Alexander Mathis

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4204348/publications.pdf

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22 papers	5,579 citations	430442 18 h-index	752256 20 g-index
32 all docs	32 docs citations	32 times ranked	4684 citing authors

#	Article	IF	Citations
1	Perspectives in machine learning for wildlife conservation. Nature Communications, 2022, 13, 792.	5.8	176
2	Multi-animal pose estimation, identification and tracking with DeepLabCut. Nature Methods, 2022, 19, 496-504.	9.0	165
3	Pretraining boosts out-of-domain robustness for pose estimation. , 2021, , .		53
4	Tumor-specific cytolytic CD4 T cells mediate immunity against human cancer. Science Advances, 2021, 7, .	4.7	157
5	Perspectives on Individual Animal Identification from Biology and Computer Vision. Integrative and Comparative Biology, 2021, 61, 900-916.	0.9	30
6	Measuring and modeling the motor system with machine learning. Current Opinion in Neurobiology, 2021, 70, 11-23.	2.0	44
7	AcinoSet: A 3D Pose Estimation Dataset and Baseline Models for Cheetahs in the Wild. , 2021, , .		23
8	Deep learning tools for the measurement of animal behavior in neuroscience. Current Opinion in Neurobiology, 2020, 60, 1-11.	2.0	271
9	A Primer on Motion Capture with Deep Learning: Principles, Pitfalls, and Perspectives. Neuron, 2020, 108, 44-65.	3.8	131
10	Real-time, low-latency closed-loop feedback using markerless posture tracking. ELife, 2020, 9, .	2.8	93
11	Highlights from the 29th Annual Meeting of the Society for the Neural Control of Movement. Journal of Neurophysiology, 2019, 122, 1777-1783.	0.9	7
12	Using DeepLabCut for 3D markerless pose estimation across species and behaviors. Nature Protocols, 2019, 14, 2152-2176.	5.5	792
13	DeepLabCut: markerless pose estimation of user-defined body parts with deep learning. Nature Neuroscience, 2018, 21, 1281-1289.	7.1	2,710
14	Somatosensory Cortex Plays an Essential Role in Forelimb Motor Adaptation in Mice. Neuron, 2017, 93, 1493-1503.e6.	3.8	144
15	Neuronal Representation of Social Information in the Medial Amygdala of Awake Behaving Mice. Cell, 2017, 171, 1176-1190.e17.	13.5	197
16	Periodic population codes: From a single circular variable to higher dimensions, multiple nested scales, and conceptual spaces. Current Opinion in Neurobiology, 2017, 46, 99-108.	2.0	13
17	Reading Out Olfactory Receptors: Feedforward Circuits Detect Odors in Mixtures without Demixing. Neuron, 2016, 91, 1110-1123.	3.8	42
18	Connecting multiple spatial scales to decode the population activity of grid cells. Science Advances, 2015, 1, e1500816.	4.7	117

#	Article	IF	Citations
19	Probable nature of higher-dimensional symmetries underlying mammalian grid-cell activity patterns. ELife, 2015, 4, .	2.8	43
20	Multiscale codes in the nervous system: The problem of noise correlations and the ambiguity of periodic scales. Physical Review E, 2013, 88, 022713.	0.8	25
21	Resolution of Nested Neuronal Representations Can Be Exponential in the Number of Neurons. Physical Review Letters, 2012, 109, 018103.	2.9	44
22	Optimal Population Codes for Space: Grid Cells Outperform Place Cells. Neural Computation, 2012, 24, 2280-2317.	1.3	179