Tsutomu Suzuki

List of Publications by Year
in descending order

229	18,482	11651 70	16650 123
papers	citations	h-index	g-index

239	239	239	15613
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cell-free translation reconstituted with purified components. Nature Biotechnology, 2001, 19, 751-755.	17.5	1,647
2	Human Mitochondrial tRNAs: Biogenesis, Function, Structural Aspects, and Diseases. Annual Review of Genetics, 2011, 45, 299-329.	7.6	464
3	Hsc70/Hsp90 Chaperone Machinery Mediates ATP-Dependent RISC Loading of Small RNA Duplexes. Molecular Cell, 2010, 39, 292-299.	9.7	404
4	Pimet, the Drosophila homolog of HEN1, mediates 2â€²-O-methylation of Piwi- interacting RNAs at their 3â€² ends. Genes and Development, 2007, 21, 1603-1608.	5.9	400
5	Selective stabilization of mammalian microRNAs by 3â€² adenylation mediated by the cytoplasmic poly(A) polymerase GLD-2. Genes and Development, 2009, 23, 433-438.	5.9	378
6	Taurine as a constituent of mitochondrial tRNAs: new insights into the functions of taurine and human mitochondrial diseases. EMBO Journal, 2002, 21, 6581-6589.	7.8	332
7	The TDRD9-MIWI2 Complex Is Essential for piRNA-Mediated Retrotransposon Silencing in the Mouse Male Germline. Developmental Cell, 2009, 17, 775-787.	7.0	297
8	The expanding world of tRNA modifications and their disease relevance. Nature Reviews Molecular Cell Biology, 2021, 22, 375-392.	37.0	282
9	Cap-specific terminal N ⁶ -methylation of RNA by an RNA polymerase IIâ€“associated methyltransferase. Science, 2019, 363, .	12.6	262
10	Codon-specific translational defect caused by a wobble modification deficiency in mutant tRNA from a human mitochondrial disease. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15070-15075.	7.1	254
11	A complete landscape of post-transcriptional modifications in mammalian mitochondrial tRNAs. Nucleic Acids Research, 2014, 42, 7346-7357.	14.5	247
12	Mechanistic Insights into Sulfur Relay by Multiple Sulfur Mediators Involved in Thiouridine Biosynthesis at tRNA Wobble Positions. Molecular Cell, 2006, 21, 97-108.	9.7	246
13	S-Adenosylmethionine Synthesis Is Regulated by Selective N6-Adenosine Methylation and mRNA Degradation Involving METTL16 and YTHDC1. Cell Reports, 2017, 21, 3354-3363.	6.4	240
14	A Comprehensive Genomic Analysis Reveals the Genetic Landscape of Mitochondrial Respiratory Chain Complex Deficiencies. PLoS Genetics, 2016, 12, e1005679.	3.5	236
15	Modification Defect at Anticodon Wobble Nucleotide of Mitochondrial tRNAsLeu(UUR) with Pathogenic Mutations of Mitochondrial Myopathy, Encephalopathy, Lactic Acidosis, and Stroke-like Episodes. Journal of Biological Chemistry, 2000, 275, 4251-4257.	3.4	232
16	RNA modifications: what have we learned and where are we headed?. Nature Reviews Genetics, 2016, 17, 365-372.	16.3	215
17	Mutation in TRMU Related to Transfer RNA Modification Modulates the Phenotypic Expression of the Deafness-Associated Mitochondrial 12S Ribosomal RNA Mutations. American Journal of Human Genetics, 2006, 79, 291-302.	6.2	212
18	Deficit of tRNALys modification by Cdkal1 causes the development of type 2 diabetes in mice. Journal of Clinical Investigation, 2011, 121, 3598-3608.	8.2	212

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19	Wobble modification defect in tRNA disturbs codon-anticodon interaction in a mitochondrial disease. EMBO Journal, 2001, 20, 4794-4802.	7.8	202
20	The 3â€² termini of mouse Piwi-interacting RNAs are 2â€²-O-methylated. Nature Structural and Molecular Biology, 2007, 14, 349-350.	8.2	202
21	Mechanistic characterization of the sulfur-relay system for eukaryotic 2-thiouridine biogenesis at tRNA wobble positions. Nucleic Acids Research, 2009, 37, 1335-1352.	14.5	193
22	Mitochondria-specific RNA-modifying Enzymes Responsible for the Biosynthesis of the Wobble Base in Mitochondrial tRNAs. Journal of Biological Chemistry, 2005, 280, 1613-1624.	3.4	192
