Agamemnon J Carpousis

List of Publications by Year
in descending order

48 papers	4,768 citations	101543 36 h-index	206112 48 g-index
52 all docs	52 docs citations	52 times ranked	2301 citing authors

#	Article	IF	Citations
1	A DEAD-box RNA helicase in the Escherichia coli RNA degradosome. Nature, 1996, 381, 169-172.	27.8	546
2	Copurification of E. coli RNAase E and PNPase: Evidence for a specific association between two enzymes important in RNA processing and degradation. Cell, 1994, 76, 889-900.	28.9	434
3	The RNA Degradosome of <i>Escherichia coli</i>: An mRNA-Degrading Machine Assembled on RNase E. Annual Review of Microbiology, 2007, 61, 71-87.	7.3	398
4	Cycling of ribonucleic acid polymerase to produce oligonucleotides during initiation in vitro at the lac UV5 promoter. Biochemistry, 1980, 19, 3245-3253.	2.5	299
5	Interaction of RNA polymerase with lacUV5 promoter DNA during mRNA initiation and elongation. Journal of Molecular Biology, 1985, 183, 165-177.	4.2	214
6	mRNA degradation: a tale of poly(A) and multiprotein machines. Trends in Genetics, 1999, 15, 24-28.	6.7	210
7	The RNase E of <i>Escherichia coli</i> is a membraneâ€binding protein. Molecular Microbiology, 2008, 70, 799-813.	2.5	180
8	Running rings around RNA: a superfamily of phosphate-dependent RNases. Trends in Biochemical Sciences, 2002, 27, 11-18.	7.5	145
9	The RNA degradosome and poly(A) polymerase of Escherichia coli are required in vivo for the degradation of small mRNA decay intermediates containing REP-stabilizers. Molecular Microbiology, 2003, 51, 777-790.	2.5	137
10	Chapter 3 Endonucleolytic Initiation of mRNA Decay in Escherichia coli. Progress in Molecular Biology and Translational Science, 2009, 85, 91-135.	1.7	137
11	Polyphosphate kinase is a component of the Escherichia coli RNA degradosome. Molecular Microbiology, 1997, 26, 387-398.	2.5	125
12	<scp>RNA</scp> degradosomes in bacteria and chloroplasts: classification, distribution and evolution of <scp>RN</scp>ase <scp>E</scp> homologs. Molecular Microbiology, 2015, 97, 1021-1135.	2.5	112
13	The RNase E of Escherichia coli has at least two binding sites for DEAD-box RNA helicases: functional replacement of RhlB by RhlE. Molecular Microbiology, 2004, 54, 1422-1430.	2.5	105
14	The RNA degradosome: life in the fast lane of adaptive molecular evolution. Trends in Biochemical Sciences, 2006, 31, 359-365.	7.5	104
15	Polyadenylation Promotes Degradation of 3â€²-Structured RNA by theEscherichia coli mRNA Degradosome in Vitro. Journal of Biological Chemistry, 1999, 274, 4009-4016.	3.4	97
16	Function in Escherichia coli of the non-catalytic part of RNase E: role in the degradation of ribosome-free mRNA. Molecular Microbiology, 2002, 45, 1231-1243.	2.5	95
17	Membrane Recognition and Dynamics of the RNA Degradosome. PLoS Genetics, 2015, 11, e1004961.	3.5	93
18	Poly(A) polymerase I of Escherichia coli: characterization of the catalytic domain, an RNA binding site and regions for the interaction with proteins involved in mRNA degradation. Molecular Microbiology, 1999, 32, 765-775.	2.5	87

