

# Yuri Motorin

## List of Publications by Year in descending order

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103  
papers

6,291  
citations

81900

39  
h-index

76900

74  
g-index

113  
all docs

113  
docs citations

113  
times ranked

4863  
citing authors

#	ARTICLE	IF	CITATIONS
1	Detecting RNA modifications in the epitranscriptome: predict and validate. Nature Reviews Genetics, 2017, 18, 275-291.	16.3	501
2	tRNA Stabilization by Modified Nucleotides. Biochemistry, 2010, 49, 4934-4944.	2.5	384
3	RNA nucleotide methylation. Wiley Interdisciplinary Reviews RNA, 2011, 2, 611-631.	6.4	348
4	5-methylcytosine in RNA: detection, enzymatic formation and biological functions. Nucleic Acids Research, 2010, 38, 1415-1430.	14.5	300
5	Identification of Modified Residues in RNAs by Reverse Transcription-Based Methods. Methods in Enzymology, 2007, 425, 21-53.	1.0	203
6	Evidence for rRNA 2'-O-methylation plasticity: Control of intrinsic translational capabilities of human ribosomes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12934-12939.	7.1	197
7	Illumina-based RiboMethSeq approach for mapping of 2'-O-Me residues in RNA. Nucleic Acids Research, 2016, 44, e135-e135.	14.5	178
8	The reverse transcription signature of N <sup>1</sup> -methyladenosine in RNA-Seq is sequence dependent. Nucleic Acids Research, 2015, 43, gkv895.	14.5	163
9	Multisite-specific tRNA:m5C-methyltransferase (Trm4) in yeast <i>Saccharomyces cerevisiae</i> : Identification of the gene and substrate specificity of the enzyme. Rna, 1999, 5, 1105-1118.	3.5	162
10	Pseudouridine: Still mysterious, but never a fake (uridine)!. RNA Biology, 2014, 11, 1540-1554.	3.1	158
11	FTSJ3 is an RNA 2'-O-methyltransferase recruited by HIV to avoid innate immune sensing. Nature, 2019, 565, 500-504.	27.8	151
12	The yeast gene YNL292w encodes a pseudouridine synthase (Pus4) catalyzing the formation of psi55 in both mitochondrial and cytoplasmic tRNAs. Nucleic Acids Research, 1997, 25, 4493-4499.	14.5	147
13	Pseudouridine Mapping in the <i>Saccharomyces cerevisiae</i> Spliceosomal U Small Nuclear RNAs (snRNAs) Reveals that Pseudouridine Synthase Pus1p Exhibits a Dual Substrate Specificity for U2 snRNA and tRNA. Molecular and Cellular Biology, 1999, 19, 2142-2154.	2.3	143
14	Characterization of Yeast Protein Deg1 as Pseudouridine Synthase (Pus3) Catalyzing the Formation of ̢ <sup>38</sup> and ̢ <sup>39</sup> in tRNA Anticodon Loop. Journal of Biological Chemistry, 1998, 273, 1316-1323.	3.4	124
15	RNA ribose methylation (2'-O-methylation): Occurrence, biosynthesis and biological functions. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2019, 1862, 253-269.	1.9	120
16	AlkAniline-Seq: Profiling of m <sup>7</sup> G and m <sup>3</sup> C RNA Modifications at Single Nucleotide Resolution. Angewandte Chemie - International Edition, 2018, 57, 16785-16790.	13.8	119
17	Expanding the chemical scope of RNA:methyltransferases to site-specific alkylation of RNA for click labeling. Nucleic Acids Research, 2011, 39, 1943-1952.	14.5	114
18	Methods for RNA Modification Mapping Using Deep Sequencing: Established and New Emerging Technologies. Genes, 2019, 10, 35.	2.4	103