23	Biosynthesis of wybutosine, a hyper-modified nucleoside in eukaryotic phenylalanine tRNA. EMBO Journal, 2006, 25, 2142-2154.	7.8	188
24	An RNA-Modifying Enzyme that Governs Both the Codon and Amino Acid Specificities of Isoleucine tRNA. Molecular Cell, 2003, 12, 689-698.	9.7	182
25	ALKBH1 is an RNA dioxygenase responsible for cytoplasmic and mitochondrial tRNA modifications. Nucleic Acids Research, 2017, 45, 7401-7415.	14.5	180
26	NSUN3 methylase initiates 5-formylcytidine biogenesis in human mitochondrial tRNAMet. Nature Chemical Biology, 2016, 12, 546-551.	8.0	174
27	Non-universal decoding of the leucine codon CUG in severalCandidaspecies. Nucleic Acids Research, 1993, 21, 4039-4045.	14.5	173
28	Inosine cyanoethylation identifies A-to-I RNA editing sites in the human transcriptome. Nature Chemical Biology, 2010, 6, 733-740.	8.0	163
29	Human Mitochondrial mRNAs Are Stabilized with Polyadenylation Regulated by Mitochondria-specific Poly(A) Polymerase and Polynucleotide Phosphorylase. Journal of Biological Chemistry, 2005, 280, 19721-19727.	3.4	162
30	Human NAT10 Is an ATP-dependent RNA Acetyltransferase Responsible for N4-Acetylcytidine Formation in 18 S Ribosomal RNA (rRNA). Journal of Biological Chemistry, 2014, 289, 35724-35730.	3.4	159
31	Identification and Functional Analysis of the Pre-piRNA 3â€² Trimmer in Silkworms. Cell, 2016, 164, 962-973.	28.9	159
32	Fine-tuning of the ribosomal decoding center by conserved methyl-modifications in the Escherichia coli 16S rRNA. Nucleic Acids Research, 2010, 38, 1341-1352.	14.5	151
33	Mechanism of mRNA deadenylation: evidence for a molecular interplay between translation termination factor eRF3 and mRNA deadenylases. Genes and Development, 2007, 21, 3135-3148.	5.9	150
34	Specific correlation between the wobble modification deficiency in mutant tRNAs and the clinical features of a human mitochondrial disease. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7127-7132.	7.1	147
35	A cyclic form of N6-threonylcarbamoyladenosine as a widely distributed tRNA hypermodification. Nature Chemical Biology, 2013, 9, 105-111.	8.0	147
36	Trmt61B is a methyltransferase responsible for 1-methyladenosine at position 58 of human mitochondrial tRNAs. Rna, 2012, 18, 2269-2276.	3.5	145

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37	Complete chemical structures of human mitochondrial tRNAs. Nature Communications, 2020, 11, 4269.	12.8	144
38	Modified Uridines with C5-methylene Substituents at the First Position of the tRNA Anticodon Stabilize UÂ·G Wobble Pairing during Decoding. Journal of Biological Chemistry, 2008, 283, 18801-18811.	3.4	142
39	LRPPRC/SLIRP suppresses PNPase-mediated mRNA decay and promotes polyadenylation in human mitochondria. Nucleic Acids Research, 2012, 40, 8033-8047.	14.5	141
40	vacC, a virulence-associated chromosomal locus of Shigella flexneri, is homologous to tgt, a gene encoding tRNA-guanine transglycosylase (Tgt) of Escherichia coli K-12. Journal of Bacteriology, 1994, 176, 4627-4634.	2.2	137
41	Induced Loss of ADAR2 Engenders Slow Death of Motor Neurons from Q/R Site-Unedited GluR2. Journal of Neuroscience, 2010, 30, 11917-11925.	3.6	137
42	Proteomic Analysis of the Mammalian Mitochondrial Ribosome. Journal of Biological Chemistry, 2001, 276, 33181-33195.	3.4	131
43	Poly(A)-Specific Ribonuclease Mediates 3â€²-End Trimming of Argonaute2-Cleaved Precursor MicroRNAs. Cell Reports, 2013, 5, 715-726.	6.4	131
44	Agmatine-conjugated cytidine in a tRNA anticodon is essential for AUA decoding in archaea. Nature Chemical Biology, 2010, 6, 277-282.	8.0	127
45	The `polysemous' codon_a codon with multiple amino acid assignment caused by dual specificity of tRNA identity. EMBO Journal, 1997, 16, 1122-1134.	7.8	126
