Robert Landick

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/4809519/robert-landick-publications-by-year.pdf
Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

113 papers	6,683 citations	46 h-index	80 g-index
125 ext. papers	8,058 ext. citations	14.8 avg, IF	6.08 L-index

#	Paper	IF	Citations
113	Basis of narrow-spectrum activity of fidaxomicin on Clostridioides difficile.. *Nature*, **2022**,	50.4	2
112	Seeing gene expression in cells: the future of structural biology.. *Faculty Reviews*, **2021**, 10, 79	1.2	1
111	Conserved Trigger Loop Histidine of RNA Polymerase II Functions as a Positional Catalyst Primarily through Steric Effects. *Biochemistry*, **2021**, 60, 3323-3336	3.2	0
110	Structural basis for backtracking by the SARS-CoV-2 replication-transcription complex. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	29
109	Chemical-genetic interrogation of RNA polymerase mutants reveals structure-function relationships and physiological tradeoffs. *Molecular Cell*, **2021**, 81, 2201-2215.e9	17.6	1
108	Bacterial Transcription Continues to Surprise: Activation by Alarmone-Mediated σ Factor Tethering. *Molecular Cell*, **2021**, 81, 8-9	17.6	
107	Transcriptional Pausing as a Mediator of Bacterial Gene Regulation. *Annual Review of Microbiology*, **2021**, 75, 291-314	17.5	2
106	Obligate movements of an active site-linked surface domain control RNA polymerase elongation and pausing via a Phe pocket anchor. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
105	Crabtree/Warburg-like aerobic xylose fermentation by engineered Saccharomyces cerevisiae. *Metabolic Engineering*, **2021**, 68, 119-130	9.7	3
104	A majority of promoters lack a crucial RNA polymerase recognition feature, enabling coordinated transcription activation. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 29658-29668	11.5	6
103	Regulated redirection of central carbon flux enhances anaerobic production of bioproducts in Zymomonas mobilis. *Metabolic Engineering*, **2020**, 61, 261-274	9.7	11
102	Alternative transcription cycle for bacterial RNA polymerase. *Nature Communications*, **2020**, 11, 448	17.4	13
101	Genome-Wide Identification of Transcription Start Sites in Two , Rhodobacter sphaeroides 2.4.1 and Novosphingobium aromaticivorans DSM 12444. *Microbiology Resource Announcements*, **2020**, 9,	1.3	4
100	The antibiotic sorangicin A inhibits promoter DNA unwinding in a rifampicin-resistant RNA polymerase. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 30423-30432	11.5	7
99	Genome-Scale Transcription-Translation Mapping Reveals Features of Zymomonas mobilis Transcription Units and Promoters. *MSystems*, **2020**, 5,	7.6	10
98	CRISpy-Pop: A Web Tool for Designing CRISPR/Cas9-Driven Genetic Modifications in Diverse Populations. *G3: Genes, Genomes, Genetics*, **2020**, 10, 4287-4294	3.2	2
97	Heterologous expression of a glycosyl hydrolase and cellular reprogramming enable Zymomonas mobilis growth on cellobiose. *PLoS ONE*, **2020**, 15, e0226235	3.7	1

96	Multiomic Fermentation Using Chemically Defined Synthetic Hydrolyzates Revealed Multiple Effects of Lignocellulose-Derived Inhibitors on Cell Physiology and Xylose Utilization in. *Frontiers in Microbiology*, **2019**, 10, 2596	5.7	8
95	RNA Polymerase Clamp Movement Aids Dissociation from DNA but Is Not Required for RNA Release at Intrinsic Terminators. *Journal of Molecular Biology*, **2019**, 431, 696-713	6.5	10
94	Mechanisms of Transcriptional Pausing in Bacteria. *Journal of Molecular Biology*, **2019**, 431, 4007-4029	6.5	30
93	Transcription of Bacterial Chromatin. *Journal of Molecular Biology*, **2019**, 431, 4040-4066	6.5	30
92	Systems Metabolic Engineering of Escherichia coli Improves Coconversion of Lignocellulose-Derived Sugars. *Biotechnology Journal*, **2019**, 14, e1800441	5.6	3
91	A Markerless Method for Genome Engineering in ZM4. *Frontiers in Microbiology*, **2019**, 10, 2216	5.7	9
90	Delayed inhibition mechanism for secondary channel factor regulation of ribosomal RNA transcription. *ELife*, **2019**, 8,	8.9	9
89	The elemental mechanism of transcriptional pausing. *ELife*, **2019**, 8,	8.9	32
88	Conserved mechanisms of transcriptional pausing regulate diverse RNA polymerases. *FASEB Journal*, **2019**, 33, 624.2	0.9	
87	OptSSeq explores enzyme expression and function landscapes to maximize isobutanol production rate. *Metabolic Engineering*, **2019**, 52, 324-340	9.7	19
86	Life times of metastable states guide regulatory signaling in transcriptional riboswitches. *Nature Communications*, **2018**, 9, 944	17.4	30
85	RNA Polymerase Accommodates a Pause RNA Hairpin by Global Conformational Rearrangements that Prolong Pausing. *Molecular Cell*, **2018**, 69, 802-815.e5	17.6	85
84	Natural Variation in the Multidrug Efflux Pump Underlies Ionic Liquid Tolerance in Yeast. *Genetics*, **2018**, 210, 219-234	4	19
83	Complete genome sequence and the expression pattern of plasmids of the model ethanologen ZM4 and its xylose-utilizing derivatives 8b and 2032. *Biotechnology for Biofuels*, **2018**, 11, 125	7.8	39
82	In Vitro Transcription Assay to Quantify Effects of H-NS Filaments on RNA Chain Elongation by RNA Polymerase. *Methods in Molecular Biology*, **2018**, 1837, 351-386	1.4	
81	Mechanism for the Regulated Control of Bacterial Transcription Termination by a Universal Adaptor Protein. *Molecular Cell*, **2018**, 71, 911-922.e4	17.6	41
80	Structural Basis for Transcript Elongation Control by NusG Family Universal Regulators. *Cell*, **2018**, 173, 1650-1662.e14	56.2	81
79	StpA and Hha stimulate pausing by RNA polymerase by promoting DNA-DNA bridging of H-NS filaments. *Nucleic Acids Research*, **2018**, 46, 5525-5546	20.1	36

