Christopher S Francklyn

List of Publications by Year
in descending order

55	3,240	186265 28	155660 55
papers	citations	h-index	g-index

57	57	57	3753
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neuropathyâ€associated histidylâ€tRNA synthetase variants attenuate protein synthesis in vitro and disrupt axon outgrowth in developing zebrafish. FEBS Journal, 2021, 288, 142-159.	4.7	13
2	De Novo and Bi-allelic Pathogenic Variants in NARS1 Cause Neurodevelopmental Delay Due to Toxic Gain-of-Function and Partial Loss-of-Function Effects. American Journal of Human Genetics, 2020, 107, 311-324.	6.2	32
3	Biâ€allelic mutations in HARS1 severely impair histidylâ€tRNA synthetase expression and enzymatic activity causing a novel multisystem ataxic syndrome. Human Mutation, 2020, 41, 1232-1237.	2.5	15
4	Immunity-Guided Identification of Threonyl-tRNA Synthetase as the Molecular Target of Obafluorin, a Î²-Lactone Antibiotic. ACS Chemical Biology, 2019, 14, 2663-2671.	3.4	13
5	Progress and challenges in aminoacyl-tRNA synthetase-based therapeutics. Journal of Biological Chemistry, 2019, 294, 5365-5385.	3.4	103
6	Peripheral neuropathy and cognitive impairment associated with a novel monoallelic <scp>HARS</scp> variant. Annals of Clinical and Translational Neurology, 2019, 6, 1072-1080.	3.7	15
7	Knock-Down of Histidyl-tRNA Synthetase Causes Cell Cycle Arrest and Apoptosis of Neuronal Progenitor Cells in vivo. Frontiers in Cell and Developmental Biology, 2019, 7, 67.	3.7	14
8	Biallelic VARS variants cause developmental encephalopathy with microcephaly that is recapitulated in vars knockout zebrafish. Nature Communications, 2019, 10, 708.	12.8	40
9	Substrate interaction defects in histidyl-tRNA synthetase linked to dominant axonal peripheral neuropathy. Human Mutation, 2018, 39, 415-432.	2.5	30
10	The Usher Syndrome Type IIIB Histidyl-tRNA Synthetase Mutation Confers Temperature Sensitivity. Biochemistry, 2017, 56, 3619-3631.	2.5	19
11	Characterization of aminoacyl-tRNA synthetase stability and substrate interaction by differential scanning fluorimetry. Methods, 2017, 113, 64-71.	3.8	11
12	A single Danio rerio hars gene encodes both cytoplasmic and mitochondrial histidyl-tRNA synthetases. PLoS ONE, 2017, 12, e0185317.	2.5	10
13	Aminoacyl-Transfer RNA Synthetases. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 582-583.	2.4	4
14	Aminoacyl-tRNA synthetase dependent angiogenesis revealed by a bioengineered macrolide inhibitor. Scientific Reports, 2015, 5, 13160.	3.3	26
15	Structural basis for full-spectrum inhibition of translational functions on a tRNA synthetase. Nature Communications, 2015, 6, 6402.	12.8	67
16	Regulation of Angiogenesis by Aminoacyl-tRNA Synthetases. International Journal of Molecular Sciences, 2014, 15, 23725-23748.	4.1	33
17	Transfer RNA and human disease. Frontiers in Genetics, 2014, 5, 158.	2.3	169
18	Analogs of natural aminoacyl-tRNA synthetase inhibitors clear malaria in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5508-17.	7.1	69

