Michaela Frye

List of Publications by Year
in descending order

53 papers	7,498 citations	81900 39 h-index	189892 50 g-index
56 all docs	56 docs citations	56 times ranked	7859 citing authors

#	Article	IF	Citations
1	RNA modifications modulate gene expression during development. Science, 2018, 361, 1346-1349.	12.6	762
2	Aberrant methylation of t<scp>RNA</scp>s links cellular stress to neuroâ€developmental disorders. EMBO Journal, 2014, 33, 2020-2039.	7.8	490
3	RNA cytosine methylation by Dnmt2 and NSun2 promotes tRNA stability and protein synthesis. Nature Structural and Molecular Biology, 2012, 19, 900-905.	8.2	488
4	Lrig1 Expression Defines a Distinct Multipotent Stem Cell Population in Mammalian Epidermis. Cell Stem Cell, 2009, 4, 427-439.	11.1	450
5	NSun2-Mediated Cytosine-5 Methylation of Vault Noncoding RNA Determines Its Processing into Regulatory Small RNAs. Cell Reports, 2013, 4, 255-261.	6.4	448
6	Stem cell function and stress response are controlled by protein synthesis. Nature, 2016, 534, 335-340.	27.8	345
7	RNA modifications regulating cell fate in cancer. Nature Cell Biology, 2019, 21, 552-559.	10.3	257
8	Stem Cell Depletion Through Epidermal Deletion of Rac1. Science, 2005, 309, 933-935.	12.6	243
9	The RNA Methyltransferase Misu (NSun2) Mediates Myc-Induced Proliferation and Is Upregulated in Tumors. Current Biology, 2006, 16, 971-981.	3.9	229
10	RNA modifications: what have we learned and where are we headed?. Nature Reviews Genetics, 2016, 17, 365-372.	16.3	215
11	Characterizing 5-methylcytosine in the mammalian epitranscriptome. Genome Biology, 2013, 14, 215.	9.6	204
12	Whole exome sequencing identifies a splicing mutation in <i>NSUN2</i> as a cause of a Dubowitz-like syndrome. Journal of Medical Genetics, 2012, 49, 380-385.	3.2	198
13	Analysis of CLIP and iCLIP methods for nucleotide-resolution studies of protein-RNA interactions. Genome Biology, 2012, 13, R67.	9.6	195
14	Mutation in NSUN2, which Encodes an RNA Methyltransferase, Causes Autosomal-Recessive Intellectual Disability. American Journal of Human Genetics, 2012, 90, 856-863.	6.2	189
15	Deficient methylation and formylation of mt-tRNAMet wobble cytosine in a patient carrying mutations in NSUN3. Nature Communications, 2016, 7, 12039.	12.8	178
16	Evidence that Myc activation depletes the epidermal stem cell compartment by modulating adhesive interactions with the local microenvironment. Development (Cambridge), 2003, 130, 2793-2808.	2.5	163
17	The RNAâ€"Methyltransferase Misu (NSun2) Poises Epidermal Stem Cells to Differentiate. PLoS Genetics, 2011, 7, e1002403.	3.5	160
18	MYC in mammalian epidermis: how can an oncogene stimulate differentiation?. Nature Reviews Cancer, 2008, 8, 234-242.	28.4	144

