Manuel Zimmer

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6258649/publications.pdf

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35 4,162 21 32 papers citations h-index g-index

41 41 4282 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Simultaneous whole-animal 3D imaging of neuronal activity using light-field microscopy. Nature Methods, 2014, 11, 727-730.	9.0	672
2	Microfluidics for in vivo imaging of neuronal and behavioral activity in Caenorhabditis elegans. Nature Methods, 2007, 4, 727-731.	9.0	539
3	Global Brain Dynamics Embed the Motor Command Sequence of Caenorhabditis elegans. Cell, 2015, 163, 656-669.	13.5	410
4	EphB–ephrinB bi-directional endocytosis terminates adhesion allowing contact mediated repulsion. Nature Cell Biology, 2003, 5, 869-878.	4.6	324
5	Brain-wide 3D imaging of neuronal activity in Caenorhabditis elegans with sculpted light. Nature Methods, 2013, 10, 1013-1020.	9.0	293
6	EphrinB Phosphorylation and Reverse Signaling. Molecular Cell, 2002, 9, 725-737.	4.5	274
7	Neurons Detect Increases and Decreases in Oxygen Levels Using Distinct Guanylate Cyclases. Neuron, 2009, 61, 865-879.	3 . 8	253
8	Ephrin-B3 is the midline barrier that prevents corticospinal tract axons from recrossing, allowing for unilateral motor control. Genes and Development, 2001, 15, 877-888.	2.7	228
9	Quantitative Mapping of a Digenic Behavioral Trait Implicates Globin Variation in C. elegans Sensory Behaviors. Neuron, 2009, 61, 692-699.	3.8	219
10	A global brain state underlies <i>C. elegans</i> sleep behavior. Science, 2017, 356, .	6.0	143
11	Serine phosphorylation of ephrinB2 regulates trafficking of synaptic AMPA receptors. Nature Neuroscience, 2008, 11, 1035-1043.	7.1	100
12	Nested Neuronal Dynamics Orchestrate a Behavioral Hierarchy across Timescales. Neuron, 2020, 105, 562-576.e9.	3.8	95
13	The in vitro and in vivo phosphotyrosine map of activated MuSK. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4585-4590.	3.3	92
14	Energy Scarcity Promotes a Brain-wide Sleep State Modulated by Insulin Signaling in C.Âelegans. Cell Reports, 2018, 22, 953-966.	2.9	73
15	Brain-wide representations of ongoing behavior: a universal principle?. Current Opinion in Neurobiology, 2020, 64, 60-69.	2.0	62
16	Dissection of neuronal gap junction circuits that regulate social behavior in <i>Caenorhabditis elegans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1263-E1272.	3.3	48
17	Regulation of two motor patterns enables the gradual adjustment of locomotion strategy in Caenorhabditis elegans. ELife, 2016, 5, .	2.8	48
18	C.Âelegans Body Cavity Neurons Are Homeostatic Sensors that Integrate Fluctuations in Oxygen Availability and Internal Nutrient Reserves. Cell Reports, 2016, 14, 1641-1654.	2.9	38

#	Article	IF	Citations
19	Oxygen-induced social behaviours in <i>Pristionchus pacificus</i> have a distinct evolutionary history and genetic regulation from <i>Caenorhabditis elegans</i> B: Biological Sciences, 2016, 283, 20152263.	1.2	31
20	Cellular and molecular basis of decisionâ€making. EMBO Reports, 2014, 15, 1023-1035.	2.0	29
21	Sensorimotor integration in <i>Caenorhabditis elegans</i> : a reappraisal towards dynamic and distributed computations. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170371.	1.8	29
22	EGL-13/SoxD Specifies Distinct O2 and CO2 Sensory Neuron Fates in Caenorhabditis elegans. PLoS Genetics, 2013, 9, e1003511.	1.5	25
23	Neuron type-specific miRNA represses two broadly expressed genes to modulate an avoidance behavior in <i>C. elegans</i> . Genes and Development, 2016, 30, 2042-2047.	2.7	25
24	Designing Worm-inspired Neural Networks for Interpretable Robotic Control., 2019,,.		17
25	A set of hub neurons and non-local connectivity features support global brain dynamics in C.Âelegans. Current Biology, 2022, 32, 3443-3459.e8.	1.8	16
26	A programmable platform for sub-second multichemical dynamic stimulation and neuronal functional imaging in <i>C. elegans</i> Lab on A Chip, 2018, 18, 505-513.	3.1	11
27	Unsupervised learning of control signals and their encodings in <i>Caenorhabditis elegans</i> whole-brain recordings. Journal of the Royal Society Interface, 2020, 17, 20200459.	1.5	9
28	Methods for analyzing neuronal structure and activity in <i>Caenorhabditis elegans</i> . Genetics, 2021, 218, .	1.2	9
29	Sensorimotor Integration for Decision Making: How the Worm Steers. Neuron, 2018, 97, 258-260.	3.8	7
30	Life(span) in balance: oxygen fuels a sophisticated neural network for lifespan homeostasis in C. elegans. EMBO Journal, 2013, 32, 1499-1501.	3.5	3
31	Molecular Multicolor Multiphoton in Vivo Bioimaging Based on a Direct Diode Pumped Ti:sapphire Oscillator. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	1.9	2
32	Insect locomotion: Flies show you how to stay onÂcourse. Current Biology, 2021, 31, R1395-R1397.	1.8	1
33	Behavioral Assays to Study Oxygen and Carbon Dioxide Sensing in Caenorhabditis elegans. Bio-protocol, 2018, 8, .	0.2	1
34	Imaging the Emergence of Behavior. Cell, 2019, 179, 285-286.	13.5	0
35	Predator–prey interactions: Strategic biting. Current Biology, 2022, 32, R367-R370.	1.8	0