Samie R Jaffrey

List of Publications by Year in Descending Order

143 papers	21,301 citations	66 h-index	145 g-index
168 ext. papers	26,809 ext. citations	17.2 avg, IF	7.5 L-index

#	Paper	IF	Citations
143	YTHDC2 control of gametogenesis requires helicase activity but not mA binding.. *Genes and Development*, **2022**,	12.6	2
142	Self-Assembly of Intracellular Multivalent RNA Complexes Using Dimeric Corn and Beetroot Aptamers.. *Journal of the American Chemical Society*, **2022**, 144, 5471-5477	16.4	0
141	N-methyladenosine in poly(A) tails stabilize VSG transcripts.. *Nature*, **2022**,	50.4	2
140	Caspase-11 interaction with NLRP3 potentiates the noncanonical activation of the NLRP3 inflammasome.. *Nature Immunology*, **2022**,	19.1	2
139	Repurposing an adenine riboswitch into a fluorogenic imaging and sensing tag.. *Nature Chemical Biology*, **2021**,	11.7	3
138	Trans ligation of RNAs to generate hybrid circular RNAs using highly efficient autocatalytic transcripts. *Methods*, **2021**, 196, 104-112	4.6	0
137	Naturally occurring three-way junctions can be repurposed as genetically encoded RNA-based sensors. *Cell Chemical Biology*, **2021**, 28, 1569-1580.e4	8.2	2
136	mTORC1 promotes cell growth via mA-dependent mRNA degradation. *Molecular Cell*, **2021**, 81, 2064-2075.e8	17.6	9
135	Mapping of mA and Its Regulatory Targets in Prostate Cancer Reveals a METTL3-Low Induction of Therapy Resistance. *Molecular Cancer Research*, **2021**, 19, 1398-1411	6.6	2
134	Transcriptional regulation of N-methyladenosine orchestrates sex-dimorphic metabolic traits. *Nature Metabolism*, **2021**, 3, 940-953	14.6	3
133	The RNA m6A Reader YTHDF2 Maintains Oncogene Expression and Is a Targetable Dependency in Glioblastoma Stem Cells. *Cancer Discovery*, **2021**, 11, 480-499	24.4	73
132	N-Methyladenosine on mRNA facilitates a phase-separated nuclear body that suppresses myeloid leukemic differentiation. *Cancer Cell*, **2021**, 39, 958-972.e8	24.3	25
131	Engineering Fluorophore Recycling in a Fluorogenic RNA Aptamer. *Angewandte Chemie*, **2021**, 133, 24355	3.6	1
130	Engineering Fluorophore Recycling in a Fluorogenic RNA Aptamer. *Angewandte Chemie - International Edition*, **2021**, 60, 24153-24161	16.4	2
129	A Unified Model for the Function of YTHDF Proteins in Regulating mA-Modified mRNA. *Cell*, **2020**, 181, 1582-1595.e18	56.2	158
128	m6A RNA methylation impacts fate choices during skin morphogenesis. *ELife*, **2020**, 9,	8.9	9
127	Fluorophore-Promoted RNA Folding and Photostability Enables Imaging of Single Broccoli-Tagged mRNAs in Live Mammalian Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 4511-4518	16.4	32

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126	Fluorophore-Promoted RNA Folding and Photostability Enables Imaging of Single Broccoli-Tagged mRNAs in Live Mammalian Cells. *Angewandte Chemie*, **2020**, 132, 4541-4548	3.6	4
125	Imaging Intracellular -Adenosyl Methionine Dynamics in Live Mammalian Cells with a Genetically Encoded Red Fluorescent RNA-Based Sensor. *Journal of the American Chemical Society*, **2020**, 142, 14117-14124	16.4	19
124	Imaging mRNA trafficking in living cells using fluorogenic proteins. *Current Opinion in Chemical Biology*, **2020**, 57, 177-183	9.7	9
123	Caspase-8 Inhibition Prevents the Cleavage and Degradation of E3 Ligase Substrate Receptor Cereblon and Potentiates Its Biological Function. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 605989	5.7	3
