Marcel Tijsterman

List of Publications by Year
in descending order

77 papers	5,441 citations	94433 37 h-index	98798 67 g-index
81 all docs	81 docs citations	81 times ranked	5846 citing authors

#	Article	IF	Citations
1	Loss of the Putative RNA-Directed RNA Polymerase RRF-3 Makes C. elegans Hypersensitive to RNAi. Current Biology, 2002, 12, 1317-1319.	3.9	529
2	Dicers at RISC. Cell, 2004, 117, 1-3.	28.9	304
3	The Genetics of RNA Silencing. Annual Review of Genetics, 2002, 36, 489-519.	7.6	283
4	Mapping Determinants of Gene Expression Plasticity by Genetical Genomics in C. elegans. PLoS Genetics, 2006, 2, e222.	3.5	269
5	Long-term gene silencing by RNAi. Nature, 2006, 442, 882-882.	27.8	261
6	Identification of genes that protect the C. elegans genome against mutations by genome-wide RNAi. Genes and Development, 2003, 17, 443-448.	5.9	196
7	Mutagenic Capacity of Endogenous G4 DNA Underlies Genome Instability in FANCJ-Defective C. elegans. Current Biology, 2008, 18, 900-905.	3.9	186
8	A Polymerase Theta-dependent repair pathway suppresses extensive genomic instability at endogenous G4 DNA sites. Nature Communications, 2014, 5, 3216.	12.8	179
9	Histone H3K9 methylation is dispensable for Caenorhabditis elegans development but suppresses RNA:DNA hybrid-associated repeat instability. Nature Genetics, 2016, 48, 1385-1395.	21.4	173
10	PolÎ¸ inhibitors elicit BRCA-gene synthetic lethality and target PARP inhibitor resistance. Nature Communications, 2021, 12, 3636.	12.8	159
11	PPW-1, a PAZ/PIWI Protein Required for Efficient Germline RNAi, Is Defective in a Natural Isolate of C. elegans. Current Biology, 2002, 12, 1535-1540.	3.9	154
12	Genes Required for Systemic RNA Interference in Caenorhabditis elegans. Current Biology, 2004, 14, 111-116.	3.9	154
13	CRISPR/Cas9-Targeted Mutagenesis in <i>Caenorhabditis elegans</i>. Genetics, 2013, 195, 1187-1191.	2.9	153
14	RNA Helicase MUT-14-Dependent Gene Silencing Triggered in C. elegans by Short Antisense RNAs. Science, 2002, 295, 694-697.	12.6	141
15	Polymerase theta-mediated end joining of replication-associated DNA breaks in <i>C. elegans</i>. Genome Research, 2014, 24, 954-962.	5.5	137
16	<scp>FANCJ</scp> promotes <scp>DNA</scp> synthesis through Gâ€quadruplex structures. EMBO Journal, 2014, 33, 2521-2533.	7.8	127
17	The TWIST1 oncogene is a direct target of hypoxia-inducible factor-2Î±. Oncogene, 2008, 27, 1501-1510.	5.9	119
18	T-DNA integration in plants results from polymerase-Î¸-mediated DNA repair. Nature Plants, 2016, 2, 16164.	9.3	118

