Roy Parker

List of Publications by Year
in descending order

115 papers	30,107 citations	20817 60 h-index	22166 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). Autophagy, 2016, 12, 1-222.	9.1	4,701
2	Formation and Maturation of Phase-Separated Liquid Droplets by RNA-Binding Proteins. Molecular Cell, 2015, 60, 208-219.	9.7	1,298
3	ATPase-Modulated Stress Granules Contain a Diverse Proteome and Substructure. Cell, 2016, 164, 487-498.	28.9	1,213
4	Eukaryotic Stress Granules: The Ins and Outs of Translation. Molecular Cell, 2009, 36, 932-941.	9.7	1,206
5	Decapping and Decay of Messenger RNA Occur in Cytoplasmic Processing Bodies. Science, 2003, 300, 805-808.	12.6	1,168
6	Principles and Properties of Stress Granules. Trends in Cell Biology, 2016, 26, 668-679.	7.9	1,161
7	P Bodies and the Control of mRNA Translation and Degradation. Molecular Cell, 2007, 25, 635-646.	9.7	1,137
8	Circular RNAs: diversity of form and function. Rna, 2014, 20, 1829-1842.	3.5	1,022
9	Compositional Control of Phase-Separated Cellular Bodies. Cell, 2016, 166, 651-663.	28.9	945
10	Test sensitivity is secondary to frequency and turnaround time for COVID-19 screening. Science Advances, 2021, 7, .	10.3	889
11	Movement of Eukaryotic mRNAs Between Polysomes and Cytoplasmic Processing Bodies. Science, 2005, 310, 486-489.	12.6	677
12	Rethinking Covid-19 Test Sensitivity â€" A Strategy for Containment. New England Journal of Medicine, 2020, 383, e120.	27.0	648
13	P-Bodies and Stress Granules: Possible Roles in the Control of Translation and mRNA Degradation. Cold Spring Harbor Perspectives in Biology, 2012, 4, a012286-a012286.	5.5	627
14	Endonucleolytic cleavage of eukaryotic mRNAs with stalls in translation elongation. Nature, 2006, 440, 561-564.	27.8	614
15	Eukaryotic Stress Granules Are Cleared by Autophagy and Cdc48/VCP Function. Cell, 2013, 153, 1461-1474.	28.9	600
16	Distinct stages in stress granule assembly and disassembly. ELife, 2016, 5, .	6.0	593
17	Processing bodies require RNA for assembly and contain nontranslating mRNAs. Rna, 2005, 11, 371-382.	3.5	583
18	The Stress Granule Transcriptome Reveals Principles of mRNA Accumulation in Stress Granules. Molecular Cell, 2017, 68, 808-820.e5.	9.7	580

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19	General Translational Repression by Activators of mRNA Decapping. Cell, 2005, 122, 875-886.	28.9	555
20	Altered Ribostasis: RNA-Protein Granules in Degenerative Disorders. Cell, 2013, 154, 727-736.	28.9	543
21	P bodies promote stress granule assembly in <i>Saccharomyces cerevisiae </i>. Journal of Cell Biology, 2008, 183, 441-455.	5.2	455
22	Edc3p and a glutamine/asparagine-rich domain of Lsm4p function in processing body assembly in <i>Saccharomyces cerevisiae </i>. Journal of Cell Biology, 2007, 179, 437-449.	5.2	411
23	RNA self-assembly contributes to stress granule formation and defining the stress granule transcriptome. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2734-2739.	7.1	402
24	Emerging Roles for Intermolecular RNA-RNA Interactions in RNP Assemblies. Cell, 2018, 174, 791-802.	28.9	317
25	An essential component of the decapping enzyme required for normal rates of mRNA turnover. Nature, 1996, 382, 642-646.	27.8	316
26	Quality control of mRNA 3â€²-end processing is linked to the nuclear exosome. Nature, 2001, 413, 538-542.	27.8	312
27	Principles and Properties of Eukaryotic mRNPs. Molecular Cell, 2014, 54, 547-558.	9.7	309
28	Circular RNAs Co-Precipitate with Extracellular Vesicles: A Possible Mechanism for circRNA Clearance. PLoS ONE, 2016, 11, e0148407.	2.5	308
29	The DEAD box helicase, Dhh1p, functions in mRNA decapping and interacts with both the decapping and deadenylase complexes. Rna, 2001, 7, 1717-1727.	3.5	300
30	Targeting of Aberrant mRNAs to Cytoplasmic Processing Bodies. Cell, 2006, 125, 1095-1109.	28.9	260
31	Intrinsically Disordered Regions Can Contribute Promiscuous Interactions to RNP Granule Assembly. Cell Reports, 2018, 22, 1401-1412.	6.4	256
32	An improved MS2 system for accurate reporting of the mRNA life cycle. Nature Methods, 2018, 15, 81-89.	19.0	252
33	Analysis of P-Body Assembly in Saccharomyces cerevisiae. Molecular Biology of the Cell, 2007, 18, 2274-2287.	2.1	210
34	Modulation of RNA Condensation by the DEAD-Box Protein eIF4A. Cell, 2020, 180, 411-426.e16.	28.9	189
35	Multiple Modes of Proteinâ€"Protein Interactions Promote RNP Granule Assembly. Journal of Molecular Biology, 2018, 430, 4636-4649.	4.2	179
36	Endoplasmic reticulum contact sites regulate the dynamics of membraneless organelles. Science, 2020, 367, .	12.6	170

