Lynne E Maquat

List of Publications by Year
in descending order

108 papers	15,839 citations	19657 61 h-index	28297 105 g-index
173 all docs	173 docs citations	173 times ranked	16275 citing authors

#	Article	IF	Citations
1	lncRNAs transactivate STAU1-mediated mRNA decay by duplexing with 3â€² UTRs via Alu elements. Nature, 2011, 470, 284-288.	27.8	1,122
2	Nonsense-mediated mRNA decay: splicing, translation and mRNP dynamics. Nature Reviews Molecular Cell Biology, 2004, 5, 89-99.	37.0	1,070
3	A rule for termination-codon position within intron-containing genes: when nonsense affects RNA abundance. Trends in Biochemical Sciences, 1998, 23, 198-199.	7.5	999
4	Regulation of cytoplasmic mRNA decay. Nature Reviews Genetics, 2012, 13, 246-259.	16.3	542
5	Evidence for a Pioneer Round of mRNA Translation. Cell, 2001, 106, 607-617.	28.9	502
6	Quality control of eukaryotic mRNA: safeguarding cells from abnormal mRNA function. Genes and Development, 2007, 21, 1833-3856.	5.9	501
7	Quality and quantity control of gene expression by nonsense-mediated mRNA decay. Nature Reviews Molecular Cell Biology, 2019, 20, 406-420.	37.0	501
8	Mammalian Staufen1 Recruits Upf1 to Specific mRNA 3â€²UTRs so as to Elicit mRNA Decay. Cell, 2005, 120, 195-208.	28.9	438
9	Organizing Principles of Mammalian Nonsense-Mediated mRNA Decay. Annual Review of Genetics, 2013, 47, 139-165.	7.6	369
10	Mechanistic links between nonsense-mediated mRNA decay and pre-mRNA splicing in mammalian cells. Current Opinion in Cell Biology, 2005, 17, 309-315.	5.4	358
11	Nonsense-Mediated mRNA Decay in Mammalian Cells Involves Decapping, Deadenylating, and Exonucleolytic Activities. Molecular Cell, 2003, 12, 675-687.	9.7	322
12	Retrotransposons as regulators of gene expression. Science, 2016, 351, aac7247.	12.6	321
13	Quality Control of mRNA Function. Cell, 2001, 104, 173-176.	28.9	301
14	Intron function in the nonsense-mediated decay of Î²-globin mRNA: Indications that pre-mRNA splicing in the nucleus can influence mRNA translation in the cytoplasm. Rna, 1998, 4, 801-815.	3.5	279
15	Unstable Î²-globin mRNA in mRNA-deficient Î²0 thalassemia. Cell, 1981, 27, 543-553.	28.9	273
16	Nonsense-mediated mRNA decay in humans at a glance. Journal of Cell Science, 2016, 129, 461-7.	2.0	272
17	The multiple lives of NMD factors: balancing roles in gene and genome regulation. Nature Reviews Genetics, 2008, 9, 699-712.	16.3	261
18	At Least One Intron Is Required for the Nonsense-Mediated Decay of Triosephosphate Isomerase mRNA: a Possible Link between Nuclear Splicing and Cytoplasmic Translation. Molecular and Cellular Biology, 1998, 18, 5272-5283.	2.3	255