46	Snapshots of tRNA sulphuration via an adenylated intermediate. Nature, 2006, 442, 419-424.	27.8	123
47	5-Hydroxymethylcytosine Plays a Critical Role in Glioblastomagenesis by Recruiting the CHTOP-Methylosome Complex. Cell Reports, 2014, 9, 48-60.	6.4	122
48	A biochemical landscape of A-to-I RNA editing in the human brain transcriptome. Genome Research, 2014, 24, 522-534.	5.5	121
49	Defect in modification at the anticodon wobble nucleotide of mitochondrial tRNALyswith the MERRF encephalomyopathy pathogenic mutation. FEBS Letters, 2000, 467, 175-178.	2.8	117
50	Defining fundamental steps in the assembly of the Drosophila RNAi enzyme complex. Nature, 2015, 521, 533-536.	27.8	115
51	Mass Spectrometric Identification and Characterization of RNAâ€Modifying Enzymes. Methods in Enzymology, 2007, 425, 211-229.	1.0	114
52	Yeast Nfs1p Is Involved in Thio-modification of Both Mitochondrial and Cytoplasmic tRNAs. Journal of Biological Chemistry, 2004, 279, 12363-12368.	3.4	110
53	Metabolic and chemical regulation of tRNA modification associated with taurine deficiency and human disease. Nucleic Acids Research, 2018, 46, 1565-1583.	14.5	110
54	Wobble modification differences and subcellular localization of tRNAs in Leishmania tarentolae: implication for tRNA sorting mechanism. EMBO Journal, 2003, 22, 657-667.	7.8	106

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55	Structural Compensation for the Deficit of rRNA with Proteins in the Mammalian Mitochondrial Ribosome. Journal of Biological Chemistry, 2001, 276, 21724-21736.	3.4	105
56	The Human Mitochondrial Ribosomal Protein Genes: Mapping of 54 Genes to the Chromosomes and Implications for Human Disorders. Genomics, 2001, 77, 65-70.	2.9	100
57	Identification and Characterization of Mammalian Mitochondrial tRNA nucleotidyltransferases. Journal of Biological Chemistry, 2001, 276, 40041-40049.	3.4	100
58	Human mitochondrial diseases caused by lack of taurine modification in mitochondrial tRNAs. Wiley Interdisciplinary Reviews RNA, 2011, 2, 376-386.	6.4	100
59	Cdk5rap1-Mediated 2-Methylthio Modification of Mitochondrial tRNAs Governs Protein Translation and Contributes to Myopathy in Mice and Humans. Cell Metabolism, 2015, 21, 428-442.	16.2	95
60	Mitochondrial 16S rRNA Is Methylated by tRNA Methyltransferase TRMT61B in All Vertebrates. PLoS Biology, 2016, 14, e1002557.	5.6	95
61	Biogenesis of glutaminyl-mt tRNA ^{Gln} in human mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16209-16214.	7.1	93
62	Rectifier of aberrant mRNA splicing recovers tRNA modification in familial dysautonomia. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2764-2769.	7.1	93
63	Structural basis for nonribosomal peptide synthesis by an aminoacyl-tRNA synthetase paralog. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3912-3917.	7.1	92
64	Dual-mode recognition of noncanonical tRNAsSer by seryl-tRNA synthetase in mammalian mitochondria. EMBO Journal, 2005, 24, 3369-3379.	7.8	88
65	Loss of ribosomal RNA modification causes developmental defects in zebrafish. Nucleic Acids Research, 2012, 40, 391-398.	14.5	88
66	CO2-sensitive tRNA modification associated with human mitochondrial disease. Nature Communications, 2018, 9, 1875.	12.8	87
67	Specific residues at every third position of siRNA shape its efficient RNAi activity. Nucleic Acids Research, 2007, 35, e27.	14.5	85
68	Defective Mitochondrial tRNA Taurine Modification Activates Global Proteostress and Leads to Mitochondrial Disease. Cell Reports, 2018, 22, 482-496.	6.4	84
69	The RNA acetyltransferase driven by ATP hydrolysis synthesizes N4-acetylcytidine of tRNA anticodon. EMBO Journal, 2008, 27, 2194-2203.	7.8	79
70	A Single Acetylation of 18 S rRNA Is Essential for Biogenesis of the Small Ribosomal Subunit in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2014, 289, 26201-26212.	3.4	76
