

# Edward Darzynkiewicz

## List of Publications by Year in descending order

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156  
papers

6,455  
citations

66343

42  
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76900

74  
g-index

164  
all docs

164  
docs citations

164  
times ranked

4117  
citing authors

#	ARTICLE	IF	CITATIONS
1	A nuclear cap binding protein complex involved in pre-mRNA splicing. <i>Cell</i> , 1994, 78, 657-668.	28.9	493
2	MicroRNA Inhibition of Translation Initiation in Vitro by Targeting the Cap-Binding Complex eIF4F. <i>Science</i> , 2007, 317, 1764-1767.	12.6	458
3	Biophysical Studies of eIF4E Cap-binding Protein: Recognition of mRNA 5' Cap Structure and Synthetic Fragments of eIF4G and 4E-BP1 Proteins. <i>Journal of Molecular Biology</i> , 2002, 319, 615-635.	4.2	353
4	The trimethylguanosine cap structure of U1 snRNA is a component of a bipartite nuclear targeting signal. <i>Cell</i> , 1990, 62, 569-577.	28.9	314
5	Novel "anti-reverse" cap analogs with superior translational properties. <i>Rna</i> , 2003, 9, 1108-1122.	3.5	214
6	Phosphorylation of Eukaryotic Protein Synthesis Initiation Factor 4E at Ser-209. <i>Journal of Biological Chemistry</i> , 1995, 270, 14597-14603.	3.4	196
7	Characterization of hMTr1, a Human Cap1 2'-O-Ribose Methyltransferase*. <i>Journal of Biological Chemistry</i> , 2010, 285, 33037-33044.	3.4	136
8	Phosphorothioate cap analogs stabilize mRNA and increase translational efficiency in mammalian cells. <i>Rna</i> , 2007, 13, 1745-1755.	3.5	126
9	Phosphorylation of eIF4E attenuates its interaction with mRNA 5' cap analogs by electrostatic repulsion: Intein-mediated protein ligation strategy to obtain phosphorylated protein. <i>Rna</i> , 2003, 9, 52-61.	3.5	124
10	Quantitative Assessment of mRNA Cap Analogues as Inhibitors of in Vitro Translation. <i>Biochemistry</i> , 1999, 38, 8538-8547.	2.5	121
11	Synthesis and characterization of mRNA cap analogs containing phosphorothioate substitutions that bind tightly to eIF4E and are resistant to the decapping pyrophosphatase DcpS. <i>Rna</i> , 2008, 14, 1119-1131.	3.5	108
12	mRNA Decapping Is Promoted by an RNA-Binding Channel in Dcp2. <i>Molecular Cell</i> , 2008, 29, 324-336.	9.7	99
13	Multiple Isoforms of Eukaryotic Protein Synthesis Initiation Factor 4E in <i>Caenorhabditis elegans</i> Can Distinguish between Mono- and Trimethylated mRNA Cap Structures. <i>Journal of Biological Chemistry</i> , 1998, 273, 10538-10542.	3.4	84
14	Chemical synthesis and characterization of 7-methylguanosine cap analogs. <i>Biochemistry</i> , 1985, 24, 1701-1707.	2.5	79
15	Synthesis of Anti-Reverse Cap Analogs (ARCAs) and their Applications in mRNA Translation and Stability. <i>Methods in Enzymology</i> , 2007, 431, 203-227.	1.0	79
16	Structural analysis of human 2'-O-ribose methyltransferases involved in mRNA cap structure formation. <i>Nature Communications</i> , 2014, 5, 3004.	12.8	79
17	Binding Specificities and Potential Roles of Isoforms of Eukaryotic Initiation Factor 4E in <i>Leishmania</i> . <i>Eukaryotic Cell</i> , 2006, 5, 1969-1979.	3.4	77
18	Novel cap analogs for in vitro synthesis of mRNAs with high translational efficiency. <i>Rna</i> , 2004, 10, 1479-1487.	3.5	75

