Rachel Green

List of Publications by Year in Descending Order

114 papers	9,105 citations	50 h-index	95 g-index
133 ext. papers	11,170 ext. citations	16.9 avg, IF	6.86 L-index

#	Paper	IF	Citations
114	Evolutionarily conserved inhibitory uORFs sensitize mRNA translation to start codon selection stringency.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	4
113	Ribosome collisions induce mRNA cleavage and ribosome rescue in bacteria.. *Nature*, **2022**,	50.4	4
112	Translational repression of NMD targets by GIGYF2 and EIF4E2. *PLoS Genetics*, **2021**, 17, e1009813	6	9
111	Live-cell imaging reveals kinetic determinants of quality control triggered by ribosome stalling. *Molecular Cell*, **2021**, 81, 1830-1840.e8	17.6	6
110	Ribosome states signal RNA quality control. *Molecular Cell*, **2021**, 81, 1372-1383	17.6	18
109	Translational control of stem cell function. *Nature Reviews Molecular Cell Biology*, **2021**, 22, 671-690	48.7	11
108	A small molecule that induces translational readthrough of CFTR nonsense mutations by eRF1 depletion. *Nature Communications*, **2021**, 12, 4358	17.4	12
107	Yeast translation elongation factor eEF3 promotes late stages of tRNA translocation. *EMBO Journal*, **2021**, 40, e106449	13	6
106	Mechanisms that ensure speed and fidelity in eukaryotic translation termination. *Science*, **2021**, 373, 876-882	33.3	6
105	Nuclease-mediated depletion biases in ribosome footprint profiling libraries. *Rna*, **2020**, 26, 1481-1488	5.8	11
104	Ribosome Collisions Trigger General Stress Responses to Regulate Cell Fate. *Cell*, **2020**, 182, 404-416.e14	36.2	73
103	Stop codon context influences genome-wide stimulation of termination codon readthrough by aminoglycosides. *ELife*, **2020**, 9,	8.9	53
102	Translational initiation in occurs at the correct sites genome-wide in the absence of mRNA-rRNA base-pairing. *ELife*, **2020**, 9,	8.9	30
101	EDF1 coordinates cellular responses to ribosome collisions. *ELife*, **2020**, 9,	8.9	27
100	Ribosome recycling is not critical for translational coupling in. *ELife*, **2020**, 9,	8.9	5
99	Puromycin reactivity does not accurately localize translation at the subcellular level. *ELife*, **2020**, 9,	8.9	22
98	Make or break: the ribosome as a regulator of mRNA decay. *Cell Research*, **2020**, 30, 195-196	24.7	

97	Molecular mechanism of translational stalling by inhibitory codon combinations and poly(A) tracts. *EMBO Journal*, **2020**, 39, e103365	13	56
96	Bifunctional Nitrone-Conjugated Secondary Metabolite Targeting the Ribosome. *Journal of the American Chemical Society*, **2020**, 142, 18369-18377	16.4	5
95	GIGYF2 and 4EHP Inhibit Translation Initiation of Defective Messenger RNAs to Assist Ribosome-Associated Quality Control. *Molecular Cell*, **2020**, 79, 950-962.e6	17.6	36
94	High-Resolution Ribosome Profiling Defines Discrete Ribosome Elongation States and Translational Regulation during Cellular Stress. *Molecular Cell*, **2019**, 73, 959-970.e5	17.6	116
93	Ribosome queuing enables non-AUG translation to be resistant to multiple protein synthesis inhibitors. *Genes and Development*, **2019**, 33, 871-885	12.6	32
92	The endonuclease Cue2 cleaves mRNAs at stalled ribosomes during No Go Decay. *ELife*, **2019**, 8,	8.9	69
91	A systematically-revised ribosome profiling method for bacteria reveals pauses at single-codon resolution. *ELife*, **2019**, 8,	8.9	81
90	Assaying RNA structure with LASER-Seq. *Nucleic Acids Research*, **2019**, 47, 43-55	20.1	26
89	Translation Elongation and Recoding in Eukaryotes. *Cold Spring Harbor Perspectives in Biology*, **2018** , 10,	10.2	78
88	An evolutionarily conserved ribosome-rescue pathway maintains epidermal homeostasis. *Nature*, **2018**, 556, 376-380	50.4	30
87	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	20.1	9
86	Structural characterization of mRNA-tRNA translocation intermediates. *journal of hand surgery Asian-Pacific volume, The*, **2018**, 450-455	0.5	
85	Roadblocks and resolutions in eukaryotic translation. *Nature Reviews Molecular Cell Biology*, **2018**, 19, 526-541	48.7	98
84	Rapid generation of hypomorphic mutations. *Nature Communications*, **2017**, 8, 14112	17.4	12
83	Slowed decay of mRNAs enhances platelet specific translation. *Blood*, **2017**, 129, e38-e48	2.2	39
82	Ribosome pausing, arrest and rescue in bacteria and eukaryotes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2017**, 372,	5.8	96
81	Translation of poly(A) tails leads to precise mRNA cleavage. *Rna*, **2017**, 23, 749-761	5.8	55
80	Inhibition of Eukaryotic Translation by the Antitumor Natural Product Agelastatin A. *Cell Chemical Biology*, **2017**, 24, 605-613.e5	8.2	30

