Matthew D Simon

List of Publications by Year in Descending Order

58 papers	4,660 citations	25 h-index	63 g-index
63 ext. papers	5,770 ext. citations	15.2 avg, IF	5.52 L-index

#	Paper	IF	Citations
58	Precision analysis of mutant U2AF1 activity reveals deployment of stress granules in myeloid malignancies.. *Molecular Cell*, **2022**, 82, 1107-1122.e7	17.6	1
57	Functional elements of the cis-regulatory lincRNA-p21.. *Cell Reports*, **2022**, 39, 110687	10.6	1
56	U2AF1 Mutations Enhance Stress Granule Response in Myeloid Malignancies. *Blood*, **2021**, 138, 321-321	2.2	
55	ALKBH5 Modulates Hematopoietic Stem and Progenitor Cell Energy Metabolism through m 6a Modification-Mediated RNA Stability. *Blood*, **2021**, 138, 298-298	2.2	
54	Genome-wide CRISPR Screens Reveal Host Factors Critical for SARS-CoV-2 Infection. *Cell*, **2021**, 184, 76-91.e13	56.2	202
53	Discovery of cellular substrates of human RNA-decapping enzyme DCP2 using a stapled bicyclic peptide inhibitor. *Cell Chemical Biology*, **2021**, 28, 463-474.e7	8.2	3
52	Hyperosmotic stress alters the RNA polymerase II interactome and induces readthrough transcription despite widespread transcriptional repression. *Molecular Cell*, **2021**, 81, 502-513.e4	17.6	14
51	STL-seq reveals pause-release and termination kinetics for promoter-proximal paused RNA polymerase II transcripts. *Molecular Cell*, **2021**, 81, 4398-4412.e7	17.6	0
50	Global Profiling of Cellular Substrates of Human Dcp2. *Biochemistry*, **2020**, 59, 4176-4188	3.2	8
49	Enhanced nucleotide chemistry and toehold nanotechnology reveals lncRNA spreading on chromatin. *Nature Structural and Molecular Biology*, **2020**, 27, 297-304	17.6	2
48	p53 Activates the Long Noncoding RNA Pvt1b to Inhibit Myc and Suppress Tumorigenesis. *Molecular Cell*, **2020**, 77, 761-774.e8	17.6	59
47	High-Resolution Binding Atlas of U2AF1 Mutants Uncovers New Complexity in Splicing Alterations and Kinetics in Myeloid Malignancies. *Blood*, **2020**, 136, 3-4	2.2	
46	The NBDY Microprotein Regulates Cellular RNA Decapping. *Biochemistry*, **2020**, 59, 4131-4142	3.2	8
45	Stella's Role in Oocyte DNA Methylation Suggests Additional Activities of DNMT1. *Biochemistry*, **2019**, 58, 1833-1834	3.2	
44	Antisense lncRNA Transcription Mediates DNA Demethylation to Drive Stochastic Protocadherin Promoter Choice. *Cell*, **2019**, 177, 639-653.e15	56.2	73
43	Reengineering a tRNA Methyltransferase To Covalently Capture New RNA Substrates. *Journal of the American Chemical Society*, **2019**, 141, 17460-17465	16.4	1
42	Principles and Practices of Hybridization Capture Experiments to Study Long Noncoding RNAs That Act on Chromatin. *Cold Spring Harbor Perspectives in Biology*, **2019**, 11,	10.2	2

41	Carbodiimide reagents for the chemical probing of RNA structure in cells. *Rna*, **2019**, 25, 135-146	5.8	24
40	Gaining insight into transcriptome-wide RNA population dynamics through the chemistry of 4-thiouridine. *Wiley Interdisciplinary Reviews RNA*, **2019**, 10, e1513	9.3	15
39	Catching RNAs on chromatin using hybridization capture methods. *Briefings in Functional Genomics*, **2018**, 17, 96-103	4.9	14
38	TimeLapse-seq: adding a temporal dimension to RNA sequencing through nucleoside recoding. *Nature Methods*, **2018**, 15, 221-225	21.6	105
37	Solid phase chemistry to covalently and reversibly capture thiolated RNA. *Nucleic Acids Research*, **2018**, 46, 6996-7005	20.1	12
36	Studying Stimulus-Induced Changes in RNA Dynamics by Mutational Mapping through TimeLapse-seq. *FASEB Journal*, **2018**, 32, lb23	0.9	
35	Expanding the Nucleoside Recoding Toolkit: Revealing RNA Population Dynamics with 6-Thioguanosine. *Journal of the American Chemical Society*, **2018**, 140, 14567-14570	16.4	17
34	Interpreting Reverse Transcriptase Termination and Mutation Events for Greater Insight into the Chemical Probing of RNA. *Biochemistry*, **2017**, 56, 4713-4721	3.2	42
33	mA mRNA methylation controls T cell homeostasis by targeting the IL-7/STAT5/SOCS pathways. *Nature*, **2017**, 548, 338-342	50.4	367
32	Insight into lncRNA biology using hybridization capture analyses. *Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms*, **2016**, 1859, 121-7	6	24
31	Enriching s U-RNA Using Methane Thiosulfonate (MTS) Chemistry. *Current Protocols in Chemical Biology*, **2016**, 8, 234-250	1.8	20
30	The Properties of Long Noncoding RNAs That Regulate Chromatin. *Annual Review of Genomics and Human Genetics*, **2016**, 17, 69-94	9.7	61
29	Capture Hybridization Analysis of DNA Targets. *Methods in Molecular Biology*, **2016**, 1480, 87-97	1.4	3
28	Tracking Distinct RNA Populations Using Efficient and Reversible Covalent Chemistry. *Molecular Cell*, **2015**, 59, 858-66	17.6	118
27	Probing Xist RNA Structure in Cells Using Targeted Structure-Seq. *PLoS Genetics*, **2015**, 11, e1005668	6	91
26	The long noncoding RNAs NEAT1 and MALAT1 bind active chromatin sites. *Molecular Cell*, **2014**, 55, 791-802	8.2	421
25	A chromatin-dependent role of the fragile X mental retardation protein FMRP in the DNA damage response. *Cell*, **2014**, 157, 869-81	56.2	113
24	Multiplexed Illumina sequencing libraries from picogram quantities of DNA. *BMC Genomics*, **2013**, 14, 466	4.5	62

