

# Roy Parker

## List of Publications by Year in descending order

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Version: 2024-02-01

115  
papers

30,107  
citations

20759

60  
h-index

22102

113  
g-index

144  
all docs

144  
docs citations

144  
times ranked

34163  
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). <i>Autophagy</i> , 2016, 12, 1-222.	4.3	4,701
2	Formation and Maturation of Phase-Separated Liquid Droplets by RNA-Binding Proteins. <i>Molecular Cell</i> , 2015, 60, 208-219.	4.5	1,298
3	ATPase-Modulated Stress Granules Contain a Diverse Proteome and Substructure. <i>Cell</i> , 2016, 164, 487-498.	13.5	1,213
4	Eukaryotic Stress Granules: The Ins and Outs of Translation. <i>Molecular Cell</i> , 2009, 36, 932-941.	4.5	1,206
5	Decapping and Decay of Messenger RNA Occur in Cytoplasmic Processing Bodies. <i>Science</i> , 2003, 300, 805-808.	6.0	1,168
6	Principles and Properties of Stress Granules. <i>Trends in Cell Biology</i> , 2016, 26, 668-679.	3.6	1,161
7	P Bodies and the Control of mRNA Translation and Degradation. <i>Molecular Cell</i> , 2007, 25, 635-646.	4.5	1,137
8	Circular RNAs: diversity of form and function. <i>Rna</i> , 2014, 20, 1829-1842.	1.6	1,022
9	Compositional Control of Phase-Separated Cellular Bodies. <i>Cell</i> , 2016, 166, 651-663.	13.5	945
10	Test sensitivity is secondary to frequency and turnaround time for COVID-19 screening. <i>Science Advances</i> , 2021, 7, .	4.7	889
11	Movement of Eukaryotic mRNAs Between Polysomes and Cytoplasmic Processing Bodies. <i>Science</i> , 2005, 310, 486-489.	6.0	677
12	Rethinking Covid-19 Test Sensitivity – A Strategy for Containment. <i>New England Journal of Medicine</i> , 2020, 383, e120.	13.9	648
13	P-Bodies and Stress Granules: Possible Roles in the Control of Translation and mRNA Degradation. <i>Cold Spring Harbor Perspectives in Biology</i> , 2012, 4, a012286-a012286.	2.3	627
14	Endonucleolytic cleavage of eukaryotic mRNAs with stalls in translation elongation. <i>Nature</i> , 2006, 440, 561-564.	13.7	614
15	Eukaryotic Stress Granules Are Cleared by Autophagy and Cdc48/VCP Function. <i>Cell</i> , 2013, 153, 1461-1474.	13.5	600
16	Distinct stages in stress granule assembly and disassembly. <i>ELife</i> , 2016, 5, .	2.8	593
17	Processing bodies require RNA for assembly and contain nontranslating mRNAs. <i>Rna</i> , 2005, 11, 371-382.	1.6	583
18	The Stress Granule Transcriptome Reveals Principles of mRNA Accumulation in Stress Granules. <i>Molecular Cell</i> , 2017, 68, 808-820.e5.	4.5	580

