

# Andrei Chabes

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7998903/publications.pdf>

Version: 2024-02-01

73  
papers

5,478  
citations

101543

36  
h-index

88630

70  
g-index

77  
all docs

77  
docs citations

77  
times ranked

5385  
citing authors

#	ARTICLE	IF	CITATIONS
1	Isocratic HPLC analysis for the simultaneous determination of dNTPs, rNTPs and ADP in biological samples. <i>Nucleic Acids Research</i> , 2022, 50, e18-e18.	14.5	8
2	Increased contribution of DNA polymerase delta to the leading strand replication in yeast with an impaired CMG helicase complex. <i>DNA Repair</i> , 2022, 110, 103272.	2.8	4
3	Chl1 helicase controls replication fork progression by regulating dNTP pools. <i>Life Science Alliance</i> , 2022, 5, e202101153.	2.8	1
4	Inactivation of folylpolyglutamate synthetase Met7 results in genome instability driven by an increased dUTP/dTTP ratio. <i>Nucleic Acids Research</i> , 2020, 48, 264-277.	14.5	7
5	Proofreading deficiency in mitochondrial DNA polymerase does not affect total dNTP pools in mouse embryos. <i>Nature Metabolism</i> , 2020, 2, 673-675.	11.9	7
6	Elimination of rNMPs from mitochondrial DNA has no effect on its stability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 14306-14313.	7.1	14
7	High density of unrepaired genomic ribonucleotides leads to Topoisomerase 1-mediated severe growth defects in absence of ribonucleotide reductase. <i>Nucleic Acids Research</i> , 2020, 48, 4274-4297.	14.5	8
8	Mec1 Is Activated at the Onset of Normal S Phase by Low-dNTP Pools Impeding DNA Replication. <i>Molecular Cell</i> , 2020, 78, 396-410.e4.	9.7	48
9	SAMHD1 Limits the Efficacy of Forodesine in Leukemia by Protecting Cells against the Cytotoxicity of dGTP. <i>Cell Reports</i> , 2020, 31, 107640.	6.4	16
10	De novo dNTP production is essential for normal postnatal murine heart development. <i>Journal of Biological Chemistry</i> , 2019, 294, 15889-15897.	3.4	12
11	Dinucleotide Degradation by REXO2 Maintains Promoter Specificity in Mammalian Mitochondria. <i>Molecular Cell</i> , 2019, 76, 784-796.e6.	9.7	22
12	A recurrent cancer-associated substitution in DNA polymerase $\hat{\mu}$ produces a hyperactive enzyme. <i>Nature Communications</i> , 2019, 10, 374.	12.8	59
13	Ribonucleotides in mitochondrial <sc>DNA</sc>. <i>FEBS Letters</i> , 2019, 593, 1554-1565.	2.8	13
14	The absence of the catalytic domains of <i>Saccharomyces cerevisiae</i> DNA polymerase $\hat{\mu}$ strongly reduces DNA replication fidelity. <i>Nucleic Acids Research</i> , 2019, 47, 3986-3995.	14.5	19
15	A geographically matched control population efficiently limits the number of candidate disease-causing variants in an unbiased whole-genome analysis. <i>PLoS ONE</i> , 2019, 14, e0213350.	2.5	8
16	A genetic screen pinpoints ribonucleotide reductase residues that sustain dNTP homeostasis and specifies a highly mutagenic type of dNTP imbalance. <i>Nucleic Acids Research</i> , 2019, 47, 237-252.	14.5	16
17	SAMHD1 acts at stalled replication forks to prevent interferon induction. <i>Nature</i> , 2018, 557, 57-61.	27.8	319
18	Simultaneous determination of ribonucleoside and deoxyribonucleoside triphosphates in biological samples by hydrophilic interaction liquid chromatography coupled with tandem mass spectrometry. <i>Nucleic Acids Research</i> , 2018, 46, e66-e66.	14.5	40