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37	Multicolour single-molecule tracking of mRNA interactions with RNP granules. Nature Cell Biology, 2019, 21, 162-168.	10.3	168
38	TDP-43 and RNA form amyloid-like myo-granules in regenerating muscle. Nature, 2018, 563, 508-513.	27.8	163
39	Mechanisms and Regulation of RNA Condensation in RNP Granule Formation. Trends in Biochemical Sciences, 2020, 45, 764-778.	7.5	132
40	Structural Basis of Dcp2 Recognition and Activation by Dcp1. Molecular Cell, 2008, 29, 337-349.	9.7	130
41	Just 2% of SARS-CoV-2â^ˆ'positive individuals carry 90% of the virus circulating in communities. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	124
42	MS2 coat proteins bound to yeast mRNAs block 5â€² to 3â€² degradation and trap mRNA decay products: implications for the localization of mRNAs by MS2-MCP system. Rna, 2015, 21, 1393-1395.	3.5	119
43	Identification of NAD ⁺ capped mRNAs in <i>Saccharomyces cerevisiae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 480-485.	7.1	118
44	A multicolor riboswitch-based platform for imaging of RNA in live mammalian cells. Nature Chemical Biology, 2018, 14, 964-971.	8.0	114
45	Tau aggregates are RNA-protein assemblies that mislocalize multiple nuclear speckle components. Neuron, 2021, 109, 1675-1691.e9.	8.1	111
46	Differential effects of Ydj1 and Sis1 on Hsp70-mediated clearance of stress granules in <i>Saccharomyces cerevisiae</i>. Rna, 2015, 21, 1660-1671.	3.5	110
47	mRNP architecture in translating and stress conditions reveals an ordered pathway of mRNP compaction. Journal of Cell Biology, 2018, 217, 4124-4140.	5.2	110
48	FMRP and Ataxin-2 function together in long-term olfactory habituation and neuronal translational control. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E99-E108.	7.1	108
49	Noâ€go decay: a quality control mechanism for RNA in translation. Wiley Interdisciplinary Reviews RNA, 2010, 1, 132-141.	6.4	104
50	mRNA surveillance in eukaryotes: Kinetic proofreading of proper translation termination as assessed by mRNP domain organization?. Rna, 1999, 5, 711-719.	3.5	100
51	RNP-Granule Assembly via Ataxin-2 Disordered Domains Is Required for Long-Term Memory and Neurodegeneration. Neuron, 2018, 98, 754-766.e4.	8.1	98
52	Inhibition of telomerase RNA decay rescues telomerase deficiency caused by dyskerin or PARN defects. Nature Structural and Molecular Biology, 2016, 23, 286-292.	8.2	93
53	RNase L Reprograms Translation by Widespread mRNA Turnover Escaped by Antiviral mRNAs. Molecular Cell, 2019, 75, 1203-1217.e5.	9.7	93
54	A quantitative inventory of yeast P body proteins reveals principles of composition and specificity. ELife, 2020, 9, .	6.0	90

