Rachel Green

List of Publications by Year
in descending order

110 papers	12,687 citations	28190 55 h-index	30848 102 g-index
133 all docs	133 docs citations	133 times ranked	12576 citing authors

#	Article	IF	Citations
1	Evolutionarily conserved inhibitory uORFs sensitize <i>Hox</i> mRNA translation to start codon selection stringency. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	25
2	Ribosome collisions induce mRNA cleavage and ribosome rescue in bacteria. Nature, 2022, 603, 503-508.	13.7	50
3	Yeast translation elongation factor eEF3 promotes late stages of tRNA translocation. EMBO Journal, 2021, 40, e106449.	3.5	19
4	Live-cell imaging reveals kinetic determinants of quality control triggered by ribosome stalling. Molecular Cell, 2021, 81, 1830-1840.e8.	4.5	23
5	Ribosome states signal RNA quality control. Molecular Cell, 2021, 81, 1372-1383.	4.5	75
6	Translational control of stem cell function. Nature Reviews Molecular Cell Biology, 2021, 22, 671-690.	16.1	69
7	A small molecule that induces translational readthrough of CFTR nonsense mutations by eRF1 depletion. Nature Communications, 2021, 12, 4358.	5.8	59
8	Mechanisms that ensure speed and fidelity in eukaryotic translation termination. Science, 2021, 373, 876-882.	6.0	33
9	Translational repression of NMD targets by GIGYF2 and EIF4E2. PLoS Genetics, 2021, 17, e1009813.	1.5	25
10	Make or break: the ribosome as a regulator of mRNA decay. Cell Research, 2020, 30, 195-196.	5.7	0
11	Molecular mechanism of translational stalling by inhibitory codon combinations and poly(A) tracts. EMBO Journal, 2020, 39, e103365.	3.5	113
12	Bifunctional Nitrone-Conjugated Secondary Metabolite Targeting the Ribosome. Journal of the American Chemical Society, 2020, 142, 18369-18377.	6.6	7
13	GIGYF2 and 4EHP Inhibit Translation Initiation of Defective Messenger RNAs to Assist Ribosome-Associated Quality Control. Molecular Cell, 2020, 79, 950-962.e6.	4.5	119
14	Nuclease-mediated depletion biases in ribosome footprint profiling libraries. Rna, 2020, 26, 1481-1488.	1.6	29
15	Ribosome Collisions Trigger General Stress Responses to Regulate Cell Fate. Cell, 2020, 182, 404-416.e14.	13.5	253
16	Stop codon context influences genome-wide stimulation of termination codon readthrough by aminoglycosides. ELife, 2020, 9, .	2.8	122
17	Translational initiation in E. coli occurs at the correct sites genome-wide in the absence of mRNA-rRNA base-pairing. ELife, 2020, 9, .	2.8	73
18	EDF1 coordinates cellular responses to ribosome collisions. ELife, 2020, 9, .	2.8	96