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19	Drosophila miR2 Primarily Targets the m7GpppN Cap Structure for Translational Repression. <i>Molecular Cell</i> , 2009, 35, 881-888.	9.7	74
20	Differential Inhibition of mRNA Degradation Pathways by Novel Cap Analogs. <i>Journal of Biological Chemistry</i> , 2006, 281, 1857-1867.	3.4	73
21	Stopped-flow Kinetic Analysis of eIF4E and Phosphorylated eIF4E Binding to Cap Analogs and Capped Oligoribonucleotides. <i>Journal of Biological Chemistry</i> , 2006, 281, 14927-14938.	3.4	71
22	Synthetic mRNA cap analogs with a modified triphosphate bridge – synthesis, applications and prospects. <i>New Journal of Chemistry</i> , 2010, 34, 829.	2.8	71
23	Influence of Electric Charge Variation at Residues 209 and 159 on the Interaction of eIF4E with the mRNA 5' Terminus. <i>Biochemistry</i> , 2004, 43, 5370-5379.	2.5	70
24	Contribution of Trans-splicing, 5' Leader Length, Cap-Poly(A) Synergism, and Initiation Factors to Nematode Translation in an <i>Ascaris suum</i> Embryo Cell-free System. <i>Journal of Biological Chemistry</i> , 2004, 279, 45573-45585.	3.4	67
25	Weak binding affinity of human 4EHP for mRNA cap analogs. <i>Rna</i> , 2007, 13, 691-697.	3.5	66
26	Evolutionary changes in the <i>Leishmania</i> eIF4F complex involve variations in the eIF4E-eIF4G interactions. <i>Nucleic Acids Research</i> , 2009, 37, 3243-3253.	14.5	65
27	Positive Heat Capacity Change upon Specific Binding of Translation Initiation Factor eIF4E to mRNA 5' Cap. <i>Biochemistry</i> , 2002, 41, 12140-12148.	2.5	62
28	Proximity of mRNA 5'-region and 18S rRNA in eukaryotic initiation complexes. <i>Nature</i> , 1980, 286, 226-230.	27.8	60
29	A comparison of the binding of methylated cap analogs to wheat germ protein synthesis initiation factors 4F and (iso) 4F. <i>Biochemistry</i> , 1991, 30, 1624-1627.	2.5	59
30	Specificity of recognition of mRNA 5' cap by human nuclear cap-binding complex. <i>Rna</i> , 2005, 11, 1355-1363.	3.5	59
31	Inhibition of eukaryotic translation by nucleoside 5'-monophosphate analogs of mRNA 5'-cap: changes in N7 substituent affect analog activity. <i>Biochemistry</i> , 1989, 28, 4771-4778.	2.5	57
32	A spectroscopic study of the binding of N-7-substituted cap analogs to human protein synthesis initiation factor 4E. <i>Biochemistry</i> , 1990, 29, 3337-3341.	2.5	57
33	Nematode m7GpppG and m32,2,7GpppG decapping: Activities in <i>Ascaris</i> embryos and characterization of <i>C. elegans</i> scavenger DcpS. <i>Rna</i> , 2004, 10, 1609-1624.	3.5	53
34	Synthesis and properties of mRNA cap analogs containing imidodiphosphate moiety – fairly mimicking natural cap structure, yet resistant to enzymatic hydrolysis. <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 1699-1710.	3.0	52
35	Cap analogs modified with 1,2-dithiodiphosphate moiety protect mRNA from decapping and enhance its translational potential. <i>Nucleic Acids Research</i> , 2016, 44, gkw896.	14.5	52
36	Enzymatically stable 5' mRNA cap analogs: Synthesis and binding studies with human DcpS decapping enzyme. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 3223-3230.	3.0	51

