Nancy Maizels

List of Publications by Year
in descending order

75 papers	6,257 citations	101384 36 h-index	79541 73 g-index
81 all docs	81 docs citations	81 times ranked	5708 citing authors

#	Article	IF	Citations
1	The Bloom's Syndrome Helicase Unwinds G4 DNA. Journal of Biological Chemistry, 1998, 273, 27587-27592.	1.6	472
2	Intracellular transcription of G-rich DNAs induces formation of G-loops, novel structures containing G4 DNA. Genes and Development, 2004, 18, 1618-1629.	2.7	452
3	Gene function correlates with potential for G4 DNA formation in the human genome. Nucleic Acids Research, 2006, 34, 3887-3896.	6.5	452
4	The G4 Genome. PLoS Genetics, 2013, 9, e1003468.	1.5	437
5	Dynamic roles for G4 DNA in the biology of eukaryotic cells. Nature Structural and Molecular Biology, 2006, 13, 1055-1059.	3.6	393
6	G4â€associated human diseases. EMBO Reports, 2015, 16, 910-922.	2.0	261
7	Conserved elements with potential to form polymorphic G-quadruplex structures in the first intron of human genes. Nucleic Acids Research, 2008, 36, 1321-1333.	6.5	258
8	Immunoglobulin Gene Diversification. Annual Review of Genetics, 2005, 39, 23-46.	3.2	241
9	High Affinity Interactions of Nucleolin with G-G-paired rDNA. Journal of Biological Chemistry, 1999, 274, 15908-15912.	1.6	196
10	G quadruplexes are genomewide targets of transcriptional helicases XPB and XPD. Nature Chemical Biology, 2014, 10, 313-318.	3.9	183
11	Homology-directed repair of DNA nicks via pathways distinct from canonical double-strand break repair. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E924-32.	3.3	174
12	G4 DNA Binding by LR1 and Its Subunits, Nucleolin and hnRNP D, A Role for G-G pairing in Immunoglobulin Switch Recombination. Journal of Biological Chemistry, 1999, 274, 1066-1071.	1.6	159
13	AID binds to transcription-induced structures in c-MYC that map to regions associated with translocation and hypermutation. Oncogene, 2005, 24, 5791-5798.	2.6	128
14	A Conserved G4 DNA Binding Domain in RecQ Family Helicases. Journal of Molecular Biology, 2006, 358, 1071-1080.	2.0	126
15	CpG Island Methylator Phenotype Is Associated With Response to Adjuvant Irinotecan-Based Therapy for Stage III Colon Cancer. Gastroenterology, 2014, 147, 637-645.	0.6	118
16	Somatic hypermutation: How many mechanisms diversify V region sequences?. Cell, 1995, 83, 9-12.	13.5	112
17	MutSÎ± Binds to and Promotes Synapsis of Transcriptionally Activated Immunoglobulin Switch Regions. Current Biology, 2005, 15, 470-474.	1.8	111
18	Generation of a nicking enzyme that stimulates site-specific gene conversion from the I-AniI LAGLIDADG homing endonuclease. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5099-5104.	3.3	108

