David Keays

List of Publications by Year
in descending order

59 papers	3,665 citations	159585 30 h-index	133252 59 g-index
65 all docs	65 docs citations	65 times ranked	5365 citing authors

#	Article	IF	Citations
1	Mutations in Î±-Tubulin Cause Abnormal Neuronal Migration in Mice and Lissencephaly in Humans. Cell, 2007, 128, 45-57.	28.9	397
2	Mutations in the Î²-tubulin gene TUBB2B result in asymmetrical polymicrogyria. Nature Genetics, 2009, 41, 746-752.	21.4	330
3	Impaired Synaptic Plasticity and Motor Learning in Mice with a Point Mutation Implicated in Human Speech Deficits. Current Biology, 2008, 18, 354-362.	3.9	304
4	Large spectrum of lissencephaly and pachygyria phenotypes resulting from de novo missense mutations in tubulin alpha 1A (TUBA1A). Human Mutation, 2007, 28, 1055-1064.	2.5	213
5	Mutations in the Î²-Tubulin Gene TUBB5 Cause Microcephaly with Structural Brain Abnormalities. Cell Reports, 2012, 2, 1554-1562.	6.4	162
6	Clusters of iron-rich cells in the upper beak of pigeons are macrophages not magnetosensitive neurons. Nature, 2012, 484, 367-370.	27.8	150
7	A gene-driven ENU-based approach to generating an allelic series in any gene. Mammalian Genome, 2004, 15, 585-591.	2.2	148
8	Therapeutic applications of conotoxins that target the neuronal nicotinic acetylcholine receptor. Toxicon, 2006, 48, 810-829.	1.6	128
9	Mutations in the HECT domain of NEDD4L lead to AKTâ€“mTOR pathway deregulation and cause periventricular nodular heterotopia. Nature Genetics, 2016, 48, 1349-1358.	21.4	101
10	Magnetoreceptionâ€”A sense without a receptor. PLoS Biology, 2017, 15, e2003234.	5.6	92
11	Mutations in PGAP3 Impair GPI-Anchor Maturation, Causing a Subtype of Hyperphosphatasia with Mental Retardation. American Journal of Human Genetics, 2014, 94, 278-287.	6.2	88
12	Periventricular heterotopia in 6q terminal deletion syndrome: role of the C6orf70 gene. Brain, 2013, 136, 3378-3394.	7.6	85
13	Deletions and de novo mutations ofSOX11are associated with a neurodevelopmental disorder with features of Coffinâ€“Siris syndrome. Journal of Medical Genetics, 2016, 53, 152-162.	3.2	69
14	Tubulins and brain development â€“ The origins of functional specification. Molecular and Cellular Neurosciences, 2017, 84, 58-67.	2.2	67
15	No evidence for intracellular magnetite in putative vertebrate magnetoreceptors identified by magnetic screening. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 262-267.	7.1	66
16	Mutations inPIGY: expanding the phenotype of inherited glycosylphosphatidylinositol deficiencies. Human Molecular Genetics, 2015, 24, 6146-6159.	2.9	64
17	Disease-associated mutations in TUBA1A result in a spectrum of defects in the tubulin folding and heterodimer assembly pathway. Human Molecular Genetics, 2010, 19, 3599-3613.	2.9	63
18	Mutations in Either TUBB or MAPRE2 Cause Circumferential Skin Creases Kunze Type. American Journal of Human Genetics, 2015, 97, 790-800.	6.2	63

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19	Improved Genome Assembly and Annotation for the Rock Pigeon (Columba livia). G3: Genes, Genomes, Genetics, 2018, 8, 1391-1398.	1.8	62
20	A Putative Mechanism for Magnetoreception by Electromagnetic Induction in the Pigeon Inner Ear. Current Biology, 2019, 29, 4052-4059.e4.	3.9	61
21	Exome sequencing can detect pathogenic mosaic mutations present at low allele frequencies. Journal of Human Genetics, 2012, 57, 70-72.	2.3	58
22	Estimating the number of coding mutations in genotypic- and phenotypic-driven N-ethyl-N-nitrosourea (ENU) screens. Mammalian Genome, 2006, 17, 230-238.	2.2	57
23	Determining sequences and post-translational modifications of novel conotoxins inConus victoriae using cDNA sequencing and mass spectrometry. Journal of Mass Spectrometry, 2004, 39, 548-557.	1.6	56
24	Germline recessive mutations in PI4KA are associated with perisylvian polymicrogyria, cerebellar hypoplasia and arthrogryposis. Human Molecular Genetics, 2015, 24, 3732-3741.	2.9	56
25	Is magnetogenetics the new optogenetics?. EMBO Journal, 2017, 36, 1643-1646.	7.8	56
26	Microtubules and Neurodevelopmental Disease: The Movers and the Makers. Advances in Experimental Medicine and Biology, 2014, 800, 75-96.	1.6	55
27	The biophysical, molecular, and anatomical landscape of pigeon CRY4: A candidate light-based quantal magnetosensor. Science Advances, 2020, 6, eabb9110.	10.3	50
28	Mutation of the Diamond-Blackfan Anemia Gene Rps7 in Mouse Results in Morphological and Neuroanatomical Phenotypes. PLoS Genetics, 2013, 9, e1003094.	3.5	47
29	An Iron-Rich Organelle in the Cuticular Plate of Avian Hair Cells. Current Biology, 2013, 23, 924-929.	3.9	41
30	Tuba8 Is Expressed at Low Levels in the Developing Mouse and Human Brain. American Journal of Human Genetics, 2010, 86, 819-822.	6.2	35
31	Mutations in MAST1 Cause Mega-Corpus-Callosum Syndrome with Cerebellar Hypoplasia and Cortical Malformations. Neuron, 2018, 100, 1354-1368.e5.	8.1	35
32	TUBB5 and its disease-associated mutations influence the terminal differentiation and dendritic spine densities of cerebral cortical neurons. Human Molecular Genetics, 2014, 23, 5147-5158.	2.9	32
33	Estimating the number of coding mutations in genotypic and phenotypic driven N-ethyl-N-nitrosourea (ENU) screens: revisited. Mammalian Genome, 2007, 18, 123-124.	2.2	30
34	Mutations in Vps15 perturb neuronal migration in mice and are associated with neurodevelopmental disease in humans. Nature Neuroscience, 2018, 21, 207-217.	14.8	30
35	Mutations in the murine homologue of TUBB5 cause microcephaly by perturbing cell cycle progression and inducing p53 associated apoptosis. Development (Cambridge), 2016, 143, 1126-33.	2.5	25
36	High resolution anatomical mapping confirms the absence of a magnetic sense system in the rostral upper beak of pigeons. Communicative and Integrative Biology, 2013, 6, e24859.	1.4	24