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19	The yeast tRNA:pseudouridine synthase Pus1p displays a multisite substrate specificity. <i>Rna</i> , 1998, 4, 856-869.	3.5	100
20	The <i>Saccharomyces cerevisiae</i> U2 snRNA:pseudouridine-synthase Pus7p is a novel multisite-multisubstrate RNA:Â-synthase also acting on tRNAs. <i>Rna</i> , 2003, 9, 1371-1382.	3.5	96
21	Use of Specific Chemical Reagents for Detection of Modified Nucleotides in RNA. <i>Journal of Nucleic Acids</i> , 2011, 2011, 1-17.	1.2	92
22	Identification of sites of 2- <sup>6</sup> -O-methylation vulnerability in human ribosomal RNAs by systematic mapping. <i>Scientific Reports</i> , 2017, 7, 11490.	3.3	91
23	Next-generation sequencing technologies for detection of modified nucleotides in RNAs. <i>RNA Biology</i> , 2017, 14, 1124-1137.	3.1	91
24	FTO-mediated cytoplasmic m6Am demethylation adjusts stem-like properties in colorectal cancer cell. <i>Nature Communications</i> , 2021, 12, 1716.	12.8	83
25	Intron-dependent enzymatic formation of modified nucleosides in eukaryotic tRNAs: A review. <i>Biochimie</i> , 1997, 79, 293-302.	2.6	78
26	Eukaryotic rRNA Modification by Yeast 5-Methylcytosine-Methyltransferases and Human Proliferation-Associated Antigen p120. <i>PLoS ONE</i> , 2015, 10, e0133321.	2.5	73
27	HydraPsiSeq: a method for systematic and quantitative mapping of pseudouridines in RNA. <i>Nucleic Acids Research</i> , 2020, 48, e110-e110.	14.5	72
28	Engineering of a DNA Polymerase for Direct m <sup>6</sup> A Sequencing. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 417-421.	13.8	66
29	A PRDX1 mutant allele causes a MMACHC secondary epimutation in cbLC patients. <i>Nature Communications</i> , 2018, 9, 67.	12.8	64
30	Pleiotropic effects of intron removal on base modification pattern of yeast tRNA <sup>Phe</sup> : an in vitro study. <i>Nucleic Acids Research</i> , 1997, 25, 2694-2701.	14.5	63
31	Major identity determinants for enzymatic formation of ribothymidine and pseudouridine in the T <sup>Ψ</sup> -loop of yeast tRNAs. <i>Journal of Molecular Biology</i> , 1997, 274, 505-518.	4.2	58
32	Identification of the <i>Saccharomyces cerevisiae</i> RNA:pseudouridine synthase responsible for formation of Â2819 in 21S mitochondrial ribosomal RNA. <i>Nucleic Acids Research</i> , 2000, 28, 1941-1946.	14.5	55
33	A multifunctional bioconjugate module for versatile photoaffinity labeling and click chemistry of RNA. <i>Nucleic Acids Research</i> , 2011, 39, 7348-7360.	14.5	50
34	Next-Generation Sequencing-Based RiboMethSeq Protocol for Analysis of tRNA 2- <sup>6</sup> -O-Methylation. <i>Biomolecules</i> , 2017, 7, 13.	4.0	49
35	High-throughput sequencing for 1-methyladenosine (m1A) mapping in RNA. <i>Methods</i> , 2016, 107, 110-121.	3.8	47
36	Characterisation and Enzymatic Properties of tRNA(guanine 26, N2,N2)-dimethyltransferase (Trm1p) from <i>Pyrococcus furiosus</i> . <i>Journal of Molecular Biology</i> , 1999, 291, 375-392.	4.2	46