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19	Regulation of gene expression by the BLM helicase correlates with the presence of G-quadruplex DNA motifs. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9905-9910.	3.3	108
20	A rapid and sensitive assay for DNAâ€"protein covalent complexes in living cells. Nucleic Acids Research, 2013, 41, e104-e104.	6.5	106
21	G4 motifs correlate with promoter-proximal transcriptional pausing in human genes. Nucleic Acids Research, 2011, 39, 4975-4983.	6.5	101
22	In Vitro Properties of the Conserved Mammalian Protein hnRNP D Suggest a Role in Telomere Maintenance. Molecular and Cellular Biology, 2000, 20, 5425-5432.	1.1	90
23	The Werner syndrome RECQ helicase targets G4 DNA in human cells to modulate transcription. Human Molecular Genetics, 2016, 25, 2060-2069.	1.4	81
24	DNA Breaks in Hypermutating Immunoglobulin Genes: Evidence for a Break-and-Repair Pathway of Somatic Hypermutation. Genetics, 2001, 158, 369-378.	1.2	77
25	MRE11/RAD50 Cleaves DNA in the AID/UNG-Dependent Pathway of Immunoglobulin Gene Diversification. Molecular Cell, 2005, 20, 367-375.	4.5	72
26	Somatic hypermutation and the three R's: repair, replication and recombination. Mutation Research - Reviews in Mutation Research, 1999, 436, 157-178.	2.4	70
27	Novel fluorescent genome editing reporters for monitoring DNA repair pathway utilization at endonuclease-induced breaks. Nucleic Acids Research, 2014, 42, e4-e4.	6.5	65
28	The MRE11-RAD50-NBS1 complex accelerates somatic hypermutation and gene conversion of immunoglobulin variable regions. Nature Immunology, 2005, 6, 730-736.	7.0	62
29	G-quadruplexes Sequester Free Heme in Living Cells. Cell Chemical Biology, 2019, 26, 1681-1691.e5.	2.5	58
30	G-Rich Proto-Oncogenes Are Targeted for Genomic Instability in B-Cell Lymphomas. Cancer Research, 2007, 67, 2586-2594.	0.4	57
31	DNA Nicks Promote Efficient and Safe Targeted Gene Correction. PLoS ONE, 2011, 6, e23981.	1.1	57
32	DNA Repair Factor MRE11/RAD50 Cleaves 3â€²-Phosphotyrosyl Bonds and Resects DNA to Repair Damage Caused by Topoisomerase 1 Poisons. Journal of Biological Chemistry, 2011, 286, 44945-44951.	1.6	51
33	Selection for the G4 DNA motif at the 5â€² end of human genes. Molecular Carcinogenesis, 2009, 48, 319-325.	1.3	48
34	Two Distinct Pathways Support Gene Correction by Single-Stranded Donors at DNA Nicks. Cell Reports, 2016, 17, 1872-1881.	2.9	45
35	Chromatin Structure Regulates Gene Conversion. PLoS Biology, 2007, 5, e246.	2.6	42
36	Recovery of Soluble, Active Recombinant Protein from Inclusion Bodies. BioTechniques, 1997, 23, 1036-1038.	0.8	41

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37	MRE11 Function in Response to Topoisomerase Poisons Is Independent of its Function in Double-Strand Break Repair in Saccharomyces cerevisiae. PLoS ONE, 2010, 5, e15387.	1.1	36
38	Initiation of homologous recombination at DNA nicks. Nucleic Acids Research, 2018, 46, 6962-6973.	6.5	34
39	Ultrasensitive isolation, identification and quantification of DNAâ€“protein adducts by ELISA-based RADAR assay. Nucleic Acids Research, 2014, 42, e108-e108.	6.5	33
40	Cell Cycle Regulates Nuclear Stability of AID and Determines the Cellular Response to AID. PLoS Genetics, 2015, 11, e1005411.	1.5	32
41	A Î»1 transgene under the control of a heavy chain promoter and enhancer does not undergo somatic hypermutation. European Journal of Immunology, 1994, 24, 1649-1656.	1.6	30
42	Genomic Stability: FANCJ-Dependent G4 DNA Repair. Current Biology, 2008, 18, R613-R614.	1.8	30
43	Targeted gene therapies: tools, applications, optimization. Critical Reviews in Biochemistry and Molecular Biology, 2012, 47, 264-281.	2.3	30
44	EVOLUTION:Enhanced: A Deadly Double Life. Science, 1999, 284, 63-64.	6.0	28
45	Activities of human exonuclease 1 that promote cleavage of transcribed immunoglobulin switch regions. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16508-16512.	3.3	28
46	Transcription-coupled mutagenesis by the DNA deaminase AID. Genome Biology, 2004, 5, 211.	13.9	26
47	G4 motifs in human genes. Annals of the New York Academy of Sciences, 2012, 1267, 53-60.	1.8	26
48	Distinct Activities of Exonuclease 1 and Flap Endonuclease 1 at Telomeric G4 DNA. PLoS ONE, 2010, 5, e8908.	1.1	22
49	Recombination-based mechanisms for somatic hypermutation. Immunological Reviews, 1998, 162, 67-76.	2.8	21
50	E2A Acts in cis in G1 Phase of Cell Cycle to Promote Ig Gene Diversification. Journal of Immunology, 2009, 182, 408-415.	0.4	21
51	G4 DNA: at risk in the genome. EMBO Journal, 2011, 30, 3878-3879.	3.5	21
52	PMS2-deficiency diminishes hypermutation of a ÃŽÂ»1 transgene in young but not older mice. Molecular Immunology, 1999, 36, 83-91.	1.0	20
53	Immunoglobulin Class Switch Recombination: Will Genetics Provide New Clues to Mechanism?. American Journal of Human Genetics, 1999, 64, 1270-1275.	2.6	19
54	POLQ suppresses interhomolog recombination and loss of heterozygosity at targeted DNA breaks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22900-22909.	3.3	19