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19	General Translational Repression by Activators of mRNA Decapping. <i>Cell</i> , 2005, 122, 875-886.	13.5	555
20	Altered Ribostasis: RNA-Protein Granules in Degenerative Disorders. <i>Cell</i> , 2013, 154, 727-736.	13.5	543
21	P bodies promote stress granule assembly in <i>Saccharomyces cerevisiae</i> . <i>Journal of Cell Biology</i> , 2008, 183, 441-455.	2.3	455
22	Edc3p and a glutamine/asparagine-rich domain of Lsm4p function in processing body assembly in <i>Saccharomyces cerevisiae</i> . <i>Journal of Cell Biology</i> , 2007, 179, 437-449.	2.3	411
23	RNA self-assembly contributes to stress granule formation and defining the stress granule transcriptome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2734-2739.	3.3	402
24	Emerging Roles for Intermolecular RNA-RNA Interactions in RNP Assemblies. <i>Cell</i> , 2018, 174, 791-802.	13.5	317
25	An essential component of the decapping enzyme required for normal rates of mRNA turnover. <i>Nature</i> , 1996, 382, 642-646.	13.7	316
26	Quality control of mRNA 3'-end processing is linked to the nuclear exosome. <i>Nature</i> , 2001, 413, 538-542.	13.7	312
27	Principles and Properties of Eukaryotic mRNPs. <i>Molecular Cell</i> , 2014, 54, 547-558.	4.5	309
28	Circular RNAs Co-Precipitate with Extracellular Vesicles: A Possible Mechanism for circRNA Clearance. <i>PLoS ONE</i> , 2016, 11, e0148407.	1.1	308
29	The DEAD box helicase, Dhh1p, functions in mRNA decapping and interacts with both the decapping and deadenylase complexes. <i>Rna</i> , 2001, 7, 1717-1727.	1.6	300
30	Targeting of Aberrant mRNAs to Cytoplasmic Processing Bodies. <i>Cell</i> , 2006, 125, 1095-1109.	13.5	260
31	Intrinsically Disordered Regions Can Contribute Promiscuous Interactions to RNP Granule Assembly. <i>Cell Reports</i> , 2018, 22, 1401-1412.	2.9	256
32	An improved MS2 system for accurate reporting of the mRNA life cycle. <i>Nature Methods</i> , 2018, 15, 81-89.	9.0	252
33	Analysis of P-Body Assembly in <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2007, 18, 2274-2287.	0.9	210
34	Modulation of RNA Condensation by the DEAD-Box Protein eIF4A. <i>Cell</i> , 2020, 180, 411-426.e16.	13.5	189
35	Multiple Modes of Protein-Protein Interactions Promote RNP Granule Assembly. <i>Journal of Molecular Biology</i> , 2018, 430, 4636-4649.	2.0	179
36	Endoplasmic reticulum contact sites regulate the dynamics of membraneless organelles. <i>Science</i> , 2020, 367, .	6.0	170

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37	Multicolour single-molecule tracking of mRNA interactions with RNP granules. <i>Nature Cell Biology</i> , 2019, 21, 162-168.	4.6	168
38	TDP-43 and RNA form amyloid-like myo-granules in regenerating muscle. <i>Nature</i> , 2018, 563, 508-513.	13.7	163
39	Mechanisms and Regulation of RNA Condensation in RNP Granule Formation. <i>Trends in Biochemical Sciences</i> , 2020, 45, 764-778.	3.7	132
40	Structural Basis of Dcp2 Recognition and Activation by Dcp1. <i>Molecular Cell</i> , 2008, 29, 337-349.	4.5	130
41	Just 2% of SARS-CoV-2 <sup>+</sup> positive individuals carry 90% of the virus circulating in communities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	124
42	MS2 coat proteins bound to yeast mRNAs block 5' to 3' degradation and trap mRNA decay products: implications for the localization of mRNAs by MS2-MCP system. <i>Rna</i> , 2015, 21, 1393-1395.	1.6	119
43	Identification of NAD <sup>+</sup> capped mRNAs in <i>Saccharomyces cerevisiae</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 480-485.	3.3	118
44	A multicolor riboswitch-based platform for imaging of RNA in live mammalian cells. <i>Nature Chemical Biology</i> , 2018, 14, 964-971.	3.9	114
45	Tau aggregates are RNA-protein assemblies that mislocalize multiple nuclear speckle components. <i>Neuron</i> , 2021, 109, 1675-1691.e9.	3.8	111
46	Differential effects of Ydj1 and Sis1 on Hsp70-mediated clearance of stress granules in <i>Saccharomyces cerevisiae</i> . <i>Rna</i> , 2015, 21, 1660-1671.	1.6	110
47	mRNP architecture in translating and stress conditions reveals an ordered pathway of mRNP compaction. <i>Journal of Cell Biology</i> , 2018, 217, 4124-4140.	2.3	110
48	FMRP and Ataxin-2 function together in long-term olfactory habituation and neuronal translational control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E99-E108.	3.3	108
49	No-go decay: a quality control mechanism for RNA in translation. <i>Wiley Interdisciplinary Reviews RNA</i> , 2010, 1, 132-141.	3.2	104
50	mRNA surveillance in eukaryotes: Kinetic proofreading of proper translation termination as assessed by mRNP domain organization?. <i>Rna</i> , 1999, 5, 711-719.	1.6	100
51	RNP-Granule Assembly via Ataxin-2 Disordered Domains Is Required for Long-Term Memory and Neurodegeneration. <i>Neuron</i> , 2018, 98, 754-766.e4.	3.8	98
52	Inhibition of telomerase RNA decay rescues telomerase deficiency caused by dyskerin or PARN defects. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 286-292.	3.6	93
53	RNase L Reprograms Translation by Widespread mRNA Turnover Escaped by Antiviral mRNAs. <i>Molecular Cell</i> , 2019, 75, 1203-1217.e5.	4.5	93
54	A quantitative inventory of yeast P body proteins reveals principles of composition and specificity. <i>ELife</i> , 2020, 9, .	2.8	90