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37	Identification and Characterization of the tRNA: <sup>31</sup> Synthase (Pus6p) of <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 2001, 276, 34934-34940.	3.4	46
38	Pseudouridylation at Position 32 of Mitochondrial and Cytoplasmic tRNAs Requires Two Distinct Enzymes in <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 52998-53006.	3.4	46
39	2,6-Diaminopurine as a highly potent corrector of UGA nonsense mutations. <i>Nature Communications</i> , 2020, 11, 1509.	12.8	46
40	Machine learning of reverse transcription signatures of variegated polymerases allows mapping and discrimination of methylated purines in limited transcriptomes. <i>Nucleic Acids Research</i> , 2020, 48, 3734-3746.	14.5	45
41	A Vastly Increased Chemical Variety of RNA Modifications Containing a Thioacetal Structure. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7893-7897.	13.8	44
42	Balancing of mitochondrial translation through METTL8-mediated m3C modification of mitochondrial tRNAs. <i>Molecular Cell</i> , 2021, 81, 4810-4825.e12.	9.7	44
43	Transfer RNA modification enzymes from <i>Pyrococcus furiosus</i> : detection of the enzymatic activities in vitro. <i>Nucleic Acids Research</i> , 1999, 27, 1308-1315.	14.5	43
44	Detection and Analysis of RNA Ribose 2'-O-Methylations: Challenges and Solutions. <i>Genes</i> , 2018, 9, 642.	2.4	42
45	A previously unidentified activity of yeast and mouse RNA:pseudouridine synthases 1 (Pus1p) on tRNAs. <i>Rna</i> , 2006, 12, 1583-1593.	3.5	40
46	Ribosomal RNA 2'-O-methylation as a novel layer of inter-tumour heterogeneity in breast cancer. <i>NAR Cancer</i> , 2020, 2, zcaa036.	3.1	40
47	Identification of protein partners of the human immunodeficiency virus 1 tat <sup>rev</sup> exon 3 leads to the discovery of a new HIV-1 splicing regulator, protein hnRNP K. <i>RNA Biology</i> , 2011, 8, 325-342.	3.1	39
48	RNA nucleotide methylation: 2021 update. <i>Wiley Interdisciplinary Reviews RNA</i> , 2022, 13, e1691.	6.4	39
49	Analysis of RNA Modifications by Second- and Third-Generation Deep Sequencing: 2020 Update. <i>Genes</i> , 2021, 12, 278.	2.4	38
50	Limited antibody specificity compromises epitranscriptomic analyses. <i>Nature Communications</i> , 2019, 10, 5669.	12.8	34
51	tRNA 2'-O-methylation by a duo of TRM7/FTSJ1 proteins modulates small RNA silencing in <i>Drosophila</i> . <i>Nucleic Acids Research</i> , 2020, 48, 2050-2072.	14.5	30
52	The tRNA(guanine-26,N2-N2) methyltransferase (Trm1) from the hyperthermophilic archaeon <i>Pyrococcus furiosus</i> : cloning, sequencing of the gene and its expression in <i>Escherichia coli</i> . <i>Nucleic Acids Research</i> , 1998, 26, 3753-3761.	14.5	29
53	Absolute Quantification of Noncoding RNA by Microscale Thermophoresis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9565-9569.	13.8	29
54	RNA Sequence and Two-dimensional Structure Features Required for Efficient Substrate Modification by the <i>Saccharomyces cerevisiae</i> RNA: <sup>31</sup> Synthase Pus7p. <i>Journal of Biological Chemistry</i> , 2009, 284, 5845-5858.	3.4	28