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19	Ribosome recycling is not critical for translational coupling in Escherichia coli. ELife, 2020, 9, .	2.8	19
20	Puromycin reactivity does not accurately localize translation at the subcellular level. ELife, 2020, 9, .	2.8	51
21	High-Resolution Ribosome Profiling Defines Discrete Ribosome Elongation States and Translational Regulation during Cellular Stress. Molecular Cell, 2019, 73, 959-970.e5.	4.5	234
22	Ribosome queuing enables non-AUG translation to be resistant to multiple protein synthesis inhibitors. Genes and Development, 2019, 33, 871-885.	2.7	60
23	A systematically-revised ribosome profiling method for bacteria reveals pauses at single-codon resolution. ELife, 2019, 8, .	2.8	161
24	Assaying RNA structure with LASER-Seq. Nucleic Acids Research, 2019, 47, 43-55.	6.5	69
25	The endonuclease Cue2 cleaves mRNAs at stalled ribosomes during No Go Decay. ELife, 2019, 8, .	2.8	139
26	Translation Elongation and Recoding in Eukaryotes. Cold Spring Harbor Perspectives in Biology, 2018, 10, a032649.	2.3	154
27	An evolutionarily conserved ribosome-rescue pathway maintains epidermal homeostasis. Nature, 2018, 556, 376-380.	13.7	47
28	Directed hydroxyl radical probing reveals Upf1 binding to the 80S ribosomal E site rRNA at the L1 stalk. Nucleic Acids Research, 2018, 46, 2060-2073.	6.5	13
29	Roadblocks and resolutions in eukaryotic translation. Nature Reviews Molecular Cell Biology, 2018, 19, 526-541.	16.1	177
30	Structural characterization of mRNA-tRNA translocation intermediates. journal of hand surgery Asian-Pacific volume, The, 2018, , 450-455.	0.2	0
31	Rapid generation of hypomorphic mutations. Nature Communications, 2017, 8, 14112.	5.8	15
32	Slowed decay of mRNAs enhances platelet specific translation. Blood, 2017, 129, e38-e48.	0.6	68
33	Ribosome pausing, arrest and rescue in bacteria and eukaryotes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160183.	1.8	149
34	Translation of poly(A) tails leads to precise mRNA cleavage. Rna, 2017, 23, 749-761.	1.6	77
35	Inhibition of Eukaryotic Translation by the Antitumor Natural Product Agelastatin A. Cell Chemical Biology, 2017, 24, 605-613.e5.	2.5	41
36	The ABC(E1)s of Ribosome Recycling and Reinitiation. Molecular Cell, 2017, 66, 578-580.	4.5	14

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37	eIF5A Functions Globally in Translation Elongation and Termination. Molecular Cell, 2017, 66, 194-205.e5.	4.5	352
38	Ribosomopathies: Thereâ€™s strength in numbers. Science, 2017, 358, .	6.0	343
39	Not just Salk. Science, 2017, 357, 1105-1106.	6.0	4
40	Precision genome editing using synthesis-dependent repair of Cas9-induced DNA breaks. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10745-E10754.	3.3	175
41	Can Multidrug-Resistant Candidaauris Be Reliably Identified in Clinical Microbiology Laboratories?. Journal of Clinical Microbiology, 2017, 55, 638-640.	1.8	181
42	Regulated Ire1-dependent mRNA decay requires no-go mRNA degradation to maintain endoplasmic reticulum homeostasis in S. pombe. ELife, 2017, 6, .	2.8	64
43	When stop makes sense. Science, 2016, 354, 1106-1106.	6.0	4
44	Dynamic Regulation of a Ribosome Rescue Pathway in Erythroid Cells and Platelets. Cell Reports, 2016, 17, 1-10.	2.9	117
45	The DEAD-Box Protein Dhh1p Couples mRNA Decay and Translation by Monitoring Codon Optimality. Cell, 2016, 167, 122-132.e9.	13.5	232
46	Connections Underlying Translation and mRNA Stability. Journal of Molecular Biology, 2016, 428, 3558-3564.	2.0	97
47	Clarifying the Translational Pausing Landscape in Bacteria by Ribosome Profiling. Cell Reports, 2016, 14, 686-694.	2.9	161
48	High-Precision Analysis of Translational Pausing by Ribosome Profiling in Bacteria Lacking EFP. Cell Reports, 2015, 11, 13-21.	2.9	219
49	Saccharomyces cerevisiae Ski7 Is a GTP-Binding Protein Adopting the Characteristic Conformation of Active Translational GTPases. Structure, 2015, 23, 1336-1343.	1.6	26
50	Exploring the Mechanism of Dhh1-Mediated Translational Repression. Biophysical Journal, 2015, 108, 391a.	0.2	1
51	Synthesis at the Speed of Codons. Trends in Biochemical Sciences, 2015, 40, 717-718.	3.7	14
52	Rli1/ABCE1 Recycles Terminating Ribosomes and Controls Translation Reinitiation in 3â€²UTRs InÂVivo. Cell, 2015, 162, 872-884.	13.5	184
53	Translational control by lysine-encoding A-rich sequences. Science Advances, 2015, 1, .	4.7	94
54	Ribosomes slide on lysine-encoding homopolymeric A stretches. ELife, 2015, 4, .	2.8	98