122	Limits in the detection of mA changes using MeRIP/mA-seq. *Scientific Reports*, **2020**, 10, 6590	4.9	71
121	Live imaging of mRNA using RNA-stabilized fluorogenic proteins. *Nature Methods*, **2019**, 16, 862-865	21.6	38
120	RIBOTACs: Small Molecules Target RNA for Degradation. *Cell Chemical Biology*, **2019**, 26, 1047-1049	8.2	9
119	Quantifying the RNA cap epitranscriptome reveals novel caps in cellular and viral RNA. *Nucleic Acids Research*, **2019**, 47, e130	20.1	62
118	Reading, writing and erasing mRNA methylation. *Nature Reviews Molecular Cell Biology*, **2019**, 20, 608-624	48.7	542
117	Discovering and Mapping the Modified Nucleotides That Comprise the Epitranscriptome of mRNA. *Cold Spring Harbor Perspectives in Biology*, **2019**, 11,	10.2	35
116	Spectral Tuning by a Single Nucleotide Controls the Fluorescence Properties of a Fluorogenic Aptamer. *Biochemistry*, **2019**, 58, 1560-1564	3.2	15
115	Transcriptome-Wide Mapping of m A and m Am at Single-Nucleotide Resolution Using miCLIP. *Current Protocols in Molecular Biology*, **2019**, 126, e88	2.9	13
114	Highly efficient expression of circular RNA aptamers in cells using autocatalytic transcripts. *Nature Biotechnology*, **2019**, 37, 667-675	44.5	104
113	Combining Chemical Synthesis and Enzymatic Methylation to Access Short RNAs with Various 5T Caps. *ChemBioChem*, **2019**, 20, 1693-1700	3.8	2
112	mA RNA Methylation Maintains Hematopoietic Stem Cell Identity and Symmetric Commitment. *Cell Reports*, **2019**, 28, 1703-1716.e6	10.6	59
111	mA enhances the phase separation potential of mRNA. *Nature*, **2019**, 571, 424-428	50.4	241
110	The human 18S rRNA m6A methyltransferase METTL5 is stabilized by TRMT112. *Nucleic Acids Research*, **2019**, 47, 7719-7733	20.1	152
109	Synaptogenesis Stimulates a Proteasome-Mediated Ribosome Reduction in Axons. *Cell Reports*, **2019**, 28, 864-876.e6	10.6	13

108	Identification of the mAm Methyltransferase PCIF1 Reveals the Location and Functions of mAm in the Transcriptome. *Molecular Cell*, **2019**, 75, 631-643.e8	17.6	95
107	Antibody cross-reactivity accounts for widespread appearance of mA in 5TUTRs. *Nature Communications*, **2019**, 10, 5126	17.4	42
106	A Fluorogenic RNA-Based Sensor Activated by Metabolite-Induced RNA Dimerization. *Cell Chemical Biology*, **2019**, 26, 1725-1731.e6	8.2	11
105	FTO controls reversible mAm RNA methylation during snRNA biogenesis. *Nature Chemical Biology*, **2019**, 15, 340-347	11.7	117
104	Detection of Low-Abundance Metabolites in Live Cells Using an RNA Integrator. *Cell Chemical Biology*, **2019**, 26, 471-481.e3	8.2	22
103	RNA-Based Fluorescent Biosensors for Detecting Metabolites in vitro and in Living Cells. *Advances in Pharmacology*, **2018**, 82, 187-203	5.7	23
102	Distinguishing RNA modifications from noise in epitranscriptome maps. *Nature Chemical Biology*, **2018**, 14, 215-225	11.7	59
101	Molecular basis for the specific and multivariant recognitions of RNA substrates by human hnRNP A2/B1. *Nature Communications*, **2018**, 9, 420	17.4	136
100	Reading mA in the Transcriptome: mA-Binding Proteins. *Trends in Cell Biology*, **2018**, 28, 113-127	18.3	272
99	FTO, m A , and the hypothesis of reversible epitranscriptomic mRNA modifications. *FEBS Letters*, **2018**, 592, 2012-2022	3.8	55
