Alan M Lambowitz

List of Publications by Year
in descending order

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109	papers
5,837	citations
101543 36	h-index
168389 53	g-index
121	all docs
121	docs citations
121	times ranked
5446	citing authors

#	Article	IF	Citations
1	Efficient and quantitative high-throughput tRNA sequencing. Nature Methods, 2015, 12, 835-837.	19.0	426
2	Mobile Group II Introns. Annual Review of Genetics, 2004, 38, 1-35.	7.6	421
3	Group II Introns: Mobile Ribozymes that Invade DNA. Cold Spring Harbor Perspectives in Biology, 2011, 3, a003616-a003616.	5.5	357
4	DMS-MaPseq for genome-wide or targeted RNA structure probing in vivo. Nature Methods, 2017, 14, 75-82.	19.0	309
5	Group I and group II introns.. FASEB Journal, 1993, 7, 15-24.	0.5	268
6	Broad role for YBX1 in defining the small noncoding RNA composition of exosomes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8987-E8995.	7.1	250
7	Rqc2p and 60 <i>S</i> ribosomal subunits mediate mRNA-independent elongation of nascent chains. Science, 2015, 347, 75-78.	12.6	245
8	Group II Introns Designed to Insert into Therapeutically Relevant DNA Target Sites in Human Cells. Science, 2000, 289, 452-457.	12.6	203
9	Group II introns as controllable gene targeting vectors for genetic manipulation of bacteria. Nature Biotechnology, 2001, 19, 1162-1167.	17.5	193
10	Thermostable group II intron reverse transcriptase fusion proteins and their use in cDNA synthesis and next-generation RNA sequencing. Rna, 2013, 19, 958-970.	3.5	175
11	Direct CRISPR spacer acquisition from RNA by a natural reverse transcriptaseâ€“Cas1 fusion protein. Science, 2016, 351, aad4234.	12.6	170
12	Efficient integration of an intron RNA into double-stranded DNA by reverse splicing. Nature, 1996, 381, 332-335.	27.8	165
13	Distinct mechanisms of microRNA sorting into cancer cell-derived extracellular vesicle subtypes. ELife, 2019, 8, .	6.0	164
14	RNA and Protein Catalysis in Group II Intron Splicing and Mobility Reactions Using Purified Components. Biochemistry, 1999, 38, 9069-9083.	2.5	144
15	Mitochondrial plasmids of neurospora: Integration into mitochondrial DNA and evidence for reverse transcription in mitochondria. Cell, 1986, 47, 505-516.	28.9	139
16	Characterization of a novel plasmid DNA found in mitochondria of N. crassa. Cell, 1981, 24, 443-452.	28.9	136
17	A tyrosyl-tRNA synthetase can function similarly to an RNA structure in the Tetrahymena ribozyme. Nature, 1994, 370, 147-150.	27.8	122
18	Mobile Bacterial Group II Introns at the Crux of Eukaryotic Evolution. Microbiology Spectrum, 2015, 3, MDNA3-0050-2014.	3.0	119

