Helge Grosshans

List of Publications by Year
in descending order

60 papers	7,784 citations	159585 30 h-index	133252 59 g-index
73 all docs	73 docs citations	73 times ranked	10309 citing authors

#	Article	IF	Citations
1	RAS Is Regulated by the let-7 MicroRNA Family. Cell, 2005, 120, 635-647.	28.9	3,291
2	let-7 microRNAs in development, stem cells and cancer. Trends in Molecular Medicine, 2008, 14, 400-409.	6.7	539
3	Active turnover modulates mature microRNA activity in Caenorhabditis elegans. Nature, 2009, 461, 546-549.	27.8	331
4	MicroRNA turnover: when, how, and why. Trends in Biochemical Sciences, 2012, 37, 436-446.	7.5	298
5	The expanding world of small RNAs. Nature, 2008, 451, 414-416.	27.8	246
6	The Temporal Patterning MicroRNA let-7 Regulates Several Transcription Factors at the Larval to Adult Transition in C. elegans. Developmental Cell, 2005, 8, 321-330.	7.0	231
7	Extensive Oscillatory Gene Expression during C.Âelegans Larval Development. Molecular Cell, 2014, 53, 380-392.	9.7	188
8	Potent degradation of neuronal mi <scp>RNA</scp> s induced by highly complementary targets. EMBO Reports, 2015, 16, 500-511.	4.5	165
9	An aminoacylation-dependent nuclear tRNA export pathway in yeast. Genes and Development, 2000, 14, 830-840.	5.9	156
10	Target-Mediated Protection of Endogenous MicroRNAs in C. elegans. Developmental Cell, 2011, 20, 388-396.	7.0	150
11	Micro-RNAs. Journal of Cell Biology, 2002, 156, 17-22.	5.2	132
12	Biogenesis of the Signal Recognition Particle (Srp) Involves Import of Srp Proteins into the Nucleolus, Assembly with the Srp-Rna, and Xpo1p-Mediated Export. Journal of Cell Biology, 2001, 153, 745-762.	5.2	128
13	Repression of C. elegans microRNA targets at the initiation level of translation requires GW182 proteins. EMBO Journal, 2009, 28, 213-222.	7.8	121
14	The let-7 microRNA Directs Vulval Development through a Single Target. Developmental Cell, 2015, 32, 335-344.	7.0	121
15	Regulating the regulators: mechanisms controlling the maturation of microRNAs. Trends in Biotechnology, 2009, 27, 27-36.	9.3	97
16	Targeted Heritable Mutation and Gene Conversion by Cas9-CRISPR in <i>Caenorhabditis elegans</i>. Genetics, 2013, 195, 1173-1176.	2.9	95
17	A quantitative targeted proteomics approach to validate predicted microRNA targets in C. elegans. Nature Methods, 2010, 7, 837-842.	19.0	80
18	The nuclear export receptor XPO-1 supports primary miRNA processing in C. elegans and Drosophila. EMBO Journal, 2010, 29, 1830-1839.	7.8	72

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19	Formation and nuclear export of tRNA, rRNA and mRNA is regulated by the ubiquitin ligase Rsp5p. EMBO Reports, 2003, 4, 1156-1162.	4.5	71
20	LIN41 Post-transcriptionally Silences mRNAs by Two Distinct and Position-Dependent Mechanisms. Molecular Cell, 2017, 65, 476-489.e4.	9.7	71
21	The intracellular location of two aminoacyl-tRNA synthetases depends on complex formation with Arc1p. EMBO Journal, 2001, 20, 6889-6898.	7.8	68
22	Review: Transport of tRNA out of the Nucleusâ€”Direct Channeling to the Ribosome?. Journal of Structural Biology, 2000, 129, 288-294.	2.8	65
23	Bayesian prediction of RNA translation from ribosome profiling. Nucleic Acids Research, 2017, 45, gkw1350.	14.5	64
24	An interplay of miRNA abundance and target site architecture determines miRNA activity and specificity. Nucleic Acids Research, 2018, 46, 3259-3269.	14.5	62
25	The Decapping Scavenger Enzyme DCS-1 Controls MicroRNA Levels in Caenorhabditis elegans. Molecular Cell, 2013, 50, 281-287.	9.7	57
26	LIN-41/TRIM71: emancipation of a miRNA target. Genes and Development, 2013, 27, 581-589.	5.9	55
27	The let-7 microRNA interfaces extensively with the translation machinery to regulate cell differentiation. Cell Cycle, 2008, 7, 3083-3090.	2.6	53
28	Developmental function and state transitions of a gene expression oscillator in <i>Caenorhabditis elegans</i>. Molecular Systems Biology, 2020, 16, e9498.	7.2	53
29	Pus1p-dependent tRNA Pseudouridinylation Becomes Essential When tRNA Biogenesis Is Compromised in Yeast. Journal of Biological Chemistry, 2001, 276, 46333-46339.	3.4	46
30	The multifunctional RNase XRN2. Biochemical Society Transactions, 2013, 41, 825-830.	3.4	46
31	Proteomics Joins the Search for MicroRNA Targets. Cell, 2008, 134, 560-562.	28.9	41
32	Timing mechanism of sexually dimorphic nervous system differentiation. ELife, 2019, 8, .	6.0	40
33	H3K9me selectively blocks transcription factor activity and ensures differentiated tissue integrity. Nature Cell Biology, 2021, 23, 1163-1175.	10.3	37
34	Transcriptome-wide measurement of ribosomal occupancy by ribosome profiling. Methods, 2015, 85, 75-89.	3.8	35
35	Two distinct transcription termination modes dictated by promoters. Genes and Development, 2017, 31, 1870-1879.	5.9	35
36	Evolutionary plasticity of the NHL domain underlies distinct solutions to RNA recognition. Nature Communications, 2018, 9, 1549.	12.8	35

