Robert C Spitale

List of Publications by Year
in descending order

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53 papers	4,339 citations	257101 24 h-index	174990 52 g-index
58 all docs	58 docs citations	58 times ranked	6182 citing authors

#	Article	IF	Citations
1	Analysis of subcellular transcriptomes by RNA proximity labeling with Halo-seq. Nucleic Acids Research, 2022, 50, e24-e24.	6.5	25
2	Exploiting Endogenous Enzymes for Cancer-Cell Selective Metabolic Labeling of RNA in Vivo. Journal of the American Chemical Society, 2022, 144, 7085-7088.	6.6	8
3	An atlas of posttranslational modifications on RNA binding proteins. Nucleic Acids Research, 2022, 50, 4329-4339.	6.5	8
4	Haloâ€seq: An RNA Proximity Labeling Method for the Isolation and Analysis of Subcellular RNA Populations. Current Protocols, 2022, 2, e424.	1.3	1
5	Chemical Approaches To Analyzing RNA Structure Transcriptomeâ€Wide. ChemBioChem, 2021, 22, 1114-1121.	1.3	8
6	Diverse functional elements in RNA predicted transcriptome-wide by orthogonal RNA structure probing. Nucleic Acids Research, 2021, 49, 11868-11882.	6.5	5
7	A biologically stable DNAzyme that efficiently silences gene expression in cells. Nature Chemistry, 2021, 13, 319-326.	6.6	121
8	Allele-Specific RNA Knockdown with a Biologically Stable and Catalytically Efficient XNAzyme. Journal of the American Chemical Society, 2021, 143, 4519-4523.	6.6	30
9	Chemical methods for measuring <scp>RNA</scp> expression with metabolic labeling. Wiley Interdisciplinary Reviews RNA, 2021, 12, e1650.	3.2	11
10	Mutually Orthogonal Bioconjugation of Vinyl Nucleosides for RNA Metabolic Labeling. Organic Letters, 2021, 23, 7183-7187.	2.4	6
11	Taylor-made production of pyrimidine nucleoside-5â€²-monophosphate analogues by highly stabilized mutant uracil phosphoribosyltransferase from Toxoplasma gondii. Bioresource Technology, 2021, 339, 125649.	4.8	4
12	A Bump-Hole Strategy for Increased Stringency of Cell-Specific Metabolic Labeling of RNA. ACS Chemical Biology, 2020, 15, 3099-3105.	1.6	9
13	Chromatin remodeling protein HELLS is critical for retinoblastoma tumor initiation and progression. Oncogenesis, 2020, 9, 25.	2.1	30
14	An optimized chemical-genetic method for cell-specific metabolic labeling of RNA. Nature Methods, 2020, 17, 311-318.	9.0	38
15	Identification of novel regulators of dendrite arborization using cell type-specific RNA metabolic labeling. PLoS ONE, 2020, 15, e0240386.	1.1	2
16	Assaying RNA solvent accessibility in living cells with LASER. Methods in Enzymology, 2020, 641, 401-411.	0.4	1
17	Expanding the Scope of RNA Metabolic Labeling with Vinyl Nucleosides and Inverse Electron-Demand Dielsâ€“Alder Chemistry. ACS Chemical Biology, 2019, 14, 1698-1707.	1.6	36
18	Identification of Adenosine-to-Inosine RNA Editing with Acrylonitrile Reagents. Organic Letters, 2019, 21, 7948-7951.	2.4	15