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37	Inhibition of eukaryotic translation by analogs of messenger RNA 5'-cap: chemical and biological consequences of 5'-phosphate modifications of 7-methylguanosine 5'-monophosphate. <i>Biochemistry</i> , 1987, 26, 4372-4380.	2.5	50
38	Synthetic dinucleotide mRNA cap analogs with tetraphosphate 5â€²,5â€² bridge containing methylenebis(phosphonate) modification. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 4763.	2.8	50
39	Synthesis, properties, and biological activity of boranophosphate analogs of the mRNA cap: versatile tools for manipulation of therapeutically relevant cap-dependent processes. <i>Nucleic Acids Research</i> , 2014, 42, 10245-10264.	14.5	49
40	eIF4F-like complexes formed by cap-binding homolog TbEIF4E5 with TbEIF4G1 or TbEIF4G2 are implicated in post-transcriptional regulation in <i>Trypanosoma brucei</i> . <i>Rna</i> , 2014, 20, 1272-1286.	3.5	48
41	Cap-binding activity of an eIF4E homolog from <i>Leishmania</i> . <i>Rna</i> , 2004, 10, 1764-1775.	3.5	46
42	mRNAs containing the histone 3â€² stemâ€²loop are degraded primarily by decapping mediated by oligouridylation of the 3â€² end. <i>Rna</i> , 2013, 19, 1-16.	3.5	46
43	Synthesis, Conformation and Hydrolytic Stability of p<sup>1</sup>,p<sup>3</sup>â€² Dinucleoside Triphosphates Related to mRNA 5â€²-cap, and Comparative Kinetic Studies on their Nucleoside and Nucleoside Monophosphate Analogs. <i>Nucleosides &amp; Nucleotides</i> , 1990, 9, 599-618.	0.5	44
44	Synthetic mRNAs with Superior Translation and Stability Properties. <i>Methods in Molecular Biology</i> , 2013, 969, 55-72.	0.9	44
45	Thermodynamics of mRNA 5â€² Cap Binding by Eukaryotic Translation Initiation Factor eIF4Eâ€². <i>Biochemistry</i> , 2004, 43, 13305-13317.	2.5	41
46	<i>Trypanosoma brucei</i> Translation Initiation Factor Homolog EIF4E6 Forms a Tripartite Cytosolic Complex with EIF4G5 and a Capping Enzyme Homolog. <i>Eukaryotic Cell</i> , 2014, 13, 896-908.	3.4	41
47	The g5R (D250) Gene of African Swine Fever Virus Encodes a Nudix Hydrolase That Preferentially Degrades Diphosphoinositol Polyphosphates. <i>Journal of Virology</i> , 2002, 76, 1415-1421.	3.4	39
48	Modified ARCA analogs providing enhanced translational properties of capped mRNAs. <i>Cell Cycle</i> , 2018, 17, 1624-1636.	2.6	39
49	A direct method for the synthesis of nucleoside 5â€²-methylenebis(phosphonate)s from nucleosides. <i>Tetrahedron Letters</i> , 2005, 46, 2417-2421.	1.4	38
50	Structural basis for nematode eIF4E binding an m 2,2,7 G-Cap and its implications for translation initiation. <i>Nucleic Acids Research</i> , 2011, 39, 8820-8832.	14.5	38
51	Assignment of reovirus mRNA ribosome binding sites to virion genome segments by nucleotide sequence analyses. <i>Nucleic Acids Research</i> , 1980, 8, 337-350.	14.5	37
52	The antiviral drug ribavirin does not mimic the 7-methylguanosine moiety of the mRNA cap structure in vitro. <i>Rna</i> , 2005, 11, 1505-1513.	3.5	37
53	CAP-MAP: cap analysis protocol with minimal analyte processing, a rapid and sensitive approach to analysing mRNA cap structures. <i>Open Biology</i> , 2020, 10, 190306.	3.6	36
54	Discrimination between mono- and trimethylated cap structures by two isoforms of <i>Caenorhabditis elegans</i> eIF4E. <i>EMBO Journal</i> , 2002, 21, 4680-4690.	7.8	35