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37	Engineering of a conditional allele reveals multiple roles of XRN2 in <i>Caenorhabditis elegans</i> development and substrate specificity in microRNA turnover. Nucleic Acids Research, 2014, 42, 4056-4067.	14.5	34
38	<i>let-7</i>coordinates the transition to adulthood through a single primary and four secondary targets. Life Science Alliance, 2019, 2, e201900335.	2.8	33
39	PAXT-1 Promotes XRN2 Activity by Stabilizing It through a Conserved Domain. Molecular Cell, 2014, 53, 351-360.	9.7	32
40	The RNA hairpin binder TRIM71 modulates alternative splicing by repressing MBNL1. Genes and Development, 2019, 33, 1221-1235.	5.9	31
41	The Liver-Specific MicroRNA miR-122: Biology and Therapeutic Potential. , 2011, , 221-238.		26
42	MicroRNases and the Regulated Degradation of Mature Animal miRNAs. Advances in Experimental Medicine and Biology, 2010, 700, 140-155.	1.6	25
43	The ribonucleotidyl transferase USIP-1 acts with SART3 to promote U6 snRNA recycling. Nucleic Acids Research, 2015, 43, 3344-3357.	14.5	22
44	Structural basis and function of XRN2 binding by XTB domains. Nature Structural and Molecular Biology, 2016, 23, 164-171.	8.2	17
45	The type II poly(A)-binding protein PABP-2 genetically interacts with the let-7 miRNA and elicits heterochronic phenotypes in Caenorhabditis elegans. Nucleic Acids Research, 2011, 39, 5647-5657.	14.5	16
46	A genetic interactome of the let-7 microRNA in C. elegans. Developmental Biology, 2015, 401, 276-286.	2.0	15
47	XRN2 Autoregulation and Control of Polycistronic Gene Expresssion in Caenorhabditis elegans. PLoS Genetics, 2016, 12, e1006313.	3.5	15
48	Nuclear Export of tRNA. Results and Problems in Cell Differentiation, 2002, 35, 115-131.	0.7	15
49	Protease-mediated processing of Argonaute proteins controls small RNA association. Molecular Cell, 2021, 81, 2388-2402.e8.	9.7	13
50	A branched heterochronic pathway directs juvenile-to-adult transition through two LIN-29 isoforms. ELife, 2020, 9, .	6.0	13
51	Coupling of growth rate and developmental tempo reduces body size heterogeneity in C. elegans. Nature Communications, 2022, 13, .	12.8	13
52	MicroRNAses and the regulated degradation of mature animal miRNAs. Advances in Experimental Medicine and Biology, 2010, 700, 140-55.	1.6	12
53	MicroRNA Biogenesis Takes Another Single Hit from Microsatellite Instability. Cancer Cell, 2010, 18, 295-297.	16.8	11
54	Gene therapy â€“ when a simple concept meets a complex reality. Functional and Integrative Genomics, 2000, 1, 142-145.	3.5	10

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55	Gene expression oscillations in C. elegans underlie a new developmental clock. Current Topics in Developmental Biology, 2021, 144, 19-43.	2.2	10
56	Turning the table on miRNAs. Nature Structural and Molecular Biology, 2018, 25, 195-197.	8.2	6
57	miRNA, piRNA, siRNAâ€"kleine wiener ribonukleinsÃuren. BioEssays, 2007, 29, 940-943.	2.5	2
58	Translational Control of Endogenous MicroRNA Target Genes in C. elegans. Progress in Molecular and Subcellular Biology, 2010, 50, 21-40.	1.6	1
59	MicroRNAs in C. elegans Development. Modecular Medicine and Medicinal, 2010, , 51-93.	0.4	0
60	Regulation of microRNAs. Preface. Advances in Experimental Medicine and Biology, 2010, 700, v-vi.	1.6	0