#	ARTICLE	IF	CITATIONS
19	Upregulation of dNTP Levels After Telomerase Inactivation Influences Telomerase-Independent Telomere Maintenance Pathway Choice in <i>Saccharomyces cerevisiae</i> . <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 2551-2558.	1.8	9
20	Mrc1 and Rad9 cooperate to regulate initiation and elongation of DNA replication in response to DNA damage. <i>EMBO Journal</i> , 2018, 37, .	7.8	54
21	Rtt105 functions as a chaperone for replication protein A to preserve genome stability. <i>EMBO Journal</i> , 2018, 37, .	7.8	23
22	A mechanism for preventing asymmetric histone segregation onto replicating DNA strands. <i>Science</i> , 2018, 361, 1386-1389.	12.6	179
23	Acute Smc5/6 depletion reveals its primary role in rDNA replication by restraining recombination at fork pausing sites. <i>PLoS Genetics</i> , 2018, 14, e1007129.	3.5	35
24	Separable roles for Mec1/ATR in genome maintenance, DNA replication, and checkpoint signaling. <i>Genes and Development</i> , 2018, 32, 822-835.	5.9	30
25	Alterations in cellular metabolism triggered by <i>URA7</i> or <i>GLN3</i> inactivation cause imbalanced dNTP pools and increased mutagenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E4442-E4451.	7.1	30
26	Shortage of dNTPs underlies altered replication dynamics and DNA breakage in the absence of the APC/C cofactor Cdh1. <i>Oncogene</i> , 2017, 36, 5808-5818.	5.9	19
27	Checkpoint Kinase Rad53 Couples Leading- and Lagging-Strand DNA Synthesis under Replication Stress. <i>Molecular Cell</i> , 2017, 68, 446-455.e3.	9.7	49
28	Ribonucleotides incorporated by the yeast mitochondrial DNA polymerase are not repaired. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12466-12471.	7.1	39
29	Yeast DNA polymerase $\delta$ maintains consistent activity and mutagenicity across a wide range of physiological dNTP concentrations. <i>Nucleic Acids Research</i> , 2017, 45, 1200-1218.	14.5	18
30	Rnr1, but not Rnr3, facilitates the sustained telomerase-dependent elongation of telomeres. <i>PLoS Genetics</i> , 2017, 13, e1007082.	3.5	20
31	Heterozygous colon cancer-associated mutations of <i>SAMHD1</i> have functional significance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 4723-4728.	7.1	100
32	Hydroxyurea-Mediated Cytotoxicity Without Inhibition of Ribonucleotide Reductase. <i>Cell Reports</i> , 2016, 17, 1657-1670.	6.4	24
33	The mutation spectrum in genomic late replication domains shapes mammalian GC content. <i>Nucleic Acids Research</i> , 2016, 44, 4222-4232.	14.5	29
34	Genome-wide analysis of the specificity and mechanisms of replication infidelity driven by imbalanced dNTP pools. <i>Nucleic Acids Research</i> , 2016, 44, 1669-1680.	14.5	62
35	S phase block following <i>MEC1ATR</i> inactivation occurs without severe dNTP depletion. <i>Biology Open</i> , 2015, 4, 1739-1743.	1.2	6
36	Colon cancer-associated mutator DNA polymerase $\delta$ variant causes expansion of dNTP pools increasing its own infidelity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E2467-76.	7.1	58

#	ARTICLE	IF	CITATIONS
37	dNTP pool levels modulate mutator phenotypes of error-prone DNA polymerase $\hat{\mu}$ variants. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2457-66.	7.1	47
38	Evidence that processing of ribonucleotides in DNA by topoisomerase 1 is leading-strand specific. Nature Structural and Molecular Biology, 2015, 22, 291-297.	8.2	45
39	Determination of Deoxyribonucleoside Triphosphate Concentrations in Yeast Cells by Strong Anion-Exchange High-Performance Liquid Chromatography Coupled with Ultraviolet Detection. Methods in Molecular Biology, 2015, 1300, 113-121.	0.9	27
40	Myc-dependent purine biosynthesis affects nucleolar stress and therapy response in prostate cancer. Oncotarget, 2015, 6, 12587-12602.	1.8	58
41	Telomere length kinetics assay (TELKA) sorts the telomere length maintenance (tlm) mutants into functional groups. Nucleic Acids Research, 2014, 42, 6314-6325.	14.5	14
42	H2B Mono-ubiquitylation Facilitates Fork Stalling and Recovery during Replication Stress by Coordinating Rad53 Activation and Chromatin Assembly. PLoS Genetics, 2014, 10, e1004667.	3.5	26
43	Phosphines are ribonucleotide reductase reductants that act via C-terminal cysteines similar to thioredoxins and glutaredoxins. Scientific Reports, 2014, 4, 5539.	3.3	9
44	Increased and Imbalanced dNTP Pools Symmetrically Promote Both Leading and Lagging Strand Replication Infidelity. PLoS Genetics, 2014, 10, e1004846.	3.5	71
45	Strand-Specific Analysis Shows Protein Binding at Replication Forks and PCNA Unloading from Lagging Strands when Forks Stall. Molecular Cell, 2014, 56, 551-563.	9.7	153
46	The Histone Deacetylases Sir2 and Rpd3 Act on Ribosomal DNA to Control the Replication Program in Budding Yeast. Molecular Cell, 2014, 54, 691-697.	9.7	95
47	Topoisomerase 1-Mediated Removal of Ribonucleotides from Nascent Leading-Strand DNA. Molecular Cell, 2013, 49, 1010-1015.	9.7	130
48	Telomere Length Homeostasis Responds to Changes in Intracellular dNTP Pools. Genetics, 2013, 193, 1095-1105.	2.9	44
49	Pre-activation of the genome integrity checkpoint increases DNA damage tolerance. Nucleic Acids Research, 2013, 41, 10371-10378.	14.5	10
50	Molecular Basis of the Essential S Phase Function of the Rad53 Checkpoint Kinase. Molecular and Cellular Biology, 2013, 33, 3202-3213.	2.3	22
51	dNTP pools determine fork progression and origin usage under replication stress. EMBO Journal, 2012, 31, 883-894.	7.8	232
52	Replication Fork Collapse and Genome Instability in a Deoxycytidylate Deaminase Mutant. Molecular and Cellular Biology, 2012, 32, 4445-4454.	2.3	50
53	Endogenous DNA replication stress results in expansion of dNTP pools and a mutator phenotype. EMBO Journal, 2012, 31, 895-907.	7.8	95
54	A Common Telomeric Gene Silencing Assay Is Affected by Nucleotide Metabolism. Molecular Cell, 2011, 42, 127-136.	9.7	63