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19	A novel reverse transcriptase activity associated with mitochondrial plasmids of neurospora. Cell, 1988, 55, 693-704.	28.9	109
20	The mauriceville plasmid reverse transcriptase can initiate cDNA synthesis de novo and may be related to reverse transcriptase and DNA polymerase progenitor. Cell, 1993, 75, 1071-1081.	28.9	106
21	High-throughput sequencing of human plasma RNA by using thermostable group II intron reverse transcriptases. Rna, 2016, 22, 111-128.	3.5	101
22	Characterization of the C-Terminal DNA-binding/DNA Endonuclease Region of a Group II Intron-encoded Protein. Journal of Molecular Biology, 2002, 324, 933-951.	4.2	85
23	Domain structure and three-dimensional model of a group II intron-encoded reverse transcriptase. Rna, 2005, 11, 14-28.	3.5	85
24	RNA-seq of human reference RNA samples using a thermostable group II intron reverse transcriptase. Rna, 2016, 22, 597-613.	3.5	80
25	Broad and adaptable RNA structure recognition by the human interferon-induced tetratricopeptide repeat protein IFIT5. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12025-12030.	7.1	76
26	Biotechnological applications of mobile group II introns and their reverse transcriptases: gene targeting, RNA-seq, and non-coding RNA analysis. Mobile DNA, 2014, 5, 2.	3.6	66
27	Limitations of alignment-free tools in total RNA-seq quantification. BMC Genomics, 2018, 19, 510.	2.8	64
28	Structure of a Thermostable Group II Intron Reverse Transcriptase with Template-Primer and Its Functional and Evolutionary Implications. Molecular Cell, 2017, 68, 926-939.e4.	9.7	61
29	Simultaneous sequencing of coding and noncoding RNA reveals a human transcriptome dominated by a small number of highly expressed noncoding genes. Rna, 2018, 24, 950-965.	3.5	61
30	Improved TGIRT-seq methods for comprehensive transcriptome profiling with decreased adapter dimer formation and bias correction. Scientific Reports, 2019, 9, 7953.	3.3	56
31	On the Origin of Reverse Transcriptase-Using CRISPR-Cas Systems and Their Hyperdiverse, Enigmatic Spacer Repertoires. MBio, 2017, 8, .	4.1	52
32	Gene Targeting in Gram-Negative Bacteria by Use of a Mobile Group II Intron (â€œTargetronâ€) Expressed from a Broad-Host-Range Vector. Applied and Environmental Microbiology, 2007, 73, 2735-2743.	3.1	49
33	De novo and DNA primer-mediated initiation of cDNA synthesis by the mauriceville retroplasmid reverse transcriptase involve recognition of a 3â€² CCA sequence 1 1Edited by J. Karn. Journal of Molecular Biology, 1997, 271, 311-332.	4.2	47
34	The contribution of cellulosomal scaffoldins to cellulose hydrolysis by Clostridium thermocellum analyzed by using thermotargetrons. Biotechnology for Biofuels, 2014, 7, 80.	6.2	46
35	DUSP11 activity on triphosphorylated transcripts promotes Argonaute association with noncanonical viral microRNAs and regulates steady-state levels of cellular noncoding RNAs. Genes and Development, 2016, 30, 2076-2092.	5.9	46
36	Mechanisms Used for Genomic Proliferation by Thermophilic Group II Introns. PLoS Biology, 2010, 8, e1000391.	5.6	45

