Matthew S Sachs

List of Publications by Year
in descending order

70 papers	7,614 citations	109137 35 h-index	95083 68 g-index
116 all docs	116 docs citations	116 times ranked	7610 citing authors

#	Article	IF	Citations
1	E-site drug specificity of the human pathogen Candida albicans ribosome. Science Advances, 2022, 8, .	4.7	10
2	The Antidepressant Sertraline Induces the Formation of Supersized Lipid Droplets in the Human Pathogen Cryptococcus neoformans. Journal of Fungi (Basel, Switzerland), 2022, 8, 642.	1.5	7
3	Structural basis for the tryptophan sensitivity of TnaC-mediated ribosome stalling. Nature Communications, 2021, 12, 5340.	5.8	20
4	Structure of the translating Neurospora ribosome arrested by cycloheximide. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
5	Conserved Upstream Open Reading Frame Nascent Peptides That Control Translation. Annual Review of Genetics, 2020, 54, 237-264.	3.2	62
6	Circadian clock control of eIF2Î± phosphorylation is necessary for rhythmic translation initiation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10935-10945.	3.3	32
7	eRF1 mediates codon usage effects on mRNA translation efficiency through premature termination at rare codons. Nucleic Acids Research, 2019, 47, 9243-9258.	6.5	41
8	The cell free protein synthesis system from the model filamentous fungus Neurospora crassa. Methods, 2018, 137, 11-19.	1.9	12
9	The Neurospora Transcription Factor ADV-1 Transduces Light Signals and Temporal Information to Control Rhythmic Expression of Genes Involved in Cell Fusion. G3: Genes, Genomes, Genetics, 2017, 7, 129-142.	0.8	47
10	Synaptic vesicles isolated from the electric organ of Torpedo californica and from the central nervous system of Mus musculus contain small ribonucleic acids (sRNAs). Genomics Data, 2017, 12, 52-53.	1.3	1
11	Translation Initiation from Conserved Non-AUG Codons Provides Additional Layers of Regulation and Coding Capacity. MBio, 2017, 8, .	1.8	25
12	Draft de novo transcriptome assembly and proteome characterization of the electric lobe of Tetronarce californica: a molecular tool for the study of cholinergic neurotransmission in the electric organ. BMC Genomics, 2017, 18, 611.	1.2	7
13	Structure and function of the yeast listerin (Ltn1) conserved N-terminal domain in binding to stalled 60S ribosomal subunits. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4151-60.	3.3	34
14	Circadian clock regulation of mRNA translation through eukaryotic elongation factor eEF-2. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9605-9610.	3.3	46
15	Ribosome Elongation Stall Directs Gene-specific Translation in the Integrated Stress Response. Journal of Biological Chemistry, 2016, 291, 6546-6558.	1.6	57
16	Synaptic vesicles contain small ribonucleic acids (sRNAs) including transfer RNA fragments (trfRNA) and microRNAs (miRNA). Scientific Reports, 2015, 5, 14918.	1.6	25
17	A Nascent Peptide Signal Responsive to Endogenous Levels of Polyamines Acts to Stimulate Regulatory Frameshifting on Antizyme mRNA. Journal of Biological Chemistry, 2015, 290, 17863-17878.	1.6	21
18	Control of mRNA Stability in Fungi by NMD, EJC and CBC Factors Through 3â€²UTR Introns. Genetics, 2015, 200, 1133-1148.	1.2	28

