Susan K Dutcher

List of Publications by Year
in descending order

96	11,157	76326	46799
papers	citations	40 h-index	89 g-index

111	111	111	14998
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Chlamydomonas Genome Reveals the Evolution of Key Animal and Plant Functions. Science, 2007, 318, 245-250.	12.6	2,354
2	The Physcomitrella Genome Reveals Evolutionary Insights into the Conquest of Land by Plants. Science, 2008, 319, 64-69.	12.6	1,712
3	Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program. Nature, 2021, 590, 290-299.	27.8	1,069
4	Comparative Genomics Identifies a Flagellar and Basal Body Proteome that Includes the BBS5 Human Disease Gene. Cell, 2004, 117, 541-552.	28.9	721
5	Characterizing the Major Structural Variant Alleles of the Human Genome. Cell, 2019, 176, 663-675.e19.	28.9	364
6	High-resolution comparative analysis of great ape genomes. Science, 2018, 360, .	12.6	304
7	Flagellar assembly in two hundred and fifty easy-to-follow steps. Trends in Genetics, 1995, 11, 398-404.	6.7	213
8	TheUNI3Gene Is Required for Assembly of Basal Bodies ofChlamydomonasand Encodes Î´-Tubulin, a New Member of the Tubulin Superfamily. Molecular Biology of the Cell, 1998, 9, 1293-1308.	2.1	203
9	Mapping and characterization of structural variation in 17,795 human genomes. Nature, 2020, 583, 83-89.	27.8	194
10	Structure of the Decorated Ciliary Doublet Microtubule. Cell, 2019, 179, 909-922.e12.	28.9	186
11	The tubulin fraternity: alpha to eta. Current Opinion in Cell Biology, 2001, 13, 49-54.	5.4	183
12	Whole-Exome Capture and Sequencing Identifies HEATR2 Mutation as a Cause of Primary Ciliary Dyskinesia. American Journal of Human Genetics, 2012, 91, 685-693.	6.2	163
13	Exome sequencing of Finnish isolates enhances rare-variant association power. Nature, 2019, 572, 323-328.	27.8	161
14	Phosphoregulation of an Inner Dynein Arm Complex in Chlamydomonas reinhardtii Is Altered in Phototactic Mutant Strains. Journal of Cell Biology, 1997, 136, 177-191.	5.2	158
15	Genetics and biology of primary ciliary dyskinesia. Paediatric Respiratory Reviews, 2016, 18, 18-24.	1.8	151
16	The Chlamydomonas genome project: a decade on. Trends in Plant Science, 2014, 19, 672-680.	8.8	145
17	Uniflagellar mutants of chlamydomonas: Evidence for the role of basal bodies in transmission of positional information. Cell, 1982, 29, 745-753.	28.9	143
18	Îµ-Tubulin Is an Essential Component of the Centriole. Molecular Biology of the Cell, 2002, 13, 3859-3869.	2.1	136