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55	Phosphorothioate analogs of m7GTP are enzymatically stable inhibitors of cap-dependent translation. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 1921-1925.	2.2	35
56	Towards mRNA with superior translational activity: synthesis and properties of ARCA tetraphosphates with single phosphorothioate modifications. <i>New Journal of Chemistry</i> , 2010, 34, 993.	2.8	35
57	Structural analysis of 5' m <sup>7</sup> G cap interactions with the human AGO2 MID domain. <i>EMBO Reports</i> , 2011, 12, 415-420.	4.5	35
58	A simple and rapid synthesis of nucleotide analogues containing a phosphorothioate moiety at the terminal position of the phosphate chain. <i>Tetrahedron Letters</i> , 2007, 48, 5475-5479.	1.4	34
59	Chemical synthesis and binding activity of the trypanosomatid cap-4 structure. <i>Rna</i> , 2004, 10, 1469-1478.	3.5	33
60	Biophysical Approach to Studies of Cap-eIF4E Interaction by Synthetic Cap Analogs. <i>Methods in Enzymology</i> , 2007, 430, 209-245.	1.0	33
61	Recognition of different nucleotidyl-derivatives as substrates of reactions catalyzed by various HIT-proteins. <i>New Journal of Chemistry</i> , 2010, 34, 888.	2.8	32
62	Translation, stability, and resistance to decapping of mRNAs containing caps substituted in the triphosphate chain with BH <sub>3</sub> , Se, and NH. <i>Rna</i> , 2011, 17, 978-988.	3.5	32
63	7-Methylguanosine Diphosphate (m <sup>7</sup> GDP) Is Not Hydrolyzed but Strongly Bound by Decapping Scavenger (DcpS) Enzymes and Potently Inhibits Their Activity. <i>Biochemistry</i> , 2012, 51, 8003-8013.	2.5	32
64	Structural Insights into Parasite eIF4E Binding Specificity for m7G and m2,2,7G mRNA Caps. <i>Journal of Biological Chemistry</i> , 2009, 284, 31336-31349.	3.4	30
65	The Nematode Eukaryotic Translation Initiation Factor 4E/G Complex Works with a <i>trans</i> -Spliced Leader Stem-Loop To Enable Efficient Translation of Trimethylguanosine-Capped RNAs. <i>Molecular and Cellular Biology</i> , 2010, 30, 1958-1970.	2.3	30
66	Upregulation of RNA cap methyltransferase RNMT drives ribosome biogenesis during T cell activation. <i>Nucleic Acids Research</i> , 2021, 49, 6722-6738.	14.5	29
67	SYNTHESIS AND BIOCHEMICAL PROPERTIES OF NOVEL mRNA 5' CAP ANALOGS RESISTANT TO ENZYMATIc HYDROLYSIS. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2005, 24, 615-621.	1.1	28
68	Structural Changes of eIF4E upon Binding to the mRNA 5' Monomethylguanosine and Trimethylguanosine Cap. <i>Biochemistry</i> , 2008, 47, 2710-2720.	2.5	28
69	The synthesis of isopropylidene mRNA cap analogs modified with phosphorothioate moiety and their evaluation as promoters of mRNA translation. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 3753-3758.	2.2	25
70	Five eIF4E isoforms from <i>Arabidopsis thaliana</i> are characterized by distinct features of cap analogs binding. <i>Biochemical and Biophysical Research Communications</i> , 2015, 456, 47-52.	2.1	25
71	Guanosine nucleotide analogs as inhibitors of alphavirus mRNA capping enzyme. <i>Antiviral Research</i> , 1999, 42, 35-46.	4.1	24
72	Synthesis and evaluation of fluorescent cap analogues for mRNA labelling. <i>RSC Advances</i> , 2013, 3, 20943.	3.6	24