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19	Codon Usage Influences the Local Rate of Translation Elongation to Regulate Co-translational Protein Folding. Molecular Cell, 2015, 59, 744-754.	4.5	476
20	Ribosome Reinitiation Directs Gene-specific Translation and Regulates the Integrated Stress Response. Journal of Biological Chemistry, 2015, 290, 28257-28271.	1.6	68
21	Genome-Wide Characterization of Light-Regulated Genes inNeurospora crassa. G3: Genes, Genomes, Genetics, 2014, 4, 1731-1745.	0.8	82
22	Interactions of the TnaC nascent peptide with rRNA in the exit tunnel enable the ribosome to respond to free tryptophan. Nucleic Acids Research, 2014, 42, 1245-1256.	6.5	41
23	Preparation of a Saccharomyces cerevisiae Cell-Free Extract for In Vitro Translation. Methods in Enzymology, 2014, 539, 17-28.	0.4	19
24	Non-optimal codon usage affects expression, structure and function of clock protein FRQ. Nature, 2013, 495, 111-115.	13.7	357
25	Reconstruction and Validation of a Genome-Scale Metabolic Model for the Filamentous Fungus Neurospora crassa Using FARM. PLoS Computational Biology, 2013, 9, e1003126.	1.5	70
26	The Stringency of Start Codon Selection in the Filamentous Fungus Neurospora crassa. Journal of Biological Chemistry, 2013, 288, 9549-9562.	1.6	45
27	Crucial elements that maintain the interactions between the regulatory TnaC peptide and the ribosome exit tunnel responsible for Trp inhibition of ribosome function. Nucleic Acids Research, 2012, 40, 2247-2257.	6.5	17
28	Stringency of start codon selection modulates autoregulation of translation initiation factor eIF5. Nucleic Acids Research, 2012, 40, 2898-2906.	6.5	99
29	The Antidepressant Sertraline Provides a Promising Therapeutic Option for Neurotropic Cryptococcal Infections. Antimicrobial Agents and Chemotherapy, 2012, 56, 3758-3766.	1.4	157
30	The Arginine Attenuator Peptide Interferes with the Ribosome Peptidyl Transferase Center. Molecular and Cellular Biology, 2012, 32, 2396-2406.	1.1	46
31	Arginine Changes the Conformation of the Arginine Attenuator Peptide Relative to the Ribosome Tunnel. Journal of Molecular Biology, 2012, 416, 518-533.	2.0	32
32	Nascent polypeptide sequences that influence ribosome function. Current Opinion in Microbiology, 2011, 14, 160-166.	2.3	42
33	Sequence Requirements for Ribosome Stalling by the Arginine Attenuator Peptide. Journal of Biological Chemistry, 2010, 285, 40933-40942.	1.6	25
34	Initiation context modulates autoregulation of eukaryotic translation initiation factor 1 (eIF1). Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18056-18060.	3.3	125
35	A High-Density Single Nucleotide Polymorphism Map for Neurospora crassa. Genetics, 2009, 181, 767-781.	1.2	54
36	Characterization of Chromosome Ends in the Filamentous FungusNeurospora crassa. Genetics, 2009, 181, 1129-1145.	1.2	52

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37	Evolutionary Roles of Upstream Open Reading Frames in Mediating Gene Regulation in Fungi. Annual Review of Microbiology, 2009, 63, 385-409.	2.9	105
38	Site-Specific Release of Nascent Chains from Ribosomes at a Sense Codon. Molecular and Cellular Biology, 2008, 28, 4227-4239.	1.1	143
39	Dissection of a co-translational nascent chain separation event. Biochemical Society Transactions, 2008, 36, 712-716.	1.6	36
40	The Use of Fungal In Vitro Systems for Studying Translational Regulation. Methods in Enzymology, 2007, 429, 203-225.	0.4	36
41	Transcriptional Profiling of Cross Pathway Control in Neurospora crassa and Comparative Analysis of the Gcn4 and CPC1 Regulons. Eukaryotic Cell, 2007, 6, 1018-1029.	3.4	73
42	Enabling a Community to Dissect an Organism: Overview of the Neurospora Functional Genomics Project. Advances in Genetics, 2007, 57, 49-96.	0.8	191
43	Translation factor control of ribosome conformation during start codon selection. Genes and Development, 2007, 21, 1280-1287.	2.7	31
44	Evolutionary changes in the fungal carbamoyl-phosphate synthetase small subunit gene and its associated upstream open reading frame. Fungal Genetics and Biology, 2007, 44, 93-104.	0.9	20
45	her-2 upstream open reading frame effects on the use of downstream initiation codons. Biochemical and Biophysical Research Communications, 2006, 350, 834-841.	1.0	26
46	Early nonsense: mRNA decay solves a translational problem. Nature Reviews Molecular Cell Biology, 2006, 7, 415-425.	16.1	235
47	Downstream control of upstream open reading frames. Genes and Development, 2006, 20, 915-921.	2.7	61
48	Regulatory protein that inhibits both synthesis and use of the target protein controls flagellar phase variation in Salmonella enterica. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11340-11345.	3.3	36
49	Sequencing of Aspergillus nidulans and comparative analysis with A. fumigatus and A. oryzae. Nature, 2005, 438, 1105-1115.	13.7	1,250
50	Ribosome Occupancy of the Yeast CPA1 Upstream Open Reading Frame Termination Codon Modulates Nonsense-Mediated mRNA Decay. Molecular Cell, 2005, 20, 449-460.	4.5	144
51	Redundancy of the Two Dicer Genes in Transgene-Induced Posttranscriptional Gene Silencing in Neurospora crassa. Molecular and Cellular Biology, 2004, 24, 2536-2545.	1.1	183
52	A nascent polypeptide domain that can regulate translation elongation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4059-4064.	3.3	78
53	Lessons from the Genome Sequence of Neurospora crassa : Tracing the Path from Genomic Blueprint to Multicellular Organism. Microbiology and Molecular Biology Reviews, 2004, 68, 1-108.	2.9	572
54	The genome sequence of the filamentous fungus Neurospora crassa. Nature, 2003, 422, 859-868.	13.7	1,528