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19	Cytosine-5 RNA Methylation Regulates Neural Stem Cell Differentiation andÂMotility. Stem Cell Reports, 2017, 8, 112-124.	4.8	141
20	The Mouse Cytosine-5 RNA Methyltransferase NSun2 Is a Component of the Chromatoid Body and Required for Testis Differentiation. Molecular and Cellular Biology, 2013, 33, 1561-1570.	2.3	137
21	Regulation of Human Epidermal Stem Cell Proliferation and Senescence Requires Polycomb- Dependent and -Independent Functions of Cbx4. Cell Stem Cell, 2011, 9, 233-246.	11.1	128
22	The nucleolar RNA methyltransferase Misu (NSun2) is required for mitotic spindle stability. Journal of Cell Biology, 2009, 186, 27-40.	5.2	125
23	Characterization of Bipotential Epidermal Progenitors Derived from Human Sebaceous Gland: Contrasting Roles of c-Myc and <i>Î²</i>-Catenin. Stem Cells, 2008, 26, 1241-1252.	3.2	117
24	Myc regulates keratinocyte adhesion and differentiation via complex formation with Miz1. Journal of Cell Biology, 2006, 172, 139-149.	5.2	108
25	Role of RNA methyltransferases in tissue renewal and pathology. Current Opinion in Cell Biology, 2014, 31, 1-7.	5.4	105
26	Mitochondrial RNA modifications shape metabolic plasticity in metastasis. Nature, 2022, 607, 593-603.	27.8	102
27	Epithelial Defensins Impair Adenoviral Infection: Implication for Adenovirus-Mediated Gene Therapy. Human Gene Therapy, 1999, 10, 957-964.	2.7	100
28	Epidermal Stem Cells Are Defined by Global Histone Modifications that Are Altered by Myc-Induced Differentiation. PLoS ONE, 2007, 2, e763.	2.5	89
29	Cytosine-5 RNA methylation links protein synthesis to cell metabolism. PLoS Biology, 2019, 17, e3000297.	5.6	87
30	NSUN2 introduces 5-methylcytosines in mammalian mitochondrial tRNAs. Nucleic Acids Research, 2019, 47, 8720-8733.	14.5	84
31	Sequence- and structure-specific cytosine-5 mRNA methylation by NSUN6. Nucleic Acids Research, 2021, 49, 1006-1022.	14.5	83
32	Loss of 5-methylcytosine alters the biogenesis of vault-derived small RNAs to coordinate epidermal differentiation. Nature Communications, 2019, 10, 2550.	12.8	81
33	Genomic gain of 5p15 leads to over-expression of Misu (NSUN2) in breast cancer. Cancer Letters, 2010, 289, 71-80.	7.2	80
34	The histone methyltransferase Setd8 acts in concert with c-Myc and is required to maintain skin. EMBO Journal, 2012, 31, 616-629.	7.8	71
35	Post-transcriptional modifications in development and stem cells. Development (Cambridge), 2016, 143, 3871-3881.	2.5	66
36	Mitochondrial haplotypes and the New Zealand origin of clonal European Potamopyrgus, an invasive aquatic snail. Molecular Ecology, 2005, 14, 2465-2473.	3.9	57

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37	The opposing transcriptional functions of Sin3a and c-Myc are required to maintain tissue homeostasis. Nature Cell Biology, 2011, 13, 1395-1405.	10.3	57
38	Expression of human Î²-defensin-1 promotes differentiation of keratinocytes. Journal of Molecular Medicine, 2001, 79, 275-282.	3.9	55
39	Posttranscriptional methylation of transfer and ribosomal RNA in stress response pathways, cell differentiation, and cancer. Current Opinion in Oncology, 2016, 28, 65-71.	2.4	51
40	Codon usage optimization in pluripotent embryonic stem cells. Genome Biology, 2019, 20, 119.	8.8	43
41	Chromatin regulators in mammalian epidermis. Seminars in Cell and Developmental Biology, 2012, 23, 897-905.	5.0	36
42	Noncanonical functions of the serineâ€arginineâ€rich splicing factor (SR) family of proteins in development and disease. BioEssays, 2021, 43, e2000242.	2.5	34
43	Expression of Human Beta Defensin (HBD-1 and HBD-2) mRNA in Nasal Epithelia of Adult Cystic Fibrosis Patients, Healthy Individuals, and Individuals with Acute Cold. Respiration, 2002, 69, 46-51.	2.6	33
44	Stem cells in ectodermal development. Journal of Molecular Medicine, 2012, 90, 783-790.	3.9	24
45	Positioning Europe for the EPITRANSCRIPTOMICS challenge. RNA Biology, 2018, 15, 1-3.	3.1	18
46	Genetically Induced Cell Death in Bulge Stem Cells Reveals Their Redundancy for Hair and Epidermal Regeneration. Stem Cells, 2015, 33, 988-998.	3.2	13
47	CONCUR: quick and robust calculation of codon usage from ribosome profiling data. Bioinformatics, 2021, 37, 717-719.	4.1	5
48	RN7SK small nuclear RNA controls bidirectional transcription of highly expressed gene pairs in skin. Nature Communications, 2021, 12, 5864.	12.8	5
49	Considerations for skin carcinogenesis experiments using inducible transgenic mouse models. BMC Research Notes, 2018, 11, 67.	1.4	3
50	RNA Methylation in theÂControl of Stem Cell Activity and Epidermal Differentiation. Contributions To Management Science, 2018, , 215-229.	0.5	1
51	The RNA Methyltransferase Misu (NSun2) Mediates Myc-Induced Proliferation and Is Upregulated in Tumors. Current Biology, 2007, 17, 2002.	3.9	0
52	Regulation of Human Epidermal Stem Cell Proliferation and Senescence Requires Polycomb- Dependent and -Independent Functions of Cbx4. Cell Stem Cell, 2011, 9, 486.	11.1	0
53	Die Bedeutung der ZelladhÃsionsmolekÃ¼le fÃ¼r die Struktur der Epidermis und Biorhythmik. Fortschritte Der Praktischen Dermatologie Und Venerologie, 2007, , 26-29.	0.0	0