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19	Upf1 Phosphorylation Triggers Translational Repression during Nonsense-Mediated mRNA Decay. Cell, 2008, 133, 314-327.	28.9	251
20	Nonsense-mediated mRNA decay in mammals. Journal of Cell Science, 2005, 118, 1773-1776.	2.0	248
21	Leveraging Rules of Nonsense-Mediated mRNA Decay for Genome Engineering and Personalized Medicine. Cell, 2016, 165, 1319-1322.	28.9	243
22	The exon junction complex is detected on CBP80-bound but not eIF4E-bound mRNA in mammalian cells: dynamics of mRNP remodeling. EMBO Journal, 2002, 21, 3536-3545.	7.8	228
23	Identification and Characterization of Human Orthologues to Saccharomyces cerevisiae Upf2 Protein and Upf3 Protein (Caenorhabditis elegans SMG-4). Molecular and Cellular Biology, 2001, 21, 209-223.	2.3	226
24	Applying nonsense-mediated mRNA decay research to the clinic: progress and challenges. Trends in Molecular Medicine, 2006, 12, 306-316.	6.7	211
25	Selenium Deficiency Reduces the Abundance of mRNA for Se-Dependent Glutathione Peroxidase 1 by a UGA-Dependent Mechanism Likely To Be Nonsense Codon-Mediated Decay of Cytoplasmic mRNA. Molecular and Cellular Biology, 1998, 18, 2932-2939.	2.3	207
26	The mRNA Surveillance Protein hSMG-1 Functions in Genotoxic Stress Response Pathways in Mammalian Cells. Molecular Cell, 2004, 14, 585-598.	9.7	202
27	Quantitative microarray profiling provides evidence against widespread coupling of alternative splicing with nonsense-mediated mRNA decay to control gene expression. Genes and Development, 2006, 20, 153-158.	5.9	192
28	The Pioneer Round of Translation: Features and Functions. Cell, 2010, 142, 368-374.	28.9	192
29	A Yeast Model of FUS/TLS-Dependent Cytotoxicity. PLoS Biology, 2011, 9, e1001052.	5.6	191
30	Regulation of Multiple Core Spliceosomal Proteins by Alternative Splicing-Coupled Nonsense-Mediated mRNA Decay. Molecular and Cellular Biology, 2008, 28, 4320-4330.	2.3	183
31	Staufenâ€mediated <scp>mRNA</scp> decay. Wiley Interdisciplinary Reviews RNA, 2013, 4, 423-435.	6.4	175
32	Staufen1 regulates diverse classes of mammalian transcripts. EMBO Journal, 2007, 26, 2670-2681.	7.8	174
33	SMD and NMD are competitive pathways that contribute to myogenesis: effects on PAX3 and myogenin mRNAs. Genes and Development, 2009, 23, 54-66.	5.9	160
34	UPFront and center in RNA decay: UPF1 in nonsense-mediated mRNA decay and beyond. Rna, 2019, 25, 407-422.	3.5	152
35	A post-translational regulatory switch on UPF1 controls targeted mRNA degradation. Genes and Development, 2014, 28, 1900-1916.	5.9	148
36	Characterization of human Smg5/7a: A protein with similarities to Caenorhabditis elegans SMG5 and SMG7 that functions in the dephosphorylation of Upf1. Rna, 2003, 9, 77-87.	3.5	144

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37	Cloning of a Novel Phosphatidylinositol Kinase-related Kinase. Journal of Biological Chemistry, 2001, 276, 22709-22714.	3.4	138
38	CBP80 promotes interaction of Upf1 with Upf2 during nonsense-mediated mRNA decay in mammalian cells. Nature Structural and Molecular Biology, 2005, 12, 893-901.	8.2	130
39	In vitro analysis of the Escherichia coli RNA polymerase interaction with wild-type and mutant lactose promoters. Journal of Molecular Biology, 1978, 125, 467-490.	4.2	127
40	Nonsense-mediated mRNA decay (NMD) in animal embryogenesis: to die or not to die, that is the question. Current Opinion in Genetics and Development, 2011, 21, 422-430.	3.3	125
41	The pioneer translation initiation complex is functionally distinct from but structurally overlaps with the steady-state translation initiation complex. Genes and Development, 2004, 18, 745-754.	5.9	121
42	Nonsense-mediated mRNA Decay and Cancer. Current Opinion in Genetics and Development, 2018, 48, 44-50.	3.3	120
43	Evidence that phosphorylation of human Upf1 protein varies with intracellular location and is mediated by a wortmannin-sensitive and rapamycin-sensitive PI 3-kinase-related kinase signaling pathway. Rna, 2001, 7, 5-15.	3.5	120
44	Temporal and spatial characterization of nonsense-mediated mRNA decay. Genes and Development, 2013, 27, 541-551.	5.9	116
45	mRNA-deficint Î²Â°-thaladssemia results from a single nucleotide deletion. Nucleic Acids Research, 1982, 10, 5421-5427.	14.5	111
46	Rules that govern UPF1 binding to mRNA 3â€² UTRs. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3357-3362.	7.1	110
47	STAU1 binding 3â€² UTR IRAlus complements nuclear retention to protect cells from PKR-mediated translational shutdown. Genes and Development, 2013, 27, 1495-1510.	5.9	109
48	Control of myogenesis by rodent SINE-containing lncRNAs. Genes and Development, 2013, 27, 793-804.	5.9	109
49	Nonsense-mediated mRNA decay. Current Biology, 2002, 12, R196-R197.	3.9	107
50	UPF1 Association with the Cap-Binding Protein, CBP80, Promotes Nonsense-Mediated mRNA Decay at Two Distinct Steps. Molecular Cell, 2010, 39, 396-409.	9.7	106
51	Mammalian heat shock p70 and histone H4 transcripts, which derive from naturally intronless genes, are immune to nonsense-mediated decay. Rna, 2001, 7, 445-456.	3.5	100
52	Cellular RNA surveillance in health and disease. Science, 2019, 366, 822-827.	12.6	95
53	Evidence that Poly(A) Binding Protein C1 Binds Nuclear Pre-mRNA Poly(A) Tails. Molecular and Cellular Biology, 2006, 26, 3085-3097.	2.3	92
54	Re-capping the message. Trends in Biochemical Sciences, 2009, 34, 435-442.	7.5	87