#	Article	IF	Citations
19	De Novo Mutations in FOXJ1 Result in a Motile Ciliopathy with Hydrocephalus and Randomization of Left/Right Body Asymmetry. American Journal of Human Genetics, 2019, 105, 1030-1039.	6.2	129
20	CCDC65 Mutation Causes Primary Ciliary Dyskinesia with Normal Ultrastructure and Hyperkinetic Cilia. PLoS ONE, 2013, 8, e72299.	2.5	108
21	Uni-directional ciliary membrane protein trafficking by a cytoplasmic retrograde IFT motor and ciliary ectosome shedding. ELife, 2015, 4, .	6.0	107
22	Retrograde Intraflagellar Transport Mutants Identify Complex A Proteins With Multiple Genetic Interactions inChlamydomonas reinhardtii. Genetics, 2009, 183, 885-896.	2.9	103
23	Elucidation of Basal Body and Centriole Functions in Chlamydomonas reinhardtii. Traffic, 2003, 4, 443-451.	2.7	95
24	THE ROLE OF S. CEREVISIAE CELL DIVISION CYCLE GENES IN NUCLEAR FUSION. Genetics, 1982, 100, 175-184.	2.9	92
25	LRRC6 Mutation Causes Primary Ciliary Dyskinesia with Dynein Arm Defects. PLoS ONE, 2013, 8, e59436.	2.5	87
26	Structures of radial spokes and associated complexes important for ciliary motility. Nature Structural and Molecular Biology, 2021, 28, 29-37.	8.2	81
27	Long-lost relatives reappear: identification of new members of the tubulin superfamily. Current Opinion in Microbiology, 2003, 6, 634-640.	5.1	70
28	Review of the algal biology program within the National Alliance for Advanced Biofuels and Bioproducts. Algal Research, 2017, 22, 187-215.	4.6	69
29	Identification of Cilia Genes That Affect Cell-Cycle Progression Using Whole-Genome Transcriptome Analysis in Chlamydomonas reinhardtti. G3: Genes, Genomes, Genetics, 2013, 3, 979-991.	1.8	64
30	Flexural Rigidity and Shear Stiffness of Flagella Estimated from Induced Bends and Counterbends. Biophysical Journal, 2016, 110, 2759-2768.	0.5	61
31	A revised nomenclature for the human and rodent Î±-tubulin gene family. Genomics, 2007, 90, 285-289.	2.9	60
32	Whole-Genome Sequencing to Identify Mutants and Polymorphisms inChlamydomonas reinhardtii. G3: Genes, Genomes, Genetics, 2012, 2, 15-22.	1.8	53
33	Whole Genome Sequencing Identifies a Deletion in Protein Phosphatase 2A That Affects Its Stability and Localization in Chlamydomonas reinhardtii. PLoS Genetics, 2013, 9, e1003841.	3.5	52
34	Genes that act before conjugation to prepare the Saccharomyces cerevisiae nucleus for caryogamy. Cell, 1983, 33, 203-210.	28.9	50
35	Mutant Kinesin-2 Motor Subunits Increase Chromosome Loss. Molecular Biology of the Cell, 2005, 16, 3810-3820.	2.1	50
36	Two Flagellar Genes, AGG2 and AGG3, Mediate Orientation to Light in Chlamydomonas. Current Biology, 2006, 16, 1147-1153.	3.9	49

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37	Eyespot-Assembly Mutants in Chlamydomonas reinhardtii. Genetics, 1999, 153, 721-729.	2.9	49
38	Chapter 76 Mating and Tetrad Analysis in Chlamydomonas reinhardtii. Methods in Cell Biology, 1995, 47, 531-540.	1.1	46
39	The ciliary inner dynein arm, I1 dynein, is assembled in the cytoplasm and transported by <scp>IFT</scp> before axonemal docking. Cytoskeleton, 2014, 71, 573-586.	2.0	46
40	Extragenic Bypass Suppressors of Mutations in the Essential Gene BLD2 Promote Assembly of Basal Bodies With Abnormal Microtubules in Chlamydomonas reinhardtii. Genetics, 2001, 157, 163-181.	2.9	46
41	Synthesizing and Salvaging NAD+: Lessons Learned from Chlamydomonas reinhardtii. PLoS Genetics, 2010, 6, e1001105.	3.5	45
42	Identification of the Gene Encoding the Tryptophan Synthase Î²-Subunit from Chlamydomonas reinhardtii1. Plant Physiology, 1998, 117, 455-464.	4.8	44
43	A NIMA-Related Kinase Suppresses the Flagellar Instability Associated with the Loss of Multiple Axonemal Structures. PLoS Genetics, 2015, 11, e1005508.	3.5	42
44	The awesome power of dikaryons for studying flagella and basal bodies in Chlamydomonas reinhardtii. Cytoskeleton, 2014, 71, 79-94.	2.0	41
45	How Does Cilium Length Affect Beating?. Biophysical Journal, 2019, 116, 1292-1304.	0.5	40
46	bop5 mutations reveal new roles for the IC138 phosphoprotein in the regulation of flagellar motility and asymmetric waveforms. Molecular Biology of the Cell, 2011, 22, 2862-2874.	2.1	39
47	Cilia and Models for Studying Structure and Function. Proceedings of the American Thoracic Society, 2011, 8, 423-429.	3.5	39
48	The IDA3 adapter, required for intraflagellar transport of I1 dynein, is regulated by ciliary length. Molecular Biology of the Cell, 2018, 29, 886-896.	2.1	37
49	Mutation of CFAP57, a protein required for the asymmetric targeting of a subset of inner dynein arms in Chlamydomonas, causes primary ciliary dyskinesia. PLoS Genetics, 2020, 16, e1008691.	3.5	36
50	Understanding Microtubule Organizing Centers by Comparing Mutant and Wildâ€Type Structures with Electron Tomography. Methods in Cell Biology, 2007, 79, 125-143.	1.1	35
51	New mutations in flagellar motors identified by whole genome sequencing in Chlamydomonas. Cilia, 2013, 2, 14.	1.8	34
52	Ciliary central apparatus structure reveals mechanisms of microtubule patterning. Nature Structural and Molecular Biology, 2022, 29, 483-492.	8.2	33
53	Chlamydomonas DYX1C1/PF23 is essential for axonemal assembly and proper morphology of inner dynein arms. PLoS Genetics, 2017, 13, e1006996.	3.5	32
54	Flagella in prokaryotes and lower eukaryotes. Current Opinion in Genetics and Development, 1992, 2, 756-767.	3.3	28