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37	Molecular insights into RNA and DNA helicase evolution from the determinants of specificity for a DEAD-box RNA helicase. ELife, 2014, 3, e04630.	6.0	33
38	Copy-out-Paste-in Transposition of IS911: A Major Transposition Pathway. , 0, , 591-607.		30
39	Facile single-stranded DNA sequencing of human plasma DNA via thermostable group II intron reverse transcriptase template switching. Scientific Reports, 2017, 7, 8421.	3.3	28
40	Group II Intron RNPs and Reverse Transcriptases: From Retroelements to Research Tools. Cold Spring Harbor Perspectives in Biology, 2019, 11, a032375.	5.5	26
41	The Influence of LINE-1 and SINE Retrotransposons on Mammalian Genomes. , 0, , 1165-1208.		25
42	A Reverse Transcriptase-Cas1 Fusion Protein Contains a Cas6 Domain Required for Both CRISPR RNA Biogenesis and RNA Spacer Acquisition. Molecular Cell, 2018, 72, 700-714.e8.	9.7	25
43	Genetic identification of potential RNA-binding regions in a group II intron-encoded reverse transcriptase. Rna, 2010, 16, 732-747.	3.5	24
44	BCDIN3D regulates tRNAHis 3â€™ fragment processing. PLoS Genetics, 2019, 15, e1008273.	3.5	24
45	An Overview of Tyrosine Site-specific Recombination: From an Flp Perspective. , 0, , 41-71.		24
46	The Retrohoming of Linear Group II Intron RNAs in Drosophila melanogaster Occurs by Both DNA Ligase 4â€“Dependent and â€“Independent Mechanisms. PLoS Genetics, 2012, 8, e1002534.	3.5	23
47	Identification of protein-protected mRNA fragments and structured excised intron RNAs in human plasma by TGIRT-seq peak calling. ELife, 2020, 9, .	6.0	20
48	Template-switching mechanism of a group II intron-encoded reverse transcriptase and its implications for biological function and RNA-Seq. Journal of Biological Chemistry, 2019, 294, 19764-19784.	3.4	18
49	The Tn<i>3</i>-family of Replicative Transposons. , 0, , 693-726.		14
50	Detection of expanded RNA repeats using thermostable group II intron reverse transcriptase. Nucleic Acids Research, 2018, 46, e1-e1.	14.5	14
51	A Highly Proliferative Group IIC Intron from Geobacillus stearothermophilus Reveals New Features of Group II Intron Mobility and Splicing. Journal of Molecular Biology, 2018, 430, 2760-2783.	4.2	14
52	Phage-encoded Serine Integrases and Other Large Serine Recombinases. , 0, , 253-272.		14
53	Tn7. , 0, , 647-667.		13
54	Structural basis for template switching by a group II intronâ€“encoded non-LTR-retroelement reverse transcriptase. Journal of Biological Chemistry, 2021, 297, 100971.	3.4	13

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55	Everyman's Guide to Bacterial Insertion Sequences. , 0, , 555-590.		12
56	Mobile Bacterial Group II Introns at the Crux of Eukaryotic Evolution. , 2015, , 1209-1236.		12
57	Evolution of RNA-Protein Interactions: Non-Specific Binding Led to RNA Splicing Activity of Fungal Mitochondrial Tyrosyl-tRNA Synthetases. PLoS Biology, 2014, 12, e1002028.	5.6	11
58	Mechanisms of DNA Transposition. , 0, , 529-553.		11
59	Retrohoming of a Mobile Group II Intron in Human Cells Suggests How Eukaryotes Limit Group II Intron Proliferation. PLoS Genetics, 2015, 11, e1005422.	3.5	11
60	Mammalian Endogenous Retroviruses. , 2015, , 1079-1100.		10
61	<i>Helitrons</i>, the Eukaryotic Rolling-circle Transposable Elements. , 0, , 891-924.		8
62	Diversity-generating Retroelements in Phage and Bacterial Genomes. , 0, , 1237-1252.		8
63	Cre Recombinase. , 0, , 119-138.		7
64	The Integron: Adaptation On Demand. , 0, , 139-161.		7
65	piggyBac Transposony. , 2015, , 873-890.		6
66	P Transposable Elements in <i>Drosophila</i> and other Eukaryotic Organisms. , 0, , 727-752.		6
67	A Moveable Feast: An Introduction to Mobile DNA. , 0, , 1-39.		6
68	Transposable Phage Mu. , 0, , 669-691.		6
69	Tyrosine Recombinase Retrotransposons and Transposons. , 0, , 1271-1291.		5
70	The IS200/IS605Family and â€œPeel and Pasteâ€•Single-strand Transposition Mechanism. , 2015, , 609-630.		5
71	The Serine Recombinases. , 0, , 73-89.		5
72	Ty3, a Position-specific Retrotransposon in Budding Yeast. , 0, , 965-996.		5