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55	Remodeling of the pioneer translation initiation complex involves translation and the karyopherin importin Î². Genes and Development, 2009, 23, 2537-2550.	5.9	85
56	eIF4G is required for the pioneer round of translation in mammalian cells. Nature Structural and Molecular Biology, 2004, 11, 992-1000.	8.2	84
57	Tudor-SNâ€“mediated endonucleolytic decay of human cell microRNAs promotes G ₁ /S phase transition. Science, 2017, 356, 859-862.	12.6	77
58	Staufen2 functions in Staufen1-mediated mRNA decay by binding to itself and its paralog and promoting UPF1 helicase but not ATPase activity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 405-412.	7.1	71
59	Attenuation of nonsense-mediated mRNA decay facilitates the response to chemotherapeutics. Nature Communications, 2015, 6, 6632.	12.8	67
60	Efficiency of the Pioneer Round of Translation Affects the Cellular Site of Nonsense-Mediated mRNA Decay. Molecular Cell, 2008, 29, 255-262.	9.7	66
61	lac Promoter mutations located downstream from the transcription start site. Journal of Molecular Biology, 1980, 139, 537-549.	4.2	64
62	mRNAâ€“mRNA duplexes that autoelicit Staufen1-mediated mRNA decay. Nature Structural and Molecular Biology, 2013, 20, 1214-1220.	8.2	58
63	The Dharma of Nonsense-Mediated mRNA Decay in Mammalian Cells. Molecules and Cells, 2014, 37, 1-8.	2.6	55
64	NASty effects on fibrillin pre-mRNA splicing: another case of ESE does it, but proposals for translation-dependent splice site choice live on. Genes and Development, 2002, 16, 1743-1753.	5.9	53
65	Â-Globin mRNA decay in erythroid cells: UG site-preferred endonucleolytic cleavage that is augmented by a premature termination codon. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12741-12746.	7.1	53
66	Failsafe nonsense-mediated mRNA decay does not detectably target eIF4E-bound mRNA. Nature Structural and Molecular Biology, 2007, 14, 974-979.	8.2	53
67	Staufen1 dimerizes through a conserved motif and a degenerate dsRNA-binding domain to promote mRNA decay. Nature Structural and Molecular Biology, 2013, 20, 515-524.	8.2	51
68	Beyond Transcription: Roles of Transcription Factors in Pre-mRNA Splicing. Chemical Reviews, 2018, 118, 4339-4364.	47.7	50
69	Cap-binding protein 1-mediated and eukaryotic translation initiation factor 4E-mediated pioneer rounds of translation in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4258-4263.	7.1	47
70	mRNA surveillance in mammalian cells: The relationship between introns and translation termination. Rna, 2000, 6, 1-8.	3.5	43
71	The nuclear cap-binding complex as choreographer of gene transcription and pre-mRNA processing. Genes and Development, 2020, 34, 1113-1127.	5.9	41
72	MOLECULAR BIOLOGY: Skiing Toward Nonstop mRNA Decay. Science, 2002, 295, 2221-2222.	12.6	38