71	Automated parallel isolation of multiple species of non-coding RNAs by the reciprocal circulating chromatography method. Nucleic Acids Research, 2007, 35, e24.	14.5	74
72	Destabilization of microRNAs in human cells by 3â€² deadenylation mediated by PARN and CUGBP1. Nucleic Acids Research, 2015, 43, 7521-7534.	14.5	74

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73	Retrograde nuclear import of tRNA precursors is required for modified base biogenesis in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10502-10507.	7.1	72
74	Temperature-dependent Biosynthesis of 2-Thioribothymidine of Thermus thermophilus tRNA. Journal of Biological Chemistry, 2006, 281, 2104-2113.	3.4	71
75	Human Mitochondrial Diseases Associated with tRNA Wobble Modification Deficiency. RNA Biology, 2005, 2, 41-44.	3.1	70
76	Antibiotic susceptibility of mammalian mitochondrial translation. FEBS Letters, 2005, 579, 6423-6427.	2.8	70
77	Molecular Mechanism of Lysidine Synthesis that Determines tRNA Identity and Codon Recognition. Molecular Cell, 2005, 19, 235-246.	9.7	69
78	Identification of Two tRNA Thiolation Genes Required for Cell Growth at Extremely High Temperatures. Journal of Biological Chemistry, 2006, 281, 14296-14306.	3.4	69
79	Discovery and characterization of tRNA^{Ile} lysidine synthetase (TilS). FEBS Letters, 2010, 584, 272-277.	2.8	69
80	Wobble modification deficiency in mutant tRNAs in patients with mitochondrial diseases. FEBS Letters, 2005, 579, 2948-2952.	2.8	68
81	Comprehensive genetic selection revealed essential bases in the peptidyl-transferase center. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15386-15391.	7.1	68
82	Intrinsic Ribosome Destabilization Underlies Translation and Provides an Organism with a Strategy of Environmental Sensing. Molecular Cell, 2017, 68, 528-539.e5.	9.7	68
83	Serine tRNA complementary to the nonuniversal serine codon CUG in Candida cylindracea: evolutionary implications.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 7408-7411.	7.1	67
84	Transcriptome-wide identification of adenosine-to-inosine editing using the ICE-seq method. Nature Protocols, 2015, 10, 715-732.	12.0	67
85	Thio Modification of Yeast Cytosolic tRNA Is an Iron-Sulfur Protein-Dependent Pathway. Molecular and Cellular Biology, 2007, 27, 2841-2847.	2.3	66
86	Genetic Code Variations in Mitochondria: tRNA as a Major Determinant of Genetic Code Plasticity. Journal of Molecular Evolution, 2001, 53, 314-326.	1.8	64
87	Crystal Structure of the Radical SAM Enzyme Catalyzing Tricyclic Modified Base Formation in tRNA. Journal of Molecular Biology, 2007, 372, 1204-1214.	4.2	63
88	Biosynthesis and function of tRNA wobble modifications. Topics in Current Genetics, 0, , 23-69.	0.7	62
89	Conserved Loop Sequence of Helix 69 in Escherichia coli 23 S rRNA Is Involved in A-site tRNA Binding and Translational Fidelity. Journal of Biological Chemistry, 2006, 281, 17203-17211.	3.4	62
90	Actin-binding protein ABP140 is a methyltransferase for 3-methylcytidine at position 32 of tRNAs in Saccharomyces cerevisiae. Rna, 2011, 17, 1111-1119.	3.5	62

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91	The A-site Finger in 23 S rRNA Acts as a Functional Attenuator for Translocation. Journal of Biological Chemistry, 2006, 281, 32303-32309.	3.4	61
92	RNA helicase module in an acetyltransferase that modifies a specific tRNA anticodon. EMBO Journal, 2009, 28, 1362-1373.	7.8	61
93	Nucleoside Analysis by Hydrophilic Interaction Liquid Chromatography Coupled with Mass Spectrometry. Methods in Enzymology, 2015, 560, 19-28.	1.0	61
94	Substrate tRNA Recognition Mechanism of tRNA (m7G46) Methyltransferase from Aquifex aeolicus. Journal of Biological Chemistry, 2004, 279, 49151-49159.	3.4	60
95	Expanding Role of the Jumonji C Domain as an RNA Hydroxylase. Journal of Biological Chemistry, 2010, 285, 34503-34507.	3.4	60