23	High-resolution Xist binding maps reveal two-step spreading during X-chromosome inactivation. *Nature*, **2013**, 504, 465-469	50.4	289
22	LSD2/KDM1B and its cofactor NPAC/GLYR1 endow a structural and molecular model for regulation of H3K4 demethylation. *Molecular Cell*, **2013**, 49, 558-70	17.6	61
21	Capture hybridization analysis of RNA targets (CHART). *Current Protocols in Molecular Biology*, **2013** , Chapter 21, Unit 21.25.	2.9	44
20	Epigenetic mechanism: silent nucleosomal structures and non-coding RNAs.. *FASEB Journal*, **2013**, 27, 456.2	0.9	
19	A method to site-specifically incorporate methyl-lysine analogues into recombinant proteins. *Methods in Enzymology*, **2012**, 512, 57-69	1.7	10
18	The fragile X mental retardation protein FMRP plays a role in the DNA damage response. *FASEB Journal*, **2012**, 26, 88.1	0.9	1
17	Chromodomain-mediated oligomerization of HP1 suggests a nucleosome-bridging mechanism for heterochromatin assembly. *Molecular Cell*, **2011**, 41, 67-81	17.6	214
16	The genomic binding sites of a noncoding RNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 20497-502	11.5	333
15	Innate immune responses activated in Arabidopsis roots by microbe-associated molecular patterns. *Plant Cell*, **2010**, 22, 973-90	11.6	393
14	Installation of site-specific methylation into histones using methyl lysine analogs. *Current Protocols in Molecular Biology*, **2010**, Chapter 21, Unit 21.18.1-10	2.9	17
13	Histone H3 lysine 36 dimethylation (H3K36me2) is sufficient to recruit the Rpd3s histone deacetylase complex and to repress spurious transcription. *Journal of Biological Chemistry*, **2009**, 284, 7970-6	5.4	117
12	Polycomb proteins remain bound to chromatin and DNA during DNA replication in vitro. *Cell*, **2009**, 137, 110-22	56.2	141
11	Jumonji modulates polycomb activity and self-renewal versus differentiation of stem cells. *Cell*, **2009**, 139, 1303-14	56.2	360
10	ING4 mediates crosstalk between histone H3 K4 trimethylation and H3 acetylation to attenuate cellular transformation. *Molecular Cell*, **2009**, 33, 248-56	17.6	166
9	The effect of H3K79 dimethylation and H4K20 trimethylation on nucleosome and chromatin structure. *Nature Structural and Molecular Biology*, **2008**, 15, 1122-4	17.6	176
8	The polycomb group protein SUZ12 regulates histone H3 lysine 9 methylation and HP1 alpha distribution. *Chromosome Research*, **2007**, 15, 299-314	4.4	35
7	The site-specific installation of methyl-lysine analogs into recombinant histones. *Cell*, **2007**, 128, 1003-12	56.2	368
6	Structure and properties of a re-engineered homeodomain protein-DNA interface. *ACS Chemical Biology*, **2006**, 1, 755-60	4.9	4

List of Publications

5	A phage display selection of engrailed homeodomain mutants and the importance of residue Q50. *Nucleic Acids Research*, **2004**, 32, 3623-31	20.1	11
4	Dissecting the Engrailed homeodomain-DNA interaction by phage-displayed shotgun scanning. *Chemistry and Biology*, **2004**, 11, 1017-23		19
3	Adaptability at a protein-DNA interface: re-engineering the engrailed homeodomain to recognize an unnatural nucleotide. *Journal of the American Chemical Society*, **2004**, 126, 8078-9	16.4	12
2	Revealing Biological Specificity by Engineering Protein-Ligand Interactions115-139		2
1	Antisense lncRNA transcription drives stochastic Protocadherin promoter choice		3