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73	Evidence for convergent evolution of SINE-directed Staufen-mediated mRNA decay. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 968-973.	7.1	37
74	Gene expression networks: competing mRNA decay pathways in mammalian cells. Biochemical Society Transactions, 2009, 37, 1287-1292.	3.4	36
75	Biochemical analysis of long non-coding RNA-containing ribonucleoprotein complexes. Methods, 2012, 58, 88-93.	3.8	36
76	UPF1 helicase promotes TSN-mediated miRNA decay. Genes and Development, 2017, 31, 1483-1493.	5.9	34
77	NMD-degradome sequencing reveals ribosome-bound intermediates with 3â€²-end non-templated nucleotides. Nature Structural and Molecular Biology, 2018, 25, 940-950.	8.2	32
78	A Î²Â°-thalassemic Î²-globin RNA that is labile in bone marrow cells is relatively stable in HeLa cells. Nucleic Acids Research, 1985, 13, 2855-2867.	14.5	28
79	â€œAluâ€strious long ncRNAs and their roles in shortening mRNA half-lives. Cell Cycle, 2011, 10, 1882-1883.	2.6	27
80	Evidence that selenium deficiency results in the cytoplasmic decay of GPx1 mRNA dependent on preâ€mRNA splicing proteins bound to the mRNA exonâ€exon junction. BioFactors, 2001, 14, 37-42.	5.4	25
81	Viral subversion of nonsense-mediated mRNA decay. Rna, 2020, 26, 1509-1518.	3.5	24
82	Loss of the fragile X syndrome protein FMRP results in misregulation of nonsense-mediated mRNA decay. Nature Cell Biology, 2021, 23, 40-48.	10.3	23
83	lac Promoter mutation Pr115 generates a new transcription initiation point. Journal of Molecular Biology, 1980, 139, 551-556.	4.2	20
84	NMD resulting from encephalomyocarditis virus IRESâ€directed translation initiation seems to be restricted to CBP80/20â€bound mRNA. EMBO Reports, 2008, 9, 446-451.	4.5	19
85	Transcriptional coactivator PGC-1Î± contains a novel CBP80-binding motif that orchestrates efficient target gene expression. Genes and Development, 2018, 32, 555-567.	5.9	18
86	Short interspersed nuclear element (SINE)-mediated post-transcriptional effects on human and mouse gene expression: SINE-UP for active duty. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190344.	4.0	18
87	Studying Nonsense-Mediated mRNA Decay in Mammalian Cells. Methods in Enzymology, 2008, 449, 177-201.	1.0	14
88	Noncoding RNAs: biology and applicationsâ€”a Keystone Symposia report. Annals of the New York Academy of Sciences, 2021, 1506, 118-141.	3.8	13
89	CARMing down the SINEs of anarchy: two paths to freedom from paraspeckle detention. Genes and Development, 2015, 29, 687-689.	5.9	10
90	Identifying Cellular Nonsense-Mediated mRNA Decay (NMD) Targets: Immunoprecipitation of Phosphorylated UPF1 Followed by RNA Sequencing (p-UPF1 RIPâ€™Seq). Methods in Molecular Biology, 2018, 1720, 175-186.	0.9	10

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91	NMD abnormalities during brain development in the Fmr1-knockout mouse model of fragile X syndrome. Genome Biology, 2021, 22, 317.	8.8	9
92	UPF1 Learns to Relax and Unwind. Molecular Cell, 2011, 41, 621-623.	9.7	8
93	3â€²READS + RIP defines differential Staufen1 binding to alternative 3â€²UTR isoforms and reveals structures and sequence motifs influencing binding and polysome association. Rna, 2020, 26, 1621-1636.	3.5	8
94	An enemy within: fly reconnaissance deploys an endonuclease to destroy nonsense-containing mRNA. Trends in Cell Biology, 2004, 14, 594-597.	7.9	7
95	A TRICK'n way to see the pioneer round of translation. Science, 2015, 347, 1316-1317.	12.6	7
96	NCBP3: A Multifaceted Adaptive Regulator of Gene Expression. Trends in Biochemical Sciences, 2021, 46, 87-96.	7.5	7
97	Distinct mechanisms obviate the potentially toxic effects of inverted-repeat Alu elements on cellular RNA metabolism. Nature Structural and Molecular Biology, 2017, 24, 496-498.	8.2	7
98	Defining nonsense-mediated mRNA decay intermediates in human cells. Methods, 2019, 155, 68-76.	3.8	5
99	Dodging two bullets with one dsRNA-binding protein. Cell Cycle, 2014, 13, 345-346.	2.6	4
100	Transcriptional Coactivator PGC-1Î± Binding to Newly Synthesized RNA via CBP80: A Nexus for Co- and Posttranscriptional Gene Regulation. Cold Spring Harbor Symposia on Quantitative Biology, 2019, 84, 47-54.	1.1	4
101	Telomeric RNAs as a novel player in telomeric integrity. F1000 Biology Reports, 2009, 1, 90.	4.0	4
102	Molecular autopsy provides evidence for widespread ribosome-phased mRNA fragmentation. Nature Structural and Molecular Biology, 2018, 25, 299-301.	8.2	3
103	Defective secretory-protein mRNAs take the RAPP. Trends in Biochemical Sciences, 2014, 39, 154-156.	7.5	2
104	Evaluating the susceptibility of AGO2-loaded microRNAs to degradation by nucleases in vitro. Methods, 2019, 152, 18-22.	3.8	1
105	Lessons from the functional characterization of lncRNAs: introduction to mammalian genome special issue. Mammalian Genome, 2022, , .	2.2	1
106	Mobile DNA: an evolving field. Mobile DNA, 2014, 5, 16.	3.6	0
107	mRNA decay in mammals. FASEB Journal, 2012, 26, 353.1.	0.5	0
108	Nonsenseâ€mediated mRNA decay and human disease: Genome guardian and executor. FASEB Journal, 2018, 32, 99.1.	0.5	0