96	Mammalian NSUN2 introduces 5-methylcytidines into mitochondrial tRNAs. Nucleic Acids Research, 2019, 47, 8734-8745.	14.5	60
97	Molecular basis of dihydrouridine formation on tRNA. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19593-19598.	7.1	58
98	Common thiolation mechanism in the biosynthesis of tRNA thiouridine and sulphur-containing cofactors. EMBO Journal, 2008, 27, 3267-3278.	7.8	56
99	Structural basis for translational fidelity ensured by transfer RNA lysidine synthetase. Nature, 2009, 461, 1144-1148.	27.8	56
100	A gene involved in modifying transfer RNA is required for fungal pathogenicity and stress tolerance of Colletotrichum lagenarium. Molecular Microbiology, 2006, 60, 81-92.	2.5	55
101	Chaplet Column Chromatography: Isolation of a Large Set of Individual RNAs in a Single Step. Methods in Enzymology, 2007, 425, 231-239.	1.0	55
102	Aquifex aeolicus tRNA (N2,N2-Guanine)-dimethyltransferase (Trm1) Catalyzes Transfer of Methyl Groups Not Only to Guanine 26 but Also to Guanine 27 in tRNA. Journal of Biological Chemistry, 2009, 284, 20467-20478.	3.4	54
103	Identification and characterization of tRNA (Gm18) methyltransferase fromThermus thermophilusHB8: domain structure and conserved amino acid sequence motifs. Genes To Cells, 2002, 7, 259-272.	1.2	53
104	The ribosomal A-site finger is crucial for binding and activation of the stringent factor RelA. Nucleic Acids Research, 2018, 46, 1973-1983.	14.5	53
105	Structures of tRNAs with an expanded anticodon loop in the decoding center of the 30S ribosomal subunit. Rna, 2007, 13, 817-823.	3.5	52
106	Single methylation of 23S rRNA triggers late steps of 50S ribosomal subunit assembly. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4707-16.	7.1	52
107	Precursors of tRNAs are stabilized by methylguanosine cap structures. Nature Chemical Biology, 2016, 12, 648-655.	8.0	52
108	Dual Mode Recognition of Two Isoacceptor tRNAs by Mammalian Mitochondrial Seryl-tRNA Synthetase. Journal of Biological Chemistry, 2001, 276, 46770-46778.	3.4	50

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109	Conserved Bases in the TΨC Loop of tRNA Are Determinants for Thermophile-specific 2-Thiouridylation at Position 54. Journal of Biological Chemistry, 2002, 277, 39128-39135.	3.4	50
110	S-Peptide as a Potent Peptidyl Linker for Protein Cross-Linking by Microbial Transglutaminase fromStreptomyces mobaraensis. Bioconjugate Chemistry, 2003, 14, 351-357.	3.6	50
111	Biogenesis and growth phase-dependent alteration of 5-methoxycarbonylmethoxyuridine in tRNA anticodons. Nucleic Acids Research, 2016, 44, 509-523.	14.5	49
112	Translation ability of mitochondrial tRNAsSerwith unusual secondary structures in anin vitrotranslation system of bovine mitochondria. Genes To Cells, 2001, 6, 1019-1030.	1.2	48
113	Identification of 2-methylthio cyclic N6-threonylcarbamoyladenosine (ms2ct6A) as a novel RNA modification at position 37 of tRNAs. Nucleic Acids Research, 2017, 45, 2124-2136.	14.5	48
114	The 7472insC Mitochondrial DNA Mutation Impairs the Synthesis and Extent of Aminoacylation of tRNASer(UCN) but Not Its Structure or Rate of Turnover. Journal of Biological Chemistry, 2002, 277, 22240-22250.	3.4	47
115	Structural basis for lysidine formation by ATP pyrophosphatase accompanied by a lysine-specific loop and a tRNA-recognition domain. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7487-7492.	7.1	47
116	Crystal structure of a novel JmjC-domain-containing protein, TYW5, involved in tRNA modification. Nucleic Acids Research, 2011, 39, 1576-1585.	14.5	47
117	A pathogenic point mutation reduces stability of mitochondrial mutant tRNAIle. Nucleic Acids Research, 2000, 28, 3779-3784.	14.5	46
118	Characterization and tRNA Recognition of Mammalian Mitochondrial Seryl-tRNA Synthetase. Journal of Biological Chemistry, 2000, 275, 19913-19920.	3.4	45
