Jonathan D Dinman

List of Publications by Year
in descending order

134 papers	6,929 citations	47006 47 h-index	74163 75 g-index
140 all docs	140 docs citations	140 times ranked	6035 citing authors

#	Article	IF	Citations
1	Identifying Inhibitors of âˆ’1 Programmed Ribosomal Frameshifting in a Broad Spectrum of Coronaviruses. Viruses, 2022, 14, 177.	3.3	21
2	EGR1 Upregulation during Encephalitic Viral Infections Contributes to Inflammation and Cell Death. Viruses, 2022, 14, 1210.	3.3	12
3	Programmed âˆ’1 Ribosomal Frameshifting in coronaviruses: A therapeutic target. Virology, 2021, 554, 75-82.	2.4	45
4	PERK Is Critical for Alphavirus Nonstructural Protein Translation. Viruses, 2021, 13, 892.	3.3	5
5	<i>De Novo</i> variants in <i>EEF2</i> cause a neurodevelopmental disorder with benign external hydrocephalus. Human Molecular Genetics, 2021, 29, 3892-3899.	2.9	11
6	EGR1 upregulation following Venezuelan equine encephalitis virus infection is regulated by ERK and PERK pathways contributing to cell death. Virology, 2020, 539, 121-128.	2.4	16
7	Ribosomal protein gene RPL9 variants can differentially impair ribosome function and cellular metabolism. Nucleic Acids Research, 2020, 48, 770-787.	14.5	28
8	Two Ribosomes Are Better Than One... Sometimes. Molecular Cell, 2020, 79, 541-543.	9.7	2
9	Structural and functional conservation of the programmed âˆ’1 ribosomal frameshift signal of SARS coronavirus 2 (SARS-CoV-2). Journal of Biological Chemistry, 2020, 295, 10741-10748.	3.4	163
10	The Expanding Riboverse. Cells, 2019, 8, 1205.	4.1	13
11	Still Searching for Specialized Ribosomes. Developmental Cell, 2019, 48, 744-746.	7.0	10
12	Translational recoding signals: Expanding the synthetic biology toolbox. Journal of Biological Chemistry, 2019, 294, 7537-7545.	3.4	14
13	Scaring Ribosomes Shiftless. Biochemistry, 2019, 58, 1831-1832.	2.5	3
14	Slippery ribosomes prefer shapeshifting mRNAs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19225-19227.	7.1	5
15	Ribosomal Lesions Promote Oncogenic Mutagenesis. Cancer Research, 2019, 79, 320-327.	0.9	22
16	Translation Elongation and Recoding in Eukaryotes. Cold Spring Harbor Perspectives in Biology, 2018, 10, a032649.	5.5	154
17	CCR 5 RNA Pseudoknots: Residue and Siteâ€Specific Labeling correlate Internal Motions with microRNA Binding. Chemistry - A European Journal, 2018, 24, 5462-5468.	3.3	12
18	Functional and structural characterization of the chikungunya virus translational recoding signals. Journal of Biological Chemistry, 2018, 293, 17536-17545.	3.4	20

#	Article	IF	Citations
19	Shapeshifting RNAs guide innate immunity. Journal of Biological Chemistry, 2018, 293, 16125-16126.	3.4	1
20	Trajectories of the ribosome as a Brownian nanomachine. journal of hand surgery Asian-Pacific volume, The, 2018, , 463-475.	0.4	2
21	Programmed Ribosomal Frameshifting Generates a Copper Transporter and a Copper Chaperone from the Same Gene. Molecular Cell, 2017, 65, 207-219.	9.7	81
22	A Ribosomopathy Reveals Decoding Defective Ribosomes Driving Human Dysmorphism. American Journal of Human Genetics, 2017, 100, 506-522.	6.2	69
23	Tracking fluctuation hotspots on the yeast ribosome through the elongation cycle. Nucleic Acids Research, 2017, 45, 4958-4971.	14.5	17
24	How Ribosomes Translate Cancer. Cancer Discovery, 2017, 7, 1069-1087.	9.4	131
