Sebastian A Leidel

List of Publications by Year
in descending order

59 papers	5,356 citations	136950 32 h-index	155660 55 g-index
67 all docs	67 docs citations	67 times ranked	6471 citing authors

#	Article	IF	Citations
1	Functional genomic analysis of cell division in C. elegans using RNAi of genes on chromosome III. Nature, 2000, 408, 331-336.	27.8	854
2	Optimization of Codon Translation Rates via tRNA Modifications Maintains Proteome Integrity. Cell, 2015, 161, 1606-1618.	28.9	427
3	SAS-6 defines a protein family required for centrosome duplication in C. elegans and in human cells. Nature Cell Biology, 2005, 7, 115-125.	10.3	362
4	Regulated HsSAS-6 Levels Ensure Formation of a Single Procentriole per Centriole during the Centrosome Duplication Cycle. Developmental Cell, 2007, 13, 203-213.	7.0	305
5	Ubiquitin-related modifier Urm1 acts as a sulphur carrier in thiolation of eukaryotic transfer RNA. Nature, 2009, 458, 228-232.	27.8	245
6	SAS-4 Is Essential for Centrosome Duplication in C. elegans and Is Recruited to Daughter Centrioles Once per Cell Cycle. Developmental Cell, 2003, 4, 431-439.	7.0	208
7	Codon-specific translation reprogramming promotes resistance to targeted therapy. Nature, 2018, 558, 605-609.	27.8	177
8	A Dynamic Unfolded Protein Response Contributes to the Control of Cortical Neurogenesis. Developmental Cell, 2015, 35, 553-567.	7.0	169
9	Mutations in KEOPS-complex genes cause nephrotic syndrome with primary microcephaly. Nature Genetics, 2017, 49, 1529-1538.	21.4	164
10	Centriolar SAS-5 is required for centrosome duplication in C. elegans. Nature Cell Biology, 2004, 6, 656-664.	10.3	156
11	Synergism with the Coactivator OBF-1 (OCA-B, BOB-1) Is Mediated by a Specific POU Dimer Configuration. Cell, 2000, 103, 853-864.	28.9	134
12	Elp3 links tRNA modification to IRES-dependent translation of LEF1 to sustain metastasis in breast cancer. Journal of Experimental Medicine, 2016, 213, 2503-2523.	8.5	128
13	A fully automated high-throughput workflow for 3D-based chemical screening in human midbrain organoids. ELife, 2020, 9, .	6.0	117
14	Matching tRNA modifications in humans to their known and predicted enzymes. Nucleic Acids Research, 2019, 47, 2143-2159.	14.5	116
15	Modification of tRNALysUUU by Elongator Is Essential for Efficient Translation of Stress mRNAs. PLoS Genetics, 2013, 9, e1003647.	3.5	115
16	miR-31 Functions as a Negative Regulator of Lymphatic Vascular Lineage-Specific Differentiation <i>In Vitro</i> and Vascular Development <i>In Vivo</i>. Molecular and Cellular Biology, 2010, 30, 3620-3634.	2.3	102
17	Stepwise Clearance of Repressive Roadblocks Drives Cardiac Induction in Human ESCs. Cell Stem Cell, 2016, 18, 341-353.	11.1	89
18	The human methyltransferase ZCCHC4 catalyses N6-methyladenosine modification of 28S ribosomal RNA. Nucleic Acids Research, 2020, 48, 830-846.	14.5	88

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19	The Gcn4 transcription factor reduces protein synthesis capacity and extends yeast lifespan. Nature Communications, 2017, 8, 457.	12.8	83
20	Enzymatic or In Vivo Installation of Propargyl Groups in Combination with Click Chemistry for the Enrichment and Detection of Methyltransferase Target Sites in RNA. Angewandte Chemie - International Edition, 2018, 57, 6342-6346.	13.8	82
21	Wobble uridine modificationsâ€"a reason to live, a reason to die?!. RNA Biology, 2017, 14, 1209-1222.	3.1	81
22	The dual methyltransferase METTL13 targets N terminus and Lys55 of eEF1A and modulates codon-specific translation rates. Nature Communications, 2018, 9, 3411.	12.8	81
23	An evolutionary approach uncovers a diverse response of tRNA 2-thiolation to elevated temperatures in yeast. Rna, 2015, 21, 202-212.	3.5	67
24	Modify or die? - RNA modification defects in metazoans. RNA Biology, 2014, 11, 1555-1567.	3.1	65
25	The novel lysine specific methyltransferase METTL21B affects mRNA translation through inducible and dynamic methylation of Lys-165 in human eukaryotic elongation factor 1 alpha (eEF1A). Nucleic Acids Research, 2017, 45, gkx002.	14.5	64
26	pymzML v2.0: introducing a highly compressed and seekable gzip format. Bioinformatics, 2018, 34, 2513-2514.	4.1	56
27	Urm1 at the crossroad of modifications. EMBO Reports, 2008, 9, 1196-1202.	4.5	53
28	Dual randomization of oligonucleotides to reduce the bias in ribosome-profiling libraries. Methods, 2016, 107, 89-97.	3.8	50
29	Centrosome Duplication and Nematodes: Recent Insights from an Old Relationship. Developmental Cell, 2005, 9, 317-325.	7.0	48
30	A novel translational control mechanism involving RNA structures within coding sequences. Genome Research, 2017, 27, 95-106.	5.5	48
31	Methylation of human eukaryotic elongation factor alpha (eEF1A) by a member of a novel protein lysine methyltransferase family modulates mRNA translation. Nucleic Acids Research, 2017, 45, 8239-8254.	14.5	44
32	Nano LC-MS using capillary columns enables accurate quantification of modified ribonucleosides at low femtomol levels. Rna, 2018, 24, 1403-1417.	3.5	42
33	Repulsive cues combined with physical barriers and cellâ€"cell adhesion determine progenitor cell positioning during organogenesis. Nature Communications, 2016, 7, 11288.	12.8	38
34	The exonuclease Xrn1 activates transcription and translation of mRNAs encoding membrane proteins. Nature Communications, 2019, 10, 1298.	12.8	36
35	Glutaredoxin GRXS17 Associates with the Cytosolic Iron-Sulfur Cluster Assembly Pathway. Plant Physiology, 2016, 172, pp.00261.2016.	4.8	35
36	pyQms enables universal and accurate quantification of mass spectrometry data. Molecular and Cellular Proteomics, 2017, 16, 1736-1745.	3.8	35