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19	Genomes and G-Quadruplexes: For Better or for Worse. Journal of Molecular Biology, 2013, 425, 4782-4789.	4.2	109
20	Mutational signatures of nonâ€homologous and polymerase thetaâ€mediated endâ€joining in embryonic stem cells. EMBO Journal, 2017, 36, 3634-3649.	7.8	109
21	A Caenorhabditis elegans Wild Type Defies the Temperatureâ€"Size Rule Owing to a Single Nucleotide Polymorphism in tra-3. PLoS Genetics, 2007, 3, e34.	3.5	104
22	Templated Insertions: A Smoking Gun for Polymerase Theta-Mediated End Joining. Trends in Genetics, 2019, 35, 632-644.	6.7	103
23	Mutagenic consequences of a single G-quadruplex demonstrate mitotic inheritance of DNA replication fork barriers. Nature Communications, 2015, 6, 8909.	12.8	102
24	Inactivation of Pol Î¸ and C-NHEJ eliminates off-target integration of exogenous DNA. Nature Communications, 2017, 8, 66.	12.8	99
25	Identification of Conserved Pathways of DNA-Damage Response and Radiation Protection by Genome-Wide RNAi. Current Biology, 2006, 16, 1344-1350.	3.9	88
26	Polymerase Î¸ is a key driver of genome evolution and of CRISPR/Cas9-mediated mutagenesis. Nature Communications, 2015, 6, 7394.	12.8	87
27	COM-1 Promotes Homologous Recombination during Caenorhabditis elegans Meiosis by Antagonizing Ku-Mediated Non-Homologous End Joining. PLoS Genetics, 2013, 9, e1003276.	3.5	77
28	CRISPR-Cas9 induces large structural variants at on-target and off-target sites in vivo that segregate across generations. Nature Communications, 2022, 13, 627.	12.8	65
29	RNA Polymerase II Transcription Suppresses Nucleosomal Modulation of UV-Induced (6-4) Photoproduct and Cyclobutane Pyrimidine Dimer Repair in Yeast. Molecular and Cellular Biology, 1999, 19, 934-940.	2.3	59
30	DNA double-strand break repair in Caenorhabditis elegans. Chromosoma, 2011, 120, 1-21.	2.2	59
31	Transitions in the coupling of transcription and nucleotide excision repair within RNA polymerase II-transcribed genes of Saccharomyces cerevisiae. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8027-8032.	7.1	57
32	Gene interactions in the DNA damage-response pathway identified by genome-wide RNA-interference analysis of synthetic lethality. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12992-12996.	7.1	55
33	Genomic Scars Generated by Polymerase Theta Reveal the Versatile Mechanism of Alternative End-Joining. PLoS Genetics, 2016, 12, e1006368.	3.5	53
34	RAP-1 and the RAL-1/exocyst pathway coordinate hypodermal cell organization in Caenorhabditis elegans. EMBO Journal, 2007, 26, 5083-5092.	7.8	49
35	Frequent Germline Mutations and Somatic Repeat Instability in DNA Mismatch-Repair-Deficient Caenorhabditis elegans. Genetics, 2002, 161, 651-660.	2.9	49
36	A Broad Requirement for TLS Polymerases Î· and Îº, and Interacting Sumoylation and Nuclear Pore Proteins, in Lesion Bypass during C. elegans Embryogenesis. PLoS Genetics, 2012, 8, e1002800.	3.5	45

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37	A Robust Network of Double-Strand Break Repair Pathways Governs Genome Integrity during C. elegans Development. Current Biology, 2009, 19, 1384-1388.	3.9	43
38	BRCA1-associated structural variations are a consequence of polymerase theta-mediated end-joining. Nature Communications, 2020, 11, 3615.	12.8	39
39	Transcription-coupled and global genome repair in the Saccharomyces cerevisiae RPB2 gene at nucleotide resolution. Nucleic Acids Research, 1996, 24, 3499-3506.	14.5	37
40	The repair of G-quadruplex-induced DNA damage. Experimental Cell Research, 2014, 329, 178-183.	2.6	31
41	Small tandem DNA duplications result from CST-guided Pol Î±-primase action at DNA break termini. Nature Communications, 2021, 12, 4843.	12.8	27
42	Saccharomyces cerevisiae mms19 mutants are deficient in transcription- coupled and global nucleotide excision repair. Nucleic Acids Research, 1997, 25, 3974-3979.	14.5	23
43	A Role for the Malignant Brain Tumour (MBT) Domain Protein LIN-61 in DNA Double-Strand Break Repair by Homologous Recombination. PLoS Genetics, 2013, 9, e1003339.	3.5	18
44	Rad26, the Yeast Homolog of the Cockayne Syndrome B Gene Product, Counteracts Inhibition of DNA Repair Due to RNA Polymerase II Transcription. Journal of Biological Chemistry, 1999, 274, 1199-1202.	3.4	17
45	Distinct mechanisms for genomic attachment of the 5â€² and 3â€² ends of Agrobacterium T-DNA in plants. Nature Plants, 2022, 8, 526-534.	9.3	17
46	Isolation of deletion alleles by G4 DNA-induced mutagenesis. Nature Methods, 2009, 6, 655-657.	19.0	16
47	Preservation of lagging strand integrity at sites of stalled replication by Pol Î±-primase and 9-1-1 complex. Science Advances, 2021, 7, .	10.3	16
48	Helicase Q promotes homology-driven DNA double-strand break repair and prevents tandem duplications. Nature Communications, 2021, 12, 7126.	12.8	16
49	Genomic instability and cancer: scanning the Caenorhabditis elegans genome for tumor suppressors. Oncogene, 2004, 23, 8366-8375.	5.9	15
50	Microhomology-Mediated Intron Loss during Metazoan Evolution. Genome Biology and Evolution, 2013, 5, 1212-1219.	2.5	15
51	Gene targeting in polymerase thetaâ€deficient <i>Arabidopsis thaliana</i>. Plant Journal, 2022, 109, 112-125.	5.7	13
52	Translesion synthesis polymerases are dispensable for C. elegans reproduction but suppress genome scarring by polymerase theta-mediated end joining. PLoS Genetics, 2020, 16, e1008759.	3.5	12
53	A versatile microsatellite instability reporter system in human cells. Nucleic Acids Research, 2013, 41, e158-e158.	14.5	11
54	Defective Kin28, a subunit of yeast TFIIH, impairs transcription-coupled but not global genome nucleotide excision repair. Mutation Research DNA Repair, 1998, 409, 181-188.	3.7	10

