

Alan M Lambowitz

List of Publications by Year in descending order

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109
papers

5,837
citations

101535

36
h-index

168376

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

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19	A novel reverse transcriptase activity associated with mitochondrial plasmids of neurospora. <i>Cell</i> , 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. <i>Cell</i> , 1993, 75, 1071-1081.	28.9	106
21	High-throughput sequencing of human plasma RNA by using thermostable group II intron reverse transcriptases. <i>Rna</i> , 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. <i>Journal of Molecular Biology</i> , 2002, 324, 933-951.	4.2	85
23	Domain structure and three-dimensional model of a group II intron-encoded reverse transcriptase. <i>Rna</i> , 2005, 11, 14-28.	3.5	85
24	RNA-seq of human reference RNA samples using a thermostable group II intron reverse transcriptase. <i>Rna</i> , 2016, 22, 597-613.	3.5	80
25	Broad and adaptable RNA structure recognition by the human interferon-induced tetratricopeptide repeat protein IFIT5. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 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. <i>Mobile DNA</i> , 2014, 5, 2.	3.6	66
27	Limitations of alignment-free tools in total RNA-seq quantification. <i>BMC Genomics</i> , 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. <i>Molecular Cell</i> , 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. <i>Rna</i> , 2018, 24, 950-965.	3.5	61
30	Improved TGIRT-seq methods for comprehensive transcriptome profiling with decreased adapter dimer formation and bias correction. <i>Scientific Reports</i> , 2019, 9, 7953.	3.3	56
31	On the Origin of Reverse Transcriptase-Using CRISPR-Cas Systems and Their Hyperdiverse, Enigmatic Spacer Repertoires. <i>MBio</i> , 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. <i>Applied and Environmental Microbiology</i> , 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€™ CCA sequence 1 Edited by J. Karn. <i>Journal of Molecular Biology</i> , 1997, 271, 311-332.	4.2	47
34	The contribution of cellulosomal scaffoldins to cellulose hydrolysis by <i>Clostridium thermocellum</i> analyzed by using thermotargetrons. <i>Biotechnology for Biofuels</i> , 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. <i>Genes and Development</i> , 2016, 30, 2076-2092.	5.9	46
36	Mechanisms Used for Genomic Proliferation by Thermophilic Group II Introns. <i>PLoS Biology</i> , 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. <i>ELife</i> , 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. <i>Scientific Reports</i> , 2017, 7, 8421.	3.3	28
40	Group II Intron RNPs and Reverse Transcriptases: From Retroelements to Research Tools. <i>Cold Spring Harbor Perspectives in Biology</i> , 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. <i>Molecular Cell</i> , 2018, 72, 700-714.e8.	9.7	25
43	Genetic identification of potential RNA-binding regions in a group II intron-encoded reverse transcriptase. <i>Rna</i> , 2010, 16, 732-747.	3.5	24
44	BCDIN3D regulates tRNA ^{His} 3' fragment processing. <i>PLoS Genetics</i> , 2019, 15, e1008273.	3.5	24
45	An Overview of Tyrosine Site-specific Recombination: From an F1p Perspective. , 0, , 41-71.		24
46	The Retrohoming of Linear Group II Intron RNAs in <i>Drosophila melanogaster</i> Occurs by Both DNA Ligase 4-Dependent and -Independent Mechanisms. <i>PLoS Genetics</i> , 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. <i>ELife</i> , 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. <i>Journal of Biological Chemistry</i> , 2019, 294, 19764-19784.	3.4	18
49	The Tn3-family of Replicative Transposons. , 0, , 693-726.		14
50	Detection of expanded RNA repeats using thermostable group II intron reverse transcriptase. <i>Nucleic Acids Research</i> , 2018, 46, e1-e1.	14.5	14
51	A Highly Proliferative Group IIC Intron from <i>Geobacillus stearothermophilus</i> Reveals New Features of Group II Intron Mobility and Splicing. <i>Journal of Molecular Biology</i> , 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 intron-encoded non-LTR-retroelement reverse transcriptase. <i>Journal of Biological Chemistry</i> , 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/IS605 Family and "Peel and Paste" 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 in Tetrahymena. , 0, , 349-367.		1
101	Recombination and Diversification of the Variant Antigen Encoding Genes in the Malaria Parasite <i> Plasmodium falciparum</i> . , 0, , 437-449.		1
102	Programmed Genome Rearrangements in the Ciliate <i> Oxytricha</i> . , 0, , 389-407.		1
103	The Ty1 LTR-Retrotransposon of Budding Yeast, <i> Saccharomyces cerevisiae</i> . , 0, , 925-964.		1
104	Retroviral Integrase Structure and DNA Recombination Mechanism. , 2015, , 1011-1033.		0
105	Mobile Group II Introns: Site-Specific DNA Integration and Applications in Gene Targeting. <i> FASEB Journal</i> , 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