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55	The Yeast Cytoplasmic Lsm1/Pat1p Complex Protects mRNA 3' Termini From Partial Degradation. <i>Genetics</i> , 2001, 158, 1445-1455.	1.2	89
56	Isolation of yeast and mammalian stress granule cores. <i>Methods</i> , 2017, 126, 12-17.	1.9	88
57	The Discovery and Analysis of P Bodies. <i>Advances in Experimental Medicine and Biology</i> , 2013, 768, 23-43.	0.8	87
58	UBAP2L Forms Distinct Cores that Act in Nucleating Stress Granules Upstream of G3BP1. <i>Current Biology</i> , 2020, 30, 698-707.e6.	1.8	85
59	Numerous interactions act redundantly to assemble a tunable size of P bodies in <i>Saccharomyces cerevisiae</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9569-E9578.	3.3	77
60	Defects in the mRNA export factors Rat7p, Gle1p, Mex67p, and Rat8p cause hyperadenylation during 3'-end formation of nascent transcripts. <i>Rna</i> , 2001, 7, 753-764.	1.6	76
61	Crystal Structure of Human Edc3 and Its Functional Implications. <i>Molecular and Cellular Biology</i> , 2008, 28, 5965-5976.	1.1	69
62	RNP Granule Formation: Lessons from P-Bodies and Stress Granules. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2019, 84, 203-215.	2.0	67
63	SARS-CoV-2 infection triggers widespread host mRNA decay leading to an mRNA export block. <i>Rna</i> , 2021, 27, 1318-1329.	1.6	66
64	Analysis of the association between codon optimality and mRNA stability in <i>Schizosaccharomyces pombe</i> . <i>BMC Genomics</i> , 2016, 17, 895.	1.2	65
65	Transcriptome-Wide Comparison of Stress Granules and P-Bodies Reveals that Translation Plays a Major Role in RNA Partitioning. <i>Molecular and Cellular Biology</i> , 2019, 39, .	1.1	63
66	The landscape of eukaryotic mRNPs. <i>Rna</i> , 2020, 26, 229-239.	1.6	61
67	Hypo- and Hyper-Assembly Diseases of RNA-Protein Complexes. <i>Trends in Molecular Medicine</i> , 2016, 22, 615-628.	3.5	59
68	Coupling of Ribostasis and Proteostasis: Hsp70 Proteins in mRNA Metabolism. <i>Trends in Biochemical Sciences</i> , 2015, 40, 552-559.	3.7	58
69	RNA partitioning into stress granules is based on the summation of multiple interactions. <i>Rna</i> , 2021, 27, 174-189.	1.6	58
70	Identification and Analysis of the Interaction between Edc3 and Dcp2 in <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 2010, 30, 1446-1456.	1.1	57
71	Sbp1p Affects Translational Repression and Decapping in <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 2006, 26, 5120-5130.	1.1	56
72	The RNase PARN Controls the Levels of Specific miRNAs that Contribute to p53 Regulation. <i>Molecular Cell</i> , 2019, 73, 1204-1216.e4.	4.5	54

