

# Steven W Zucker

## List of Publications by Year in descending order

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

Version: 2024-02-01

24  
papers

1,535  
citations

759233

12  
h-index

713466

21  
g-index

25  
all docs

25  
docs citations

25  
times ranked

952  
citing authors

#	ARTICLE	IF	CITATIONS
1	From boundaries to bumps: When closed (extremal) contours are critical. <i>Journal of Vision</i> , 2021, 21, 7.	0.3	9
2	Flow stimuli reveal ecologically appropriate responses in mouse visual cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11304-11309.	7.1	23
3	Conduction in the Heart Wall: Helicoidal Fibers Minimize Diffusion Bias. <i>Scientific Reports</i> , 2018, 8, 7165.	3.3	7
4	Tensors, Differential Geometry and Statistical Shading Analysis. <i>Journal of Mathematical Imaging and Vision</i> , 2018, 60, 968-992.	1.3	10
5	Colour, contours, shading and shape: flow interactions reveal anchor neighbourhoods. <i>Interface Focus</i> , 2018, 8, 20180019.	3.0	21
6	Hue Flows and Shading Flows: emergent properties from their interaction. <i>Journal of Vision</i> , 2018, 18, 222.	0.3	0
7	Which parts of a shaded image relate invariably to which parts of a 3D shape?. <i>Journal of Vision</i> , 2018, 18, 721.	0.3	0
8	Feedback between motion and sensation provides nonlinear boost in run-and-tumble navigation. <i>PLoS Computational Biology</i> , 2017, 13, e1005429.	3.2	36
9	Critical contours link surface inferences with image flows. <i>Journal of Vision</i> , 2017, 17, 319.	0.3	1
10	Understanding the statistics of the natural environment and their implications for vision. <i>Vision Research</i> , 2016, 120, 1-4.	1.4	5
11	On relationships between fixation identification algorithms and fractal box counting methods. , 2014, 2014, 67-74.		5
12	How Shading Constrains Surface Patches without Knowledge of Light Sources. <i>SIAM Journal on Imaging Sciences</i> , 2014, 7, 641-668.	2.2	13
13	Local field potentials and border ownership: A conjecture about computation in visual cortex. <i>Journal of Physiology (Paris)</i> , 2012, 106, 297-315.	2.1	15
14	General Geometric Good Continuation: From Taylor to Laplace via Level Sets. <i>International Journal of Computer Vision</i> , 2010, 86, 48-71.	15.6	4
15	Boundaries, shading, and border ownership: A cusp at their interaction. <i>Journal of Physiology (Paris)</i> , 2009, 103, 18-36.	2.1	9
16	On the Differential Geometry of 3D Flow Patterns: Generalized Helicoids and Diffusion MRI Analysis. , 2007, , .		11
17	Contextual Inference in Contour-Based Stereo Correspondence. <i>International Journal of Computer Vision</i> , 2006, 69, 59-75.	15.6	21
18	Geometrical Computations Explain Projection Patterns of Long-Range Horizontal Connections in Visual Cortex. <i>Neural Computation</i> , 2004, 16, 445-476.	2.2	100

#	ARTICLE	IF	CITATIONS
19	Hue geometry and horizontal connections. <i>Neural Networks</i> , 2004, 17, 753-771.	5.9	16
20	Multiscale Medial Loci and Their Properties. <i>International Journal of Computer Vision</i> , 2003, 55, 155-179.	15.6	141
21	Shock Graphs and Shape Matching. <i>International Journal of Computer Vision</i> , 1999, 35, 13-32.	15.6	482
22	Shapes, shocks, and deformations I: The components of two-dimensional shape and the reaction-diffusion space. <i>International Journal of Computer Vision</i> , 1995, 15, 189-224.	15.6	493
23	Sensitivity to corners in flow patterns. <i>Spatial Vision</i> , 1987, 2, 233-244.	1.4	22
24	Early orientation selection: Tangent fields and the dimensionality of their support. <i>Computer Vision, Graphics, and Image Processing</i> , 1985, 32, 74-103.	1.0	87