25	Subtractional Heterogeneity: A Crucial Step toward Defining Specialized Ribosomes. Molecular Cell, 2017, 67, 3-4.	9.7	25
26	Ablation of Programmed â^'1 Ribosomal Frameshifting in Venezuelan Equine Encephalitis Virus Results in Attenuated Neuropathogenicity. Journal of Virology, 2017, 91, .	3.4	38
27	Activation of the unfolded protein response in sarcoma cells treated with rapamycin or temsirolimus. PLoS ONE, 2017, 12, e0185089.	2.5	5
28	Structural and Functional Characterization of Programmed Ribosomal Frameshift Signals in West Nile Virus Strains Reveals High Structural Plasticity Among cis-Acting RNA Elements. Journal of Biological Chemistry, 2016, 291, 15788-15795.	3.4	37
29	The Functional Role of eL19 and eB12 Intersubunit Bridge in the Eukaryotic Ribosome. Journal of Molecular Biology, 2016, 428, 2203-2216.	4.2	17
30	Reprogramming the genetic code: The emerging role of ribosomal frameshifting in regulating cellular gene expression. BioEssays, 2016, 38, 21-26.	2.5	38
31	Venezuelan Equine Encephalitis Virus Induces Apoptosis through the Unfolded Protein Response Activation of EGR1. Journal of Virology, 2016, 90, 3558-3572.	3.4	48
32	Pathways to Specialized Ribosomes: The Brussels Lecture. Journal of Molecular Biology, 2016, 428, 2186-2194.	4.2	99
33	Crystal Structures of the uL3 Mutant Ribosome: Illustration of the Importance of Ribosomal Proteins for Translation Efficiency. Journal of Molecular Biology, 2016, 428, 2195-2202.	4.2	17
34	Ribosomopathies and the paradox of cellular hypo- to hyperproliferation. Blood, 2015, 125, 1377-1382.	1.4	83
35	Cell cycle control (and more) by programmed â^'1 ribosomal frameshifting: implications for disease and therapeutics. Cell Cycle, 2015, 14, 172-178.	2.6	29
36	Ribosomal protein uS19 mutants reveal its role in coordinating ribosome structure and function. Translation, 2015, 3, e1117703.	2.9	13

#	Article	IF	Citations
37	Entry signals control development. Nature, 2015, 517, 24-25.	27.8	0
38	Ribosomes in the balance: structural equilibrium ensures translational fidelity and proper gene expression. Nucleic Acids Research, 2014, 42, 13384-13392.	14.5	5
39	Eukaryotic rpL10 drives ribosomal rotation. Nucleic Acids Research, 2014, 42, 2049-2063.	14.5	59
40	Trajectories of the ribosome as a Brownian nanomachine. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17492-17497.	7.1	218
41	Bypass of the pre-60S ribosomal quality control as a pathway to oncogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5640-5645.	7.1	71
42	A new system for naming ribosomal proteins. Current Opinion in Structural Biology, 2014, 24, 165-169.	5.7	481
43	Single-Molecule Measurements of the CCR5 mRNA Unfolding Pathways. Biophysical Journal, 2014, 106, 244-252.	0.5	26
44	Small molecule inhibitors of Ago2 decrease Venezuelan equine encephalitis virus replication. Antiviral Research, 2014, 112, 26-37.	4.1	26
45	Ribosomal frameshifting in the CCR5 mRNA is regulated by miRNAs and the NMD pathway. Nature, 2014, 512, 265-269.	27.8	130
46	Altering SARS Coronavirus Frameshift Efficiency Affects Genomic and Subgenomic RNA Production. Viruses, 2013, 5, 279-294.	3.3	67
47	The Kissing-Loop T-Shaped Structure Translational Enhancer of Pea Enation Mosaic Virus Can Bind Simultaneously to Ribosomes and a 5â€² Proximal Hairpin. Journal of Virology, 2013, 87, 11987-12002.	3.4	40