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73	Ubiquitous accumulation of 3' mRNA decay fragments in <i>Saccharomyces cerevisiae</i> mRNAs with chromosomally integrated MS2 arrays. <i>Rna</i> , 2016, 22, 657-659.	1.6	52
74	Neuronal Regulation of eIF2 $\pm$ Function in Health and Neurological Disorders. <i>Trends in Molecular Medicine</i> , 2018, 24, 575-589.	3.5	52
75	RNase L promotes the formation of unique ribonucleoprotein granules distinct from stress granules. <i>Journal of Biological Chemistry</i> , 2020, 295, 1426-1438.	1.6	47
76	Quality control of assembly-defective U1 snRNAs by decapping and 5' to 3' exonucleolytic digestion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3277-86.	3.3	46
77	Lsm2 and Lsm3 bridge the interaction of the Lsm1-7 complex with Pat1 for decapping activation. <i>Cell Research</i> , 2014, 24, 233-246.	5.7	43
78	Isolation of mammalian stress granule cores for RNA-Seq analysis. <i>Methods</i> , 2018, 137, 49-54.	1.9	43
79	Norovirus infection results in eIF2 $\pm$ independent host translation shut-off and remodels the G3BP1 interactome evading stress granule formation. <i>PLoS Pathogens</i> , 2020, 16, e1008250.	2.1	41
80	Principles of Stress Granules Revealed by Imaging Approaches. <i>Cold Spring Harbor Perspectives in Biology</i> , 2019, 11, a033068.	2.3	40
81	Coupling of translation quality control and mRNA targeting to stress granules. <i>Journal of Cell Biology</i> , 2020, 219, .	2.3	40
82	EIF2B2 mutations in vanishing white matter disease hypersuppress translation and delay recovery during the integrated stress response. <i>Rna</i> , 2018, 24, 841-852.	1.6	38
83	High-resolution within-sewer SARS-CoV-2 surveillance facilitates informed intervention. <i>Water Research</i> , 2021, 204, 117613.	5.3	38
84	Saliva TwoStep for rapid detection of asymptomatic SARS-CoV-2 carriers. <i>ELife</i> , 2021, 10, .	2.8	37
85	Arginine methylation promotes translation repression activity of eIF4G-binding protein, Scd6. <i>Nucleic Acids Research</i> , 2016, 44, gkw762.	6.5	35
86	PARN Modulates Y RNA Stability and Its 3'-End Formation. <i>Molecular and Cellular Biology</i> , 2017, 37, .	1.1	34
87	Higher Viral Load Drives Infrequent Severe Acute Respiratory Syndrome Coronavirus 2 Transmission Between Asymptomatic Residence Hall Roommates. <i>Journal of Infectious Diseases</i> , 2021, 224, 1316-1324.	1.9	29
88	Are stress granules the RNA analogs of misfolded protein aggregates?. <i>Rna</i> , 2022, 28, 67-75.	1.6	29
89	RNA is required for the integrity of multiple nuclear and cytoplasmic membraneless RNP granules. <i>EMBO Journal</i> , 2022, 41, e110137.	3.5	29
90	The link between adjacent codon pairs and mRNA stability. <i>BMC Genomics</i> , 2017, 18, 364.	1.2	28

