Ryszard Stolarski

List of Publications by Year in descending order

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88 papers 2,666 citations

28 h-index 49 g-index

94 all docs 94 docs citations 94 times ranked 1743 citing authors

#	Article	IF	CITATIONS
1	Biophysical Studies of elF4E Cap-binding Protein: Recognition of mRNA 5′ Cap Structure and Synthetic Fragments of elF4G and 4E-BP1 Proteins. Journal of Molecular Biology, 2002, 319, 615-635.	4.2	353
2	Novel "anti-reverse" cap analogs with superior translational properties. Rna, 2003, 9, 1108-1122.	3.5	214
3	Phosphorylation of Eukaryotic Protein Synthesis Initiation Factor 4E at Ser-209. Journal of Biological Chemistry, 1995, 270, 14597-14603.	3.4	196
4	Phosphorylation of eIF4E attenuates its interaction with mRNA 5' cap analogs by electrostatic repulsion: Intein-mediated protein ligation strategy to obtain phosphorylated protein. Rna, 2003, 9, 52-61.	3.5	124
5	Quantitative Assessment of mRNA Cap Analogues as Inhibitors of in Vitro Translationâ€. Biochemistry, 1999, 38, 8538-8547.	2.5	121
6	Multiple Isoforms of Eukaryotic Protein Synthesis Initiation Factor 4E in Caenorhabditis elegans Can Distinguish between Mono- and Trimethylated mRNA Cap Structures. Journal of Biological Chemistry, 1998, 273, 10538-10542.	3.4	84
7	Synthesis of Antiâ€Reverse Cap Analogs (ARCAs) and their Applications in mRNA Translation and Stability. Methods in Enzymology, 2007, 431, 203-227.	1.0	79
8	Novel cap analogs for in vitro synthesis of mRNAs with high translational efficiency. Rna, 2004, 10, 1479-1487.	3.5	75
9	NMR Studies on the syn-anti Dynamic Equilibrium in Purine Nucleosides and Nucleotides. FEBS Journal, 1980, 108, 111-121.	0.2	72
10	Influence of Electric Charge Variation at Residues 209 and 159 on the Interaction of eIF4E with the mRNA 5†Terminusâ€. Biochemistry, 2004, 43, 5370-5379.	2.5	70
11	Positive Heat Capacity Change upon Specific Binding of Translation Initiation Factor elF4E to mRNA 5â€~ Cap. Biochemistry, 2002, 41, 12140-12148.	2.5	62
12	Specificity of recognition of mRNA 5' cap by human nuclear cap-binding complex. Rna, 2005, 11, 1355-1363.	3.5	59
13	Enzymatically stable 5′ mRNA cap analogs: Synthesis and binding studies with human DcpS decapping enzyme. Bioorganic and Medicinal Chemistry, 2006, 14, 3223-3230.	3.0	51
14	Solution structure of the EcoRI DNA octamer containing 5-fluorouracil via restrained molecular dynamics using distance and torsion angle constraints extracted from NMR spectral simulations. Biochemistry, 1992, 31, 7027-7042.	2.5	47
15	Synthesis, Conformation and Hydrolytic Stability of p ¹ ,p ³ â^'Dinucleoside Triphosphates Related to mRNA 5′-cap, and Comparative Kinetic Studies on their Nucleoside and Nucleoside Monophosphate Analogs. Nucleosides & Nucleotides, 1990, 9, 599-618.	0.5	44
16	Studies on the dynamic syn-anti equilibrium in purine nucleosides and nucleotides with the aid of 1H and 13C NMR spectroscopy. FEBS Journal, 1984, 138, 187-192.	0.2	41
17	Thermodynamics of mRNA 5†Cap Binding by Eukaryotic Translation Initiation Factor eIF4Eâ€. Biochemistry, 2004, 43, 13305-13317.	2.5	41
18	A direct method for the synthesis of nucleoside 5′-methylenebis(phosphonate)s from nucleosides. Tetrahedron Letters, 2005, 46, 2417-2421.	1.4	38