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55	BIOCHEMISTRY: Sense and Sensitivity--Controlling the Ribosome. Science, 2002, 297, 1820-1821.	6.0	7
56	Toeprint analysis of the positioning of translation apparatus components at initiation and termination codons of fungal mRNAs. Methods, 2002, 26, 105-114.	1.9	63
57	Neurospora crassa supersuppressor mutants are amber codon-specific. Fungal Genetics and Biology, 2002, 36, 167-175.	0.9	11
58	Information on Individual Loci. , 2001, , 7-197.		1
59	The Neurospora crassa Genome: Cosmid Libraries Sorted by Chromosome. Genetics, 2001, 157, 979-990.	1.2	51
60	Evolutionarily Conserved Features of the Arginine Attenuator Peptide Provide the Necessary Requirements for Its Function in Translational Regulation. Journal of Biological Chemistry, 2000, 275, 26710-26719.	1.6	32
61	A Highly Conserved Mechanism of Regulated Ribosome Stalling Mediated by Fungal Arginine Attenuator Peptides That Appears Independent of the Charging Status of Arginyl-tRNAs. Journal of Biological Chemistry, 1999, 274, 37565-37574.	1.6	63
62	Posttranscriptional Control of Gene Expression in Filamentous Fungi. Fungal Genetics and Biology, 1998, 23, 117-125.	0.9	21
63	The Evolutionarily Conserved Eukaryotic Arginine Attenuator Peptide Regulates the Movement of Ribosomes That Have Translated It. Molecular and Cellular Biology, 1998, 18, 7528-7536.	1.1	56
64	Expression of herpes virus thymidine kinase in Neurospora crassa. Nucleic Acids Research, 1997, 25, 2389-2395.	6.5	32
65	Arginine-specific Regulation Mediated by the Neurospora crassa arg-2 Upstream Open Reading Frame in a Homologous, Cell-free in Vitro Translation System. Journal of Biological Chemistry, 1997, 272, 255-261.	1.6	66
66	Developmental and Photoregulation of ThreeNeurospora crassaCarotenogenic Genes during Conidiation Induced by Desiccation. Fungal Genetics and Biology, 1997, 21, 101-108.	0.9	14
67	A UV-Induced Mutation in Neurospora That Affects Translational Regulation in Response to Arginine. Genetics, 1996, 142, 117-127.	1.2	32
68	A recommendation for naming proteins in Neurospora. Fungal Genetics Reports, 1996, 43, 72.	0.6	2
69	Developmental expression of genes involved in conidiation and amino acid biosynthesis in Neurospora crassa. Developmental Biology, 1991, 148, 117-128.	0.9	107
70	DNA Repair in Neurospora. , 0, , 503-538.		6