Susan K Dutcher

List of Publications by Year
in descending order

96 papers	11,157 citations	76326 40 h-index	46799 89 g-index
111 all docs	111 docs citations	111 times ranked	14998 citing authors

#	Article	IF	Citations
1	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
2	Ciliary central apparatus structure reveals mechanisms of microtubule patterning. Nature Structural and Molecular Biology, 2022, 29, 483-492.	8.2	33
3	Structures of radial spokes and associated complexes important for ciliary motility. Nature Structural and Molecular Biology, 2021, 28, 29-37.	8.2	81
4	Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program. Nature, 2021, 590, 290-299.	27.8	1,069
5	Chromosome Xq23 is associated with lower atherogenic lipid concentrations and favorable cardiometabolic indices. Nature Communications, 2021, 12, 2182.	12.8	17
6	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
7	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
8	Asymmetries in the cilia of<i>Chlamydomonas</i>. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190153.	4.0	25
9	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
10	Basal Feet: Walking to the Discovery of a Novel Hybrid Cilium. Developmental Cell, 2020, 55, 115-117.	7.0	2
11	Alternative Splicing During the<i>Chlamydomonas</i><i>reinhardtii</i>Cell Cycle. G3: Genes, Genomes, Genetics, 2020, 10, 3797-3810.	1.8	15
12	Mapping and characterization of structural variation in 17,795 human genomes. Nature, 2020, 583, 83-89.	27.8	194
13	CCDC61/VFL3 Is a Paralog of SAS6 and Promotes Ciliary Functions. Structure, 2020, 28, 674-689.e11.	3.3	16
14	Exome sequencing of Finnish isolates enhances rare-variant association power. Nature, 2019, 572, 323-328.	27.8	161
15	Structure of the Decorated Ciliary Doublet Microtubule. Cell, 2019, 179, 909-922.e12.	28.9	186
16	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
17	Dynein tails: how to hitch a ride on an IFT train. Nature Structural and Molecular Biology, 2019, 26, 760-761.	8.2	1
18	Whole Genome Sequencing Identifies CRISPLD2 as a Lung Function Gene in Children With Asthma. Chest, 2019, 156, 1068-1079.	0.8	5

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19	How Does Cilium Length Affect Beating?. Biophysical Journal, 2019, 116, 1292-1304.	0.5	40
20	Acoustic trap-and-release for rapid assessment of cell motility. Soft Matter, 2019, 15, 4266-4275.	2.7	11
21	Characterizing the Major Structural Variant Alleles of the Human Genome. Cell, 2019, 176, 663-675.e19.	28.9	364
22	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
23	MAPINS, a Highly Efficient Detection Method That Identifies Insertional Mutations and Complex DNA Rearrangements. Plant Physiology, 2018, 178, 1436-1447.	4.8	20
24	RPGRIP1L helps to establish the ciliary gate for entry of proteins. Journal of Cell Science, 2018, 131, .	2.0	20
25	Identifying RNA splicing factors using IFT genes in Chlamydomonas reinhardtii. Open Biology, 2018, 8, 170211.	3.6	10
26	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
27	High-resolution comparative analysis of great ape genomes. Science, 2018, 360, .	12.6	304
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	Chlamydomonas DYX1C1/PF23 is essential for axonemal assembly and proper morphology of inner dynein arms. PLoS Genetics, 2017, 13, e1006996.	3.5	32
30	Flexural Rigidity and Shear Stiffness of Flagella Estimated from Induced Bends and Counterbends. Biophysical Journal, 2016, 110, 2759-2768.	0.5	61
31	Genetics and biology of primary ciliary dyskinesia. Paediatric Respiratory Reviews, 2016, 18, 18-24.	1.8	151
32	Dyneinâ€deficient flagella respond to increased viscosity with contrasting changes in power and recovery strokes. Cytoskeleton, 2015, 72, 477-490.	2.0	15
33	A NIMA-Related Kinase Suppresses the Flagellar Instability Associated with the Loss of Multiple Axonemal Structures. PLoS Genetics, 2015, 11, e1005508.	3.5	42
34	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
35	Uni-directional ciliary membrane protein trafficking by a cytoplasmic retrograde IFT motor and ciliary ectosome shedding. ELife, 2015, 4, .	6.0	107
36	The awesome power of dikaryons for studying flagella and basal bodies in <i>Chlamydomonas reinhardtii</i>. Cytoskeleton, 2014, 71, 79-94.	2.0	41