98	The dynamic epitranscriptome: Control of mRNA fate and function by nucleotide modifications. *FASEB Journal*, **2018**, 32, 381.2	0.9	
97	m6A Maintains Hematopoietic Stem and Progenitor Cell Identity. *Blood*, **2018**, 132, 327-327	2.2	
96	Nonsense-mediated RNA decay in the brain: emerging modulator of neural development and disease. *Nature Reviews Neuroscience*, **2018**, 19, 715-728	13.5	58
95	Emerging links between mA and misregulated mRNA methylation in cancer. *Genome Medicine*, **2017** , 9, 2	14.4	81
94	MetaPlotR: a Perl/R pipeline for plotting metagenes of nucleotide modifications and other transcriptomic sites. *Bioinformatics*, **2017**, 33, 1563-1564	7.2	58
93	Mapping mA at Individual-Nucleotide Resolution Using Crosslinking and Immunoprecipitation (miCLIP). *Methods in Molecular Biology*, **2017**, 1562, 55-78	1.4	45
92	Reversible methylation of mA in the 5Tcap controls mRNA stability. *Nature*, **2017**, 541, 371-375	50.4	540
91	Epitranscriptomics: Shrinking maps of RNA modifications. *Nature*, **2017**, 551, 174-176	50.4	22

90	Imaging RNA polymerase III transcription using a photostable RNA-fluorophore complex. *Nature Chemical Biology*, **2017**, 13, 1187-1194	11.7	144
89	A homodimer interface without base pairs in an RNA mimic of red fluorescent protein. *Nature Chemical Biology*, **2017**, 13, 1195-1201	11.7	67
88	Defining the location of promoter-associated R-loops at near-nucleotide resolution using bisDRIP-seq. *ELife*, **2017**, 6,	8.9	56
87	The N-methyladenosine (mA)-forming enzyme METTL3 controls myeloid differentiation of normal hematopoietic and leukemia cells. *Nature Medicine*, **2017**, 23, 1369-1376	50.5	584
86	Rethinking mA Readers, Writers, and Erasers. *Annual Review of Cell and Developmental Biology*, **2017**, 33, 319-342	12.6	494
85	A Staufen1-mediated decay pathway influences the local transcriptome in axons. *Translation*, **2017**, 5, e1414016		2
84	The mA pathway facilitates sex determination in Drosophila. *Nature Communications*, **2017**, 8, 15737	17.4	103
83	m6a Regulates Differentiation State and mRNA Translation in Myeloid Leukemia. *Blood*, **2017**, 130, 791-791	2.2	
82	Peptide Synthesis on a Next-Generation DNA Sequencing Platform. *ChemBioChem*, **2016**, 17, 1628-35	3.8	9
81	Nucleic Acid-Based Nanodevices in Biological Imaging. *Annual Review of Biochemistry*, **2016**, 85, 349-73	29.1	101
80	Expanding the diversity of DNA base modifications with N�methyldeoxyadenosine. *Genome Biology* , **2016**, 17, 5	18.3	10
79	Fluorescent RNA Aptamers as a Tool to Study RNA-Modifying Enzymes. *Cell Chemical Biology*, **2016**, 23, 415-25	8.2	35
78	Tracking translation one mRNA at a time. *Nature Biotechnology*, **2016**, 34, 723-4	44.5	
77	RNA Imaging with Dimeric Broccoli in Live Bacterial and Mammalian Cells. *Current Protocols in Chemical Biology*, **2016**, 8, 1-28	1.8	31
76	Separating neuronal compartments gives clues as to local effect of ubiquitin conjugates in synaptogenesis. *Journal of Cell Biology*, **2016**, 212, 751-3	7.3	1
75	RNA modifications: what have we learned and where are we headed?. *Nature Reviews Genetics*, **2016**, 17, 365-72	30.1	144
74	m(6)A RNA methylation promotes XIST-mediated transcriptional repression. *Nature*, **2016**, 537, 369-373	50.4	781
