Andrew W Murray

List of Publications by Year
in descending order

72 papers	8,058 citations	236612 25 h-index	128067 60 g-index
91 all docs	91 docs citations	91 times ranked	7288 citing authors

#	Article	IF	Citations
1	Cyclin is degraded by the ubiquitin pathway. Nature, 1991, 349, 132-138.	13.7	2,321
2	Feedback control of mitosis in budding yeast. Cell, 1991, 66, 519-531.	13.5	1,153
3	Recycling the Cell Cycle. Cell, 2004, 116, 221-234.	13.5	968
4	Creative blocks: cell-cycle checkpoints and feedback controls. Nature, 1992, 359, 599-601.	13.7	712
5	The Speed of Evolution and Maintenance of Variation in Asexual Populations. Current Biology, 2007, 17, 385-394.	1.8	291
6	Requirement of the Spindle Checkpoint for Proper Chromosome Segregation in Budding Yeast Meiosis. Science, 2000, 289, 300-303.	6.0	217
7	Niche engineering demonstrates a latent capacity for fungal-algal mutualism. Science, 2014, 345, 94-98.	6.0	192
8	Cell cycle checkpoints. Current Opinion in Cell Biology, 1994, 6, 872-876.	2.6	187
9	Genetic drift opposes mutualism during spatial population expansion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1037-1042.	3.3	173
10	Exploring genetic suppression interactions on a global scale. Science, 2016, 354, .	6.0	157
11	Selective sweeps in growing microbial colonies. Physical Biology, 2012, 9, 026008.	0.8	150
12	Improved use of a public good selects for the evolution of undifferentiated multicellularity. ELife, 2013, 2, e00367.	2.8	119
13	Many, but not all, lineage-specific genes can be explained by homology detection failure. PLoS Biology, 2020, 18, e3000862.	2.6	113
14	Positive-Feedback Loops as a Flexible Biological Module. Current Biology, 2007, 17, 668-677.	1.8	108
15	Spo13 protects meiotic cohesin at centromeres in meiosis I. Genes and Development, 2002, 16, 1659-1671.	2.7	85
16	A Novel Yeast Screen for Mitotic Arrest Mutants IdentifiesDOC1, a New Gene Involved in Cyclin Proteolysis. Molecular Biology of the Cell, 1997, 8, 1877-1887.	0.9	83
17	Evolutionary adaptation after crippling cell polarization follows reproducible trajectories. ELife, 2015, 4, .	2.8	63
18	The mitotic feedback control gene MAD2 encodes the Î±-subunit of a prenyltransferase. Nature, 1993, 366, 82-84.	13.7	55

#	Article	IF	Citations
19	Lesions in Many Different Spindle Components Activate the Spindle Checkpoint in the Budding Yeast Saccharomyces cerevisiae. Genetics, 1999, 152, 509-518.	1.2	53
20	A Putative Bet-Hedging Strategy Buffers Budding Yeast against Environmental Instability. Current Biology, 2020, 30, 4563-4578.e4.	1.8	46
21	Physical interactions reduce the power of natural selection in growing yeast colonies. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11448-11453.	3.3	43
22	Polymerization in the actin ATPase clan regulates hexokinase activity in yeast. Science, 2020, 367, 1039-1042.	6.0	41
23	Cohesion is established during DNA replication utilising chromosome associated cohesin rings as well as those loaded de novo onto nascent DNAs. ELife, 2020, 9, .	2.8	36
24	Mixing genome annotation methods in a comparative analysis inflates the apparent number of lineage-specific genes. Current Biology, 2022, 32, 2632-2639.e2.	1.8	36
25	A brief history of error. Nature Cell Biology, 2011, 13, 1178-1182.	4.6	35
26	How Obstacles Perturb Population Fronts and Alter Their Genetic Structure. PLoS Computational Biology, 2015, 11, e1004615.	1.5	29
27	Chromosomal attachments set length and microtubule number in theSaccharomyces cerevisiaemitotic spindle. Molecular Biology of the Cell, 2014, 25, 4034-4048.	0.9	28
28	Cell-size regulation in budding yeast does not depend on linear accumulation of Whi5. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14243-14250.	3.3	28
29	The evolutionary plasticity of chromosome metabolism allows adaptation to constitutive DNA replication stress. ELife, 2020, 9, .	2.8	28
30	Heterozygous mutations cause genetic instability in a yeast model of cancer evolution. Nature, 2019, 566, 275-278.	13.7	27
31	Cyclins in meiosis and mitosis. Nature, 1987, 326, 542-543.	13.7	26
32	Details Matter: Noise and Model Structure Set the Relationship between Cell Size and Cell Cycle Timing. Frontiers in Cell and Developmental Biology, 2017, 5, 92.	1.8	26
33	Can gene-inactivating mutations lead to evolutionary novelty?. Current Biology, 2020, 30, R465-R471.	1.8	26
34	Spatially Constrained Growth Enhances Conversional Meltdown. Biophysical Journal, 2016, 110, 2800-2808.	0.2	25
35	Genetic drift and selection in many-allele range expansions. PLoS Computational Biology, 2017, 13, e1005866.	1.5	25
36	Rapid toxin sequestration modifies poison frog physiology. Journal of Experimental Biology, 2021, 224, .	0.8	23