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19	5â€² Nucleotide heterogeneity and altered initiation of transcription at mutant lac promoters. Journal of Molecular Biology, 1982, 157, 619-633.	4.2	83
20	The social fabric of the RNA degradosome. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2013, 1829, 514-522.	1.9	76
21	The K-loop, a general feature of the Pyrococcus C/D guide RNAs, is an RNA structural motif related to the K-turn. Nucleic Acids Research, 2005, 33, 6507-6514.	14.5	74
22	Productive and abortive initiation of transcription in vitro at the lac UV5 promoter. Biochemistry, 1980, 19, 5864-5869.	2.5	72
23	From conformational chaos to robust regulation: the structure and function of the multi-enzyme RNA degradosome. Quarterly Reviews of Biophysics, 2012, 45, 105-145.	5.7	71
24	Dual role of transcription and transcript stability in the regulation of gene expression in <i>Escherichia coli</i> cells cultured on glucose at different growth rates. Nucleic Acids Research, 2014, 42, 2460-2472.	14.5	71
25	Recognition and Cooperation Between the ATP-dependent RNA Helicase RhlB and Ribonuclease RNase E. Journal of Molecular Biology, 2007, 367, 113-132.	4.2	66
26	Evidence<i>in vivo</i>that the DEAD-box RNA helicase RhlB facilitates the degradation of ribosome-free mRNA by RNase E. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6913-6918.	7.1	65
27	Nucleolytic Inactivation and Degradation of the RNase III Processed pnp Message Encoding Polynucleotide Phosphorylase of Escherichia coli. Journal of Molecular Biology, 1994, 239, 439-454.	4.2	55
28	RNase II levels change according to the growth conditions: characterization of gmr, a new Escherichia coli gene involved in the modulation of RNase II. Molecular Microbiology, 2001, 39, 1550-1561.	2.5	51
29	Emergence of the Î²-CASP ribonucleases: Highly conserved and ubiquitous metallo-enzymes involved in messenger RNA maturation and degradation. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2013, 1829, 532-551.	1.9	48
30	Transcription and messenger RNA processing upstream of bacteriophage T4 gene 32. Molecular Genetics and Genomics, 1989, 219, 39-48.	2.4	45
31	Euryarchaeal Î²-CASP Proteins with Homology to Bacterial RNase J Have 5â€²- to 3â€²-Exoribonuclease Activity. Journal of Biological Chemistry, 2010, 285, 17574-17583.	3.4	45
32	The Bacillus subtilis Nucleotidyltransferase Is a tRNA CCA-Adding Enzyme. Journal of Bacteriology, 1998, 180, 6276-6282.	2.2	45
33	A tale of two mRNA degradation pathways mediated by RNase E. Molecular Microbiology, 2011, 82, 1305-1310.	2.5	44
34	RNase E in the Î³-Proteobacteria: conservation of intrinsically disordered noncatalytic region and molecular evolution of microdomains. Molecular Genetics and Genomics, 2015, 290, 847-862.	2.1	43
35	Archaeal Î²-CASP ribonucleases of the aCPSF1 family are orthologs of the eukaryal CPSF-73 factor. Nucleic Acids Research, 2013, 41, 1091-1103.	14.5	42
36	The Csr system regulates genome-wide mRNA stability and transcription and thus gene expression in Escherichia coli. Scientific Reports, 2016, 6, 25057.	3.3	42

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37	Characterization of the RNA Degradosome of<i>Pseudoalteromonas haloplanktis</i>: Conservation of the RNase E-RhlB Interaction in the Gammaproteobacteria. Journal of Bacteriology, 2010, 192, 5413-5423.	2.2	34
38	Detachment of the RNA degradosome from the inner membrane of <i>Escherichia coli</i> results in a global slowdown of mRNA degradation, proteolysis of RNase E and increased turnover of ribosomeâ€free transcripts. Molecular Microbiology, 2019, 111, 1715-1731.	2.5	34
39	Identification of CRISPR and riboswitch related RNAs among novel noncoding RNAs of the euryarchaeon Pyrococcus abyssi. BMC Genomics, 2011, 12, 312.	2.8	30
40	Escherichia coli RNA Degradosome. Methods in Enzymology, 2001, 342, 333-345.	1.0	23
41	Degradation of targeted mRNAs in Escherichia coli: regulation by a small antisense RNA. Genes and Development, 2003, 17, 2351-2355.	5.9	21
42	Ribosomal RNA degradation induced by the bacterial RNA polymerase inhibitor rifampicin. Rna, 2021, 27, 946-958.	3.5	16
43	The association between Hfq and RNase E in longâ€term nitrogenâ€starved <i>Escherichia coli</i>. Molecular Microbiology, 2022, 117, 54-66.	2.5	14
44	Chapter 4 Coâ€immunopurification of Multiprotein Complexes Containing RNAâ€Degrading Enzymes. Methods in Enzymology, 2008, 447, 65-82.	1.0	13
45	Polyribosome-Dependent Clustering of Membrane-Anchored RNA Degradosomes To Form Sites of mRNA Degradation in Escherichia coli. MBio, 2021, 12, e0193221.	4.1	8
46	Large-Scale Measurement of mRNA Degradation in Escherichia coli: To Delay or Not to Delay. Methods in Enzymology, 2018, 612, 47-66.	1.0	7
47	Chapter 10 Assaying DEADâ€box RNA Helicases and Their Role in mRNA Degradation in Escherichia coli. Methods in Enzymology, 2008, 447, 183-197.	1.0	5
48	mRNA Decay and RNA-Degrading Machines in Prokaryotes and Eukaryotes. , 2006, , 185-206.		0