73	Small Molecule Recognition and Tools to Study Modulation of r(CGG)(exp) in Fragile X-Associated Tremor Ataxia Syndrome. *ACS Chemical Biology*, **2016**, 11, 2456-65	4.9	36

72	A novel effect of thalidomide and its analogs: suppression of cereblon ubiquitination enhances ubiquitin ligase function. *FASEB Journal*, **2015**, 29, 4829-39	0.9	35
71	Metazoan tRNA introns generate stable circular RNAs in vivo. *Rna*, **2015**, 21, 1554-65	5.8	115
70	Structure and Mechanism of RNA Mimics of Green Fluorescent Protein. *Annual Review of Biophysics*, **2015**, 44, 187-206	21.1	92
69	Single-nucleotide-resolution mapping of m6A and m6Am throughout the transcriptome. *Nature Methods*, **2015**, 12, 767-72	21.6	774
68	Coupled local translation and degradation regulate growth cone collapse. *Nature Communications*, **2015**, 6, 6888	17.4	34
67	Designing optogenetically controlled RNA for regulating biological systems. *Annals of the New York Academy of Sciences*, **2015**, 1352, 13-9	6.5	12
66	Imaging metabolite dynamics in living cells using a Spinach-based riboswitch. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E2756-65	11.5	133
65	5TUTR m(6)A Promotes Cap-Independent Translation. *Cell*, **2015**, 163, 999-1010	56.2	933
64	Dynamic m(6)A mRNA methylation directs translational control of heat shock response. *Nature*, **2015**, 526, 591-4	50.4	723
63	In-gel imaging of RNA processing using broccoli reveals optimal aptamer expression strategies. *Chemistry and Biology*, **2015**, 22, 649-60		104
62	Live-cell imaging of mammalian RNAs with Spinach2. *Methods in Enzymology*, **2015**, 550, 129-46	1.7	21
61	The dynamic epitranscriptome: N6-methyladenosine and gene expression control. *Nature Reviews Molecular Cell Biology*, **2014**, 15, 313-26	48.7	545
60	Redox modification of nuclear actin by MICAL-2 regulates SRF signaling. *Cell*, **2014**, 156, 563-76	56.2	113
59	The DNA replication program is altered at the FMR1 locus in fragile X embryonic stem cells. *Molecular Cell*, **2014**, 53, 19-31	17.6	79
58	Using Spinach-based sensors for fluorescence imaging of intracellular metabolites and proteins in living bacteria. *Nature Protocols*, **2014**, 9, 146-55	18.8	95
57	Plug-and-play fluorophores extend the spectral properties of Spinach. *Journal of the American Chemical Society*, **2014**, 136, 1198-201	16.4	170
56	Broccoli: rapid selection of an RNA mimic of green fluorescent protein by fluorescence-based selection and directed evolution. *Journal of the American Chemical Society*, **2014**, 136, 16299-308	16.4	404
55	An expanding universe of mRNA modifications. *Nature Structural and Molecular Biology*, **2014**, 21, 945-6	17.6	25

54	Structural basis for activity of highly efficient RNA mimics of green fluorescent protein. *Nature Structural and Molecular Biology*, **2014**, 21, 658-63	17.6	235
53	NAD+ and SIRT3 control microtubule dynamics and reduce susceptibility to antimicrotubule agents. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E2443-52	11.5	26
52	Using RNA Mimics of GFP to Image RNA Dynamics in Mammalian Cells **2014**, 83-91		0
51	Profiling lysine ubiquitination by selective enrichment of ubiquitin remnant-containing peptides. *Methods in Molecular Biology*, **2014**, 1174, 57-71	1.4	7
50	Activation of SIRT3 by the NAD+ precursor nicotinamide riboside protects from noise-induced hearing loss. *Cell Metabolism*, **2014**, 20, 1059-68	24.6	186