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55	Topoisomerase Assays. Current Protocols, 2021, 1, e250.	1.3	19
56	Temporal Regulation of Ig Gene Diversification Revealed by Single-Cell Imaging. Journal of Immunology, 2009, 183, 4545-4553.	0.4	17
57	MRE11-Deficiency Associated with Improved Long-Term Disease Free Survival and Overall Survival in a Subset of Stage III Colon Cancer Patients in Randomized CALGB 89803 Trial. PLoS ONE, 2014, 9, e108483.	1.1	17
58	High-fidelity correction of genomic uracil by human mismatch repair activities. BMC Molecular Biology, 2008, 9, 94.	3.0	13
59	Increased levels of RECQ5 shift DNA repair from canonical to alternative pathways. Nucleic Acids Research, 2018, 46, 9496-9509.	6.5	13
60	Assaying Repair at DNA Nicks. Methods in Enzymology, 2018, 601, 71-89.	0.4	10
61	The â€œadductomeâ€• A limited repertoire of adducted proteins in human cells. DNA Repair, 2020, 89, 102825.	1.3	10
62	Genome Engineering with Cre-<i>lox</i>P. Journal of Immunology, 2013, 191, 5-6.	0.4	9
63	Genetic Variation Stimulated by Epigenetic Modification. PLoS ONE, 2008, 3, e4075.	1.1	9
64	Breaksite batch mapping, a rapid method for assay and identification of DNA breaksites in mammalian cells. Nucleic Acids Research, 2001, 29, 33e-33.	6.5	8
65	Isotype exclusion in Î»1 transgenic mice depends on transgene copy number and diminishes with down-regulation of transgene transcripts. European Journal of Immunology, 1995, 25, 187-191.	1.6	7
66	Pathways and signatures of mutagenesis at targeted DNA nicks. PLoS Genetics, 2021, 17, e1009329.	1.5	7
67	RAD51 paralogs promote homology-directed repair at diversifying immunoglobulin V regions. BMC Molecular Biology, 2009, 10, 98.	3.0	6
68	Activation-induced deaminase (AID) localizes to the nucleus in brief pulses. PLoS Genetics, 2019, 15, e1007968.	1.5	5
69	Rapid, direct detection of bacterial topoisomerase 1-DNA adducts by RADAR/ELISA. Analytical Biochemistry, 2020, 608, 113827.	1.1	5
70	Treatment of human cells with 5-aza-dC induces formation of PARP1-DNA covalent adducts at genomic regions targeted by DNMT1. DNA Repair, 2020, 96, 102977.	1.3	4
71	Molecular Mechanism of Hypermutation. , 2004, , 327-338.		4
72	Epigenetic Modification of the Repair Donor Regulates Targeted Gene Correction. Molecular Therapy - Nucleic Acids, 2012, 1, e49.	2.3	3

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73	Antibody Discovery Ex Vivo Accelerated by the LacO/LacI Regulatory Network. PLoS ONE, 2012, 7, e36032.	1.1	2
74	Secret sharers in the immune system: a novel RNA editing activity links switch recombination and somatic hypermutation. Genome Biology, 2000, 1, reviews1025.1.	13.9	1
75	Targeted Gene Correction: Gene Therapy Promoted by Meganucleases. FASEB Journal, 2011, 25, 202.2.	0.2	0