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73	1H NMR and fluorescence studies of new mRNA 5'-cap analogues. Collection of Czechoslovak Chemical Communications, 1996, 61, 197-202.	1.0	24
74	Phosphoroselenoate Dinucleotides for Modification of mRNA 5' End. ChemBioChem, 2009, 10, 2469-2473.	2.6	23
75	Distinct Features of Cap Binding by eIF4E1b Proteins. Journal of Molecular Biology, 2015, 427, 387-405.	4.2	23
76	mRNA cap analogues substituted in the tetraphosphate chain with CX2: identification of O-to-CCl2 as the first bridging modification that confers resistance to decapping without impairing translation. Nucleic Acids Research, 2017, 45, 8661-8675.	14.5	23
77	Investigating the Consequences of eIF4E2 (4EHP) Interaction with 4E-Transporter on Its Cellular Distribution in HeLa Cells. PLoS ONE, 2013, 8, e72761.	2.5	23
78	Charge Distribution in 7-Methylguanine Regarding Cation- $\pi$ Interaction with Protein Factor eIF4E. Biophysical Journal, 2003, 85, 1450-1456.	0.5	22
79	Synthesis of biotin labelled cap analogue " incorporable into mRNA transcripts and promoting cap-dependent translation. Organic and Biomolecular Chemistry, 2012, 10, 8570.	2.8	22
80	Phosphate-modified analogues of m <sup>7</sup> GTP and m <sup>7</sup> Gppppm <sup>7</sup> Gâ€”Synthesis and biochemical properties. Bioorganic and Medicinal Chemistry, 2015, 23, 5369-5381.	3.0	21
81	The TbMTr1 Spliced Leader RNA Cap 1 2 â€²-O-Ribose Methyltransferase from Trypanosoma brucei Acts with Substrate Specificity. Journal of Biological Chemistry, 2008, 283, 3161-3172.	3.4	20
82	Correlations of conformational parameters and equilibrium conformational states in a variety of $\beta$ -D-arabinonucleosides and their analogues. Nucleic Acids and Protein Synthesis, 1979, 562, 177-191.	1.7	19
83	Diverse Role of Three Tyrosines in Binding of the RNA 5' Cap to the Human Nuclear Cap Binding Complex. Journal of Molecular Biology, 2009, 385, 618-627.	4.2	19
84	Cap analog substrates reveal three clades of cap guanine-N2 methyltransferases with distinct methyl acceptor specificities. Rna, 2010, 16, 211-220.	3.5	19
85	Fluorescence Studies on Association of Human Translation Initiation Factor eIF4E with mRNA cap-Analogues. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1999, 54, 278-284.	1.4	18
86	Amino-Functionalized 5' Cap Analogs as Tools for Site-Specific Sequence-Independent Labeling of mRNA. Bioconjugate Chemistry, 2017, 28, 1978-1992.	3.6	18
87	Association of nucleosides and their 5'-monophosphates with a tryptophan containing tripeptide, Trp-Leu-Glu: The source of an overestimation by fluorescence spectroscopy. Biophysical Chemistry, 1993, 47, 233-240.	2.8	17
88	Synthesis of Novel mRNA 5' Cap-Analogues: Dinucleoside P1, P3-Tri-, P1, P4-Tetra-, and P1, P5-Pentaphosphates. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 691-694.	1.1	17
89	In vivo translation and stability of trans-spliced mRNAs in nematode embryos. Molecular and Biochemical Parasitology, 2007, 153, 95-106.	1.1	17
90	Triazole-containing monophosphate mRNA cap analogs as effective translation inhibitors. Rna, 2014, 20, 1539-1547.	3.5	17

