Nancy Maizels

List of Publications by Citations

75 papers	5,220 citations	34 h-index	72 g-index
81 ext. papers	5,780 ext. citations	10 avg, IF	6.23 L-index

#	Paper	IF	Citations
75	The Bloom's syndrome helicase unwinds G4 DNA. *Journal of Biological Chemistry*, **1998**, 273, 27587-92	5.4	410
74	Intracellular transcription of G-rich DNAs induces formation of G-loops, novel structures containing G4 DNA. *Genes and Development*, **2004**, 18, 1618-29	12.6	390
73	Gene function correlates with potential for G4 DNA formation in the human genome. *Nucleic Acids Research*, **2006**, 34, 3887-96	20.1	378
72	The G4 genome. *PLoS Genetics*, **2013**, 9, e1003468	6	366
71	Dynamic roles for G4 DNA in the biology of eukaryotic cells. *Nature Structural and Molecular Biology* , **2006**, 13, 1055-9	17.6	353
70	Conserved elements with potential to form polymorphic G-quadruplex structures in the first intron of human genes. *Nucleic Acids Research*, **2008**, 36, 1321-33	20.1	218
69	Immunoglobulin gene diversification. *Annual Review of Genetics*, **2005**, 39, 23-46	14.5	208
68	G4-associated human diseases. *EMBO Reports*, **2015**, 16, 910-22	6.5	200
67	High affinity interactions of nucleolin with G-G-paired rDNA. *Journal of Biological Chemistry*, **1999**, 274, 15908-12	5.4	176
66	G quadruplexes are genomewide targets of transcriptional helicases XPB and XPD. *Nature Chemical Biology*, **2014**, 10, 313-8	11.7	143
65	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, 1066-71	5.4	140
64	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	11.5	134
63	A conserved G4 DNA binding domain in RecQ family helicases. *Journal of Molecular Biology*, **2006**, 358, 1071-80	6.5	118
62	AID binds to transcription-induced structures in c-MYC that map to regions associated with translocation and hypermutation. *Oncogene*, **2005**, 24, 5791-8	9.2	113
61	Somatic hypermutation: how many mechanisms diversify V region sequences?. *Cell*, **1995**, 83, 9-12	56.2	104
60	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, 5099-104	11.5	100
59	CpG island methylator phenotype is associated with response to adjuvant irinotecan-based therapy for stage III colon cancer. *Gastroenterology*, **2014**, 147, 637-45	13.3	95

58	MutSalpha binds to and promotes synapsis of transcriptionally activated immunoglobulin switch regions. *Current Biology*, **2005**, 15, 470-4	6.3	93
57	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, 9905-10	11.5	83
56	In vitro properties of the conserved mammalian protein hnRNP D suggest a role in telomere maintenance. *Molecular and Cellular Biology*, **2000**, 20, 5425-32	4.8	83
55	G4 motifs correlate with promoter-proximal transcriptional pausing in human genes. *Nucleic Acids Research*, **2011**, 39, 4975-83	20.1	82
54	DNA breaks in hypermutating immunoglobulin genes: evidence for a break-and-repair pathway of somatic hypermutation. *Genetics*, **2001**, 158, 369-78	4	68
53	MRE11/RAD50 cleaves DNA in the AID/UNG-dependent pathway of immunoglobulin gene diversification. *Molecular Cell*, **2005**, 20, 367-75	17.6	67
52	A rapid and sensitive assay for DNA-protein covalent complexes in living cells. *Nucleic Acids Research*, **2013**, 41, e104	20.1	65
51	The Werner syndrome RECQ helicase targets G4 DNA in human cells to modulate transcription. *Human Molecular Genetics*, **2016**, 25, 2060-2069	5.6	65
50	The MRE11-RAD50-NBS1 complex accelerates somatic hypermutation and gene conversion of immunoglobulin variable regions. *Nature Immunology*, **2005**, 6, 730-6	19.1	58
49	Somatic hypermutation and the three RSs: repair, replication and recombination. *Mutation Research - Reviews in Mutation Research*, **1999**, 436, 157-78	7	58
48	DNA nicks promote efficient and safe targeted gene correction. *PLoS ONE*, **2011**, 6, e23981	3.7	51
47	G-rich proto-oncogenes are targeted for genomic instability in B-cell lymphomas. *Cancer Research*, **2007**, 67, 2586-94	10.1	51
46	Novel fluorescent genome editing reporters for monitoring DNA repair pathway utilization at endonuclease-induced breaks. *Nucleic Acids Research*, **2014**, 42, e4	20.1	45
45	Selection for the G4 DNA motif at the 5Send of human genes. *Molecular Carcinogenesis*, **2009**, 48, 319-25	5	39
44	Recovery of soluble, active recombinant protein from inclusion bodies. *BioTechniques*, **1997**, 23, 1036-8	2.5	38
43	G-quadruplexes Sequester Free Heme in Living Cells. *Cell Chemical Biology*, **2019**, 26, 1681-1691.e5	8.2	35
42	DNA repair factor MRE11/RAD50 cleaves 3Sphosphotyrosyl bonds and resects DNA to repair damage caused by topoisomerase 1 poisons. *Journal of Biological Chemistry*, **2011**, 286, 44945-51	5.4	35
41	Chromatin structure regulates gene conversion. *PLoS Biology*, **2007**, 5, e246	9.7	33