78	Fidaxomicin jams RNA polymerase motions needed for initiation via RbpA contacts. *ELife*, **2018**, 7,	8.9	46
77	Dynamics of GreB-RNA polymerase interaction allow a proofreading accessory protein to patrol for transcription complexes needing rescue. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E1081-E1090	11.5	24
76	Architecture of a transcribing-translating expressome. *Science*, **2017**, 356, 194-197	33.3	110
75	RNA polymerase motions during promoter melting. *Science*, **2017**, 356, 863-866	33.3	50
74	Trigger loop of RNA polymerase is a positional, not acid-base, catalyst for both transcription and proofreading. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E5103-E5112	11.5	29
73	Trigger loop dynamics can explain stimulation of intrinsic termination by bacterial RNA polymerase without terminator hairpin contact. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E9233-E9242	11.5	8
72	The Battle of RNA Synthesis: Virus versus Host. *Viruses*, **2017**, 9,	6.2	21
71	Pausing guides RNA folding to populate transiently stable RNA structures for riboswitch-based transcription regulation. *ELife*, **2017**, 6,	8.9	32
70	A Two-Way Street: Regulatory Interplay between RNA Polymerase and Nascent RNA Structure. *Trends in Biochemical Sciences*, **2016**, 41, 293-310	10.3	83
69	Bacterial RNA polymerase can retain σ70 throughout transcription. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 602-7	11.5	40
68	P1 Ref Endonuclease: A Molecular Mechanism for Phage-Enhanced Antibiotic Lethality. *PLoS Genetics*, **2016**, 12, e1005797	6	21
67	Directed Evolution Reveals Unexpected Epistatic Interactions That Alter Metabolic Regulation and Enable Anaerobic Xylose Use by Saccharomyces cerevisiae. *PLoS Genetics*, **2016**, 12, e1006372	6	49
66	Genome Sequence and Analysis of a Stress-Tolerant, Wild-Derived Strain of Saccharomyces cerevisiae Used in Biofuels Research. *G3: Genes, Genomes, Genetics*, **2016**, 6, 1757-66	3.2	35
65	Mechanisms of Bacterial Transcription Termination: All Good Things Must End. *Annual Review of Biochemistry*, **2016**, 85, 319-47	29.1	170
64	CBR antimicrobials inhibit RNA polymerase via at least two bridge-helix cap-mediated effects on nucleotide addition. *Proceedings of the National Academy of Sciences of the United States of America* , **2015**, 112, E4178-87	11.5	29
63	Structure of a bacterial RNA polymerase holoenzyme open promoter complex. *ELife*, **2015**, 4,	8.9	130
62	H-NS and RNA polymerase: a love-hate relationship?. *Current Opinion in Microbiology*, **2015**, 24, 53-9	7.9	45
61	Bridged filaments of histone-like nucleoid structuring protein pause RNA polymerase and aid termination in bacteria. *ELife*, **2015**, 4,	8.9	82