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55	Bacterial tRNA 2â€²-O-methylation is dynamically regulated under stress conditions and modulates innate immune response. <i>Nucleic Acids Research</i> , 2020, 48, 12833-12844.	14.5	27
56	Mapping rRNA 2â€™-O-methylations and identification of C/D snoRNAs in <i>Arabidopsis thaliana</i> plants. <i>RNA Biology</i> , 2021, 18, 1760-1777.	3.1	27
57	Diversity and heterogeneity of extracellular RNA in human plasma. <i>Biochimie</i> , 2019, 164, 22-36.	2.6	26
58	Instrumental analysis of RNA modifications. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2021, 56, 178-204.	5.2	26
59	NOseq: amplicon sequencing evaluation method for RNA m6A sites after chemical deamination. <i>Nucleic Acids Research</i> , 2021, 49, e23-e23.	14.5	25
60	Cell culture NAIL-MS allows insight into human tRNA and rRNA modification dynamics in vivo. <i>Nature Communications</i> , 2021, 12, 389.	12.8	24
61	Ribosomal RNA 2â€™-O-methylations regulate translation by impacting ribosome dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2117334119.	7.1	24
62	Pseudouridine and ribothymidine formation in the tRNA-like domain of turnip yellow mosaic virus RNA. <i>Nucleic Acids Research</i> , 1998, 26, 3991-3997.	14.5	22
63	Cloning and characterization of the <i>Schizosaccharomyces pombe</i> tRNA:pseudouridine synthase Pus1p. <i>Nucleic Acids Research</i> , 2000, 28, 4604-4610.	14.5	22
64	2â€™-O-methylation within prokaryotic and eukaryotic tRNA inhibits innate immune activation by endosomal Toll-like receptors but does not affect recognition of whole organisms. <i>Rna</i> , 2019, 25, 869-880.	3.5	22
65	Optimisation of expression and purification of the recombinant Yol066 (Rib2) protein from <i>Saccharomyces cerevisiae</i> . <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2003, 786, 187-195.	2.3	21
66	The <i>Saccharomyces cerevisiae</i> Pus2 protein encoded by YGL063w ORF is a mitochondrial tRNA: <sup>27/28</sup> -synthase. <i>Rna</i> , 2007, 13, 1641-1647.	3.5	21
67	Survey and Validation of tRNA Modifications and Their Corresponding Genes in <i>Bacillus subtilis</i> sp Subtilis Strain 168. <i>Biomolecules</i> , 2020, 10, 977.	4.0	21
68	Holistic Optimization of Bioinformatic Analysis Pipeline for Detection and Quantification of 2â€™-O-Methylations in RNA by RiboMethSeq. <i>Frontiers in Genetics</i> , 2020, 11, 38.	2.3	21
69	Constitutive and variable 2â€™-O-methylation (Nm) in human ribosomal RNA. <i>RNA Biology</i> , 2021, 18, 88-97.	3.1	20
70	The first determination of pseudouridine residues in 23S ribosomal RNA from hyperthermophilic Archaea <i>Sulfolobus acidocaldarius</i> . <i>FEBS Letters</i> , 1999, 462, 94-100.	2.8	19
71	Deficiency of the tRNA Tyr : <sup>35</sup> -synthase aPus7 in Archaea of the Sulfolobales order might be rescued by the H/ACA sRNA-guided machinery. <i>Nucleic Acids Research</i> , 2009, 37, 1308-1322.	14.5	19
72	Chemistry enters nucleic acids biology: Enzymatic mechanisms of RNA modification. <i>Biochemistry (Moscow)</i> , 2013, 78, 1392-1404.	1.5	19

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73	Positioning Europe for the EPITRANSCRIPTOMICS challenge. RNA Biology, 2018, 15, 1-3.	3.1	18
74	CoverageAnalyzer (CAN): A Tool for Inspection of Modification Signatures in RNA Sequencing Profiles. Biomolecules, 2016, 6, 42.	4.0	16
75	Entwicklung einer DNA-Polymerase für die direkte m <sup>6</sup> -Sequenzierung. Angewandte Chemie, 2018, 130, 424-428.	2.0	15
76	Double methylation of tRNA-U54 to 2-O-methylthymidine (Tm) synergistically decreases immune response by Toll-like receptor 7. Nucleic Acids Research, 2018, 46, 9764-9775.	14.5	15
77	Manganese Ions Individually Alter the Reverse Transcription Signature of Modified Ribonucleosides. Genes, 2020, 11, 950.	2.4	15
78	General Principles for the Detection of Modified Nucleotides in RNA by Specific Reagents. Advanced Biology, 2021, 5, e2100866.	2.5	15
79	Pyrophosphate mediates the effect of certain tRNA mutations on aminoacylation of yeast tRNA <sup>Phe</sup> . Nucleic Acids Research, 1999, 27, 4451-4456.	14.5	14
80	Quantification of 2-O-Me Residues in RNA Using Next-Generation Sequencing (Illumina RiboMethSeq) Tj ETQq0 0 0 rgBT /Overlock 1	0.9	14
81	Mapping of 7-methylguanosine (m7G), 3-methylcytidine (m3C), dihydrouridine (D) and 5-hydroxycytidine (ho5C) RNA modifications by AlkAniline-Seq. Methods in Enzymology, 2021, 658, 25-47.	1.0	14
82	DNA and RNA Pyrimidine Nucleobase Alkylation at the Carbon-5 Position. Advances in Experimental Medicine and Biology, 2016, 945, 19-33.	1.6	13
83	Mapping and Quantification of tRNA 2-O-Methylation by RiboMethSeq. Methods in Molecular Biology, 2019, 1870, 273-295.	0.9	13
84	High-Throughput Mapping of 2-O-Me Residues in RNA Using Next-Generation Sequencing (Illumina) Tj ETQq0 0 0 rgBT /Overlock 10	0.9	12
85	Cysteinyl-tRNA synthetase from Saccharomyces cerevisiae. Purification, characterization and assignment to the genomic sequence YNL247w. Biochimie, 1997, 79, 731-740.	2.6	11
86	Graphical Workflow System for Modification Calling by Machine Learning of Reverse Transcription Signatures. Frontiers in Genetics, 2019, 10, 876.	2.3	10
87	Non-Redundant tRNA Reference Sequences for Deep Sequencing Analysis of tRNA Abundance and Epitranscriptomic RNA Modifications. Genes, 2021, 12, 81.	2.4	10
88	Analysis of pseudouridines and other RNA modifications using HydraPsiSeq protocol. Methods, 2022, 203, 383-391.	3.8	9
89	Systematic mapping of rRNA 2-O methylation during frog development and involvement of the methyltransferase Fibrillarin in eye and craniofacial development in Xenopus laevis. PLoS Genetics, 2022, 18, e1010012.	3.5	9
90	Dihydrouridine in the Transcriptome: New Life for This Ancient RNA Chemical Modification. ACS Chemical Biology, 2022, 17, 1638-1657.	3.4	9