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55	One-dimensional SDS-Polyacrylamide Gel Electrophoresis (1D SDS-PAGE). Methods in Enzymology, 2014, 541, 151-159.	0.4	129
56	Dom34 Rescues Ribosomes in 3â€² Untranslated Regions. Cell, 2014, 156, 950-962.	13.5	342
57	Dom34-Hbs1 mediated dissociation of inactive 80S ribosomes promotes restart of translation after stress. EMBO Journal, 2014, 33, n/a-n/a.	3.5	74
58	In Vitro Synthesis of Proteins in Bacterial Extracts. Methods in Enzymology, 2014, 539, 3-15.	0.4	4
59	Cryoelectron Microscopic Structures of Eukaryotic Translation Termination Complexes Containing eRF1-eRF3 or eRF1-ABCE1. Cell Reports, 2014, 8, 59-65.	2.9	105
60	Distinct Roles for Release Factor 1 and Release Factor 2 in Translational Quality Control. Journal of Biological Chemistry, 2014, 289, 17589-17596.	1.6	29
61	Coomassie Blue Staining. Methods in Enzymology, 2014, 541, 161-167.	0.4	77
62	RF3:GTP promotes rapid dissociation of the class 1 termination factor. Rna, 2014, 20, 609-620.	1.6	34
63	Polysome Analysis of Mammalian Cells. Methods in Enzymology, 2013, 530, 183-192.	0.4	19
64	Eukaryotic Release Factor 3 Is Required for Multiple Turnovers of Peptide Release Catalysis by Eukaryotic Release Factor 1. Journal of Biological Chemistry, 2013, 288, 29530-29538.	1.6	31
65	Regulation of Argonaute Slicer Activity by Guide RNA 3â€² End Interactions with the N-terminal Lobe. Journal of Biological Chemistry, 2013, 288, 7829-7840.	1.6	40
66	In Vitro Transcription from Plasmid or PCR-amplified DNA. Methods in Enzymology, 2013, 530, 101-114.	0.4	29
67	Transformation of Chemically Competent E. coli. Methods in Enzymology, 2013, 529, 329-336.	0.4	129
68	mRNA surveillance is driven by translation. FASEB Journal, 2013, 27, 325.3.	0.2	0
69	Structural basis of highly conserved ribosome recycling in eukaryotes and archaea. Nature, 2012, 482, 501-506.	13.7	210
70	Translation drives mRNA quality control. Nature Structural and Molecular Biology, 2012, 19, 594-601.	3.6	334
71	miRNA-Mediated Gene Silencing by Translational Repression Followed by mRNA Deadenylation and Decay. Science, 2012, 336, 237-240.	6.0	765
72	The Elongation, Termination, and Recycling Phases of Translation in Eukaryotes. Cold Spring Harbor Perspectives in Biology, 2012, 4, a013706-a013706.	2.3	328

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73	Distinct response of yeast ribosomes to a miscoding event during translation. Rna, 2011, 17, 925-932.	1.6	34
74	Kinetic analysis reveals the ordered coupling of translation termination and ribosome recycling in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1392-8.	3.3	225
75	Inhibition of eukaryotic translation elongation by the antitumor natural product Mycalamide B. Rna, 2011, 17, 1578-1588.	1.6	23
76	A Parsimonious Model for Gene Regulation by miRNAs. Science, 2011, 331, 550-553.	6.0	442
77	Allosteric regulation of Argonaute proteins by miRNAs. Nature Structural and Molecular Biology, 2010, 17, 144-150.	3.6	60
78	Visualization of codon-dependent conformational rearrangements during translation termination. Nature Structural and Molecular Biology, 2010, 17, 465-470.	3.6	28
79	Inhibition of eukaryotic translation elongation by cycloheximide and lactimidomycin. Nature Chemical Biology, 2010, 6, 209-217.	3.9	757
80	Kinetic basis for global loss of fidelity arising from mismatches in the P-site codon:anticodon helix. Rna, 2010, 16, 1980-1989.	1.6	18
81	Functional elucidation of a key contact between tRNA and the large ribosomal subunit rRNA during decoding. Rna, 2010, 16, 2002-2013.	1.6	13
82	Dom34:Hbs1 Promotes Subunit Dissociation and Peptidyl-tRNA Drop-Off to Initiate No-Go Decay. Science, 2010, 330, 369-372.	6.0	274
83	Hypusineâ€containing Protein eIF5A Promotes Translation Elongation. FASEB Journal, 2010, 24, 79.2.	0.2	0
84	An expanded seed sequence definition accounts for full regulation of the <i>hid</i> 3â€² UTR by <i>bantam</i> miRNA. Rna, 2009, 15, 814-822.	1.6	32
85	Quality control by the ribosome following peptide bond formation. Nature, 2009, 457, 161-166.	13.7	193
86	Hypusine-containing protein eIF5A promotes translation elongation. Nature, 2009, 459, 118-121.	13.7	361
87	Fidelity at the Molecular Level: Lessons from Protein Synthesis. Cell, 2009, 136, 746-762.	13.5	323
88	Analysis of Dom34 and Its Function in No-Go Decay. Molecular Biology of the Cell, 2009, 20, 3025-3032.	0.9	108
89	Visualization of the Hybrid State of tRNA Binding Promoted by Spontaneous Ratcheting of the Ribosome. Molecular Cell, 2008, 32, 190-197.	4.5	224
90	Recognition of aminoacyl-tRNA: a common molecular mechanism revealed by cryo-EM. EMBO Journal, 2008, 27, 3322-3331.	3.5	49