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19	Biochemical Methods To Image and Analyze RNA Localization: From One to Many. Biochemistry, 2019, 58, 379-386.	1.2	8
20	Assaying RNA structure with LASER-Seq. Nucleic Acids Research, 2019, 47, 43-55.	6.5	69
21	Improved Analysis of RNA Localization by Spatially Restricted Oxidation of RNAâ€“Protein Complexes. Biochemistry, 2018, 57, 1577-1581.	1.2	36
22	Facile synthesis and evaluation of a dual-functioning furoyl probe for in-cell SHAPE. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 601-605.	1.0	6
23	Light-activated chemical probing of nucleobase solvent accessibility inside cells. Nature Chemical Biology, 2018, 14, 276-283.	3.9	47
24	Experienceâ€dependent neural plasticity, learning, and memory in the era of epitranscriptomics. Genes, Brain and Behavior, 2018, 17, e12426.	1.1	28
25	Protected pyrimidine nucleosides for cell-specific metabolic labeling of RNA. Tetrahedron Letters, 2018, 59, 3912-3915.	0.7	5
26	Spatially Restricting Bioorthogonal Nucleoside Biosynthesis Enables Selective Metabolic Labeling of the Mitochondrial Transcriptome. ACS Chemical Biology, 2018, 13, 1474-1479.	1.6	9
27	Bioorthogonal Metabolic Labeling of Nascent RNA in Neurons Improves the Sensitivity of Transcriptome-Wide Profiling. ACS Chemical Neuroscience, 2018, 9, 1858-1865.	1.7	15
28	Cell-Selective Bioorthogonal Metabolic Labeling of RNA. Journal of the American Chemical Society, 2017, 139, 2148-2151.	6.6	42
29	Photo-controlled cell-specific metabolic labeling of RNA. Organic and Biomolecular Chemistry, 2017, 15, 5117-5120.	1.5	10
30	Temporal Labeling of Nascent RNA Using Photoclick Chemistry in Live Cells. Journal of the American Chemical Society, 2017, 139, 8090-8093.	6.6	47
31	Measuring RNA structure transcriptome-wide with icSHAPE. Methods, 2017, 120, 85-90.	1.9	9
32	Comparative Analysis Reveals Furoyl in Vivo Selective Hydroxyl Acylation Analyzed by Primer Extension Reagents Form Stable Ribosyl Ester Adducts. Biochemistry, 2017, 56, 1811-1814.	1.2	6
33	Assaying RNA Localization in Situ with Spatially Restricted Nucleobase Oxidation. ACS Chemical Biology, 2017, 12, 2709-2714.	1.6	32
34	Assaying RNA Structure Inside Living Cells with SHAPE. Methods in Molecular Biology, 2017, 1648, 247-256.	0.4	2
35	Defining Functional Structured RNA inside Living Cells. Biochemistry, 2017, 56, 5847-5848.	1.2	0
36	Multiplex Aptamer Discovery through Apta-Seq and Its Application to ATP Aptamers Derived from Human-Genomic SELEX. ACS Chemical Biology, 2017, 12, 2149-2156.	1.6	20

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37	EC-tagging allows cell type-specific RNA analysis. Nucleic Acids Research, 2017, 45, e138-e138.	6.5	37
38	Age-Dependent Pancreatic Gene Regulation Reveals Mechanisms Governing Human Î² Cell Function. Cell Metabolism, 2016, 23, 909-920.	7.2	205
39	Metabolic Incorporation of Azide Functionality into Cellular RNA. ChemBioChem, 2016, 17, 2149-2152.	1.3	55
40	Evolving insights into RNA modifications and their functional diversity in the brain. Nature Neuroscience, 2016, 19, 1292-1298.	7.1	64
41	Transcriptome-wide interrogation of RNA secondary structure in living cells with icSHAPE. Nature Protocols, 2016, 11, 273-290.	5.5	147
42	RNA structure: Merging chemistry and genomics for a holistic perspective. BioEssays, 2015, 37, 1129-1138.	1.2	7
43	Progress and challenges for chemical probing of RNA structure inside living cells. Nature Chemical Biology, 2015, 11, 933-941.	3.9	88
44	Technologies to probe functions and mechanisms of long noncoding RNAs. Nature Structural and Molecular Biology, 2015, 22, 29-35.	3.6	124
45	Structural imprints in vivo decode RNA regulatory mechanisms. Nature, 2015, 519, 486-490.	13.7	639
46	RNA helicase DDX21 coordinates transcription and ribosomal RNA processing. Nature, 2015, 518, 249-253.	13.7	232
47	<scp>RNA</scp> structural analysis by evolving <scp>SHAPE</scp> chemistry. Wiley Interdisciplinary Reviews RNA, 2014, 5, 867-881.	3.2	54
48	Landscape and variation of RNA secondary structure across the human transcriptome. Nature, 2014, 505, 706-709.	13.7	519
49	Control of somatic tissue differentiation by the long non-coding RNA TINCR. Nature, 2013, 493, 231-235.	13.7	810
50	RNA SHAPE analysis in living cells. Nature Chemical Biology, 2013, 9, 18-20.	3.9	366
51	Differential effects of dietary supplements on metabolomic profile of smokers versus non-smokers. Genome Medicine, 2012, 4, 14.	3.6	11
52	RNA templating the epigenome. Epigenetics, 2011, 6, 539-543.	1.3	184
53	Repurposing a DNAâ€Repair Enzyme for Targeted Protein Degradation. ChemBioChem, 0, , .	1.3	1