

Alipasha Vaziri

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

7,574
citations

186209

28
h-index

377752

34
g-index

39
all docs

39
docs citations

39
times ranked

7218
citing authors

#	ARTICLE	IF	CITATIONS
1	Entanglement of the orbital angular momentum states of photons. <i>Nature</i> , 2001, 412, 313-316.	13.7	2,735
2	Simultaneous whole-animal 3D imaging of neuronal activity using light-field microscopy. <i>Nature Methods</i> , 2014, 11, 727-730.	9.0	672
3	Experimental Two-Photon, Three-Dimensional Entanglement for Quantum Communication. <i>Physical Review Letters</i> , 2002, 89, 240401.	2.9	558
4	Experimental quantum cryptography with qutrits. <i>New Journal of Physics</i> , 2006, 8, 75-75.	1.2	329
5	Wapl is an essential regulator of chromatin structure and chromosome segregation. <i>Nature</i> , 2013, 501, 564-568.	13.7	308
6	Brain-wide 3D imaging of neuronal activity in <i>Caenorhabditis elegans</i> with sculpted light. <i>Nature Methods</i> , 2013, 10, 1013-1020.	9.0	293
7	Concentration of Higher Dimensional Entanglement: Qutrits of Photon Orbital Angular Momentum. <i>Physical Review Letters</i> , 2003, 91, 227902.	2.9	240
8	Rapid movement and transcriptional relocalization of human cohesin on DNA. <i>EMBO Journal</i> , 2016, 35, 2671-2685.	3.5	216
9	Two-photon single-cell optogenetic control of neuronal activity by sculpted light. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 11981-11986.	3.3	189
10	Multilayer three-dimensional super resolution imaging of thick biological samples. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 20221-20226.	3.3	182
11	Superpositions of the orbital angular momentum for applications in quantum experiments. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2002, 4, S47-S51.	1.4	174
12	Confined activation and subdiffraction localization enables whole-cell PALM with genetically expressed probes. <i>Nature Methods</i> , 2011, 8, 327-333.	9.0	174
13	Fast volumetric calcium imaging across multiple cortical layers using sculpted light. <i>Nature Methods</i> , 2016, 13, 1021-1028.	9.0	158
14	High-speed volumetric imaging of neuronal activity in freely moving rodents. <i>Nature Methods</i> , 2018, 15, 429-432.	9.0	156
15	Volumetric Ca ²⁺ Imaging in the Mouse Brain Using Hybrid Multiplexed Sculpted Light Microscopy. <i>Cell</i> , 2019, 177, 1050-1066.e14.	13.5	148
16	Video rate volumetric Ca ²⁺ imaging across cortex using seeded iterative demixing (SID) microscopy. <i>Nature Methods</i> , 2017, 14, 811-818.	9.0	135
17	Direct detection of a single photon by humans. <i>Nature Communications</i> , 2016, 7, 12172.	5.8	112
18	High-speed, cortex-wide volumetric recording of neuroactivity at cellular resolution using light beads microscopy. <i>Nature Methods</i> , 2021, 18, 1103-1111.	9.0	96

#	ARTICLE	IF	CITATIONS
19	Network mechanisms of theta related neuronal activity in hippocampal CA1 pyramidal neurons. <i>Nature Neuroscience</i> , 2010, 13, 967-972.	7.1	95
20	A Guide to Emerging Technologies for Large-Scale and Whole-Brain Optical Imaging of Neuronal Activity. <i>Annual Review of Neuroscience</i> , 2018, 41, 431-452.	5.0	87
21	Cerebellar Neurodynamics Predict Decision Timing and Outcome on the Single-Trial Level. <i>Cell</i> , 2020, 180, 536-551.e17.	13.5	71
22	Near-isotropic 3D optical nanoscopy with photon-limited chromophores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 10068-10073.	3.3	61
23	Ultrafast widefield optical sectioning microscopy by multifocal temporal focusing. <i>Optics Express</i> , 2010, 18, 19645.	1.7	60
24	Reshaping the optical dimension in optogenetics. <i>Current Opinion in Neurobiology</i> , 2012, 22, 128-137.	2.0	60
25	A Force-Induced Directional Switch of a Molecular Motor Enables Parallel Microtubule Bundle Formation. <i>Cell</i> , 2016, 167, 539-552.e14.	13.5	50
26	Brain-wide 3D light-field imaging of neuronal activity with speckle-enhanced resolution. <i>Optica</i> , 2018, 5, 345.	4.8	47
27	Non-catalytic motor domains enable processive movement and functional diversification of the kinesin-14 Kar3. <i>ELife</i> , 2015, 4, .	2.8	35
28	Vibrational excitons in ionophores: experimental probes for quantum coherence-assisted ion transport and selectivity in ion channels. <i>New Journal of Physics</i> , 2011, 13, 113030.	1.2	32
29	Visualizing KcsA Conformational Changes upon Ion Binding by Infrared Spectroscopy and Atomistic Modeling. <i>Journal of Physical Chemistry B</i> , 2015, 119, 5824-5831.	1.2	25
30	Laser-Induced Acoustic Desorption of Natural and Functionalized Biochromophores. <i>Analytical Chemistry</i> , 2015, 87, 5614-5619.	3.2	21
31	Optimizing and extending light-sculpting microscopy for fast functional imaging in neuroscience. <i>Biomedical Optics Express</i> , 2015, 6, 353.	1.5	18
32	Neurophotonic Tools for Microscopic Measurements and Manipulation: Status Report. <i>Neurophotonics</i> , 2022, 9, 013001.	1.7	17
33	Gaze mechanisms enabling the detection of faint stars in the night sky. <i>European Journal of Neuroscience</i> , 2021, 54, 5357-5367.	1.2	2
34	Cohesin is a Motor that Bends and Compacts DNA. <i>Biophysical Journal</i> , 2020, 118, 334a-335a.	0.2	0