49	Axonal transcription factors: novel regulators of growth cone-to-nucleus signaling. *Developmental Neurobiology*, **2014**, 74, 245-58	3.2	25
48	Promoter-bound trinucleotide repeat mRNA drives epigenetic silencing in fragile X syndrome. *Science*, **2014**, 343, 1002-5	33.3	215
47	Imaging bacterial protein expression using genetically encoded RNA sensors. *Nature Methods*, **2013** , 10, 873-5	21.6	110
46	The fat mass and obesity associated gene (Fto) regulates activity of the dopaminergic midbrain circuitry. *Nature Neuroscience*, **2013**, 16, 1042-8	25.5	327
45	New approaches for sensing metabolites and proteins in live cells using RNA. *Current Opinion in Chemical Biology*, **2013**, 17, 651-5	9.7	36
44	A superfolding Spinach2 reveals the dynamic nature of trinucleotide repeat-containing RNA. *Nature Methods*, **2013**, 10, 1219-24	21.6	252
43	Global profiling of stimulus-induced polyadenylation in cells using a poly(A) trap. *Nature Chemical Biology*, **2013**, 9, 671-3	11.7	43
42	Regulation of axon guidance by compartmentalized nonsense-mediated mRNA decay. *Cell*, **2013**, 153, 1252-65	56.2	136
41	Proteomic identification of protein ubiquitination events. *Biotechnology and Genetic Engineering Reviews*, **2013**, 29, 73-109	4.1	44
40	A mental retardation-linked nonsense mutation in cereblon is rescued by proteasome inhibition. *Journal of Biological Chemistry*, **2013**, 288, 29573-85	5.4	31
39	Intra-axonal translation of RhoA promotes axon growth inhibition by CSPG. *Journal of Neuroscience*, **2012**, 32, 14442-7	6.6	45
38	The birth of the Epitranscriptome: deciphering the function of RNA modifications. *Genome Biology*, **2012**, 13, 175	18.3	275
37	Intra-axonal translation of SMAD1/5/8 mediates retrograde regulation of trigeminal ganglia subtype specification. *Neuron*, **2012**, 74, 95-107	13.9	66

36	Comprehensive analysis of mRNA methylation reveals enrichment in 3TUTRs and near stop codons. *Cell*, **2012**, 149, 1635-46	56.2	2100
35	Fluorescence imaging of cellular metabolites with RNA. *Science*, **2012**, 335, 1194	33.3	383
34	Chemical genetic-mediated spatial regulation of protein expression in neurons reveals an axonal function for wld(s). *Chemistry and Biology*, **2012**, 19, 179-87		16
33	Insights into the roles of local translation from the axonal transcriptome. *Open Biology*, **2012**, 2, 120079	7	40
32	RNA mimics of green fluorescent protein. *Science*, **2011**, 333, 642-6	33.3	882
31	Chemoenzymatic labeling of protein C-termini for positive selection of C-terminal peptides. *ACS Chemical Biology*, **2011**, 6, 1015-20	4.9	31
30	Neurotrophin-mediated dendrite-to-nucleus signaling revealed by microfluidic compartmentalization of dendrites. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 11246-51	11.5	82
29	Global analysis of lysine ubiquitination by ubiquitin remnant immunoaffinity profiling. *Nature Biotechnology*, **2010**, 28, 868-73	44.5	373
28	N-CLAP: global profiling of N-termini by chemoselective labeling of the alpha-amine of proteins. *Cold Spring Harbor Protocols*, **2010**, 2010, pdb.prot5528	1.2	6
27	HDAC6 is a target for protection and regeneration following injury in the nervous system. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 19599-604	11.5	242
26	Global profiling of protease cleavage sites by chemoselective labeling of protein N-termini. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 19310-5	11.5	71
