Richard W Carthew

List of Publications by Year
in descending order

63 papers	12,188 citations	126708 33 h-index	133063 59 g-index
74 all docs	74 docs citations	74 times ranked	14667 citing authors

#	Article	IF	Citations
1	Origins and Mechanisms of miRNAs and siRNAs. Cell, 2009, 136, 642-655.	13.5	4,279
2	Distinct Roles for Drosophila Dicer-1 and Dicer-2 in the siRNA/miRNA Silencing Pathways. Cell, 2004, 117, 69-81.	13.5	1,153
3	Use of dsRNA-Mediated Genetic Interference to Demonstrate that frizzled and frizzled 2 Act in the Wingless Pathway. Cell, 1998, 95, 1017-1026.	13.5	1,036
4	Heritable gene silencing in Drosophila using double-stranded RNA. Nature Biotechnology, 2000, 18, 896-898.	9.4	471
5	Gene regulation by microRNAs. Current Opinion in Genetics and Development, 2006, 16, 203-208.	1.5	432
6	A MicroRNA Imparts Robustness against Environmental Fluctuation during Development. Cell, 2009, 137, 273-282.	13.5	432
7	A microRNA Mediates EGF Receptor Signaling and Promotes Photoreceptor Differentiation in the Drosophila Eye. Cell, 2005, 123, 1267-1277.	13.5	331
8	Silencing by small RNAs is linked to endosomal trafficking. Nature Cell Biology, 2009, 11, 1150-1156.	4.6	326
9	Surface mechanics mediate pattern formation in the developing retina. Nature, 2004, 431, 647-652.	13.7	318
10	seven in absentia, a gene required for specification of R7 cell fate in the Drosophila eye. Cell, 1990, 63, 561-577.	13.5	314
11	Making a better RNAi vector for Drosophila: use of intron spacers. Methods, 2003, 30, 322-329.	1.9	308
12	The birth and death of microRNA genes in Drosophila. Nature Genetics, 2008, 40, 351-355.	9.4	240
13	Gene silencing by double-stranded RNA. Current Opinion in Cell Biology, 2001, 13, 244-248.	2.6	227
14	Photoreceptor Cell Differentiation Requires Regulated Proteolysis of the Transcriptional Repressor Tramtrack. Cell, 1997, 90, 469-478.	13.5	212
15	Cell adhesion and cortex contractility determine cell patterning in the <i>Drosophila</i> retina. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18549-18554.	3.3	177
16	MicroRNA-mediated regulation of glucose and lipid metabolism. Nature Reviews Molecular Cell Biology, 2021, 22, 425-438.	16.1	154
17	Overlapping Activators and Repressors Delimit Transcriptional Response to Receptor Tyrosine Kinase Signals in the Drosophila Eye. Cell, 2000, 103, 87-97.	13.5	144
18	Loqs and R2D2 act sequentially in the siRNA pathway in Drosophila. Nature Structural and Molecular Biology, 2010, 17, 24-30.	3.6	127

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19	Physical modeling of cell geometric order in an epithelial tissue. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 907-911.	3.3	117
20	miR-9a Minimizes the Phenotypic Impact of Genomic Diversity by Buffering a Transcription Factor. Cell, 2013, 155, 1556-1567.	13.5	99
21	Biological Robustness and the Role of MicroRNAs. Current Topics in Developmental Biology, 2012, 99, 237-255.	1.0	92
22	Conversion of pre-RISC to holo-RISC by Ago2 during assembly of RNAi complexes. Rna, 2006, 13, 22-29.	1.6	80
23	Expanding roles for miRNAs and siRNAs in cell regulation. Current Opinion in Cell Biology, 2004, 16, 127-133.	2.6	78
24	Targets of microRNA regulation in the Drosophila oocyte proteome. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12023-12028.	3.3	77
25	MicroRNAs and their roles in developmental canalization. Current Opinion in Genetics and Development, 2014, 27, 1-6.	1.5	75
26	Functional Specialization of the Small Interfering RNA Pathway in Response to Virus Infection. PLoS Pathogens, 2013, 9, e1003579.	2.1	70
27	Pattern formation in the Drosophila eye. Current Opinion in Genetics and Development, 2007, 17, 309-313.	1.5	64
28	Functionally Diverse MicroRNA Effector Complexes Are Regulated by Extracellular Signaling. Molecular Cell, 2013, 52, 113-123.	4.5	50
29	MicroRNA function in Drosophila melanogaster. Seminars in Cell and Developmental Biology, 2017, 65, 29-37.	2.3	50
30	Adhesion proteins and the control of cell shape. Current Opinion in Genetics and Development, 2005, 15, 358-363.	1.5	48
31	MOLECULAR BIOLOGY: A New RNA Dimension to Genome Control. Science, 2006, 313, 305-306.	6.0	45
32	Cell-type-specific transcription of<i>prospero</i>is controlled by combinatorial signaling in the<i>Drosophila</i>eye. Development (Cambridge), 2008, 135, 2787-2796.	1.2	45
33	Dynamics and heterogeneity of a fate determinant during transition towards cell differentiation. ELife, 2015, 4, .	2.8	41
34	The Endo-siRNA Pathway Is Essential for Robust Development of the Drosophila Embryo. PLoS ONE, 2009, 4, e7576.	1.1	36
35	The effector mechanism of siRNA spherical nucleic acids. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1312-1320.	3.3	34
36	A comparative study of Pointed and Yan expression reveals new complexity to the transcriptional networks downstream of receptor tyrosine kinase signaling. Developmental Biology, 2014, 385, 263-278.	0.9	31