119	Structural Basis for Sulfur Relay to RNA Mediated by Heterohexameric TusBCD Complex. Structure, 2006, 14, 357-366.	3.3	44
120	Ironâ€“sulfur proteins responsible for RNA modifications. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 1272-1283.	4.1	44
121	Acetate-dependent tRNA acetylation required for decoding fidelity in protein synthesis. Nature Chemical Biology, 2018, 14, 1010-1020.	8.0	43
122	Ribosomal RNAs are tolerant toward genetic insertions: evolutionary origin of the expansion segments. Nucleic Acids Research, 2008, 36, 3539-3551.	14.5	42
123	Discovery of the Î²-barrelâ€“type RNA methyltransferase responsible forN⁶-methylation ofN⁶-threonylcarbamoyladenosine in tRNAs. Nucleic Acids Research, 2014, 42, 9350-9365.	14.5	42
124	Wobble Inosine tRNA Modification Is Essential to Cell Cycle Progression in G1/S and G2/M Transitions in Fission Yeast. Journal of Biological Chemistry, 2007, 282, 33459-33465.	3.4	41
125	Structural basis of AdoMet-dependent aminocarboxypropyl transfer reaction catalyzed by tRNA-wybutosine synthesizing enzyme, TYW2. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15616-15621.	7.1	41
126	A hydantoin isoform of cyclic N6-threonylcarbamoyladenosine (ct6A) is present in tRNAs. Nucleic Acids Research, 2017, 45, 2137-2149.	14.5	40

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127	Variable penetrance of a familial progressive necrotising encephalopathy due to a novel tRNAIle homoplasmic mutation in the mitochondrial genome. Journal of Medical Genetics, 2004, 41, 342-349.	3.2	39
128	Biogenesis and functions of aminocarboxypropyluridine in tRNA. Nature Communications, 2019, 10, 5542.	12.8	39
129	The substrate specificity of tRNA (m1G37) methyltransferase (TrmD) from Aquifex aeolicus. Genes To Cells, 2006, 11, 1353-1365.	1.2	38
130	Reversible infantile respiratory chain deficiency: A clinical and molecular study. Annals of Neurology, 2010, 68, 845-854.	5.3	38
131	Dual pathways of tRNA hydroxylation ensure efficient translation by expanding decoding capability. Nature Communications, 2019, 10, 2858.	12.8	38
132	Random mutagenesis of a hyperthermophilic archaeon identified tRNA modifications associated with cellular hyperthermotolerance. Nucleic Acids Research, 2019, 47, 1964-1976.	14.5	38
133	Biochemical and structural characterization of oxygen-sensitive 2-thiouridine synthesis catalyzed by an iron-sulfur protein TtuA. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4954-4959.	7.1	37
134	An extra tRNAGly(U*CU) found in ascidian mitochondria responsible for decoding non-universal codons AGA/AGG as glycine. Nucleic Acids Research, 1999, 27, 2554-2559.	14.5	36
135	Acquisition of the wobble modification in mitochondrial tRNALeu(CUN) bearing the G12300A mutation suppresses the MELAS molecular defect. Human Molecular Genetics, 2006, 15, 897-904.	2.9	36
136	Polyadenylation in mammalian mitochondria: Insights from recent studies. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2008, 1779, 266-269.	1.9	36
137	Decoding system for the AUA codon by tRNA Ile with the UAU anticodon in Mycoplasma mobile. Nucleic Acids Research, 2013, 41, 2621-2631.	14.5	36
138	Ribosomal <scp>RNA</scp> methyltransferases contribute to StaphylococcusÂaureus virulence. FEBS Journal, 2015, 282, 2570-2584.	4.7	36
139	m ⁶ A modification of HSATIII lncRNAs regulates temperatureâ€dependent splicing. EMBO Journal, 2021, 40, e107976.	7.8	36
140	Characterization of serine and leucine tRNAs in an asporogenic yeastCandida cylindraceaand evolutionary implications of genes for tRNASerCAG responsible for translation of a non-universal genetic code. Nucleic Acids Research, 1994, 22, 115-123.	14.5	35
141	Accurate estimation of 5-methylcytosine in mammalian mitochondrial DNA. Scientific Reports, 2018, 8, 5801.	3.3	35