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73	Adeno-associated Virus as a Mammalian DNA Vector. , 0, , 827-849.		4
74	Integration, Regulation, and Long-Term Stability of R2 Retrotransposons. , 2015, , 1125-1146.		4
75	vlsAntigenic Variation Systems of Lyme DiseaseBorrelia: Eluding Host Immunity through both Random, Segmental Gene Conversion and Framework Heterogeneity. , 2015, , 471-489.		4
76	V(D)J Recombination: Mechanism, Errors, and Fidelity. , 0, , 311-324.		4
77	Reverse Transcription of Retroviruses and LTR Retrotransposons. , 0, , 1051-1077.		4
78	TGIRT-seq Protocol for the Comprehensive Profiling of Coding and Non-coding RNA Biotypes in Cellular, Extracellular Vesicle, and Plasma RNAs. Bio-protocol, 2021, 11, e4239.	0.4	4
79	Mobile DNA in the PathogenicNeisseria. , 2015, , 451-469.		3
80	Structural Divergence of the Group I Intron Binding Surface in Fungal Mitochondrial Tyrosyl-tRNA Synthetases That Function in RNA Splicing. Journal of Biological Chemistry, 2016, 291, 11911-11927.	3.4	3
81	Related Mechanisms of Antibody Somatic Hypermutation and Class Switch Recombination. , 0, , 325-348.		3
82	Xer Site-Specific Recombination: Promoting Vertical and Horizontal Transmission of Genetic Information. , 0, , 163-182.		3
83	The Î» Integrase Site-specific Recombination Pathway. , 0, , 91-118.		2
84	<i>Sleeping Beauty</i> Transposition. , 0, , 851-872.		2
85	The Long Terminal Repeat Retrotransposons Tf1 and Tf2 of Schizosaccharomyces pombe. , 2015, , 997-1010.		2
86	An Unexplored Diversity of Reverse Transcriptases in Bacteria. , 0, , 1253-1269.		2
87	Lester Reed: A â€œcomplexâ€•man who loved science. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6247-6247.	7.1	2
88	Programmed Rearrangement in Ciliates: <i>Paramecium</i>. , 0, , 369-388.		2
89	Transposons Tn<i>10</i> and Tn<i>5</i>. , 0, , 631-645.		2
90	Mariner and the ITm Superfamily of Transposons. , 0, , 753-772.		2

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91	<i>Mutator</i> and <i>MULE</i> Transposons. , 0, , 801-826.		2
92	Host Factors in Retroviral Integration and the Selection of Integration Target Sites. , 0, , 1035-1050.		2
93	Site-specific DNA Inversion by Serine Recombinases. , 0, , 199-236.		2
94	<i>hAT</i> Transposable Elements. , 0, , 773-800.		2
95	DNA Recombination Strategies During Antigenic Variation in the African Trypanosome. , 0, , 409-435.		2
96	A Unique DNA Recombination Mechanism of the Mating/Cell-type Switching of Fission Yeasts: a Review. , 0, , 515-528.		2
97	Biology of Three ICE Families: SXT/R391, ICEBs1, and ICESt1/ICESt3. , 2015, , 289-309.		1
98	Site-specific non-LTR retrotransposons. , 2015, , 1147-1163.		1
99	Serine Resolvases. , 0, , 237-252.		1
100	Programmed Genome Rearrangements inTetrahymena. , 0, , 349-367.		1
101	Recombination and Diversification of the Variant Antigen Encoding Genes in the Malaria Parasite Plasmodium falciparum. , 0, , 437-449.		1
102	Programmed Genome Rearrangements in the CiliateOxytricha. , 0, , 389-407.		1
103	The Ty1 LTR-Retrotransposon of Budding Yeast,Saccharomyces cerevisiae. , 0, , 925-964.		1
104	Retroviral Integrase Structure and DNA Recombination Mechanism. , 2015, , 1011-1033.		0
105	Mobile Group II Introns: Siteâ€Specific DNA Integration and Applications in Gene Targeting. FASEB Journal, 2011, 25, 202.3.	0.5	0
106	Retroviral DNA Transposition: Themes and Variations. , 0, , 1101-1123.		0
107	The Integration and Excision of CTnDOT. , 0, , 183-198.		0
108	Hairpin Telomere Resolvases. , 0, , 273-287.		0

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109	Mating-type Gene Switching in <i>Saccharomyces cerevisiae</i>. , 0, , 491-514.		0