Jeffrey W Roberts

List of Publications by Year
in descending order

46 papers	4,586 citations	201385 27 h-index	243296 44 g-index
47 all docs	47 docs citations	47 times ranked	1849 citing authors

#	Article	IF	Citations
1	Termination Factor for RNA Synthesis. Nature, 1969, 224, 1168-1174.	13.7	806
2	Nature of the SOS-inducing signal in Escherichia coli. Journal of Molecular Biology, 1990, 212, 79-96.	2.0	509
3	E. coli recA protein-directed cleavage of phage Î» repressor requires polynucleotide. Nature, 1980, 283, 26-30.	13.7	379
4	E. coli Transcription Repair Coupling Factor (Mfd Protein) Rescues Arrested Complexes by Promoting Forward Translocation. Cell, 2002, 109, 757-767.	13.5	290
5	Function of E. coli RNA Polymerase Ïƒ Factor- Ïƒ70 in Promoter-Proximal Pausing. Cell, 1996, 86, 485-493.	13.5	203
6	Induction of SOS functions: Regulation of proteolytic activity of E. coil RecA protein by interaction with DNA and nucleoside triphosphate. Cell, 1981, 25, 259-267.	13.5	190
7	Single molecule analysis of RNA polymerase elongation reveals uniform kinetic behavior. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13538-13543.	3.3	182
8	Function of Transcription Cleavage Factors GreA and GreB at a Regulatory Pause Site. Molecular Cell, 2000, 6, 1275-1285.	4.5	135
9	Base-Specific Recognition of the Nontemplate Strand of Promoter DNA by E. coli RNA Polymerase. Cell, 1996, 86, 495-501.	13.5	134
10	Domain Organization of theEscherichia coliRNA Polymerase Ïƒ70Subunit. Journal of Molecular Biology, 1996, 263, 637-647.	2.0	133
11	Mechanisms of Bacterial Transcription Termination. Journal of Molecular Biology, 2019, 431, 4030-4039.	2.0	111
12	Role of DNA bubble rewinding in enzymatic transcription termination. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4870-4875.	3.3	107
13	Kinetics of recA protein-directed inactivation of repressors of phage Î» and phage P22. Journal of Molecular Biology, 1980, 139, 319-328.	2.0	104
14	RNA Polymerase Elongation Factors. Annual Review of Microbiology, 2008, 62, 211-233.	2.9	104
15	Forward Translocation Is the Natural Pathway of RNA Release at an Intrinsic Terminator. Molecular Cell, 2004, 14, 117-126.	4.5	102
16	The phage Î» gene Q transcription antiterminator binds DNA in the late gene promoter as it modifies RNA polymerase. Cell, 1992, 69, 1181-1189.	13.5	91
17	Transcription Termination. Critical Reviews in Biochemistry and Molecular Biology, 1993, 28, 1-30.	2.3	87
18	Two mutations that alter the regulatory activity of E. coli recA protein. Nature, 1981, 290, 422-424.	13.7	83

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19	Function of a nontranscribed DNA strand site in transcription elongation. Cell, 1994, 78, 317-324.	13.5	73
20	Mfd Dynamically Regulates Transcription via a Release and Catch-Up Mechanism. Cell, 2018, 172, 344-357.e15.	13.5	65
21	The Ïƒ70 Subunit of RNA Polymerase Is Contacted by the Î»Q Antiterminator during Early Elongation. Molecular Cell, 2002, 10, 611-622.	4.5	62
22	A Transcription Antiterminator ConstructsÂa NusA-Dependent Shield to the Emerging Transcript. Molecular Cell, 2007, 27, 914-927.	4.5	60
23	Ïƒ70-dependent Transcription Pausing in Escherichia coli. Journal of Molecular Biology, 2011, 412, 782-792.	2.0	56
24	A Single-Molecule Technique to Study Sequence-Dependent Transcription Pausing. Biophysical Journal, 2004, 87, 3945-3953.	0.2	53
25	Promoter Mutation in vitro. Nature, 1969, 223, 480-482.	13.7	44
26	Specificity and mechanism of antitermination by Q proteins of bacteriophages Î» and 82. Journal of Molecular Biology, 1989, 210, 453-460.	2.0	39
27	Transcription factor regulation of RNA polymeraseâ€™s torque generation capacity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2583-2588.	3.3	36
28	Two transcription pause elements underlie a Ïƒ ⁷⁰ -dependent pause cycle. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4374-80.	3.3	33
29	A brief consideration of the SOS inducing signal. Biochimie, 1982, 64, 805-807.	1.3	28
30	RNA-Mediated Destabilization of the Ïƒ70 Region 4/Î² Flap Interaction Facilitates Engagement of RNA Polymerase by the Q Antiterminator. Molecular Cell, 2006, 24, 457-468.	4.5	28
31	A backtrackâ€inducing sequence is an essential component of <i>Escherichia coli</i>Ïƒ⁷⁰â€dependent promoterâ€proximal pausing. Molecular Microbiology, 2010, 78, 636-650.	1.2	28
32	RNA polymerase mutations that impair conversion to a termination-resistant complex by Q antiterminator proteins. Genes and Development, 2003, 17, 1281-1292.	2.7	27
33	Regulation of promoter-proximal transcription elongation: enhanced DNA scrunching drives Î»Q antiterminator-dependent escape from a Ïƒ70-dependent pause. Nucleic Acids Research, 2014, 42, 5097-5108.	6.5	26
34	Role of the Non-template Strand of the Elongation Bubble in Intrinsic Transcription Termination. Journal of Molecular Biology, 2003, 334, 205-213.	2.0	25
35	Sequences required for antitermination by phage 82 Q protein. Journal of Molecular Biology, 1989, 210, 461-471.	2.0	24
36	BIOCHEMISTRY: RNA Polymerase, a Scrunching Machine. Science, 2006, 314, 1097-1098.	6.0	20

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37	DNA Binding Regions of Q Proteins of Phages Î» and Ï†80. Journal of Bacteriology, 2004, 186, 3599-3608.	1.0	16
38	Genetics and structure of the late gene regulatory region of phage 82. Virology, 1980, 105, 393-404.	1.1	15
39	Assay and characterization of late gene regulators of bacteriophages Ï†82 and Î». Journal of Molecular Biology, 1980, 142, 269-288.	2.0	14
40	A potential stem-loop structure and the sequence CAAUCAA in the transcript are insufficient to signal Ï±-dependent transcription termination at Î»tR1. Nucleic Acids Research, 1984, 12, 1287-1299.	6.5	14
41	Transcription Termination and Its Control. , 1996, , 27-45.		13
42	Promoter-specific control of <i>E. coli</i> RNA polymerase by ppGpp and a general transcription factor. Genes and Development, 2009, 23, 143-146.	2.7	12
43	Syntheses That Stay Together. Science, 2010, 328, 436-437.	6.0	12
44	A universal transcription pause sequence is an element of initiation factor Ïƒ70-dependent pausing. Nucleic Acids Research, 2016, 44, 6732-6740.	6.5	11
45	Molecular basis of transcription pausing. Science, 2014, 344, 1226-1227.	6.0	2
46	Transcription Termination. , 2004, , 195-199.		0