142	Reversible RNA phosphorylation stabilizes tRNA for cellular thermotolerance. Nature, 2022, 605, 372-379.	27.8	35
143	Involvement of the Escherichia coli folate-binding protein YgfZ in RNA modification and regulation of chromosomal replication initiation. Molecular Microbiology, 2006, 59, 265-275.	2.5	34
144	Biogenesis and iron-dependency of ribosomal RNA hydroxylation. Nucleic Acids Research, 2017, 45, 12974-12986.	14.5	34

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145	The Ordered Transcription of RNA Domains Is Not Essential for Ribosome Biogenesis in Escherichia coli. Molecular Cell, 2009, 34, 760-766.	9.7	33
146	Unique structure of new serine tRNAs responsible for decoding leucine codon CUG in various Candida species and their putative ancestral tRNA genes. Biochimie, 1994, 76, 1217-1222.	2.6	32
147	Decreased CCA-addition in Human Mitochondrial tRNAs Bearing a Pathogenic A4317G or A10044G Mutation. Journal of Biological Chemistry, 2003, 278, 16828-16833.	3.4	32
148	Structural basis of tRNA modification with CO2 fixation and methylation by wybutosine synthesizing enzyme TYW4â€. Nucleic Acids Research, 2009, 37, 2910-2925.	14.5	31
149	Epigenetic loss of the transfer RNA-modifying enzyme TYW2 induces ribosome frameshifts in colon cancer. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20785-20793.	7.1	31
150	Distinct tRNA modifications in the thermoâ€acidophilic archaeon, Thermoplasma acidophilum. FEBS Letters, 2013, 587, 3575-3580.	2.8	30
151	Loss of Ftsj1 perturbs codon-specific translation efficiency in the brain and is associated with X-linked intellectual disability. Science Advances, 2021, 7, .	10.3	30
152	A single m6A modification in U6 snRNA diversifies exon sequence at the 5â€™ splice site. Nature Communications, 2021, 12, 3244.	12.8	30
153	Base methylations in the double-stranded RNA by a fused methyltransferase bearing unwinding activity. Nucleic Acids Research, 2012, 40, 4071-4085.	14.5	28
154	Mtu1-Mediated Thiouridine Formation of Mitochondrial tRNAs Is Required for Mitochondrial Translation and Is Involved in Reversible Infantile Liver Injury. PLoS Genetics, 2016, 12, e1006355.	3.5	28
155	N6-methyladenosine (m6A) is an endogenous A3 adenosine receptor ligand. Molecular Cell, 2021, 81, 659-674.e7.	9.7	28
156	U2 Small Nuclear RNA Is a Substrate for the CCA-adding Enzyme (tRNA Nucleotidyltransferase). Journal of Biological Chemistry, 2002, 277, 3447-3455.	3.4	27
157	Tertiary network in mammalian mitochondrial tRNAAsp revealed by solution probing and phylogeny. Nucleic Acids Research, 2009, 37, 6881-6895.	14.5	27
158	Dynamic changes in tRNA modifications and abundance during T cell activation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	27
159	m⁶Aâ€mediated alternative splicing coupled with nonsenseâ€mediated mRNA decay regulates SAM synthetase homeostasis. EMBO Journal, 2021, 40, e106434.	7.8	26
160	RelA-SpoT Homolog toxins pyrophosphorylate the CCA end of tRNA to inhibit protein synthesis. Molecular Cell, 2021, 81, 3160-3170.e9.	9.7	26
161	Chapter 23 Measuring mRNA Decay in Human Mitochondria. Methods in Enzymology, 2008, 447, 489-499.	1.0	25
162	Structural basis of tRNA agmatinylation essential for AUA codon decoding. Nature Structural and Molecular Biology, 2011, 18, 1275-1280.	8.2	25

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163	Human BCDIN3D monomethylates cytoplasmic histidine transfer RNA. Nucleic Acids Research, 2017, 45, gkx051.	14.5	25
164	Functional Compatibility of Elongation Factors Between Mammalian Mitochondrial and Bacterial Ribosomes: Characterization of GTPase Activity and Translation Elongation by Hybrid Ribosomes Bearing Heterologous L7/12 Proteins. Journal of Molecular Biology, 2004, 336, 331-342.	4.2	24
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