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19	Standardizing Analysis of Circulating MicroRNA: Clinical and Biological Relevance. Journal of Cellular Biochemistry, 2014, 115, 805-811.	2.6	90
20	Secreted Threonyl-tRNA synthetase stimulates endothelial cell migration and angiogenesis. Scientific Reports, 2013, 3, 1317.	3.3	73
21	Aminoacylating Urzymes Challenge the RNA World Hypothesis. Journal of Biological Chemistry, 2013, 288, 26856-26863.	3.4	77
22	Genetic Mapping and Exome Sequencing Identify Variants Associated with Five Novel Diseases. PLoS ONE, 2012, 7, e28936.	2.5	254
23	Altered nuclear cofactor switching in retinoicâ€resistant variants of the PMLâ€RARÎ± oncoprotein of acute promyelocytic leukemia. Proteins: Structure, Function and Bioinformatics, 2012, 80, 1095-1109.	2.6	6
24	The Î±-Amino Group of the Threonine Substrate as The General Base During tRNA Aminoacylation: A New Version of Substrate-Assisted Catalysis Predicted by Hybrid DFT. Journal of Physical Chemistry A, 2011, 115, 13050-13060.	2.5	18
25	Histidyl-tRNA Synthetase Urzymes. Journal of Biological Chemistry, 2011, 286, 10387-10395.	3.4	55
26	tRNA as an active chemical scaffold for diverse chemical transformations. FEBS Letters, 2010, 584, 366-375.	2.8	52
27	Aminoacyl Transfer Rate Dictates Choice of Editing Pathway in Threonyl-tRNA Synthetase. Journal of Biological Chemistry, 2010, 285, 23810-23817.	3.4	52
28	Asymmetric Amino Acid Activation by Class II Histidyl-tRNA Synthetase from Escherichia coli. Journal of Biological Chemistry, 2009, 284, 20753-20762.	3.4	20
29	DNA Polymerases and Aminoacyl-tRNA Synthetases: Shared Mechanisms for Ensuring the Fidelity of Gene Expression. Biochemistry, 2008, 47, 11695-11703.	2.5	43
30	Methods for kinetic and thermodynamic analysis of aminoacyl-tRNA synthetases. Methods, 2008, 44, 100-118.	3.8	98
31	RNA-assisted catalysis in a protein enzyme: The 2â€²-hydroxyl of tRNA ^{Thr} A76 promotes aminoacylation by threonyl-tRNA synthetase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17748-17753.	7.1	45
32	Kinetic Discrimination of tRNA Identity by the Conserved Motif 2 Loop of a Class II Aminoacyl-tRNA Synthetase. Molecular Cell, 2007, 25, 531-542.	9.7	67
33	Distinct Kinetic Mechanisms of the Two Classes of Aminoacyl-tRNA Synthetases. Journal of Molecular Biology, 2006, 361, 300-311.	4.2	100
34	Evolutionary conservation of a functionally important backbone phosphate group critical for aminoacylation of histidine tRNAs. Rna, 2006, 12, 1315-1322.	3.5	27
35	Activation of the Hetero-octameric ATP Phosphoribosyl Transferase through Subunit Interface Rearrangement by a tRNA Synthetase Paralog. Journal of Biological Chemistry, 2005, 280, 34096-34104.	3.4	30
36	A Unique Hydrophobic Cluster Near the Active Site Contributes to Differences in Borrelidin Inhibition among Threonyl-tRNA Synthetases. Journal of Biological Chemistry, 2005, 280, 571-577.	3.4	49

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37	Turning tRNA upside down: When aminoacylation is not a prerequisite to protein synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7493-7494.	7.1	8
38	tRNA synthetase paralogs: Evolutionary links in the transition from tRNA-dependent amino acid biosynthesis to de novo biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9650-9652.	7.1	34
39	Aminoacyl-tRNA synthetases: Versatile players in the changing theater of translation. Rna, 2002, 8, 1363-1372.	3.5	74
40	The tRNA-binding moiety in GCN2 contains a dimerization domain that interacts with the kinase domain and is required for tRNA binding and kinase activation. EMBO Journal, 2001, 20, 1425-1438.	7.8	81
41	Charging two for the price of one. , 2001, 8, 189-191.		3
42	Aminoacylation at the Atomic Level in Class IIa Aminoacyl-tRNA Synthetases. Journal of Biomolecular Structure and Dynamics, 2000, 17, 23-27.	3.5	3
43	Proteobacterial Histidine-Biosynthetic Pathways Are Paraphyletic. Journal of Molecular Evolution, 2000, 50, 339-347.	1.8	27
44	Transfer RNAâ€“Mediated Editing in Threonyl-tRNA Synthetase. Cell, 2000, 103, 877-884.	28.9	175
45	Zinc ion mediated amino acid discrimination by threonyl-tRNA synthetase. Nature Structural Biology, 2000, 7, 461-465.	9.7	139
46	Mutational analysis of the engrailed homeodomain recognition helix by phage display. Nucleic Acids Research, 1999, 27, 1182-1189.	14.5	15
47	tRNA Discrimination at the Binding Step by a Class II Aminoacyl-tRNA Synthetaseâ€. Biochemistry, 1999, 38, 13725-13735.	2.5	35
48	Catalytic defects in mutants of class II histidyl-tRNA synthetase from Salmonella typhimurium previously linked to decreased control of histidine biosynthesis regulation 1 1Edited by D. Draper. Journal of Molecular Biology, 1998, 280, 847-858.	4.2	16
49	A tRNA Identity Switch Mediated by the Binding Interaction between a tRNA Anticodon and the Accessory Domain of a Class II Aminoacyl-tRNA Synthetaseâ€. Biochemistry, 1996, 35, 6559-6568.	2.5	40
50	Crystallization of Histidyl-tRNA Synthetase from Escherichia coli. Journal of Molecular Biology, 1994, 241, 275-277.	4.2	25
51	Small RNA helices as substrates for aminoacylation and their relationship to charging of transfer RNAs. FEBS Journal, 1992, 206, 315-321.	0.2	43
52	Chemical synthesis of biologically active oligoribonucleotides using Î²-cyanoethyl protected ribonucleoside phosphoramidites. Nucleic Acids Research, 1990, 18, 5433-5441.	14.5	313
53	Synthetic RNA molecules as substrates for enzymes that act on tRNAs and tRNA-like molecules. Chemical Reviews, 1990, 90, 1327-1342.	47.7	14
54	Aminoacylation of RNA minihelices with alanine. Nature, 1989, 337, 478-481.	27.8	328

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55	Molecular dissection of a transfer RNA and the basis for its identity. Trends in Biochemical Sciences, 1989, 14, 233-237.	7.5	27