79	The ABC(E1)s of Ribosome Recycling and Reinitiation. *Molecular Cell*, **2017**, 66, 578-580	17.6	9
78	eIF5A Functions Globally in Translation Elongation and Termination. *Molecular Cell*, **2017**, 66, 194-205.e5	17.6	208
77	Ribosomopathies: There's strength in numbers. *Science*, **2017**, 358,	33.3	206
76	Regulated Ire1-dependent mRNA decay requires no-go mRNA degradation to maintain endoplasmic reticulum homeostasis in. *ELife*, **2017**, 6,	8.9	41
75	Not just Salk. *Science*, **2017**, 357, 1105-1106	33.3	3
74	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	11.5	102
73	Can Multidrug-Resistant Candida auris Be Reliably Identified in Clinical Microbiology Laboratories?. *Journal of Clinical Microbiology*, **2017**, 55, 638-640	9.7	155
72	The DEAD-Box Protein Dhh1p Couples mRNA Decay and Translation by Monitoring Codon Optimality. *Cell*, **2016**, 167, 122-132.e9	56.2	148
71	Connections Underlying Translation and mRNA Stability. *Journal of Molecular Biology*, **2016**, 428, 3558-64	6.5	68
70	Clarifying the Translational Pausing Landscape in Bacteria by Ribosome Profiling. *Cell Reports*, **2016**, 14, 686-694	10.6	121
69	When stop makes sense. *Science*, **2016**, 354, 1106	33.3	2
68	Dynamic Regulation of a Ribosome Rescue Pathway in Erythroid Cells and Platelets. *Cell Reports*, **2016**, 17, 1-10	10.6	72
67	Synthesis at the Speed of Codons. *Trends in Biochemical Sciences*, **2015**, 40, 717-718	10.3	9
66	Rli1/ABCE1 Recycles Terminating Ribosomes and Controls Translation Reinitiation in 3'UTRs In Vivo. *Cell*, **2015**, 162, 872-84	56.2	132
65	Translational control by lysine-encoding A-rich sequences. *Science Advances*, **2015**, 1,	14.3	71
64	High-precision analysis of translational pausing by ribosome profiling in bacteria lacking EFP. *Cell Reports*, **2015**, 11, 13-21	10.6	162
63	Saccharomyces cerevisiae Ski7 Is a GTP-Binding Protein Adopting the Characteristic Conformation of Active Translational GTPases. *Structure*, **2015**, 23, 1336-43	5.2	23
62	Ribosomes slide on lysine-encoding homopolymeric A stretches. *ELife*, **2015**, 4,	8.9	76

