

# Alexander S Ecker

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8326430/publications.pdf>

Version: 2024-02-01

31  
papers

7,716  
citations

361388

20  
h-index

477281

29  
g-index

47  
all docs

47  
docs citations

47  
times ranked

7112  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Learning divisive normalization in primary visual cortex. <i>PLoS Computational Biology</i> , 2021, 17, e1009028.   | 3.2  | 21        |
| 2  | The temporal structure of the inner retina at a single glance. <i>Scientific Reports</i> , 2020, 10, 4399.  | 3.3  | 14        |
| 3  | Deep convolutional models improve predictions of macaque V1 responses to natural images. <i>PLoS Computational Biology</i> , 2019, 15, e1006897.  | 3.2  | 179       |
| 4  | Inception loops discover what excites neurons most using deep predictive models. <i>Nature Neuroscience</i> , 2019, 22, 2060-2065.  | 14.8 | 104       |
| 5  | Image content is more important than Bouma's Law for scene metamers. <i>ELife</i> , 2019, 8, .  | 6.0  | 27        |
| 6  | Introduction to NIPS 2017 Competition Track. <i>The Springer Series on Challenges in Machine Learning</i> , 2018, , 1-23.   | 10.4 | 0         |
| 7  | Faster processing of moving compared with flashed bars in awake macaque V1 provides a neural correlate of the flash lag illusion. <i>Journal of Neurophysiology</i> , 2018, 120, 2430-2452. | 1.8  | 25        |
| 8  | Attentional fluctuations induce shared variability in macaque primary visual cortex. <i>Nature Communications</i> , 2018, 9, 2654.  | 12.8 | 58        |
| 9  | Diverse Feature Visualizations Reveal Invariances in Early Layers of Deep Neural Networks. <i>Lecture Notes in Computer Science</i> , 2018, , 225-240.                                      | 1.3  | 14        |
| 10 | Texture and art with deep neural networks. <i>Current Opinion in Neurobiology</i> , 2017, 46, 178-186.  | 4.2  | 55        |
| 11 | Controlling Perceptual Factors in Neural Style Transfer. , 2017, , .  |      | 274       |
| 12 | A parametric texture model based on deep convolutional features closely matches texture appearance for humans. <i>Journal of Vision</i> , 2017, 17, 5.                                      | 0.3  | 40        |
| 13 | Image Style Transfer Using Convolutional Neural Networks. , 2016, , .   |      | 3,141     |
| 14 | Response to Comment on "Principles of connectivity among morphologically defined cell types in adult neocortex". <i>Science</i> , 2016, 353, 1108-1108.                                     | 12.6 | 13        |
| 15 | Spike sorting for large, dense electrode arrays. <i>Nature Neuroscience</i> , 2016, 19, 634-641.  | 14.8 | 671       |
| 16 | On the Structure of Neuronal Population Activity under Fluctuations in Attentional State. <i>Journal of Neuroscience</i> , 2016, 36, 1775-1789.   | 3.6  | 90        |
| 17 | Synaptic unreliability facilitates information transmission in balanced cortical populations. <i>Physical Review E</i> , 2015, 91, 062707.  | 2.1  | 6         |
| 18 | Improved Estimation and Interpretation of Correlations in Neural Circuits. <i>PLoS Computational Biology</i> , 2015, 11, e1004083.  | 3.2  | 58        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Principles of connectivity among morphologically defined cell types in adult neocortex. <i>Science</i> , 2015, 350, aac9462.  | 12.6 | 736       |
| 20 | Population code in mouse V1 facilitates readout of natural scenes through increased sparseness. <i>Nature Neuroscience</i> , 2014, 17, 851-857.   | 14.8 | 167       |
| 21 | Is there signal in the noise?. <i>Nature Neuroscience</i> , 2014, 17, 750-751.  | 14.8 | 14        |
| 22 | State Dependence of Noise Correlations in Macaque Primary Visual Cortex. <i>Neuron</i> , 2014, 82, 235-248.   | 8.1  | 307       |
| 23 | Macaque Monkeys Perceive the Flash Lag Illusion. <i>PLoS ONE</i> , 2013, 8, e58788.   | 2.5  | 12        |
| 24 | A Fast and Simple Population Code for Orientation in Primate V1. <i>Journal of Neuroscience</i> , 2012, 32, 10618-10626.  | 3.6  | 103       |
| 25 | The Effect of Noise Correlations in Populations of Diversely Tuned Neurons. <i>Journal of Neuroscience</i> , 2011, 31, 14272-14283.   | 3.6  | 240       |
| 26 | Reassessing optimal neural population codes with neurometric functions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 4423-4428.                | 7.1  | 52        |
| 27 | Decorrelated Neuronal Firing in Cortical Microcircuits. <i>Science</i> , 2010, 327, 584-587.  | 12.6 | 562       |
| 28 | Generating Spike Trains with Specified Correlation Coefficients. <i>Neural Computation</i> , 2009, 21, 397-423.   | 2.2  | 167       |
| 29 | Feature selectivity of the gamma-band of the local field potential in primate primary visual cortex. <i>Frontiers in Neuroscience</i> , 2008, 2, 199-207.   | 2.8  | 108       |
| 30 | Comparing the feature selectivity of the gamma-band of the local field potential and the underlying spiking activity in primate visual cortex. <i>Frontiers in Systems Neuroscience</i> , 2008, 2, 2. | 2.5  | 141       |
| 31 | Recording Chronically From the Same Neurons in Awake, Behaving Primates. <i>Journal of Neurophysiology</i> , 2007, 98, 3780-3790.   | 1.8  | 151       |