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91	Posttranscriptional modulation of TERC by PAPD5 inhibition rescues hematopoietic development in dyskeratosis congenita. <i>Blood</i> , 2019, 133, 1308-1312.	0.6	28
92	Limited effects of m6A modification on mRNA partitioning into stress granules. <i>Nature Communications</i> , 2022, 13, .	5.8	28
93	Chemical inhibition of PAPD5/7 rescues telomerase function and hematopoiesis in dyskeratosis congenita. <i>Blood Advances</i> , 2020, 4, 2717-2722.	2.5	27
94	Analysis of Double-Stranded RNA from Microbial Communities Identifies Double-Stranded RNA Virus-like Elements. <i>Cell Reports</i> , 2014, 7, 898-906.	2.9	23
95	dsRNA-Seq: Identification of Viral Infection by Purifying and Sequencing dsRNA. <i>Viruses</i> , 2019, 11, 943.	1.5	23
96	15-Deoxy- $\Delta^{12,14}$ -prostaglandin J2 promotes phosphorylation of eukaryotic initiation factor 2 $\alpha$ and activates the integrated stress response. <i>Journal of Biological Chemistry</i> , 2019, 294, 6344-6352.	1.6	21
97	Modifications on Translation Initiation. <i>Cell</i> , 2015, 163, 796-798.	13.5	20
98	Analysis of eIF2B bodies and their relationships with stress granules and P-bodies. <i>Scientific Reports</i> , 2018, 8, 12264.	1.6	20
99	Post-Transcriptional Regulation in Skeletal Muscle Development, Repair, and Disease. <i>Trends in Molecular Medicine</i> , 2021, 27, 469-481.	3.5	20
100	Codon optimality and mRNA decay. <i>Cell Research</i> , 2016, 26, 1269-1270.	5.7	18
101	RNase L limits host and viral protein synthesis via inhibition of mRNA export. <i>Science Advances</i> , 2021, 7, .	4.7	18
102	Quantitative proteomics identifies proteins that resist translational repression and become dysregulated in ALS-FUS. <i>Human Molecular Genetics</i> , 2019, 28, 2143-2160.	1.4	17
103	The Tau of Nuclear-Cytoplasmic Transport. <i>Neuron</i> , 2018, 99, 869-871.	3.8	13
104	Modeling the effectiveness of olfactory testing to limit SARS-CoV-2 transmission. <i>Nature Communications</i> , 2021, 12, 3664.	5.8	13
105	ADAR1 limits stress granule formation through both translation-dependent and translation-independent mechanisms. <i>Journal of Cell Science</i> , 2021, 134, .	1.2	13
106	Could SARS-CoV-2 cause tauopathy?. <i>Lancet Neurology</i> , The, 2021, 20, 506.	4.9	12
107	Defects in THO/TREX-2 function cause accumulation of novel cytoplasmic mRNP granules that can be cleared by autophagy. <i>Rna</i> , 2016, 22, 1200-1214.	1.6	10
108	mRNA Decapping in Yeast Requires Dissociation of the Cap Binding Protein, Eukaryotic Translation Initiation Factor 4E. <i>Molecular and Cellular Biology</i> , 2000, 20, 7933-7942.	1.1	10

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109	SARS-CoV-2 transmission and impacts of unvaccinated-only screening in populations of mixed vaccination status. <i>Nature Communications</i> , 2022, 13, 2777.	5.8	8
110	RNA-binding proteins direct myogenic cell fate decisions. <i>ELife</i> , 0, 11, .	2.8	7
111	Myo-granules Connect Physiology and Pathophysiology. <i>Journal of Experimental Neuroscience</i> , 2019, 13, 117906951984215.	2.3	6
112	TDP43 ribonucleoprotein granules: physiologic function to pathologic aggregates. <i>RNA Biology</i> , 2021, 18, 128-138.	1.5	5
113	Novel stress granules-like structures are induced via a paracrine mechanism during viral infection. <i>Journal of Cell Science</i> , 2022, , .	1.2	5
114	Identification of Endogenous mRNA-Binding Proteins in Yeast Using Crosslinking and PolyA Enrichment. <i>Methods in Molecular Biology</i> , 2016, 1421, 153-163.	0.4	1
115	Fragile X Mental Retardation Protein and the Ribosome. <i>Molecular Cell</i> , 2014, 54, 330-332.	4.5	0