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37	Wnt/Beta-catenin/Esrrb signalling controls the tissue-scale reorganization and maintenance of the pluripotent lineage during murine embryonic diapause. Nature Communications, 2020, 11, 5499.	12.8	35
38	Human METTL18 is a histidine-specific methyltransferase that targets RPL3 and affects ribosome biogenesis and function. Nucleic Acids Research, 2021, 49, 3185-3203.	14.5	34
39	Translational offsetting as a mode of estrogen receptor Î±â€dependent regulation of geneÂexpression. EMBO Journal, 2019, 38, e101323.	7.8	33
40	Differential Requirement for Translation Initiation Factor Pathways during Ecdysone-Dependent Neuronal Remodeling in Drosophila. Cell Reports, 2018, 24, 2287-2299.e4.	6.4	32
41	The epitranscriptome in translation regulation: <scp>mRNA</scp> and <scp>tRNA</scp> modifications as the two sides of the same coin?. FEBS Letters, 2019, 593, 1483-1493.	2.8	32
42	Absolute Quantification of Noncoding RNA by Microscale Thermophoresis. Angewandte Chemie - International Edition, 2019, 58, 9565-9569.	13.8	29
43	The Uba4 domain interplay is mediated via a thioester that is critical for tRNA thiolation through Urm1 thiocarboxylation. Nucleic Acids Research, 2018, 46, 5171-5181.	14.5	25
44	Humans and other commonly used model organisms are resistant to cycloheximide-mediated biases in ribosome profiling experiments. Nature Communications, 2021, 12, 5094.	12.8	21
45	Enzymatischer oder In-vivo-Einbau von Propargylgruppen in Kombination mit Klick-Chemie zur Anreicherung und Detektion von Methyltransferase-Zielsequenzen in RNA. Angewandte Chemie, 2018, 130, 6451-6455.	2.0	19
46	Molecular basis for the bifunctional Uba4â€"Urm1 sulfurâ€relay system in <scp>tRNA</scp> thiolation and ubiquitinâ€like conjugation. EMBO Journal, 2020, 39, e105087.	7.8	17
47	Diversity of foliar endophytic ascomycetes in the endemic Corsican pine forests. Fungal Ecology, 2018, 36, 128-140.	1.6	14
48	Modulation of Escherichia coli Translation by the Specific Inactivation of tRNAGly Under Oxidative Stress. Frontiers in Genetics, 2020, 11, 856.	2.3	14
49	Dynamic Regulation of tRNA Modifications in Cancer. , 2018, , 163-186.		10
50	PDCD4 controls the G1/S-phase transition in a telomerase-immortalized epithelial cell line and affects the expression level and translation of multiple mRNAs. Scientific Reports, 2020, 10, 2758.	3.3	9
51	Interaction between the<i>Caenorhabditis elegans</i>centriolar protein SAS-5 and microtubules facilitates organelle assembly. Molecular Biology of the Cell, 2018, 29, 722-735.	2.1	8
52	Enhancing Open Modification Searches via a Combined Approach Facilitated by Ursgal. Journal of Proteome Research, 2021, 20, 1986-1996.	3.7	8
53	Urm1: A Non-Canonical UBL. Biomolecules, 2021, 11, 139.	4.0	7
54	SMITERâ€"A Python Library for the Simulation of LC-MS/MS Experiments. Genes, 2021, 12, 396.	2.4	6

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55	Analysis of codon-specific translation by ribosome profiling. Methods in Enzymology, 2021, 658, 191-223.	1.0	3
56	Innentitelbild: Enzymatischer oder Inâ€vivoâ€Einbau von Propargylgruppen in Kombination mit Klickâ€Chemie zur Anreicherung und Detektion von Methyltransferaseâ€Zielsequenzen in RNA (Angew. Chem. 21/2018). Angewandte Chemie, 2018, 130, 6064-6064.	2.0	0
57	Absolute Quantifizierung nichtâ€kodierender RNAâ€Spezies mittels Mikroskalaâ€Thermophorese. Angewandte Chemie, 2019, 131, 9666-9670.	2.0	0
58	Editorial: Microbial Regulation of Translation. Frontiers in Genetics, 2020, 11, 616946.	2.3	0
59	Structures to the people!. ELife, 2015, 4, e09249.	6.0	0