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91	Cap analogs containing 6-thioguanosine " reagents for the synthesis of mRNAs selectively photo-crosslinkable with cap-binding biomolecules. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 4841-4847.	2.8	17
92	Fluorescence and NMR studies of intramolecular stacking of mRNA cap-analogues. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1997, 1354, 145-152.	2.4	16
93	A NOVEL APPROACH TO SOLID PHASE CHEMICAL SYNTHESIS OF OLIGONUCLEOTIDE mRNA CAP ANALOGS. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2005, 24, 601-605.	1.1	16
94	Hydrolytic activity of human Nudt16 enzyme on dinucleotide cap analogs and short capped oligonucleotides. <i>Rna</i> , 2018, 24, 633-642.	3.5	16
95	7-Methylguanine Nucleotides and Their Structural Analogues; Protolytic Equilibria, Complexing with Magnesium(II) Ion and Kinetics for Alkaline Opening of the Imidazole Ring.. <i>Acta Chemica Scandinavica</i> , 1988, 42b, 86-92.	0.7	16
96	Structure and conformation of pyrimidine lyxofuranosides. 1- $\beta$ -D-Lyxofuranosyluracil, 1- $\beta$ -D-Lyxofuranosylcytosine, and some O'-methyl derivatives. <i>Journal of the American Chemical Society</i> , 1979, 101, 4724-4729.	13.7	15
97	Analysis of decapping scavenger cap complex using modified cap analogs reveals molecular determinants for efficient cap binding. <i>FEBS Journal</i> , 2013, 280, 6508-6527.	4.7	15
98	Synthesis and properties of new NH2 and N7 substituted GMP and GTP 5'-mRNA cap analogues. <i>Collection of Czechoslovak Chemical Communications</i> , 1993, 58, 138-141.	1.0	15
99	Base stacking of simple mRNA cap analogues. <i>Biophysical Chemistry</i> , 1989, 33, 289-293.	2.8	14
100	Identification of the HIT-45 protein from <i>Trypanosoma brucei</i> as an FHIT protein/dinucleoside triphosphatase: Substrate specificity studies on the recombinant and endogenous proteins. <i>Rna</i> , 2009, 15, 1554-1564.	3.5	14
101	Structural requirements for <i>Caenorhabditis elegans</i> DcpS substrates based on fluorescence and HPLC enzyme kinetic studies. <i>FEBS Journal</i> , 2010, 277, 3003-3013.	4.7	14
102	Interaction of three <i>Caenorhabditis elegans</i> isoforms of translation initiation factor eIF4E with mono- and trimethylated mRNA 5' cap analogues.. <i>Acta Biochimica Polonica</i> , 2002, 49, 671-682.	0.5	13
103	Affinity resins containing enzymatically resistant mRNA cap analogs "a new tool for the analysis of cap-binding proteins. <i>Rna</i> , 2012, 18, 1421-1432.	3.5	12
104	The Cu <sup>2+</sup> -Promoted Cleavage of mRNA 5'-cap Analogs: A Kinetic Study with P <sup>1</sup> -(7-Methylguanosin-5'-yl) P <sup>3</sup> -(Nucleosid-5'-yl) Triphosphates and P <sup>1</sup> -(7-Methylguanosin-5'-yl) P <sup>4</sup> -(Guanosin-5'-yl) Tetraphosphate. <i>Nucleosides &amp; Nucleotides</i> , 1999, 18, 11-21.	0.5	11
105	Towards novel efficient and stable nuclear import signals: synthesis and properties of trimethylguanosine cap analogs modified within the 5',5'-triphosphate bridge. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 9184-9199.	2.8	11
106	Kinetic analysis of IFIT1 and IFIT5 interactions with different native and engineered RNAs and its consequences for designing mRNA-based therapeutics. <i>Rna</i> , 2020, 26, 58-68.	3.5	11
107	SYNTHESIS AND PROPERTIES OF mRNA CAP ANALOGS CONTAINING PHOSPHOROTHIOATE MOIETY IN 5',5'-TRIPHOSPHATE CHAIN. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2005, 24, 595-600.	1.1	10
108	Establishment of an in vitro trans-splicing system in <i>Trypanosoma brucei</i> that requires endogenous spliced leader RNA. <i>Nucleic Acids Research</i> , 2010, 38, e114-e114.	14.5	10

