109, 125-138.	0.7	66
111	Visual perception of materials: The science of stuff. Vision Research, 2015, 109, 123-124.	0.7	23
112	Perception of material properties. Vision Research, 2015, 115, 157-162.	0.7	26
113	Predicting shape variations from single exemplars. Journal of Vision, 2015, 15, 1126.	0.1	2
114	The influence of optical material appearance on the perception of liquids and their properties. Journal of Vision, 2015, 15, 936.	0.1	1
115	Distinguishing between texture and shading flows for 3D shape estimation. Journal of Vision, 2015, 15, 965.	0.1	2
116	Modulation of the Material-Weight Illusion in objects made of more than one material. Journal of Vision, 2015, 15, 1156.	0.1	1
117	Brain processing of gloss information with 2D and 3D depth cues. Journal of Vision, 2015, 15, 818.	0.1	2
118	Representation of shape and space when objects undergo transformations. Journal of Vision, 2015, 15, 1028.	0.1	0
119	How perceived causality influences perceived symmetry. Journal of Vision, 2015, 15, 1025.	0.1	0
120	Key characteristics of specular stereo. Journal of Vision, 2014, 14, 14-14.	0.1	10
121	Visual perception of materials and their properties. Vision Research, 2014, 94, 62-75.	0.7	229
122	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
123	Visual perception of the physical stability of asymmetric three-dimensional objects. Journal of Vision, 2013, 13, 12-12.	0.1	23
124	Perceptual qualities and material classes. Journal of Vision, 2013, 13, 9-9.	0.1	108
125	Effects of surface reflectance and 3D shape on perceived rotation axis. Journal of Vision, 2013, 13, 8-8.	0.1	11
126	Concavities, negative parts, and the perception that shapes are complete. Journal of Vision, 2013, 13, 3-3.	0.1	14

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127	Surface flows for image-based shading design. ACM Transactions on Graphics, 2012, 31, 1-9.	4.9	13
128	Human Perception: Visual Heuristics in the Perception ofÂGlossiness. Current Biology, 2012, 22, R865-R866.	1.8	33
129	Haptic Categorical Perception of Shape. PLoS ONE, 2012, 7, e43062.	1.1	13
130	Perceived Object Stability Depends on Multisensory Estimates of Gravity. PLoS ONE, 2011, 6, e19289.	1.1	21
131	Perception of Visual Artifacts in Imageâ€Based Rendering of FaÃ§ades. Computer Graphics Forum, 2011, 30, 1241-1250.	1.8	19
132	Visual Perception: Bizarre Contours Go Against the Odds. Current Biology, 2011, 21, R259-R261.	1.8	1
133	Visual Motion and the Perception of Surface Material. Current Biology, 2011, 21, 2010-2016.	1.8	106
134	Visual Perception of Thick Transparent Materials. Psychological Science, 2011, 22, 812-820.	1.8	89
135	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
136	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
137	Measuring unrestrained gaze on wall-sized displays. , 2010, , .		1
138	Eye and pointer coordination in search and selection tasks. , 2010, , .		32
139	Evaluation of reverse tone mapping through varying exposure conditions. ACM Transactions on Graphics, 2009, 28, 1-8.	4.9	78
140	Evaluation of reverse tone mapping through varying exposure conditions. , 2009, , .		20
141	Categorizing art: Comparing humans and computers. Computers and Graphics, 2009, 33, 484-495.	1.4	48
142	Visual perception of 3D shape. , 2009, , .		5
143	Do HDR displays support LDR content?. ACM Transactions on Graphics, 2007, 26, 38.	4.9	144
144	Perception and prediction of simple object interactions. , 2007, , .		17

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145	Distortion in 3D shape estimation with changes in illumination. , 2007, , .		26
146	Do HDR displays support LDR content?. , 2007, , .		56
147	Image-based material editing. ACM Transactions on Graphics, 2006, 25, 654-663.	4.9	156
148	Image-based material editing. , 2006, , .		31
149	Sketching shiny surfaces. ACM Transactions on Applied Perception, 2006, 3, 262-285.	1.2	16
150	Low-Level Image Cues in the Perception of Translucent Materials. ACM Transactions on Applied Perception, 2005, 2, 346-382.	1.2	158
151	Extracting and depicting the 3D shape of specular surfaces. , 2005, , .		3
152	Image-based material editing. , 2005, , .		3
153	Specular reflections and the perception of shape. Journal of Vision, 2004, 4, 10.	0.1	249
154	Perceiving translucent materials. , 2004, , .		20
155	Real-world illumination and the perception of surface reflectance properties. Journal of Vision, 2003, 3, 3.	0.1	351
156	The Interpolation of Object and Surface Structure. Cognitive Psychology, 2002, 44, 148-190.	0.9	92