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55	The Yeast Cytoplasmic LsmI/Pat1p Complex Protects mRNA 3â€² Termini From Partial Degradation. Genetics, 2001, 158, 1445-1455.	2.9	89
56	Isolation of yeast and mammalian stress granule cores. Methods, 2017, 126, 12-17.	3.8	88
57	The Discovery and Analysis of P Bodies. Advances in Experimental Medicine and Biology, 2013, 768, 23-43.	1.6	87
58	UBAP2L Forms Distinct Cores that Act in Nucleating Stress Granules Upstream of G3BP1. Current Biology, 2020, 30, 698-707.e6.	3.9	85
59	Numerous interactions act redundantly to assemble a tunable size of P bodies in <i>Saccharomyces cerevisiae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9569-E9578.	7.1	77
60	Defects in the mRNA export factors Rat7p, Gle1p, Mex67p, and Rat8p cause hyperadenylation during 3â€²-end formation of nascent transcripts. Rna, 2001, 7, 753-764.	3.5	76
61	Crystal Structure of Human Edc3 and Its Functional Implications. Molecular and Cellular Biology, 2008, 28, 5965-5976.	2.3	69
62	RNP Granule Formation: Lessons from P-Bodies and Stress Granules. Cold Spring Harbor Symposia on Quantitative Biology, 2019, 84, 203-215.	1.1	67
63	SARS-CoV-2 infection triggers widespread host mRNA decay leading to an mRNA export block. Rna, 2021, 27, 1318-1329.	3.5	66
64	Analysis of the association between codon optimality and mRNA stability in Schizosaccharomyces pombe. BMC Genomics, 2016, 17, 895.	2.8	65
65	Transcriptome-Wide Comparison of Stress Granules and P-Bodies Reveals that Translation Plays a Major Role in RNA Partitioning. Molecular and Cellular Biology, 2019, 39, .	2.3	63
66	The landscape of eukaryotic mRNPs. Rna, 2020, 26, 229-239.	3.5	61
67	Hypo- and Hyper-Assembly Diseases of RNAâ€“Protein Complexes. Trends in Molecular Medicine, 2016, 22, 615-628.	6.7	59
68	Coupling of Ribostasis and Proteostasis: Hsp70 Proteins in mRNA Metabolism. Trends in Biochemical Sciences, 2015, 40, 552-559.	7.5	58
69	RNA partitioning into stress granules is based on the summation of multiple interactions. Rna, 2021, 27, 174-189.	3.5	58
70	Identification and Analysis of the Interaction between Edc3 and Dcp2 in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2010, 30, 1446-1456.	2.3	57
71	Sbp1p Affects Translational Repression and Decapping in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2006, 26, 5120-5130.	2.3	56
72	The RNase PARN Controls the Levels of Specific miRNAs that Contribute to p53 Regulation. Molecular Cell, 2019, 73, 1204-1216.e4.	9.7	54

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73	Ubiquitous accumulation of 3â€² mRNA decay fragments in <i>Saccharomyces cerevisiae</i> mRNAs with chromosomally integrated MS2 arrays. Rna, 2016, 22, 657-659.	3.5	52
74	Neuronal Regulation of eIF2Î± Function in Health and Neurological Disorders. Trends in Molecular Medicine, 2018, 24, 575-589.	6.7	52
75	RNase L promotes the formation of unique ribonucleoprotein granules distinct from stress granules. Journal of Biological Chemistry, 2020, 295, 1426-1438.	3.4	47
76	Quality control of assembly-defective U1 snRNAs by decapping and 5â€²-to-3â€² exonucleolytic digestion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3277-86.	7.1	46
77	Lsm2 and Lsm3 bridge the interaction of the Lsm1-7 complex with Pat1 for decapping activation. Cell Research, 2014, 24, 233-246.	12.0	43
78	Isolation of mammalian stress granule cores for RNA-Seq analysis. Methods, 2018, 137, 49-54.	3.8	43
79	Norovirus infection results in eIF2Î± independent host translation shut-off and remodels the G3BP1 interactome evading stress granule formation. PLoS Pathogens, 2020, 16, e1008250.	4.7	41
80	Principles of Stress Granules Revealed by Imaging Approaches. Cold Spring Harbor Perspectives in Biology, 2019, 11, a033068.	5.5	40
81	Coupling of translation quality control and mRNA targeting to stress granules. Journal of Cell Biology, 2020, 219, .	5.2	40
82	<i>EIF2B2</i> mutations in vanishing white matter disease hypersuppress translation and delay recovery during the integrated stress response. Rna, 2018, 24, 841-852.	3.5	38
83	High-resolution within-sewer SARS-CoV-2 surveillance facilitates informed intervention. Water Research, 2021, 204, 117613.	11.3	38
84	Saliva TwoStep for rapid detection of asymptomatic SARS-CoV-2 carriers. ELife, 2021, 10, .	6.0	37
85	Arginine methylation promotes translation repression activity of eIF4G-binding protein, Scd6. Nucleic Acids Research, 2016, 44, gkw762.	14.5	35
86	PARN Modulates Y RNA Stability and Its 3â€²-End Formation. Molecular and Cellular Biology, 2017, 37, .	2.3	34
87	Higher Viral Load Drives Infrequent Severe Acute Respiratory Syndrome Coronavirus 2 Transmission Between Asymptomatic Residence Hall Roommates. Journal of Infectious Diseases, 2021, 224, 1316-1324.	4.0	29
88	Are stress granules the RNA analogs of misfolded protein aggregates?. Rna, 2022, 28, 67-75.	3.5	29
89	RNA is required for the integrity of multiple nuclear and cytoplasmic membraneâ€less RNP granules. EMBO Journal, 2022, 41, e110137.	7.8	29
90	The link between adjacent codon pairs and mRNA stability. BMC Genomics, 2017, 18, 364.	2.8	28