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37	Gene Regulation and Cellular Metabolism: An Essential Partnership. Trends in Genetics, 2021, 37, 389-400.	2.9	31
38	Lola regulates cell fate by antagonizing Notch induction in the Drosophila eye. Mechanisms of Development, 2008, 125, 18-29.	1.7	30
39	Cargo sorting to lysosome-related organelles regulates siRNA-mediated gene silencing. Journal of Cell Biology, 2011, 194, 77-87.	2.3	30
40	The Relationship Between Long-Range Chromatin Occupancy and Polymerization of the<i>Drosophila</i>ETS Family Transcriptional Repressor Yan. Genetics, 2013, 193, 633-649.	1.2	28
41	Reply to â€œEvolutionary flux of canonical microRNAs and mirtrons in Drosophilaâ€. Nature Genetics, 2010, 42, 9-10.	9.4	27
42	RNA Interference: The Fragile X Syndrome Connection. Current Biology, 2002, 12, R852-R854.	1.8	26
43	Repressive Gene Regulation Synchronizes Development with Cellular Metabolism. Cell, 2019, 178, 980-992.e17.	13.5	24
44	Microprocessor Recruitment to Elongating RNA Polymerase II Is Required for Differential Expression of MicroRNAs. Cell Reports, 2017, 20, 3123-3134.	2.9	23
45	Global constraints within the developmental program of the Drosophila wing. ELife, 2021, 10, .	2.8	18
46	A Systematic Genetic Screen to Dissect the MicroRNA Pathway in<i>Drosophila</i>. G3: Genes, Genomes, Genetics, 2012, 2, 437-448.	0.8	15
47	Spindle-E cycling between nuage and cytoplasm is controlled by Qin and PIWI proteins. Journal of Cell Biology, 2016, 213, 201-211.	2.3	15
48	MicroRNA miR-7 Regulates Secretion of Insulin-Like Peptides. Endocrinology, 2020, 161, .	1.4	14
49	Ordered patterning of the sensory system is susceptible to stochastic features of gene expression. ELife, 2020, 9, .	2.8	14
50	Emergence of a geometric pattern of cell fates from tissue-scale mechanics in the Drosophila eye. ELife, 2022, 11, .	2.8	13
51	Differential Masking of Natural Genetic Variation by miR-9a in <i>Drosophila</i>. Genetics, 2016, 202, 675-687.	1.2	12
52	Invading viral DNA triggers dsRNA synthesis by RNA polymerase II to activate antiviral RNA interference in Drosophila. Cell Reports, 2022, 39, 110976.	2.9	12
53	The Wg and Dpp morphogens regulate gene expression by modulating the frequency of transcriptional bursts. ELife, 2020, 9, .	2.8	10
54	SnapShot: Posttranscriptional Gene Silencing. Cell, 2007, 130, 570.e1-570.e2.	13.5	7

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55	microRNAs suppress cellular phenotypic heterogeneity. Cell Cycle, 2014, 13, 1517-1518.	1.3	6
56	A pipeline for precise and efficient genome editing by sgRNA-Cas9 RNPs in <i>Drosophila</i>. Fly, 2020, 14, 34-48.	0.9	6
57	MicroRNAs Make a Difference in Cardiovascular Robustness. Developmental Cell, 2017, 40, 515-516.	3.1	3
58	Fly-QMA: Automated analysis of mosaic imaginal discs in Drosophila. PLoS Computational Biology, 2020, 16, e1007406.	1.5	3
59	Editorial overview: Taking measure of developing plants and animals. Current Opinion in Genetics and Development, 2020, 63, iii-v.	1.5	1
60	Fly-QMA: Automated analysis of mosaic imaginal discs in Drosophila. , 2020, 16, e1007406.		0
61	Fly-QMA: Automated analysis of mosaic imaginal discs in Drosophila. , 2020, 16, e1007406.		0
62	Fly-QMA: Automated analysis of mosaic imaginal discs in Drosophila. , 2020, 16, e1007406.		0
63	Fly-QMA: Automated analysis of mosaic imaginal discs in Drosophila. , 2020, 16, e1007406.		0