40	Two Distinct Pathways Support Gene Correction by Single-Stranded Donors at DNA Nicks. *Cell Reports*, **2016**, 17, 1872-1881	10.6	33
39	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	3.7	30
38	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, 16508-12	11.5	26
37	Genomic stability: FANCJ-dependent G4 DNA repair. *Current Biology*, **2008**, 18, R613-4	6.3	25
36	Transcription-coupled mutagenesis by the DNA deaminase AID. *Genome Biology*, **2004**, 5, 211	18.3	25
35	A lambda 1 transgene under the control of a heavy chain promoter and enhancer does not undergo somatic hypermutation. *European Journal of Immunology*, **1994**, 24, 1649-56	6.1	24
34	Initiation of homologous recombination at DNA nicks. *Nucleic Acids Research*, **2018**, 46, 6962-6973	20.1	23
33	Cell Cycle Regulates Nuclear Stability of AID and Determines the Cellular Response to AID. *PLoS Genetics*, **2015**, 11, e1005411	6	22
32	Targeted gene therapies: tools, applications, optimization. *Critical Reviews in Biochemistry and Molecular Biology*, **2012**, 47, 264-81	8.7	22
31	A deadly double life. *Science*, **1999**, 284, 63-4	33.3	22
30	Ultrasensitive isolation, identification and quantification of DNA-protein adducts by ELISA-based RADAR assay. *Nucleic Acids Research*, **2014**, 42, e108	20.1	21
29	G4 motifs in human genes. *Annals of the New York Academy of Sciences*, **2012**, 1267, 53-60	6.5	21
28	G4 DNA: at risk in the genome. *EMBO Journal*, **2011**, 30, 3878-9	13	21
27	Distinct activities of exonuclease 1 and flap endonuclease 1 at telomeric g4 DNA. *PLoS ONE*, **2010**, 5, e8908	3.7	19
26	PMS2-deficiency diminishes hypermutation of a lambda1 transgene in young but not older mice. *Molecular Immunology*, **1999**, 36, 83-91	4.3	18
25	E2A acts in cis in G1 phase of cell cycle to promote Ig gene diversification. *Journal of Immunology*, **2009**, 182, 408-15	5.3	17
24	Recombination-based mechanisms for somatic hypermutation. *Immunological Reviews*, **1998**, 162, 67-76	11.3	17
23	Immunoglobulin class switch recombination: will genetics provide new clues to mechanism?. *American Journal of Human Genetics*, **1999**, 64, 1270-5	11	16

22	Temporal regulation of Ig gene diversification revealed by single-cell imaging. *Journal of Immunology*, **2009**, 183, 4545-53	5.3	15
21	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	3.7	12
20	High-fidelity correction of genomic uracil by human mismatch repair activities. *BMC Molecular Biology*, **2008**, 9, 94	4.5	11
19	Genetic variation stimulated by epigenetic modification. *PLoS ONE*, **2008**, 3, e4075	3.7	9
18	Breaksite batch mapping, a rapid method for assay and identification of DNA breaksites in mammalian cells. *Nucleic Acids Research*, **2001**, 29, E33	20.1	8
17	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	11.5	8
16	Assaying Repair at DNA Nicks. *Methods in Enzymology*, **2018**, 601, 71-89	1.7	7
15	Isotype exclusion in lambda 1 transgenic mice depends on transgene copy number and diminishes with down-regulation of transgene transcripts. *European Journal of Immunology*, **1995**, 25, 187-91	6.1	7
14	Increased levels of RECQ5 shift DNA repair from canonical to alternative pathways. *Nucleic Acids Research*, **2018**, 46, 9496-9509	20.1	6
13	Genome engineering with Cre-loxP. *Journal of Immunology*, **2013**, 191, 5-6	5.3	6
12	RAD51 paralogs promote homology-directed repair at diversifying immunoglobulin V regions. *BMC Molecular Biology*, **2009**, 10, 98	4.5	5
11	Pathways and signatures of mutagenesis at targeted DNA nicks. *PLoS Genetics*, **2021**, 17, e1009329	6	5
10	The "adductome": A limited repertoire of adducted proteins in human cells. *DNA Repair*, **2020**, 89, 102825	4.3	4
9	Molecular Mechanism of Hypermutation **2004**, 327-338		4
8	Activation-induced deaminase (AID) localizes to the nucleus in brief pulses. *PLoS Genetics*, **2019**, 15, e1007968	6	3
7	Topoisomerase Assays. *Current Protocols*, **2021**, 1, e250		3
6	Rapid, direct detection of bacterial topoisomerase 1-DNA adducts by RADAR/ELISA. *Analytical Biochemistry*, **2020**, 608, 113827	3.1	3
5	Epigenetic modification of the repair donor regulates targeted gene correction. *Molecular Therapy - Nucleic Acids*, **2012**, 1, e49	10.7	2

4	Antibody discovery ex vivo accelerated by the LacO/LacI regulatory network. *PLoS ONE*, **2012**, 7, e36032	3.7	2
3	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	4.3	2
2	Secret sharers in the immune system: a novel RNA editing activity links switch recombination and somatic hypermutation. *Genome Biology*, **2000**, 1, REVIEWS1025	18.3	1
1	Targeted Gene Correction: Gene Therapy Promoted by Meganucleases. *FASEB Journal*, **2011**, 25, 202.2	0.9	