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37	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
38	The Chlamydomonas genome project: a decade on. Trends in Plant Science, 2014, 19, 672-680.	8.8	145
39	Intraflagellar Transport Inhomogeneity in Chlamydomonas IMP3 Mutant. Biophysical Journal, 2014, 106, 362a.	0.5	1
40	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
41	Identification of Cilia Genes That Affect Cell-Cycle Progression Using Whole-Genome Transcriptome Analysis in <i>Chlamydomonas reinhardtti</i>. G3: Genes, Genomes, Genetics, 2013, 3, 979-991.	1.8	64
42	The <i>Chlamydomonas</i> mutant <i>pf27</i> reveals novel features of ciliary radial spoke assembly. Cytoskeleton, 2013, 70, 804-818.	2.0	22
43	New mutations in flagellar motors identified by whole genome sequencing in Chlamydomonas. Cilia, 2013, 2, 14.	1.8	34
44	Katanin Localization Requires Triplet Microtubules in Chlamydomonas reinhardtii. PLoS ONE, 2013, 8, e53940.	2.5	18
45	LRRC6 Mutation Causes Primary Ciliary Dyskinesia with Dynein Arm Defects. PLoS ONE, 2013, 8, e59436.	2.5	87
46	CCDC65 Mutation Causes Primary Ciliary Dyskinesia with Normal Ultrastructure and Hyperkinetic Cilia. PLoS ONE, 2013, 8, e72299.	2.5	108
47	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
48	Whole-Genome Sequencing to Identify Mutants and Polymorphisms in<i>Chlamydomonas reinhardtii</i>. G3: Genes, Genomes, Genetics, 2012, 2, 15-22.	1.8	53
49	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
50	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
51	Cilia and Models for Studying Structure and Function. Proceedings of the American Thoracic Society, 2011, 8, 423-429.	3.5	39
52	Cilia and Hedgehog Signaling in the Mouse Embryo. , 2010, 102, 103-115.		9
53	Synthesizing and Salvaging NAD+: Lessons Learned from Chlamydomonas reinhardtii. PLoS Genetics, 2010, 6, e1001105.	3.5	45
54	Protein Transport in and out of the Endoplasmic Reticulum. , 2010, 102, 51-72.		0

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55	Tracking the Road from Inflammation to Cancer: the Critical Role of IÎºB Kinase (IKK). , 2010, 102, 133-151.		8
56	Signaling Networks that Control Synapse Development and Cognitive Function. , 2010, 102, 73-102.		1
57	Derivation of Adult Stem Cells during Embryogenesis. , 2010, 102, 117-132.		0
58	Basal Bodies: Their Roles in Generating Asymmetry. , 2010, 102, 17-50.		1
59	Retrograde Intraflagellar Transport Mutants Identify Complex A Proteins With Multiple Genetic Interactions in<i>Chlamydomonas reinhardtii</i>. Genetics, 2009, 183, 885-896.	2.9	103
60	Genetic and Phenotypic Analysis of Flagellar Assembly Mutants in Chlamydomonas reinhardtii. Methods in Cell Biology, 2009, 93, 121-143.	1.1	14
61	The <i>Physcomitrella</i> Genome Reveals Evolutionary Insights into the Conquest of Land by Plants. Science, 2008, 319, 64-69.	12.6	1,712
62	The 2008 George W. Beadle Award. Genetics, 2008, 178, 1129-1130.	2.9	0
63	Treasure Hunting in the Chlamydomonas Genome. Genetics, 2008, 179, 3-6.	2.9	6
64	A revised nomenclature for the human and rodent Î±-tubulin gene family. Genomics, 2007, 90, 285-289.	2.9	60
65	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
66	Finding treasures in frozen cells: new centriole intermediates. BioEssays, 2007, 29, 630-634.	2.5	24
67	The <i>Chlamydomonas</i> Genome Reveals the Evolution of Key Animal and Plant Functions. Science, 2007, 318, 245-250.	12.6	2,354
68	Two Flagellar Genes, AGG2 and AGG3, Mediate Orientation to Light in Chlamydomonas. Current Biology, 2006, 16, 1147-1153.	3.9	49
69	Dissection of Basal Body and Centriole Function in the Unicellular Green Alga Chlamydomonas reinhardtii. , 2005, , 71-92.		1
70	Mutant Kinesin-2 Motor Subunits Increase Chromosome Loss. Molecular Biology of the Cell, 2005, 16, 3810-3820.	2.1	50
71	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
72	Comparative Genomics Identifies a Flagellar and Basal Body Proteome that Includes the BBS5 Human Disease Gene. Cell, 2004, 117, 541-552.	28.9	721