61	One-dimensional SDS-polyacrylamide gel electrophoresis (1D SDS-PAGE). *Methods in Enzymology*, **2014**, 541, 151-9	1.7	84
60	Dom34 rescues ribosomes in 3Tuntranslated regions. *Cell*, **2014**, 156, 950-62	56.2	260
59	Dom34-Hbs1 mediated dissociation of inactive 80S ribosomes promotes restart of translation after stress. *EMBO Journal*, **2014**, 33, 265-76	13	54
58	In vitro synthesis of proteins in bacterial extracts. *Methods in Enzymology*, **2014**, 539, 3-15	1.7	3
57	Cryoelectron microscopic structures of eukaryotic translation termination complexes containing eRF1-eRF3 or eRF1-ABCE1. *Cell Reports*, **2014**, 8, 59-65	10.6	78
56	Distinct roles for release factor 1 and release factor 2 in translational quality control. *Journal of Biological Chemistry*, **2014**, 289, 17589-96	5.4	21
55	Coomassie blue staining. *Methods in Enzymology*, **2014**, 541, 161-7	1.7	46
54	RF3:GTP promotes rapid dissociation of the class 1 termination factor. *Rna*, **2014**, 20, 609-20	5.8	28
53	Polysome analysis of mammalian cells. *Methods in Enzymology*, **2013**, 530, 183-92	1.7	14
52	Eukaryotic release factor 3 is required for multiple turnovers of peptide release catalysis by eukaryotic release factor 1. *Journal of Biological Chemistry*, **2013**, 288, 29530-8	5.4	30
51	Regulation of Argonaute slicer activity by guide RNA 3Tend interactions with the N-terminal lobe. *Journal of Biological Chemistry*, **2013**, 288, 7829-7840	5.4	21
50	In vitro transcription from plasmid or PCR-amplified DNA. *Methods in Enzymology*, **2013**, 530, 101-14	1.7	21
49	Transformation of chemically competent E. coli. *Methods in Enzymology*, **2013**, 529, 329-36	1.7	59
48	mRNA surveillance is driven by translation. *FASEB Journal*, **2013**, 27, 325.3	0.9	
47	Structural basis of highly conserved ribosome recycling in eukaryotes and archaea. *Nature*, **2012**, 482, 501-6	50.4	179
46	Translation drives mRNA quality control. *Nature Structural and Molecular Biology*, **2012**, 19, 594-601	17.6	271
45	miRNA-mediated gene silencing by translational repression followed by mRNA deadenylation and decay. *Science*, **2012**, 336, 237-40	33.3	661
44	The elongation, termination, and recycling phases of translation in eukaryotes. *Cold Spring Harbor Perspectives in Biology*, **2012**, 4, a013706	10.2	261

43	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	11.5	195
42	Inhibition of eukaryotic translation elongation by the antitumor natural product Mycalamide B. *Rna*, **2011**, 17, 1578-88	5.8	20
41	A parsimonious model for gene regulation by miRNAs. *Science*, **2011**, 331, 550-3	33.3	409
40	Distinct response of yeast ribosomes to a miscoding event during translation. *Rna*, **2011**, 17, 925-32	5.8	29
39	Allosteric regulation of Argonaute proteins by miRNAs. *Nature Structural and Molecular Biology*, **2010**, 17, 144-50	17.6	46
38	Visualization of codon-dependent conformational rearrangements during translation termination. *Nature Structural and Molecular Biology*, **2010**, 17, 465-70	17.6	27
37	Inhibition of eukaryotic translation elongation by cycloheximide and lactimidomycin. *Nature Chemical Biology*, **2010**, 6, 209-217	11.7	559
36	Kinetic basis for global loss of fidelity arising from mismatches in the P-site codon:anticodon helix. *Rna*, **2010**, 16, 1980-9	5.8	15
35	Functional elucidation of a key contact between tRNA and the large ribosomal subunit rRNA during decoding. *Rna*, **2010**, 16, 2002-13	5.8	13
34	Dom34:Hbs1 promotes subunit dissociation and peptidyl-tRNA drop-off to initiate no-go decay. *Science*, **2010**, 330, 369-72	33.3	235
33	Hypusine-containing Protein eIF5A Promotes Translation Elongation. *FASEB Journal*, **2010**, 24, 79.2	0.9	
32	An expanded seed sequence definition accounts for full regulation of the hid 3TUTR by bantam miRNA. *Rna*, **2009**, 15, 814-22	5.8	28
31	Quality control by the ribosome following peptide bond formation. *Nature*, **2009**, 457, 161-6	50.4	167
30	Hypusine-containing protein eIF5A promotes translation elongation. *Nature*, **2009**, 459, 118-21	50.4	304
29	Fidelity at the molecular level: lessons from protein synthesis. *Cell*, **2009**, 136, 746-62	56.2	272
28	Analysis of Dom34 and its function in no-go decay. *Molecular Biology of the Cell*, **2009**, 20, 3025-32	3.5	88
27	Visualization of the hybrid state of tRNA binding promoted by spontaneous ratcheting of the ribosome. *Molecular Cell*, **2008**, 32, 190-7	17.6	203
26	Recognition of aminoacyl-tRNA: a common molecular mechanism revealed by cryo-EM. *EMBO Journal*, **2008**, 27, 3322-31	13	44