48	Yeast telomere maintenance is globally controlled by programmed ribosomal frameshifting and the nonsense-mediated mRNA decay pathway. Translation, 2013, 1, e24418.	2.9	27
49	RNA dimerization plays a role in ribosomal frameshifting of the SARS coronavirus. Nucleic Acids Research, 2013, 41, 2594-2608.	14.5	56
50	Control of gene expression by translational recoding. Advances in Protein Chemistry and Structural Biology, 2012, 86, 129-149.	2.3	44
51	Crystal structure of the 80S yeast ribosome. Current Opinion in Structural Biology, 2012, 22, 759-767.	5.7	120
52	Mechanisms and implications of programmed translational frameshifting. Wiley Interdisciplinary Reviews RNA, 2012, 3, 661-673.	6.4	178
53	Structural Analyses of the Ribosome by Chemical Modification Methods. , 2012, , 69-81.		0
54	rRNA Pseudouridylation Defects Affect Ribosomal Ligand Binding and Translational Fidelity from Yeast to Human Cells. Molecular Cell, 2011, 44, 660-666.	9.7	256

#	Article	IF	Citations
55	Chromatographic Purification of Highly Active Yeast Ribosomes. Journal of Visualized Experiments, 2011, , .	0.3	3
56	Evolution of a helper virus-derived, ribosome binding translational enhancer in an untranslated satellite RNA of Turnip crinkle virus. Virology, 2011, 419, 10-16.	2.4	5
57	The central core region of yeast ribosomal protein L11 is important for subunit joining and translational fidelity. Molecular Genetics and Genomics, 2011, 285, 505-516.	2.1	6
58	The many paths to frameshifting: kinetic modelling and analysis of the effects of different elongation steps on programmed â€“1 ribosomal frameshifting. Nucleic Acids Research, 2011, 39, 300-312.	14.5	42
59	Ribosome Binding to a 5â€² Translational Enhancer Is Altered in the Presence of the 3â€² Untranslated Region in Cap-Independent Translation of Turnip Crinkle Virus. Journal of Virology, 2011, 85, 4638-4653.	3.4	62
60	Mutations of highly conserved bases in the peptidyltransferase center induce compensatory rearrangements in yeast ribosomes. Rna, 2011, 17, 855-864.	3.5	23
61	A rapid, inexpensive yeast-based dual-fluorescence assay of programmedâ€"1 ribosomal frameshifting for high-throughput screening. Nucleic Acids Research, 2011, 39, e97-e97.	14.5	13
62	High throughput structural analysis of yeast ribosomes using hSHAPE. RNA Biology, 2011, 8, 478-487.	3.1	26
63	Endogenous ribosomal frameshift signals operate as mRNA destabilizing elements through at least two molecular pathways in yeast. Nucleic Acids Research, 2011, 39, 2799-2808.	14.5	62
64	An Extensive Network of Information Flow through the B1b/c Intersubunit Bridge of the Yeast Ribosome. PLoS ONE, 2011, 6, e20048.	2.5	24
65	A molecular clamp ensures allosteric coordination of peptidyltransfer and ligand binding to the ribosomal A-site. Nucleic Acids Research, 2010, 38, 7800-7813.	14.5	34
66	A flexible loop in yeast ribosomal protein L11 coordinates P-site tRNA binding. Nucleic Acids Research, 2010, 38, 8377-8389.	14.5	24
67	Achieving a Golden Mean: Mechanisms by Which Coronaviruses Ensure Synthesis of the Correct Stoichiometric Ratios of Viral Proteins. Journal of Virology, 2010, 84, 4330-4340.	3.4	112