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91	AlkAniline-Seq: A Highly Sensitive and Specific Method for Simultaneous Mapping of 7-Methyl-guanosine (m7G) and 3-Methyl-cytosine (m3C) in RNAs by High-Throughput Sequencing. <i>Methods in Molecular Biology</i> , 2021, 2298, 77-95.	0.9	8
92	Purification and properties of cysteinyl-tRNA synthetase from rabbit liver. <i>Biochimie</i> , 1998, 80, 579-590.	2.6	7
93	Contribution of protein Gar1 to the RNA-guided and RNA-independent rRNA:Î-synthase activities of the archaeal Cbf5 protein. <i>Scientific Reports</i> , 2018, 8, 13815.	3.3	7
94	Implication of repeat insertion domains in the <i>trans</i>-activity of the long non-coding RNA ANRIL. <i>Nucleic Acids Research</i> , 2021, 49, 4954-4970.	14.5	6
95	Die stark wachsende chemische Vielfalt der RNAâ€Modifikationen enthÃlt eine Thioacetalstruktur. <i>Angewandte Chemie</i> , 2018, 130, 8019-8024.	2.0	5
96	Machine learning algorithm for precise prediction of 2â€O-methylation (Nm) sites from experimental RiboMethSeq datasets. <i>Methods</i> , 2022, 203, 311-321.	3.8	4
97	Studies of mutations of assembly factor Hit1 in budding yeast suggest translation defects as the molecular basis for PEHO syndrome. <i>Journal of Biological Chemistry</i> , 2022, 298, 102261.	3.4	3
98	Two human valyl-tRNA synthetase-encoding cDNA sequences deposited in GenBank display extensive differences. <i>Gene</i> , 1996, 170, 289-290.	2.2	1
99	Isolation, Extraction and Deep-Sequencing Analysis of Extracellular RNAs (exRNAs) from Human Plasma. <i>Methods in Molecular Biology</i> , 2021, 2300, 165-182.	0.9	1
100	AlkAnilineâ€Seq: Profiling of m 7 G and m 3 C RNA Modifications at Single Nucleotide Resolution. <i>Angewandte Chemie</i> , 2018, 130, 17027-17032.	2.0	0
101	RNA structure, maturation, interactions and functions. <i>Biochimie</i> , 2019, 164, 1-2.	2.6	0
102	Absolute Quantifizierung nichtâ€kodierender RNAâ€Spezies mittels Mikroskalaâ€Thermophorese. <i>Angewandte Chemie</i> , 2019, 131, 9666-9670.	2.0	0
103	Phosphorylation found inside RNA. <i>Nature</i> , 2022, 605, 234-235.	27.8	0