Michael A. Sorensen

List of Publications by Year
in descending order

34	2,600	361413	434195
papers	citations	20 h-index	31 g-index

38	38	38	2771
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Codon usage determines translation rate in Escherichia coli. Journal of Molecular Biology, 1989, 207, 365-377.	4.2	537
2	Absolute in vivo translation rates of individual codons in Escherichia coli. Journal of Molecular Biology, 1991, 222, 265-280.	4.2	260
3	Selective charging of tRNA isoacceptors induced by aminoâ€acid starvation. EMBO Reports, 2005, 6, 151-157.	4.5	201
4	Prophages and Growth Dynamics Confound Experimental Results with Antibiotic-Tolerant Persister Cells. MBio, 2017, 8, .	4.1	190
5	Synthesis of Proteins in Escherichia coli is Limited by the Concentration of Free Ribosomes. Journal of Molecular Biology, 1993, 231, 678-688.	4.2	188
6	Ribosomal protein S1 is required for translation of most, if not all, natural mRNAs in Escherichia coli in vivo. Journal of Molecular Biology, 1998, 280, 561-569.	4.2	184
7	Ribosome Hibernation. Annual Review of Genetics, 2018, 52, 321-348.	7.6	110
8	The modification of the wobble base of tRNAGlu modulates the translation rate of glutamic acid codons in vivo. Journal of Molecular Biology, 1998, 284, 621-631.	4.2	106
9	Correlation between mechanical strength of messenger RNA pseudoknots and ribosomal frameshifting. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5830-5835.	7.1	104
10	High Concentrations of ppGpp Decrease the RNA Chain Growth Rate. Journal of Molecular Biology, 1994, 236, 441-454.	4.2	81
11	Charging levels of four tRNA species in Escherichia coli Rel+ and Relâ" strains during amino acid starvation: a simple model for the effect of ppGpp on translational accuracy11Edited by D. E. Draper. Journal of Molecular Biology, 2001, 307, 785-798.	4.2	78
12	Decreasing transcription elongation rate in Escherichia Coli exposed to amino acid starvation. Molecular Microbiology, 1992, 6, 2191-2200.	2.5	75
13	mRNA pseudoknot structures can act as ribosomal roadblocks. Nucleic Acids Research, 2012, 40, 303-313.	14.5	69
14	Transfer RNA is highly unstable during early amino acid starvation inEscherichia coli. Nucleic Acids Research, 2017, 45, 793-804.	14.5	66
15	Aminoacylation of hypomodified tRNAGlu in vivo. Journal of Molecular Biology, 1998, 284, 609-620.	4.2	57
16	Pseudouridylation of helix 69 of 23S rRNA is necessary for an effective translation termination. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19410-19415.	7.1	54
17	Over Expression of a tRNALeu Isoacceptor Changes Charging Pattern of Leucine tRNAs and Reveals New Codon Reading. Journal of Molecular Biology, 2005, 354, 16-24.	4.2	47
18	Shortâ€term kinetics of rRNA degradation in Escherichia coli upon starvation for carbon, amino acid or phosphate. Molecular Microbiology, 2020, 113, 951-963.	2.5	33

#	Article	IF	Citations
19	Rapid Curtailing of the Stringent Response by Toxin-Antitoxin Module-Encoded mRNases. Journal of Bacteriology, 2016, 198, 1918-1926.	2.2	27
20	Transfer RNA instability as a stress response inEscherichia coli: Rapid dynamics of the tRNA pool as a function of demand. RNA Biology, 2018, 15, 586-593.	3.1	25
21	Hibernation factors directly block ribonucleases from entering the ribosome in response to starvation. Nucleic Acids Research, 2021, 49, 2226-2239.	14.5	21
22	Valine-Induced Isoleucine Starvation in Escherichia coli K-12 Studied by Spike-In Normalized RNA Sequencing. Frontiers in Genetics, 2020, 11, 144.	2.3	14
23	Quantification of the Abundance and Charging Levels of Transfer RNAs in Escherichia coli. Journal of Visualized Experiments, 2017, , .	0.3	13
24	The rates of macromolecular chain elongation modulate the initiation frequencies for transcription and translation inEscherichia coli. Antonie Van Leeuwenhoek, 1993, 63, 323-331.	1.7	10
25	Isolation and characterization of mutants with impaired regulation of rpsA, the gene encoding ribosomal protein S1 of Escherichia coli. Molecular Genetics and Genomics, 1993, 240, 23-28.	2.4	8
26	Existence of log-phase Escherichia coli persisters and lasting memory of a starvation pulse. Life Science Alliance, 2022, 5, e202101076.	2.8	8
27	Distinct Survival, Growth Lag, and rRNA Degradation Kinetics during Long-Term Starvation for Carbon or Phosphate. MSphere, 2022, 7, e0100621.	2.9	7
28	Determination of the Peptide Elongation Rate In Vivo. , 1998, 77, 129-142.		6
29	Polyamines are Required for tRNA Anticodon Modification in Escherichia coli. Journal of Molecular Biology, 2021, 433, 167073.	4.2	6
30	A Novel Complex: A Quantum Dot Conjugated to an Active T7RNA Polymerase. Journal of Nanomaterials, 2013, 2013, 1-9.	2.7	5
31	Three Ribosomal Operons of Escherichia coli Contain Genes Encoding Small RNAs That Interact With Hfq and CsrA in vitro. Frontiers in Microbiology, 2021, 12, 625585.	3.5	3
32	Measurement of translation rates in vivo at individual codons and implication of these rate differences for gene expression. , 1990, , 207-216.		1
33	Fullerenes May Induce Physical Changes of DNA - an Optical Tweezers Study. Biophysical Journal, 2009, 96, 344a.	0.5	0
34	Force Spectroscopy of DNA and RNA: Structure and Kinetics from Single-Molecule Experiments. Nucleic Acids and Molecular Biology, 2014, , 23-52.	0.2	0