68	Enhanced purity, activity and structural integrity of yeast ribosomes purified using a general chromatographic method. RNA Biology, 2010, 7, 354-360.	3.1	17
69	Mutants That Affect Recoding. Nucleic Acids and Molecular Biology, 2010, , 321-344.	0.2	7
70	Programmed â€“1 Ribosomal Frameshifting in SARS Coronavirus. , 2010, , 63-72.		3
71	The Eukaryotic Ribosome: Current Status and Challenges. Journal of Biological Chemistry, 2009, 284, 11761-11765.	3.4	35
72	Expanding the Ribosomal Universe. Structure, 2009, 17, 1547-1548.	3.3	0

#	Article	IF	Citations
73	PRFdb: A database of computationally predicted eukaryotic programmed -1 ribosomal frameshift signals. BMC Genomics, 2008, 9, 339.	2.8	51
74	Evaluation of Microwave-Accelerated Residue-Specific Acid Cleavage for Proteomic Applications. Journal of Proteome Research, 2008, 7, 579-586.	3.7	62
75	Yeast ribosomal protein L10 helps coordinate tRNA movement through the large subunit. Nucleic Acids Research, 2008, 36, 6187-6198.	14.5	30
76	Structure/function analysis of yeast ribosomal protein L2. Nucleic Acids Research, 2008, 36, 1826-1835.	14.5	25
77	A new kinetic model reveals the synergistic effect of E-, P- and A-sites on +1 ribosomal frameshifting. Nucleic Acids Research, 2008, 36, 2619-2629.	14.5	31
78	rRNA mutants in the yeast peptidyltransferase center reveal allosteric information networks and mechanisms of drug resistance. Nucleic Acids Research, 2008, 36, 1497-1507.	14.5	38
79	Ribosomal protein L3 functions as a â€˜rocker switchâ€™ to aid in coordinating of large subunit-associated functions in eukaryotes and Archaea. Nucleic Acids Research, 2008, 36, 6175-6186.	14.5	40
80	The 3â€² proximal translational enhancer of Turnip crinkle virus binds to 60S ribosomal subunits. Rna, 2008, 14, 2379-2393.	3.5	92
81	The role of programmed-1 ribosomal frameshifting in coronavirus propagation. Frontiers in Bioscience - Landmark, 2008, Volume, 4873.	3.0	81
82	Characterization of breast tumor metabolites reâ€editing macrophage function. FASEB Journal, 2008, 22, 1076.22.	0.5	0
83	Human ribosomal protein L13a is dispensable for canonical ribosome function but indispensable for efficient rRNA methylation. Rna, 2007, 13, 2224-2237.	3.5	69
84	Identification of functional, endogenous programmed â^'1 ribosomal frameshift signals in the genome of Saccharomyces cerevisiae. Nucleic Acids Research, 2007, 35, 165-174.	14.5	145
85	Ribosomal Protein L3: Gatekeeper to the A Site. Molecular Cell, 2007, 25, 877-888.	9.7	60
86	Integration of Residue-Specific Acid Cleavage into Proteomic Workflows. Journal of Proteome Research, 2007, 6, 4525-4527.	3.7	33
87	Optimization of Ribosome Structure and Function by rRNA Base Modification. PLoS ONE, 2007, 2, e174.	2.5	123
88	Differentiating between Near- and Non-Cognate Codons in Saccharomyces cerevisiae. PLoS ONE, 2007, 2, e517.	2.5	45
89	Efficient expression of the 15-kDa form of infectious pancreatic necrosis virus VP5 by suppression of a UGA codon. Virus Research, 2006, 122, 61-68.	2.2	2
90	Comparative study of the effects of heptameric slippery site composition on -1 frameshifting among different eukaryotic systems. Rna, 2006, 12, 666-673.	3.5	45

#	Article	IF	Citations
91	Specific Effects of Ribosome-Tethered Molecular Chaperones on Programmed âˆ'1 Ribosomal Frameshifting. Eukaryotic Cell, 2006, 5, 762-770.	3.4	28