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73	Elucidation of Basal Body and Centriole Functions in Chlamydomonas reinhardtii. Traffic, 2003, 4, 443-451.	2.7	95
74	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
75	Long-lost relatives reappear: identification of new members of the tubulin superfamily. Current Opinion in Microbiology, 2003, 6, 634-640.	5.1	70
76	Molecular Markers for Rapidly Identifying Candidate Genes in <i>Chlamydomonas reinhardtii</i>: <i>ERY1</i> and <i>ERY2</i> Encode Chloroplast Ribosomal Proteins. Genetics, 2003, 164, 1345-1353.	2.9	18
77	Îµ-Tubulin Is an Essential Component of the Centriole. Molecular Biology of the Cell, 2002, 13, 3859-3869.	2.1	136
78	Motile organelles: The importance of specific tubulin isoforms. Current Biology, 2001, 11, R419-R422.	3.9	28
79	The tubulin fraternity: alpha to eta. Current Opinion in Cell Biology, 2001, 13, 49-54.	5.4	183
80	Extragenic Bypass Suppressors of Mutations in the Essential Gene <i>BLD2</i> Promote Assembly of Basal Bodies With Abnormal Microtubules in <i>Chlamydomonas reinhardtii</i>. Genetics, 2001, 157, 163-181.	2.9	46
81	Chlamydomonas reinhardtii: Biological Rationale for Genomics1. Journal of Eukaryotic Microbiology, 2000, 47, 340-349.	1.7	21
82	Eyespot-Assembly Mutants in Chlamydomonas reinhardtii. Genetics, 1999, 153, 721-729.	2.9	49
83	Identification of the Gene Encoding the Tryptophan Synthase Î²-Subunit from Chlamydomonas reinhardtii1. Plant Physiology, 1998, 117, 455-464.	4.8	44
84	The<i>UNI3</i>Gene Is Required for Assembly of Basal Bodies of<i>Chlamydomonas</i>and Encodes Î´-Tubulin, a New Member of the Tubulin Superfamily. Molecular Biology of the Cell, 1998, 9, 1293-1308.	2.1	203
85	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
86	Chapter 76 Mating and Tetrad Analysis in Chlamydomonas reinhardtii. Methods in Cell Biology, 1995, 47, 531-540.	1.1	46
87	Chapter 45 Purification of Basal Bodies and Basal Body Complexes from Chlamydomonas reinhardtii. Methods in Cell Biology, 1995, 47, 323-334.	1.1	23
88	Flagellar assembly in two hundred and fifty easy-to-follow steps. Trends in Genetics, 1995, 11, 398-404.	6.7	213
89	Flagella in prokaryotes and lower eukaryotes. Current Opinion in Genetics and Development, 1992, 2, 756-767.	3.3	28
90	ISOLATION AND CHARACTERIZATION OF DOMINANT TUNICAMYCIN RESISTANCE MUTATIONS IN CHLAMYDOMONAS REINHARDTII (CHLOROPHYCEAE). Journal of Phycology, 1988, 24, 230-236.	2.3	5

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91	Genes that act before conjugation to prepare the Saccharomyces cerevisiae nucleus for caryogamy. Cell, 1983, 33, 203-210.	28.9	50
92	Uniflagellar mutants of chlamydomonas: Evidence for the role of basal bodies in transmission of positional information. Cell, 1982, 29, 745-753.	28.9	143
93	THE ROLE OF <i>S. CEREVISIAE</i> CELL DIVISION CYCLE GENES IN NUCLEAR FUSION. Genetics, 1982, 100, 175-184.	2.9	92
94	TWO CELL DIVISION CYCLE MUTANTS OF <i>SACCHAROMYCES CEREVISIAE</i> ARE DEFECTIVE IN TRANSMISSION OF MITOCHONDRIA TO ZYGOTES. Genetics, 1982, 102, 9-17.	2.9	7
95	Active Members. , 0, , 179-189.		0
96	Former Officers of the Harvey Society. , 0, , 153-168.		0