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37	Behavioural characterisation of the robotic mouse mutant. Behavioural Brain Research, 2007, 181, 239-247.	2.2	23
38	The expression of tubb2b undergoes a developmental transition in murine cortical neurons. Journal of Comparative Neurology, 2015, 523, 2161-2186.	1.6	23
39	Why (and how) we should publish negative data. EMBO Reports, 2020, 21, e49775.	4.5	22
40	The Role of <i>Tuba1a </i>in Adult Hippocampal Neurogenesis and the Formation of the Dentate Gyrus. Developmental Neuroscience, 2010, 32, 268-277.	2.0	18
41	No evidence for a magnetite-based magnetoreceptor in the lagena of pigeons. Current Biology, 2019, 29, R14-R15.	3.9	18
42	Lidocaine is a nocebo treatment for trigeminally mediated magnetic orientation in birds. Journal of the Royal Society Interface, 2018, 15, 20180124.	3.4	15
43	Neuronal migration: unraveling the molecular pathway with humans, mice, and a fungus. Mammalian Genome, 2007, 18, 425-30.	2.2	14
44	Cryptochrome: The magnetosensor with a sinister side?. PLoS Biology, 2018, 16, e3000018.	5.6	14
45	Quantum magnetic imaging of iron organelles within the pigeon cochlea. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
46	Comment on "Magnetosensitive neurons mediate geomagnetic orientation in Caenorhabditis elegans". ELife, 2018, 7, .	6.0	12
47	A high sensitivity ZENK monoclonal antibody to map neuronal activity in Aves. Scientific Reports, 2020, 10, 915.	3.3	12
48	Uner Tan syndrome caused by a homozygousTUBB2Bmutation affecting microtubule stability. Human Molecular Genetics, 2016, 26, ddw383.	2.9	11
49	Subcellular analysis of pigeon hair cells implicates vesicular trafficking in cuticulosome formation and maintenance. ELife, 2017, 6, .	6.0	10
50	Activation of an exonic spliceâ€donor site in exon 30 of <scp>CDK</scp>5<scp>RAP</scp>2 in a patient with severe microcephaly and pigmentary abnormalities. Clinical Case Reports (discontinued), 2016, 4, 952-956.	0.5	8
51	A proteomic survey of microtubule-associated proteins in a R402H TUBA1A mutant mouse. PLoS Genetics, 2020, 16, e1009104.	3.5	8
52	Genetic testing and insurance: When is discrimination justified?. Monash Bioethics Review, 2000, 19, S79-S88.	0.8	7
53	Cytoarchitectural disruption of the superior colliculus and an enlarged acoustic startle response in the Tuba1a mutant mouse. Neuroscience, 2011, 195, 191-200.	2.3	6
54	Brain-specific knockin of the pathogenic Tubb5 E401K allele causes defects in motor coordination and prepulse inhibition. Behavioural Brain Research, 2017, 323, 47-55.	2.2	6

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55	The expression, localisation and interactome of pigeon CRY2. Scientific Reports, 2021, 11, 20293.	3.3	6
56	Myths in magnetosensation. IScience, 2022, 25, 104454.	4.1	5
57	Neuronal circuits and the magnetic sense: central questions. Journal of Experimental Biology, 2020, 223, .	1.7	3
58	Ectopic otoconial formation in the lagena of the pigeon inner ear. Biology Open, 2018, 7, .	1.2	2
59	Treating drug-dependent patients in hospitals. Journal of Law & Medicine, 2002, 10, 109-17.	0.0	0