92	An Arc of Unpaired â€œHinge Basesâ€•Facilitates Information Exchange among Functional Centers of the Ribosome. Molecular and Cellular Biology, 2006, 26, 8992-9002.	2.3	40
93	Programmed Ribosomal Frameshifting Goes beyond Viruses. Microbe Magazine, 2006, 1, 521-527.	0.4	29
94	Effect of 3`-Azido-3`-Deoxythymidine (AZT) on Telomerase Activity and Proliferation of HO-8910 Cell Line of Ovarian Cancer. International Journal of Biomedical Science, 2006, 2, 41.	0.1	0
95	Structural and functional analysis of 5S rRNA in Saccharomyces cerevisiae. Molecular Genetics and Genomics, 2005, 274, 235-247.	2.1	40
96	A Three-Stemmed mRNA Pseudoknot in the SARS Coronavirus Frameshift Signal. PLoS Biology, 2005, 3, e172.	5.6	158
97	Identification of Functionally Important Amino Acids of Ribosomal Protein L3 by Saturation Mutagenesis. Molecular and Cellular Biology, 2005, 25, 10863-10874.	2.3	60
98	Torsional restraint: a new twist on frameshifting pseudoknots. Nucleic Acids Research, 2005, 33, 1825-1833.	14.5	80
99	5S rRNA: Structure and Function from Head to Toe. International Journal of Biomedical Science, 2005, 1, 2-7.	0.1	18
100	5S rRNA: Structure and Function from Head to Toe. International Journal of Biomedical Science, 2005, 1, 1-7.	0.1	8
101	A programmed -1 ribosomal frameshift signal can function as a cis-acting mRNA destabilizing element. Nucleic Acids Research, 2004, 32, 784-790.	14.5	43
102	Evidence against a direct role for the Upf proteins in frameshifting or nonsense codon readthrough. Rna, 2004, 10, 1721-1729.	3.5	32
103	Ribosomal Protein L3: Influence on Ribosome Structure and Function. RNA Biology, 2004, 1, 58-64.	3.1	30
104	Systematic analysis of bicistronic reporter assay data. Nucleic Acids Research, 2004, 32, e160-e160.	14.5	90
105	Decreased peptidyltransferase activity correlates with increased programmed -1 ribosomal frameshifting and viral maintenance defects in the yeast Saccharomyces cerevisiae. Rna, 2003, 9, 982-992.	3.5	44
106	The 9-A solution: How mRNA pseudoknots promote efficient programmed -1 ribosomal frameshifting. Rna, 2003, 9, 168-174.	3.5	139
107	An in vivo dual-luciferase assay system for studying translational recoding in the yeast Saccharomyces cerevisiae. Rna, 2003, 9, 1019-1024.	3.5	141
108	Delayed rRNA Processing Results in Significant Ribosome Biogenesis and Functional Defects. Molecular and Cellular Biology, 2003, 23, 1602-1613.	2.3	29

#	Article	IF	Citations
109	The frameshift signal of HIV-1 involves a potential intramolecular triplex RNA structure. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5331-5336.	7.1	76
110	An â€˜integrated modelâ€™ of programmed ribosomal frameshifting. Trends in Biochemical Sciences, 2002, 27, 448-454.	7.5	97
111	New Targets for Antivirals: The Ribosomal A-Site and the Factors That Interact with It. Virology, 2002, 300, 60-70.	2.4	49
112	Ribosomal protein L5 helps anchor peptidyl-tRNA to the P-site in Saccharomyces cerevisiae. Rna, 2001, 7, 1084-1096.	3.5	54
113	A C-Terminal Deletion Mutant of Pokeweed Antiviral Protein Inhibits Programmed +1 Ribosomal Frameshifting and Ty1 Retrotransposition without Depurinating the Sarcin/Ricin Loop of rRNA. Virology, 2001, 279, 292-301.	2.4	19