60	DksA guards elongating RNA polymerase against ribosome-stalling-induced arrest. *Molecular Cell*, **2014**, 53, 766-78	17.6	52
59	A pause sequence enriched at translation start sites drives transcription dynamics in vivo. *Science*, **2014**, 344, 1042-7	33.3	209
58	Correcting direct effects of ethanol on translation and transcription machinery confers ethanol tolerance in bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E2576-85	11.5	96
57	Genome-Wide Mapping of the Distribution of CarD, RNAP σ and RNAP σ on the Chromosome using Chromatin Immunoprecipitation Sequencing. *Genomics Data*, **2014**, 2, 110-113		12
56	RNA polymerase pausing and nascent-RNA structure formation are linked through clamp-domain movement. *Nature Structural and Molecular Biology*, **2014**, 21, 794-802	17.6	70
55	Aromatic inhibitors derived from ammonia-pretreated lignocellulose hinder bacterial ethanologenesis by activating regulatory circuits controlling inhibitor efflux and detoxification. *Frontiers in Microbiology*, **2014**, 5, 402	5.7	30
54	Mycobacterial RNA polymerase requires a U-tract at intrinsic terminators and is aided by NusG at suboptimal terminators. *MBio*, **2014**, 5, e00931	7.8	61
53	Trigger-helix folding pathway and SI3 mediate catalysis and hairpin-stabilized pausing by Escherichia coli RNA polymerase. *Nucleic Acids Research*, **2014**, 42, 12707-21	20.1	31
52	Engineering and two-stage evolution of a lignocellulosic hydrolysate-tolerant Saccharomyces cerevisiae strain for anaerobic fermentation of xylose from AFEX pretreated corn stover. *PLoS ONE*, **2014**, 9, e107499	3.7	64
51	Structural basis of transcriptional pausing in bacteria. *Cell*, **2013**, 152, 431-41	56.2	117
50	Cys-pair reporters detect a constrained trigger loop in a paused RNA polymerase. *Molecular Cell*, **2013**, 50, 882-93	17.6	40
49	Building a better stop sign: understanding the signals that terminate transcription. *Nature Methods*, **2013**, 10, 618-9	21.6	4
48	Structure and function of CarD, an essential mycobacterial transcription factor. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 12619-24	11.5	64
47	An α helix to β barrel domain switch transforms the transcription factor RfaH into a translation factor. *Cell*, **2012**, 150, 291-303	56.2	147
46	Trigger loop dynamics mediate the balance between the transcriptional fidelity and speed of RNA polymerase II. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 6555-60	11.5	98
45	Efficient reconstitution of transcription elongation complexes for single-molecule studies of eukaryotic RNA polymerase II. *Transcription*, **2012**, 3, 146-53	4.8	17
44	Mapping E. coli RNA polymerase and associated transcription factors and identifying promoters genome-wide. *Methods in Enzymology*, **2011**, 498, 449-71	1.7	17
43	RNA transcript 3′-proximal sequence affects translocation bias of RNA polymerase. *Biochemistry*, **2011**, 50, 7002-14	3.2	51

42	Role of the RNA polymerase trigger loop in catalysis and pausing. *Nature Structural and Molecular Biology*, **2010**, 17, 99-104	17.6	117
41	RNA polymerase mutants found through adaptive evolution reprogram Escherichia coli for optimal growth in minimal media. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 20500-5	11.5	153
40	The NusA N-terminal domain is necessary and sufficient for enhancement of transcriptional pausing via interaction with the RNA exit channel of RNA polymerase. *Journal of Molecular Biology*, **2010**, 401, 708-25	6.5	68
39	Transcriptional pausing without backtracking. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 8797-8	11.5	35
38	Regulator trafficking on bacterial transcription units in vivo. *Molecular Cell*, **2009**, 33, 97-108	17.6	173
37	Role of the RNA polymerase trigger loop in transcript elongation, cleavage, and pausing. *FASEB Journal*, **2009**, 23, 430.2	0.9	
36	Single Molecule Studies Reveal the Mechanism and Energetics of Transcriptional Termination. *FASEB Journal*, **2008**, 22, 399.1	0.9	
35	Structural basis for substrate loading in bacterial RNA polymerase. *Nature*, **2007**, 448, 163-8	50.4	287
34	Direct versus limited-step reconstitution reveals key features of an RNA hairpin-stabilized paused transcription complex. *Journal of Biological Chemistry*, **2007**, 282, 19020-8	5.4	42
33	Real-time footprinting of DNA in the first kinetically significant intermediate in open complex formation by Escherichia coli RNA polymerase. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 7833-8	11.5	70
32	A central role of the RNA polymerase trigger loop in active-site rearrangement during transcriptional pausing. *Molecular Cell*, **2007**, 27, 406-19	17.6	166
31	Sequence-resolved detection of pausing by single RNA polymerase molecules. *Cell*, **2006**, 125, 1083-94	56.2	229
30	A long time in the making--the Nobel Prize for RNA polymerase. *Cell*, **2006**, 127, 1087-90	56.2	4
29	The regulatory roles and mechanism of transcriptional pausing. *Biochemical Society Transactions*, **2006**, 34, 1062-6	5.1	190
28	Functional interplay between the jaw domain of bacterial RNA polymerase and allele-specific residues in the product RNA-binding pocket. *Journal of Molecular Biology*, **2006**, 356, 1163-79	6.5	29
27	The role of the lid element in transcription by E. coli RNA polymerase. *Journal of Molecular Biology*, **2006**, 361, 644-58	6.5	45
26	NTP-entry routes in multi-subunit RNA polymerases. *Trends in Biochemical Sciences*, **2005**, 30, 651-4	10.3	21
25	Downstream DNA selectively affects a paused conformation of human RNA polymerase II. *Journal of Molecular Biology*, **2004**, 341, 429-42	6.5	35