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55	Motile organelles: The importance of specific tubulin isoforms. Current Biology, 2001, 11, R419-R422.	3.9	28
56	Mutations in Î±-tubulin promote basal body maturation and flagellar assembly in the absence of Î´-tubulin. Journal of Cell Science, 2004, 117, 303-314.	2.0	26
57	Asymmetries in the cilia ofChlamydomonas. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190153.	4.0	25
58	Analysis of Chlamydomonas reinhardtii Genome Structure Using Large-Scale Sequencing of Regions on Linkage Groups I and III. Journal of Eukaryotic Microbiology, 2003, 50, 145-155.	1.7	24
59	Finding treasures in frozen cells: new centriole intermediates. BioEssays, 2007, 29, 630-634.	2.5	24
60	Rare coding variants in 35 genes associate with circulating lipid levelsâ€"A multi-ancestry analysis of 170,000 exomes. American Journal of Human Genetics, 2022, 109, 81-96.	6.2	24
61	Chapter 45 Purification of Basal Bodies and Basal Body Complexes from Chlamydomonas reinhardtii. Methods in Cell Biology, 1995, 47, 323-334.	1.1	23
62	The Chlamydomonas mutant pf27 reveals novel features of ciliary radial spoke assembly. Cytoskeleton, 2013, 70, 804-818.	2.0	22
63	Chlamydomonas reinhardtii: Biological Rationale for Genomics1. Journal of Eukaryotic Microbiology, 2000, 47, 340-349.	1.7	21
64	MAPINS, a Highly Efficient Detection Method That Identifies Insertional Mutations and Complex DNA Rearrangements. Plant Physiology, 2018, 178, 1436-1447.	4.8	20
65	RPGRIP1L helps to establish the ciliary gate for entry of proteins. Journal of Cell Science, 2018, 131, .	2.0	20
66	Molecular Markers for Rapidly Identifying Candidate Genes in Chlamydomonas reinhardtii: ERY1 and ERY2 Encode Chloroplast Ribosomal Proteins. Genetics, 2003, 164, 1345-1353.	2.9	18
67	Katanin Localization Requires Triplet Microtubules in Chlamydomonas reinhardtii. PLoS ONE, 2013, 8, e53940.	2.5	18
68	Genetic and genomic approaches to identify genes involved in flagellar assembly in Chlamydomonas reinhardtii. Methods in Cell Biology, 2015, 127, 349-386.	1.1	17
69	Chromosome Xq23 is associated with lower atherogenic lipid concentrations and favorable cardiometabolic indices. Nature Communications, 2021, 12, 2182.	12.8	17
70	CCDC61/VFL3 Is a Paralog of SAS6 and Promotes Ciliary Functions. Structure, 2020, 28, 674-689.e11.	3.3	16
71	Dyneinâ€deficient flagella respond to increased viscosity with contrasting changes in power and recovery strokes. Cytoskeleton, 2015, 72, 477-490.	2.0	15
72	Alternative Splicing During theChlamydomonasreinhardtiiCell Cycle. G3: Genes, Genomes, Genetics, 2020, 10, 3797-3810.	1.8	15