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91	Posttranscriptional modulation of TERC by PAPD5 inhibition rescues hematopoietic development in dyskeratosis congenita. Blood, 2019, 133, 1308-1312.	1.4	28
92	Limited effects of m6A modification on mRNA partitioning into stress granules. Nature Communications, 2022, 13, .	12.8	28
93	Chemical inhibition of PAPD5/7 rescues telomerase function and hematopoiesis in dyskeratosis congenita. Blood Advances, 2020, 4, 2717-2722.	5.2	27
94	Analysis of Double-Stranded RNA from Microbial Communities Identifies Double-Stranded RNA Virus-like Elements. Cell Reports, 2014, 7, 898-906.	6.4	23
95	dsRNA-Seq: Identification of Viral Infection by Purifying and Sequencing dsRNA. Viruses, 2019, 11, 943.	3.3	23
96	15-Deoxy-Î"12,14-prostaglandin J2 promotes phosphorylation of eukaryotic initiation factor 2Î± and activates the integrated stress response. Journal of Biological Chemistry, 2019, 294, 6344-6352.	3.4	21
97	Modifications on Translation Initiation. Cell, 2015, 163, 796-798.	28.9	20
98	Analysis of eIF2B bodies and their relationships with stress granules and P-bodies. Scientific Reports, 2018, 8, 12264.	3.3	20
99	Post-Transcriptional Regulation in Skeletal Muscle Development, Repair, and Disease. Trends in Molecular Medicine, 2021, 27, 469-481.	6.7	20
100	Codon optimality and mRNA decay. Cell Research, 2016, 26, 1269-1270.	12.0	18
101	RNase L limits host and viral protein synthesis via inhibition of mRNA export. Science Advances, 2021, 7, .	10.3	18
102	Quantitative proteomics identifies proteins that resist translational repression and become dysregulated in ALS-FUS. Human Molecular Genetics, 2019, 28, 2143-2160.	2.9	17
103	The Tau of Nuclear-Cytoplasmic Transport. Neuron, 2018, 99, 869-871.	8.1	13
104	Modeling the effectiveness of olfactory testing to limit SARS-CoV-2 transmission. Nature Communications, 2021, 12, 3664.	12.8	13
105	ADAR1 limits stress granule formation through both translation-dependent and translation-independent mechanisms. Journal of Cell Science, 2021, 134, .	2.0	13
106	Could SARS-CoV-2 cause tauopathy?. Lancet Neurology, The, 2021, 20, 506.	10.2	12
107	Defects in THO/TREX-2 function cause accumulation of novel cytoplasmic mRNP granules that can be cleared by autophagy. Rna, 2016, 22, 1200-1214.	3.5	10
108	mRNA Decapping in Yeast Requires Dissociation of the Cap Binding Protein, Eukaryotic Translation Initiation Factor 4E. Molecular and Cellular Biology, 2000, 20, 7933-7942.	2.3	10

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109	SARS-CoV-2 transmission and impacts of unvaccinated-only screening in populations of mixed vaccination status. Nature Communications, 2022, 13, 2777.	12.8	8
110	RNA-binding proteins direct myogenic cell fate decisions. ELife, 0, 11, .	6.0	7
111	Myo-granules Connect Physiology and Pathophysiology. Journal of Experimental Neuroscience, 2019, 13, 117906951984215.	2.3	6
112	TDP43 ribonucleoprotein granules: physiologic function to pathologic aggregates. RNA Biology, 2021, 18, 128-138.	3.1	5
113	Novel stress granules-like structures are induced via a paracrine mechanism during viral infection. Journal of Cell Science, 2022, , .	2.0	5
114	Identification of Endogenous mRNA-Binding Proteins in Yeast Using Crosslinking and PolyA Enrichment. Methods in Molecular Biology, 2016, 1421, 153-163.	0.9	1
115	Fragile X Mental Retardation Protein and the Ribosome. Molecular Cell, 2014, 54, 330-332.	9.7	0