#	ARTICLE	IF	CITATIONS
55	Break-Induced Replication Is Highly Inaccurate. <i>PLoS Biology</i> , 2011, 9, e1000594.	5.6	243
56	Lesion bypass by <i>S. cerevisiae</i> Pol $\eta$ alone. <i>DNA Repair</i> , 2011, 10, 826-834.	2.8	31
57	Mechanisms of mutagenesis in vivo due to imbalanced dNTP pools. <i>Nucleic Acids Research</i> , 2011, 39, 1360-1371.	14.5	178
58	Ixr1 Is Required for the Expression of the Ribonucleotide Reductase Rnr1 and Maintenance of dNTP Pools. <i>PLoS Genetics</i> , 2011, 7, e1002061.	3.5	64
59	Genome instability due to ribonucleotide incorporation into DNA. <i>Nature Chemical Biology</i> , 2010, 6, 774-781.	8.0	346
60	Highly mutagenic and severely imbalanced dNTP pools can escape detection by the S-phase checkpoint. <i>Nucleic Acids Research</i> , 2010, 38, 3975-3983.	14.5	124
61	Elevated dNTP levels suppress hyper-recombination in <i>Saccharomyces cerevisiae</i> S-phase checkpoint mutants. <i>Nucleic Acids Research</i> , 2010, 38, 1195-1203.	14.5	34
62	Abundant ribonucleotide incorporation into DNA by yeast replicative polymerases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4949-4954.	7.1	367
63	Evidence for lesion bypass by yeast replicative DNA polymerases during DNA damage. <i>Nucleic Acids Research</i> , 2008, 36, 5660-5667.	14.5	80
64	Constitutively high dNTP concentration inhibits cell cycle progression and the DNA damage checkpoint in yeast <i>Saccharomyces cerevisiae</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1183-1188.	7.1	118
65	Survival of DNA Damage in Yeast Directly Depends on Increased dNTP Levels Allowed by Relaxed Feedback Inhibition of Ribonucleotide Reductase. <i>Cell</i> , 2003, 112, 391-401.	28.9	382
66	DNA Building Blocks at the Foundation of Better Survival. <i>Cell Cycle</i> , 2003, 2, 171-172.	2.6	25
67	Yeast DNA Damage-inducible Rnr3 Has a Very Low Catalytic Activity Strongly Stimulated after the Formation of a Cross-talking Rnr1/Rnr3 Complex. <i>Journal of Biological Chemistry</i> , 2002, 277, 18574-18578.	3.4	51
68	Cid13 Is a Cytoplasmic Poly(A) Polymerase that Regulates Ribonucleotide Reductase mRNA. <i>Cell</i> , 2002, 109, 563-573.	28.9	130
69	The ribonucleotide reductase inhibitor Sml1 is a new target of the Mec1/Rad53 kinase cascade during growth and in response to DNA damage. <i>EMBO Journal</i> , 2001, 20, 3544-3553.	7.8	248
70	<i>Trypanosoma brucei</i> CTP synthetase: A target for the treatment of African sleeping sickness. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 6412-6416.	7.1	111
71	Mutational and Structural Analyses of the Ribonucleotide Reductase Inhibitor Sml1 Define Its Rnr1 Interaction Domain Whose Inactivation Allows Suppression of mec1 and rad53 Lethality. <i>Molecular and Cellular Biology</i> , 2000, 20, 9076-9083.	2.3	85
72	Controlled Protein Degradation Regulates Ribonucleotide Reductase Activity in Proliferating Mammalian Cells during the Normal Cell Cycle and in Response to DNA Damage and Replication Blocks. <i>Journal of Biological Chemistry</i> , 2000, 275, 17747-17753.	3.4	143

#	ARTICLE	IF	CITATIONS
73	Yeast Sml1, a Protein Inhibitor of Ribonucleotide Reductase. Journal of Biological Chemistry, 1999, 274, 36679-36683.	3.4	120