Steven W Zucker

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3451505/publications.pdf

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24	1,535	759233 12	713466 21
papers	citations	h-index	g-index

25	25	25	952
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shapes, shocks, and deformations I: The components of two-dimensional shape and the reaction-diffusion space. International Journal of Computer Vision, 1995, 15, 189-224.	15.6	493
2	Shock Graphs and Shape Matching. International Journal of Computer Vision, 1999, 35, 13-32.	15.6	482
3	Multiscale Medial Loci and Their Properties. International Journal of Computer Vision, 2003, 55, 155-179.	15.6	141
4	Geometrical Computations Explain Projection Patterns of Long-Range Horizontal Connections in Visual Cortex. Neural Computation, 2004, 16, 445-476.	2.2	100
5	Early orientation selection: Tangent fields and the dimensionality of their support. Computer Vision, Graphics, and Image Processing, 1985, 32, 74-103.	1.0	87
6	Feedback between motion and sensation provides nonlinear boost in run-and-tumble navigation. PLoS Computational Biology, 2017, 13, e1005429.	3.2	36
7	Flow stimuli reveal ecologically appropriate responses in mouse visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11304-11309.	7.1	23
8	Sensitivity to corners in flow patterns. Spatial Vision, 1987, 2, 233-244.	1.4	22
9	Contextual Inference in Contour-Based Stereo Correspondence. International Journal of Computer Vision, 2006, 69, 59-75.	15.6	21
10	Colour, contours, shading and shape: flow interactions reveal anchor neighbourhoods. Interface Focus, 2018, 8, 20180019.	3.0	21
11	Hue geometry and horizontal connections. Neural Networks, 2004, 17, 753-771.	5.9	16
12	Local field potentials and border ownership: A conjecture about computation in visual cortex. Journal of Physiology (Paris), 2012, 106, 297-315.	2.1	15
13	How Shading Constrains Surface Patches without Knowledge of Light Sources. SIAM Journal on Imaging Sciences, 2014, 7, 641-668.	2.2	13
14	On the Differential Geometry of 3D Flow Patterns: Generalized Helicoids and Diffusion MRI Analysis. , 2007, , .		11
15	Tensors, Differential Geometry and Statistical Shading Analysis. Journal of Mathematical Imaging and Vision, 2018, 60, 968-992.	1.3	10
16	Boundaries, shading, and border ownership: A cusp at their interaction. Journal of Physiology (Paris), 2009, 103, 18-36.	2.1	9
17	From boundaries to bumps: When closed (extremal) contours are critical. Journal of Vision, 2021, 21, 7.	0.3	9
18	Conduction in the Heart Wall: Helicoidal Fibers Minimize Diffusion Bias. Scientific Reports, 2018, 8, 7165.	3.3	7

#	Article	IF	Citations
19	On relationships between fixation identification algorithms and fractal box counting methods. , 2014, 2014, 67-74.		5
20	Understanding the statistics of the natural environment and their implications for vision. Vision Research, 2016, 120, 1-4.	1.4	5
21	General Geometric Good Continuation: From Taylor to Laplace via Level Sets. International Journal of Computer Vision, 2010, 86, 48-71.	15.6	4
22	Critical contours link surface inferences with image flows. Journal of Vision, 2017, 17, 319.	0.3	1
23	Hue Flows and Shading Flows: emergent properties from their interaction. Journal of Vision, 2018, 18, 222.	0.3	0
24	Which parts of a shaded image relate invariably to which parts of a 3D shape?. Journal of Vision, 2018, 18, 721.	0.3	0