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73	Genetic and Phenotypic Analysis of Flagellar Assembly Mutants in Chlamydomonas reinhardtii. Methods in Cell Biology, 2009, 93, 121-143.	1.1	14
74	Functional characterization of biallelic RTTN variants identified in an infant with microcephaly, simplified gyral pattern, pontocerebellar hypoplasia, and seizures. Pediatric Research, 2018, 84, 435-441.	2.3	11
75	Acoustic trap-and-release for rapid assessment of cell motility. Soft Matter, 2019, 15, 4266-4275.	2.7	11
76	Identifying RNA splicing factors using IFT genes in Chlamydomonas reinhardtii. Open Biology, 2018, 8, 170211.	3.6	10
77	Cilia and Hedgehog Signaling in the Mouse Embryo. , 2010, 102, 103-115.		9
78	Tracking the Road from Inflammation to Cancer: the Critical Role of IÎºB Kinase (IKK). , 2010, 102, 133-151.		8
79	TWO CELL DIVISION CYCLE MUTANTS OF SACCHAROMYCES CEREVISIAE ARE DEFECTIVE IN TRANSMISSION OF MITOCHONDRIA TO ZYGOTES. Genetics, 1982, 102, 9-17.	2.9	7
80	Treasure Hunting in the Chlamydomonas Genome. Genetics, 2008, 179, 3-6.	2.9	6
81	HY-DINâ€™ in the Cilia: Discovery of Central Pairâ€“related Mutations in Primary Ciliary Dyskinesia. American Journal of Respiratory Cell and Molecular Biology, 2020, 62, 281-282.	2.9	6
82	Whole Genome Sequencing Identifies CRISPLD2 as a Lung Function Gene in Children With Asthma. Chest, 2019, 156, 1068-1079.	0.8	5
83	ISOLATION AND CHARACTERIZATION OF DOMINANT TUNICAMYCIN RESISTANCE MUTATIONS IN CHLAMYDOMONAS REINHARDTII (CHLOROPHYCEAE). Journal of Phycology, 1988, 24, 230-236.	2.3	5
84	Tying TAZ and Nek1 into Polycystic Kidney Disease through Polycystin 2 Levels. Journal of the American Society of Nephrology: JASN, 2011, 22, 791-793.	6.1	3
85	Cytoplasmic â€œciliary inclusionsâ€•in isolation are not sufficient for the diagnosis of primary ciliary dyskinesia. Pediatric Pulmonology, 2020, 55, 130-135.	2.0	2
86	Basal Feet: Walking to the Discovery of a Novel Hybrid Cilium. Developmental Cell, 2020, 55, 115-117.	7.0	2
87	Dissection of Basal Body and Centriole Function in the Unicellular Green Alga Chlamydomonas reinhardtii. , 2005, , 71-92.		1
88	Intraflagellar Transport Inhomogeneity in Chlamydomonas IMP3 Mutant. Biophysical Journal, 2014, 106, 362a.	0.5	1
89	Dynein tails: how to hitch a ride on an IFT train. Nature Structural and Molecular Biology, 2019, 26, 760-761.	8.2	1
90	Signaling Networks that Control Synapse Development and Cognitive Function. , 2010, 102, 73-102.		1

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91	Basal Bodies: Their Roles in Generating Asymmetry. , 2010, 102, 17-50.		1
92	The 2008 George W. Beadle Award. Genetics, 2008, 178, 1129-1130.	2.9	0
93	Protein Transport in and out of the Endoplasmic Reticulum. , 2010, 102, 51-72.		0
94	Active Members. , 0, , 179-189.		0
95	Former Officers of the Harvey Society. , 0, , 153-168.		0
96	Derivation of Adult Stem Cells during Embryogenesis. , 2010, 102, 117-132.		0