25	Peptide release on the ribosome: mechanism and implications for translational control. *Annual Review of Microbiology*, **2008**, 62, 353-73	17.5	74
24	Peptide release on the ribosome depends critically on the 2TOH of the peptidyl-tRNA substrate. *Rna*, **2008**, 14, 1526-31	5.8	39
23	Mechanistic studies of ribosome function and potential implications for translational control. *FASEB Journal*, **2008**, 22, 398.2	0.9	
22	Mutational analysis reveals two independent molecular requirements during transfer RNA selection on the ribosome. *Nature Structural and Molecular Biology*, **2007**, 14, 30-6	17.6	48
21	Stop codon recognition by release factors induces structural rearrangement of the ribosomal decoding center that is productive for peptide release. *Molecular Cell*, **2007**, 28, 533-43	17.6	60
20	Mutational analysis of S12 protein and implications for the accuracy of decoding by the ribosome. *Journal of Molecular Biology*, **2007**, 374, 1065-76	6.5	97
19	Two distinct components of release factor function uncovered by nucleophile partitioning analysis. *Molecular Cell*, **2007**, 28, 458-67	17.6	79
18	Conformational flexibility required for class I release factor function. *FASEB Journal*, **2007**, 21, A647	0.9	
17	The interaction between C75 of tRNA and the A loop of the ribosome stimulates peptidyl transferase activity. *Rna*, **2006**, 12, 33-9	5.8	80
16	Affinity purification of in vivo-assembled ribosomes for in vitro biochemical analysis. *Methods*, **2005**, 36, 305-12	4.6	57
15	An active role for tRNA in decoding beyond codon:anticodon pairing. *Science*, **2005**, 308, 1178-80	33.3	184
14	Substrate-assisted catalysis of peptide bond formation by the ribosome. *Nature Structural and Molecular Biology*, **2004**, 11, 1101-6	17.6	239
13	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, 589-99	56.2	278
12	The path to perdition is paved with protons. *Cell*, **2002**, 110, 665-8	56.2	33
11	Peptidyl transferase activity catalyzed by protein-free 23S ribosomal RNA remains elusive. *Rna*, **1999**, 5, 605-8	5.8	26
10	The ribosome revealed. *Nature Structural Biology*, **1999**, 6, 999-1003		7
9	Structure of a conserved RNA component of the peptidyl transferase centre. *Nature Structural Biology*, **1997**, 4, 775-8		34
8	A base pair between tRNA and 23S rRNA in the peptidyl transferase centre of the ribosome. *Nature*, **1995**, 377, 309-14	50.4	224

7	Nuclease-mediated depletion biases in ribosome footprint profiling libraries	2
6	Dynamic regulation of translation quality control associated with ribosome stalling	4
5	Molecular mechanism of translational stalling by inhibitory codon combinations and poly(A) tracts	3
4	GIGYF2 and 4EHP Inhibit Translation Initiation of Defective Messenger RNAs to Assist Ribosome-Associated Quality Control	4
3	Studies on the Structure and Function of Ribosomes by Combined Use of Chemical Probing and X-Ray Crystallography127-150	
2	Mechanisms that ensure speed and fidelity in eukaryotic translation termination	3
1	Genetic screens identify connections between ribosome recycling and nonsense mediated decay	1