#	Article	IF	Citations
37	Growing Yeast into Cylindrical Colonies. Biophysical Journal, 2014, 106, 2214-2221.	0.2	22
38	A cycle is a cycle is a cycle. Nature, 1987, 327, 14-15.	13.7	21
39	Evolutionary Repair Experiments as a Window to the Molecular Diversity of Life. Current Biology, 2020, 30, R565-R574.	1.8	19
40	A Predictive Model for Yeast Cell Polarization in Pheromone Gradients. PLoS Computational Biology, 2016, 12, e1004795.	1.5	18
41	Multicellularity makes somatic differentiation evolutionarily stable. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8362-8367.	3.3	18
42	Seasonal changes in diet and chemical defense in the Climbing Mantella frog (Mantella laevigata). PLoS ONE, 2018, 13, e0207940.	1.1	18
43	A mitotic inducer matures. Nature, 1988, 335, 207-208.	13.7	17
44	A Model for Cell Wall Dissolution in Mating Yeast Cells: Polarized Secretion and Restricted Diffusion of Cell Wall Remodeling Enzymes Induces Local Dissolution. PLoS ONE, 2014, 9, e109780.	1.1	17
45	Evolving a 24-hr oscillator in budding yeast. ELife, 2014, 3, .	2.8	17
46	Selecting for Altered Substrate Specificity Reveals the Evolutionary Flexibility of ATP-Binding Cassette Transporters. Current Biology, 2020, 30, 1689-1702.e6.	1.8	16
47	A Model for the Evolution of Biological Specificity: a Cross-Reacting DNA-Binding Protein Causes Plasmid Incompatibility. Journal of Bacteriology, 2014, 196, 3002-3011.	1.0	15
48	Evolutionary repair: Changes in multiple functional modules allow meiotic cohesin to support mitosis. PLoS Biology, 2020, 18, e3000635.	2.6	15
49	Microbial Range Expansions on Liquid Substrates. Physical Review X, 2019, 9, .	2.8	14
50	Tethering Sister Centromeres to Each Other Suggests the Spindle Checkpoint Detects Stretch within the Kinetochore. PLoS Genetics, 2014, 10, e1004492.	1.5	13
51	Conservation Weighting Functions Enable Covariance Analyses to Detect Functionally Important Amino Acids. PLoS ONE, 2014, 9, e107723.	1.1	10
52	Don't Make Me Mad, Bub!. Developmental Cell, 2012, 22, 1123-1125.	3.1	9
53	Rum tale of replication. Nature, 1994, 367, 219-220.	13.7	8
54	Antagonism between killer yeast strains as an experimental model for biological nucleation dynamics. ELife, 2021, 10, .	2.8	8

#	Article	IF	Citations
55	Ploidy and recombination proficiency shape the evolutionary adaptation to constitutive DNA replication stress. PLoS Genetics, 2021, 17, e1009875.	1.5	6
56	Sunburnt fission yeast. Nature, 1993, 363, 302-302.	13.7	4
57	Salvador Luria and Max DelbrÃ¼ck on Random Mutation and Fluctuation Tests. Genetics, 2016, 202, 367-368.	1.2	4
58	Modeling the impact of single-cell stochasticity and size control on the population growth rate in asymmetrically dividing cells. PLoS Computational Biology, 2021, 17, e1009080.	1.5	4
59	When it comes to teaching and tenure it is time to walk the walk. ELife, 2019, 8, .	2.8	2
60	Paul Nurse and Pierre Thuriaux on wee Mutants and Cell Cycle Control. Genetics, 2016, 204, 1325-1326.	1.2	0
61	A Yeast Model for the Evolution of Multicellularity and Cellular Differentiation. FASEB Journal, 2013, 27, lb241.	0.2	0
62	Rocket yeast. Physical Review Fluids, 2021, 6, .	1.0	0
63	Title is missing!. , 2020, 18, e3000635.		0
64	Title is missing!. , 2020, 18, e3000635.		0
65	Title is missing!. , 2020, 18, e3000635.		0
66	Title is missing!. , 2020, 18, e3000635.		0
67	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0
68	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0
69	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0
70	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0
71	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0
72	Many, but not all, lineage-specific genes can be explained by homology detection failure. , 2020, 18, e3000862.		0