114	Ty1 Retrotransposition and Programmed +1 Ribosomal Frameshifting Require the Integrity of the Protein Synthetic Translocation Step. Virology, 2001, 286, 216-224.	2.4	25
115	Saturation Mutagenesis of 5S rRNA in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2001, 21, 8264-8275.	2.3	47
116	Improved Purification of the Double-Stranded RNA from Killer Strains of Yeast. BioTechniques, 2000, 28, 64-65.	1.8	4
117	The case for the involvement of the Upf3p in programmed â^'1 ribosomal frameshifting. Rna, 2000, 6, 1685-1686.	3.5	8
118	Kinetics of Ribosomal Pausing during Programmed â^'1 Translational Frameshifting. Molecular and Cellular Biology, 2000, 20, 1095-1103.	2.3	106
119	Mutations in the MOF2/SUI1 gene affect both translation and nonsense-mediated mRNA decay. Rna, 1999, 5, 794-804.	3.5	35
120	Pokeweed Antiviral Protein Accesses Ribosomes by Binding to L3. Journal of Biological Chemistry, 1999, 274, 3859-3864.	3.4	101
121	Cloning and Characterization of a Human Genotoxic and Endoplasmic Reticulum Stress-inducible cDNA That Encodes Translation Initiation Factor 1(eIF1A121/SUI1). Journal of Biological Chemistry, 1999, 274, 16487-16493.	3.4	27
122	Ribosomal Protein L3 Mutants Alter Translational Fidelity and Promote Rapid Loss of the Yeast Killer Virus. Molecular and Cellular Biology, 1999, 19, 384-391.	2.3	64
123	Identification of Putative Programmed â^'1 Ribosomal Frameshift Signals in Large DNA Databases. Genome Research, 1999, 9, 417-427.	5.5	60
124	Translating old drugs into new treatments: ribosomal frameshifting as a target for antiviral agents. Trends in Biotechnology, 1998, 16, 190-196.	9.3	81
125	The Mof2/Sui1 Protein Is a General Monitor of Translational Accuracy. Molecular and Cellular Biology, 1998, 18, 1506-1516.	2.3	81
126	The Upf3 protein is a component of the surveillance complex that monitors both translation and mRNA turnover and affects viral propagation. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 8721-8726.	7.1	36

#	Article	IF	Citations
127	The Pokeweed Antiviral Protein Specifically Inhibits Ty 1 -Directed +1 Ribosomal Frameshifting and Retrotransposition in Saccharomyces cerevisiae. Journal of Virology, 1998, 72, 1036-1042.	3.4	52
128	Peptidyl-transferase inhibitors have antiviral properties by altering programmed -1 ribosomal frameshifting efficiencies: Development of model systems. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6606-6611.	7.1	89
129	Ribosomal frameshifting in yeast viruses. Yeast, 1995, 11, 1115-1127.	1.7	68
130	Molecular cloning of a gene expressed during early embryonic development in Onchocerca volvulus. Molecular and Biochemical Parasitology, 1995, 69, 161-171.	1.1	14
131	XIV. Yeast sequencing reports. Sequence ofMKT1, needed for propagation of M2 satellite dsRNA of the L-A virus ofSaccharomyces cerevisiae. Yeast, 1994, 10, 1477-1479.	1.7	9
132	Spermidine deficiency increases +1 ribosomal frameshifting efficiency and inhibits Ty1 retrotransposition in Saccharomyces cerevisiae.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 172-176.	7.1	73
133	Onchocerca volvulus: Molecular cloning, primary structure, and expression of a microfilarial surface-associated antigen. Experimental Parasitology, 1990, 71, 176-188.	1.2	10
134	Major sperm protein genes from Onchocerca volvulus. Molecular and Biochemical Parasitology, 1989, 36, 119-126.	1.1	32