24	Active-site dynamics in RNA polymerases. *Cell*, **2004**, 116, 351-3	56.2	34
23	Co-overexpression of Escherichia coli RNA polymerase subunits allows isolation and analysis of mutant enzymes lacking lineage-specific sequence insertions. *Journal of Biological Chemistry*, **2003**, 278, 12344-55	5.4	115
22	The downstream DNA jaw of bacterial RNA polymerase facilitates both transcriptional initiation and pausing. *Journal of Biological Chemistry*, **2002**, 277, 37456-63	5.4	79
21	The transcriptional regulator RfaH stimulates RNA chain synthesis after recruitment to elongation complexes by the exposed nontemplate DNA strand. *Cell*, **2002**, 109, 193-203	56.2	200
20	Allosteric control of RNA polymerase by a site that contacts nascent RNA hairpins. *Science*, **2001**, 292, 730-3	33.3	185
19	Roles of RNA:DNA hybrid stability, RNA structure, and active site conformation in pausing by human RNA polymerase II. *Journal of Molecular Biology*, **2001**, 311, 265-82	6.5	81
18	RNA polymerase clamps down. *Cell*, **2001**, 105, 567-70	56.2	58
17	RNA Polymerases from Bacillus subtilis and Escherichia coli Differ in Recognition of Regulatory Signals In Vitro. *Journal of Bacteriology*, **2001**, 183, 1504-1504	3.5	
16	Pausing by bacterial RNA polymerase is mediated by mechanistically distinct classes of signals. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 7090-5	11.5	335
15	Single-molecule study of transcriptional pausing and arrest by E. coli RNA polymerase. *Science*, **2000**, 287, 2497-500	33.3	293
14	Folding of a large ribozyme during transcription and the effect of the elongation factor NusA. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 9545-50	11.5	116
13	Shifting RNA polymerase into overdrive. *Science*, **1999**, 284, 598-9	33.3	29
12	Multiple interactions stabilize a single paused transcription intermediate in which hairpin to 3′ end spacing distinguishes pause and termination pathways. *Journal of Molecular Biology*, **1997**, 268, 54-68	6.5	76
11	The shrewd grasp of RNA polymerase. *Science*, **1996**, 273, 202-3	33.3	11
10	Discontinuous movements of DNA and RNA in RNA polymerase accompany formation of a paused transcription complex. *Cell*, **1995**, 81, 341-50	56.2	147
9	Termination-altering amino acid substitutions in the beta′ subunit of Escherichia coli RNA polymerase identify regions involved in RNA chain elongation. *Genes and Development*, **1994**, 8, 2913-27	12.6	81
8	GreA-induced transcript cleavage in transcription complexes containing Escherichia coli RNA polymerase is controlled by multiple factors, including nascent transcript location and structure. *Journal of Biological Chemistry*, **1994**, 269, 22282-94	5.4	85
7	Dissection of the his leader pause site by base substitution reveals a multipartite signal that includes a pause RNA hairpin. *Journal of Molecular Biology*, **1993**, 233, 25-42	6.5	100

6	The Salmonella typhimurium his operon leader region contains an RNA hairpin-dependent transcription pause site. Mechanistic implications of the effect on pausing of altered RNA hairpins. *Journal of Biological Chemistry*, **1989**, 264, 20796-804	5.4	49
5	The Salmonella typhimurium his operon leader region contains an RNA hairpin-dependent transcription pause site. *Journal of Biological Chemistry*, **1989**, 264, 20796-20804	5.4	51
4	Translation activates the paused transcription complex and restores transcription of the trp operon leader region. *Proceedings of the National Academy of Sciences of the United States of America*, **1985**, 82, 4663-7	11.5	101
3	The Structure of Bacterial RNA Polymerase283-296		13
2	The elemental mechanism of transcriptional pausing		1
1	Heterologous glycosyl hydrolase expression and cellular reprogramming resembling sucrose-induction enableZymomonas mobilisgrowth on cellobiose		1