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109	Synthesis and evaluation of stability of m <sup>3</sup> G-CAP analogues in serum-supplemented medium and cytosolic extract. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 7921-7928.	3.0	10
110	Interaction Between Yeast Eukaryotic Initiation Factor eIF4E and mRNA 5' Cap Analogues Differs from That for Murine eIF4E. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2003, 22, 1711-1714.	1.1	9
111	Methylene analogues of adenosine 5'-tetraphosphate. Their chemical synthesis and recognition by human and plant mononucleoside tetraphosphatases and dinucleoside tetraphosphatases. <i>FEBS Journal</i> , 2006, 273, 829-838.	4.7	9
112	Affinity of Dinucleotide Cap Analogues for Human Decapping Scavenger (hDcpS). <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007, 26, 1349-1352.	1.1	9
113	Clickable trimethylguanosine cap analogs modified within the triphosphate bridge: synthesis, conjugation to RNA and susceptibility to degradation. <i>RSC Advances</i> , 2016, 6, 8317-8328.	3.6	9
114	Spectrophotometric Determination of the pK Values for Dissociation of the Sugar Hydroxyls in Pyrimidine Arabinonucleosides. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1975, 30, 565-570.	1.4	8
115	Interaction of human decapping scavenger with 5' mRNA cap analogues: structural requirements for catalytic activity. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 285217.	1.8	8
116	Thermodynamics of Molecular Recognition of mRNA 5' Cap by Yeast Eukaryotic Initiation Factor 4E. <i>Journal of Physical Chemistry B</i> , 2011, 115, 8746-8754.	2.6	8
117	How to find the optimal partner? studies of snurportin 1 interactions with U snRNA 5' TMG-cap analogues containing modified 2-amino group of 7-methylguanosine. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 4660-4668.	3.0	8
118	Synthesis of m <sup>22</sup> ,7GTP- and m <sup>32</sup> ,2,7GTP-Sepharose 4B: New affinity resins for isolation of cap binding proteins. <i>Collection of Czechoslovak Chemical Communications</i> , 1993, 58, 132-137.	1.0	8
119	Conformational parameters of the carbohydrate moieties of $\beta$ -arabinonucleosides. <i>Carbohydrate Research</i> , 1981, 92, 21-36.	2.3	7
120	Fluorescence studies on P <sub>1</sub> ,P <sub>3</sub> -dinucleoside triphosphates related to mRNA cap: Acidity and intramolecular stacking. <i>Collection of Czechoslovak Chemical Communications</i> , 1990, 55, 2765-2768.	1.0	7
121	Thermodynamics and conformational changes related to binding of eIF4E protein to mRNA 5' cap. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S1483-S1494.	1.8	6
122	NOVEL DINUCLEOSIDE 5',5'-TRIPHOSPHATE CAP ANALOGUES. SYNTHESIS AND AFFINITY FOR MURINE TRANSLATION FACTOR eIF4E. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2005, 24, 629-633.	1.1	6
123	SYNTHESIS AND ENZYMATIC CHARACTERIZATION OF METHYLENE ANALOGS OF ADENOSINE 5'-TETRAPHOSPHATE (P <sub>4</sub> ). <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2005, 24, 589-593.	1.1	6
124	Effect of different N7 substitution of dinucleotide cap analogs on the hydrolytic susceptibility towards scavenger decapping enzymes (DcpS). <i>Biochemical and Biophysical Research Communications</i> , 2015, 464, 89-93.	2.1	6
125	Insight into the Binding and Hydrolytic Preferences of hNudt16 Based on Nucleotide Diphosphate Substrates. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10929.	4.1	6
126	A fluorescence spectroscopic study on the binding of mRNA 5'-cap-analogs to human translation initiation factor eIF4E: a critical evaluation of the sources of error. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1998, 43, 158-163.	3.8	5