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55	Combined loss of three DNA damage response pathways renders C. elegans intolerant to light. DNA Repair, 2017, 54, 55-62.	2.8	10
56	Removal of cyclobutane pyrimidine dimers by the UV damage repair and nucleotide excision repair pathways of Schizosaccharomyces pombe at nucleotide resolution. Nucleic Acids Research, 1999, 27, 2868-2874.	14.5	8
57	Low dose ionizing radiation strongly stimulates insertional mutagenesis in a Î³H2AX dependent manner. PLoS Genetics, 2020, 16, e1008550.	3.5	7
58	Mosaic analysis and tumor induction in zebrafish by microsatellite instability-mediated stochastic gene expression. DMM Disease Models and Mechanisms, 2014, 7, 929-36.	2.4	6
59	THO complex deficiency impairs DNA double-strand break repair via the RNA surveillance kinase SMG-1. Nucleic Acids Research, 2022, 50, 6235-6250.	14.5	5
60	Enzymatic Detection of Ultraviolet-Induced Pyrimidine (6-4) Pyrimidone Photoproducts at Nucleotide Resolution inSaccharomyces cerevisiae. Analytical Biochemistry, 1998, 260, 110-113.	2.4	4
61	Isolation of RNA fromC. elegans. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4321.	0.3	4
62	Transcription-Coupled and Global Genome Nucleotide Excision Repair. Nucleic Acids and Molecular Biology, 1998, , 157-172.	0.2	3
63	Cosuppression inC. elegans. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4318.	0.3	2
64	Detection of si/miRNA inC. elegansby Northern Blot. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4320.	0.3	1
65	Introduction of Double-Stranded RNA inC. elegansby Feeding. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4317.	0.3	1
66	Introduction of Double-Stranded RNA inC. elegansby Injection. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4315.	0.3	1
67	The Mechanism of RNA Interference and the Transposon Silencing inCaenorhabditis elegans. Scientific World Journal, The, 2002, 2, 3-4.	2.1	0
68	Detection of siRNA inC. elegansUsing RNase Protection. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4319.	0.3	0
69	Introduction of Double-Stranded RNA inC. elegansby Soaking. Cold Spring Harbor Protocols, 2006, 2006, pdb.prot4316.	0.3	0
70	Title is missing!. , 2020, 16, e1008550.		0
71	Title is missing!. , 2020, 16, e1008550.		0
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73	Title is missing!. , 2020, 16, e1008550.		0
74	Title is missing!. , 2020, 16, e1008759.		0
75	Title is missing!. , 2020, 16, e1008759.		0
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77	Title is missing!. , 2020, 16, e1008759.		0