AndrÃ© E X Brown

List of Publications by Year
in descending order

46 papers	3,487 citations	279487 23 h-index	214527 47 g-index
69 all docs	69 docs citations	69 times ranked	4849 citing authors

#	Article	IF	Citations
1	Megapixel camera arrays enable high-resolution animal tracking in multiwell plates. Communications Biology, 2022, 5, 253.	2.0	18
2	Bi-allelic loss-of-function variants in PPFIBP1 cause a neurodevelopmental disorder with microcephaly, epilepsy, and periventricular calcifications. American Journal of Human Genetics, 2022, 109, 1421-1435.	2.6	6
3	Behavioral fingerprints predict insecticide and anthelmintic mode of action. Molecular Systems Biology, 2021, 17, e10267.	3.2	20
4	Quantitative behavioural phenotyping to investigate anaesthesia induced neurobehavioural impairment. Scientific Reports, 2021, 11, 19398.	1.6	2
5	Increased fidelity of protein synthesis extends lifespan. Cell Metabolism, 2021, 33, 2288-2300.e12.	7.2	66
6	A C. elegans model of C9orf72-associated ALS/FTD uncovers a conserved role for eIF2D in RAN translation. Nature Communications, 2021, 12, 6025.	5.8	27
7	Multidimensional phenotyping predicts lifespan and quantifies health in Caenorhabditis elegans. PLoS Computational Biology, 2020, 16, e1008002.	1.5	16
8	Enteric neurons increase maternal food intake during reproduction. Nature, 2020, 587, 455-459.	13.7	53
9	Systemic muscle wasting and coordinated tumour response drive tumourigenesis. Nature Communications, 2020, 11, 4653.	5.8	41
10	Comparison of solitary and collective foraging strategies of Caenorhabditis elegans in patchy food distributions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190382.	1.8	7
11	Mechanical properties measured by atomic force microscopy define health biomarkers in ageing C. elegans. Nature Communications, 2020, 11, 1043.	5.8	29
12	Measuring Caenorhabditis elegans Spatial Foraging and Food Intake Using Bioluminescent Bacteria. Genetics, 2020, 214, 577-587.	1.2	13
13	A terminal selector prevents a Hox transcriptional switch to safeguard motor neuron identity throughout life. ELife, 2020, 9, .	2.8	29
14	Establishment and maintenance of motor neuron identity via temporal modularity in terminal selector function. ELife, 2020, 9, .	2.8	24
15	Tissue-specific isoforms of the single C. elegans Ryanodine receptor gene unc-68 control specific functions. PLoS Genetics, 2020, 16, e1009102.	1.5	7
16	Shared behavioral mechanisms underlie C. elegans aggregation and swarming. ELife, 2019, 8, .	2.8	29
17	Identification of C. elegans Strains Using a Fully Convolutional Neural Network on Behavioural Dynamics. Lecture Notes in Computer Science, 2019, , 455-464.	1.0	5
18	Ethology as a physical science. Nature Physics, 2018, 14, 653-657.	6.5	125

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19	Glassy worm-like micelles in solvent and shear mediated shape transitions. Soft Matter, 2018, 14, 4194-4203.	1.2	6
20	Neuropeptides encoded bynlp-49modulate locomotion, arousal and egg-laying behaviours inCaenorhabditis elegansvia the receptor SEB-3. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170368.	1.8	28
21	Powerful and interpretable behavioural features for quantitative phenotyping ofCaenorhabditis elegans. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170375.	1.8	65
22	Connectome to behaviour: modelling Caenorhabditis elegans at cellular resolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170366.	1.8	9
23	An open-source platform for analyzing and sharing worm-behavior data. Nature Methods, 2018, 15, 645-646.	9.0	93
24	Predicting path from undulations forC. elegansusing linear and nonlinear resistive force theory. Physical Biology, 2017, 14, 025001.	0.8	6
25	Deriving Shape-Based Features for C. elegans Locomotion Using Dimensionality Reduction Methods. Frontiers in Behavioral Neuroscience, 2016, 10, 159.	1.0	13
26	Hierarchical compression ofCaenorhabditis eleganslocomotion reveals phenotypic differences in the organization of behaviour. Journal of the Royal Society Interface, 2016, 13, 20160466.	1.5	43
27	Model-Independent Phenotyping of C. elegans Locomotion Using Scale-Invariant Feature Transform. PLoS ONE, 2015, 10, e0122326.	1.1	10
28	Tracking Single C. elegans Using a USB Microscope on a Motorized Stage. Methods in Molecular Biology, 2015, 1327, 181-197.	0.4	3
29	Changes in Postural Syntax Characterize Sensory Modulation and Natural Variation of C. elegans Locomotion. PLoS Computational Biology, 2015, 11, e1004322.	1.5	55
30	A database of Caenorhabditis elegans behavioral phenotypes. Nature Methods, 2013, 10, 877-879.	9.0	280
31	A dictionary of behavioral motifs reveals clusters of genes affecting Caenorhabditis elegans locomotion. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 791-796.	3.3	196
32	Hyaluronic acid matrices show matrix stiffness in 2D and 3D dictates cytoskeletal order and myosin-II phosphorylation within stem cells. Integrative Biology (United Kingdom), 2012, 4, 422.	0.6	107
33	The Potential for Respiratory Dropletâ€“Transmissible A/H5N1 Influenza Virus to Evolve in a Mammalian Host. Science, 2012, 336, 1541-1547.	6.0	286
34	Unrestrained worms bridled by the light. Nature Methods, 2011, 8, 129-130.	9.0	3
35	Mechanism of Fibrin(ogen) Forced Unfolding. Structure, 2011, 19, 1615-1624.	1.6	114
36	Protein unfolding accounts for the unusual mechanical behavior of fibrin networks. Acta Biomaterialia, 2011, 7, 2374-2383.	4.1	75

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37	Exonâ€skipped dystrophins for treatment of Duchenne muscular dystrophy: Mass spectrometry mapping of most exons and cooperative domain designs based on single molecule mechanics. Cytoskeleton, 2010, 67, 796-807.	1.0	20
38	Optimal matrix rigidity for stress-fibre polarization in stem cells. Nature Physics, 2010, 6, 468-473.	6.5	335
39	Cell shape, spreading symmetry, and the polarization of stress-fibers in cells. Journal of Physics Condensed Matter, 2010, 22, 194110.	0.7	75
40	Curvature-Coupled Hydration of Semicrystalline Polymer Amphiphiles Yields flexible Worm Micelles but Favors Rigid Vesicles: Polycaprolactone-Based Block Copolymers. Macromolecules, 2010, 43, 9736-9746.	2.2	111
41	How deeply cells feel: methods for thin gels. Journal of Physics Condensed Matter, 2010, 22, 194116.	0.7	264
42	Conformational Changes and Signaling in Cell and Matrix Physics. Current Biology, 2009, 19, R781-R789.	1.8	79
43	Cross-Correlated TIRF/AFM Reveals Asymmetric Distribution of Force-Generating Heads along Self-Assembled, â€œSyntheticâ€•Myosin Filaments. Biophysical Journal, 2009, 96, 1952-1960.	0.2	32
44	Multiscale Mechanics of Fibrin Polymer: Gel Stretching with Protein Unfolding and Loss of Water. Science, 2009, 325, 741-744.	6.0	346
45	The role of microtubule movement in bidirectional organelle transport. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10011-10016.	3.3	131
46	Forced Unfolding of Coiled-Coils in Fibrinogen by Single-Molecule AFM. Biophysical Journal, 2007, 92, L39-L41.	0.2	134