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91	Peptide Release on the Ribosome: Mechanism and Implications for Translational Control. Annual Review of Microbiology, 2008, 62, 353-373.	2.9	88
92	Peptide release on the ribosome depends critically on the 2â€² OH of the peptidylâ€"tRNA substrate. Rna, 2008, 14, 1526-1531.	1.6	41
93	Mechanistic studies of ribosome function and potential implications for translational control. FASEB Journal, 2008, 22, 398.2.	0.2	0
94	Stop Codon Recognition by Release Factors Induces Structural Rearrangement of the Ribosomal Decoding Center that Is Productive for Peptide Release. Molecular Cell, 2007, 28, 533-543.	4.5	66
95	Mutational Analysis of S12 Protein and Implications for the Accuracy of Decoding by the Ribosome. Journal of Molecular Biology, 2007, 374, 1065-1076.	2.0	114
96	Two Distinct Components of Release Factor Function Uncovered by Nucleophile Partitioning Analysis. Molecular Cell, 2007, 28, 458-467.	4.5	90
97	Mutational analysis reveals two independent molecular requirements during transfer RNA selection on the ribosome. Nature Structural and Molecular Biology, 2007, 14, 30-36.	3.6	55
98	Catalysis And Communication In Two Active Sites Of The Ribosome. FASEB Journal, 2007, 21, .	0.2	0
99	Conformational flexibility required for class I release factor function. FASEB Journal, 2007, 21, A647.	0.2	0
100	The interaction between C75 of tRNA and the A loop of the ribosome stimulates peptidyl transferase activity. Rna, 2006, 12, 33-39.	1.6	87
101	An Active Role for tRNA in Decoding Beyond Codon:Anticodon Pairing. Science, 2005, 308, 1178-1180.	6.0	192
102	Affinity purification of in vivo-assembled ribosomes for in vitro biochemical analysis. Methods, 2005, 36, 305-312.	1.9	74
103	Substrate-assisted catalysis of peptide bond formation by the ribosome. Nature Structural and Molecular Biology, 2004, 11, 1101-1106.	3.6	264
104	The Active Site of the Ribosome Is Composed of Two Layers of Conserved Nucleotides with Distinct Roles in Peptide Bond Formation and Peptide Release. Cell, 2004, 117, 589-599.	13.5	315
105	The Path to Perdition Is Paved with Protons. Cell, 2002, 110, 665-668.	13.5	36
106	Peptidyl transferase activity catalyzed by protein-free 23S ribosomal RNA remains elusive. Rna, 1999, 5, 605-608.	1.6	30
107	The ribosome revealed. , 1999, 6, 999-1003.		10
108	Structure of a conserved RNA component of the peptidyl transferase centre. Nature Structural Biology, 1997, 4, 775-778.	9.7	35

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109	A base pair between tRNA and 23S rRNA in the peptidyl transferase centre of the ribosome. Nature, 1995, 377, 309-314.	13.7	250
110	Studies on the Structure and Function of Ribosomes by Combined Use of Chemical Probing and X-Ray Crystallography. , 0, , 127-150.		1