25	Axonal elongation triggered by stimulus-induced local translation of a polarity complex protein. *Nature Cell Biology*, **2009**, 11, 1024-30	23.4	141
24	Intra-axonal translation and retrograde trafficking of CREB promotes neuronal survival. *Nature Cell Biology*, **2008**, 10, 149-59	23.4	219
23	Nitrosothiol reactivity profiling identifies S-nitrosylated proteins with unexpected stability. *Chemistry and Biology*, **2008**, 15, 1307-16		149
22	Pharmacologic manipulation of nitric oxide signaling: targeting NOS dimerization and protein-protein interactions. *Current Topics in Medicinal Chemistry*, **2007**, 7, 97-114	3	46
21	Function and translational regulation of mRNA in developing axons. *Seminars in Cell and Developmental Biology*, **2007**, 18, 209-15	7.5	64
20	Functional and selective RNA interference in developing axons and growth cones. *Journal of Neuroscience*, **2006**, 26, 5727-32	6.6	141
19	Soluble adenylyl cyclase is required for netrin-1 signaling in nerve growth cones. *Nature Neuroscience*, **2006**, 9, 1257-64	25.5	79

18	Detection and characterization of protein nitrosothiols. *Methods in Enzymology*, **2005**, 396, 105-18	1.7	30
17	Local translation of RhoA regulates growth cone collapse. *Nature*, **2005**, 436, 1020-1024	50.4	347
16	Ligand discovery using small molecule microarrays. *Journal of Pharmacology and Experimental Therapeutics*, **2005**, 313, 1-7	4.7	40
15	Nitrosopeptide mapping: a novel methodology reveals s-nitrosylation of dexras1 on a single cysteine residue. *Chemistry and Biology*, **2002**, 9, 1329-35		58
14	Neuronal nitric-oxide synthase localization mediated by a ternary complex with synapsin and CAPON. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 3199-204	11.5	93
13	Protein S-nitrosylation: a physiological signal for neuronal nitric oxide. *Nature Cell Biology*, **2001**, 3, 193-7	23.4	1208
12	Dexras1: a G protein specifically coupled to neuronal nitric oxide synthase via CAPON. *Neuron*, **2000** , 28, 183-93	13.9	266
11	Insulin restores neuronal nitric oxide synthase expression and function that is lost in diabetic gastropathy. *Journal of Clinical Investigation*, **2000**, 106, 373-84	15.9	186
10	Haem oxygenase-1 prevents cell death by regulating cellular iron. *Nature Cell Biology*, **1999**, 1, 152-7	23.4	448
9	Structure of the PIN/LC8 dimer with a bound peptide. *Nature Structural Biology*, **1999**, 6, 735-40		131
8	Nitric oxide and carbon monoxide: parallel roles as neural messengers. *Brain Research Reviews*, **1998**, 26, 167-75		206
7	CAPON: a protein associated with neuronal nitric oxide synthase that regulates its interactions with PSD95. *Neuron*, **1998**, 20, 115-24	13.9	307
6	Nitric oxide: a neural messenger. *Annual Review of Cell and Developmental Biology*, **1995**, 11, 417-40	12.6	299
5	The interaction between the iron-responsive element binding protein and its cognate RNA is highly dependent upon both RNA sequence and structure. *Nucleic Acids Research*, **1993**, 21, 4627-31	20.1	99
4	Molecular basis for the specific and multivariate recognitions of RNA substrates by human hnRNPA2/B1		1
3	N6-methyladenosine in poly(A) tails stabilizeVSGtranscripts		2
2	The RNA demethylase FTO targets m6Am in snRNA to establish distinct methyl isoforms that influence splicing		3
1	Limits in the detection of m6A changes using MeRIP/m6A-seq		4