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127	Effect of the His-Tag Location on Decapping Scavenger Enzymes and Their Hydrolytic Activity toward Cap Analogs. ACS Omega, 2020, 5, 10759-10766.	3.5	5
128	Spectroscopic studies on association of mRNA cap-analogues with human translation factor eIF4E. From modelling of interactions to inhibitory properties. , 1999, , .		5
129	Catalytic efficiency of divalent metal salts in dinucleoside 5',5'-triphosphate bond formation. , 2002, , .		5
130	Interaction of three Caenorhabditis elegans isoforms of translation initiation factor eIF4E with mono- and trimethylated mRNA 5' cap analogues. Acta Biochimica Polonica, 2002, 49, 671-82.	0.5	5
131	Influence of the Length of the Phosphate Chain in mRNA 5' Cap Analogues on Their Interaction with Eukaryotic Initiation Factor 4E. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1707-1710.	1.1	4
132	DEAGGREGATION OF eIF4E INDUCED BY mRNA 5' CAP BINDING. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 507-511.	1.1	4
133	Solid-Supported Synthesis of 5'-mRNA CAP-4 from Trypanosomatids. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1329-1333.	1.1	4
134	Molecular recognition of mRNA 5' cap by 3' poly(A)-specific ribonuclease (PARN) differs from interactions known for other cap-binding proteins. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 331-345.	2.3	4
135	Electroanalytical Study on Nicotinamide 7-Methylguanine Dinucleotide (Nm7GD+), Analog of Coenzyme NAD+and Related Compounds. Nucleosides & Nucleotides, 1990, 9, 437-438.	0.5	3
136	Study of the 2719 mutant of the c-H-ras oncogene in a bi-intronic alternative splicing system. Oncogene, 2002, 21, 5649-5653.	5.9	3
137	Thermodynamics of 7-Methylguanosine Cation Stacking with Tryptophan upon mRNA 5' Cap Binding to Translation Factor eIF4E. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1557-1561.	1.1	3
138	Synthesis of <sup>3</sup> H and <sup>13</sup> C Labeled Mrna Cap Dinucleotides Useful Tools for Nmr, Biochemical, and Biological Studies. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1315-1319.	1.1	3
139	Synthesis, conformation and hydrolytic stability of modified mRNA 5'-cap structures: P1,P3-dinucleoside triphosphates derived from guanosine and acyclic analogues of 7-methyl-, N2,7-dimethyl- and N2,N2,7-trimethylguanosines. Collection of Czechoslovak Chemical Communications, 1990, 55, 117-120.	1.0	3
140	Inter- and intramolecular stacking of mRNA cap-analogues relevance to initiation of translation. Collection of Czechoslovak Chemical Communications, 1996, 61, 217-221.	1.0	3
141	Kinetics of the Imidazolium Ring-Opening of mRNA 5'-cap Analogs in Aqueous Alkali. Collection of Czechoslovak Chemical Communications, 2006, 71, 567-578.	1.0	3
142	Binding Studies of Eukaryotic Initiation Factor eIF4E with Novel mRNA Dinucleotide Cap Analogues. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1703-1706.	1.1	2
143	NOVEL WAY OF CAPPING mRNA TRIMER AND STUDIES OF ITS INTERACTION WITH HUMAN NUCLEAR CAP-BINDING COMPLEX. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 1131-1134.	1.1	2
144	Trimethylguanosine Nucleoside Inhibits Cross-Linking Between Snurportin 1 and m3G-CAPPED U1 snRNA. Nucleosides, Nucleotides and Nucleic Acids, 2006, 25, 909-923.	1.1	2

#	ARTICLE	IF	CITATIONS
145	Synthesis of <i>Leishmania</i> Cap-4 Intermediates, Cap-2 and Cap-3. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1339-1348.	1.1	2
146	Bisphosphonate mRNA cap analog attached to Sepharose for affinity chromatography of decapping enzymes. Nucleic Acids Symposium Series, 2008, 52, 295-296.	0.3	2
147	Decapping Scavenger Enzyme Activity toward N2-Substituted 5' End mRNA Cap Analogues. ACS Omega, 2019, 4, 17576-17580.	3.5	2
148	Development of bis-ANS-based modified fluorescence titration assay for IFIT/RNA studies. Biochemical and Biophysical Research Communications, 2020, 533, 391-396.	2.1	2
149	Partial Molar Volumes of mRNA 5' Cap Analogues. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1553-1556.	1.1	1
150	Assignment of the Absolute Configuration of P-Chiral 5' Mrna Cap Analogues Containing Phosphorothioate Moiety. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1301-1305.	1.1	1
151	mRNA and snRNA Cap Analogs: Synthesis and Applications. , 2014, , 511-561.		1
152	<sup>13</sup> C-n.m.r. analysis of the effects of dissociation of the hydroxyl groups of 1-β <sup>2</sup> -d-arabinofuranosylcytosine and its O <sup>6</sup> -methyl derivatives on conformation. Carbohydrate Research, 1981, 89, 21-32.	2.3	0
153	Significance of the first transcribed nucleoside of capped RNA for ligand-induced folding of the cap-binding complex. Journal of Physics Condensed Matter, 2005, 17, S1495-S1502.	1.8	0
154	NEW AFFINITY RESIN FOR PURIFICATION OF CAP-BINDING PROTEINS. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 503-506.	1.1	0
155	Decapping of mRNA containing the histone 3' stem loop requires recruitment of stem loop binding protein (SLBP). FASEB Journal, 2009, 23, .	0.5	0
156	REOVIRUS GENOME RNA: COMMON 3'-TERMINAL NUCLEOTIDE SEQUENCES AND ASSIGNMENT OF mRNA RIBOSOME BINDING SITES TO VIRION GENOME SEGMENTS. , 1980, , 117-127.		0