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19	Structural basis for nematode eIF4E binding an m 2,2,7 G-Cap and its implications for translation initiation. Nucleic Acids Research, 2011, 39, 8820-8832.	14.5	38
20	The antiviral drug ribavirin does not mimic the 7-methylguanosine moiety of the mRNA cap structure in vitro. Rna, 2005, 11, 1505-1513.	3.5	37
21	Comparison of the solid state and solution conformations of R and S epimers of 8,5'-cycloadenosine and their relevance to some enzymic reactions. Biochemistry, 1981, 20, 3294-3301.	2.5	33
22	Mechanism of hydroxylamine mutagenesis: tautomeric shifts and proton exchange between the promutagen N6-methoxyadenosine and cytidine. Biochemistry, 1987, 26, 4332-4337.	2.5	33
23	Chemical synthesis and binding activity of the trypanosomatid cap-4 structure. Rna, 2004, 10, 1469-1478.	3.5	33
24	Biophysical Approach to Studies of Cap–elF4E Interaction by Synthetic Cap Analogs. Methods in Enzymology, 2007, 430, 209-245.	1.0	33
25	A $<$ sup>1 $<$ /sup>H NMR Study of the Syn-Anti Dynamic Equilibrium in Adenine Nucleosides and Nucleotides with the Aid of Some Synthetic Model Analogues with Fixed Conformations. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1979, 34, 359-373.	1.4	32
26	Hydroxylamine and methoxyamine mutagenesis: displacement of the tautomeric equilibrium of the promutagen N6-methoxyadenosine by complementary base pairing. Biochemistry, 1984, 23, 2906-2913.	2.5	32
27	Synthesis and properties of N2,3-ethenoguanosine and N2,3-ethenoguanosine 5'-diphosphate. Journal of Organic Chemistry, 1987, 52, 2374-2378.	3.2	31
28	Comparison of theoretical and experimental approaches to determination of conformation of nucleosides about the glycosidic bond. Nucleic Acids and Protein Synthesis, 1980, 610, 1-19.	1.7	30
29	Studies on Prototropic Tautomerism in Neutral and Monoanionic Forms of Pyrimidines by Nuclear Magnetic Resonance Spectroscopy. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1977, 32, 894-900.	1.4	28
30	Hydroxylamine Mutagenesis: Observation of Inverted Watson-Crick Base-Pairing Between N4-Methoxycytosine and Adenine with the Aid of Natural-Abundance High-Resolution 15N NMR Spectroscopy. FEBS Journal, 1983, 130, 559-564.	0.2	28
31	SYNTHESIS AND BIOCHEMICAL PROPERTIES OF NOVEL mRNA 5′ CAP ANALOGS RESISTANT TO ENZYMATIC HYDROLYSIS. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 615-621.	1.1	28
32	Structural Changes of eIF4E upon Binding to the mRNA $5\hat{a}\in^2$ Monomethylguanosine and Trimethylguanosine Cap. Biochemistry, 2008, 47, 2710-2720.	2.5	28
33	1H NMR and fluorescence studies of new mRNA 5'-cap analogues. Collection of Czechoslovak Chemical Communications, 1996, 61, 197-202.	1.0	24
34	Charge Distribution in 7-Methylguanine Regarding Cation-Ï€ Interaction with Protein Factor eIF4E. Biophysical Journal, 2003, 85, 1450-1456.	0.5	22
35	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
36	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

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37	Purine Nucleosides and Nucleotides Unequivocally in the Syn Conformation: Guanosine and 5′-GM P with 8-tert-Butyl and 8-(α-Hydroxyisopropyl) Substituents. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1978, 33, 902-907.	1.4	18
38	Solid state and solution conformations of 1 -(β-D-2′,3′-secoribofuranosyl)-5,6-dichlorobenzimidazole, an acyclonucleoside analogue. Canadian Journal of Chemistry, 1985, 63, 1215-1221.	1.1	17
39	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
40	Eukaryotic translation initiation is controlled by cooperativity effects within ternary complexes of $4E\hat{a}\in BP1$, eIF4E, and the mRNA $5\hat{a}\in ^2$ cap. FEBS Letters, 2013, 587, 3928-3934.	2.8	17
41	1H-NMR studies on association of mRNA cap-analogues with tryptophan-containing peptides. BBA - Proteins and Proteomics, 1996, 1293, 97-105.	2.1	16
42	Fluorescence and NMR studies of intramolecular stacking of mRNA cap-analogues. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1997, 1354, 145-152.	2.4	16
43	Synthesis and properties of new NH2 and N7 substituted GMP and GTP 5'-mRNA cap analogues. Collection of Czechoslovak Chemical Communications, 1993, 58, 138-141.	1.0	15
44	Conformation about the Glycosidic Bond and Susceptibility to 5 '-Nucleotidase of 8-Substituted Analogues of 5'-GMP. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1984, 39, 55-63.	1.4	13
45	Interaction of three Caenorhabditis elegans isoforms of translation initiation factor eIF4E with mono- and trimethylated mRNA 5' cap analogues Acta Biochimica Polonica, 2002, 49, 671-682.	0.5	13
46	Base pairing-induced shift in tautomeric equilibrium of a promutagenic analogue, N 6 -methoxyadenosine. FEBS Letters, 1983, 158, 128-130.	2.8	12
47	Thermodynamics of specific protein-RNA interactions Acta Biochimica Polonica, 2003, 50, 297-318.	0.5	12
48	Preparation of $1-\hat{l}\pm$ -D-Arabinofuranosylbenzimidazole and Its 5,6-Dichloro Derivative, and the Direct Bromination of Benzimidazole Nucleosides. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1980, 35, 30-35.	1.4	11
49	SYNTHESIS AND PROPERTIES OF mRNA CAP ANALOGS CONTAINING PHOSPHOROTHIOATE MOIETY IN 5′,5′-TRIPHOSPHATE CHAIN. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 595-600.	1.1	10
50	Acetylpyrene-labelled 7-methylguanine nucleotides: unusual fluorescence properties and application to decapping scavenger activity monitoring. Organic and Biomolecular Chemistry, 2016, 14, 3863-3868.	2.8	10
51	Acyclo Nucleosides and Nucleotides: Synthesis, Conformation and Other Properties, and Behaviour in Some Enzyme Systems, of 2′,3′-Seco Purine Nucleosides, Nucleotides and 3′:5′-Cyclic Phosphates, Analogues of cAMP and cGMP. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1986. 41. 758-770.	1.4	9
52	Mechanism of hydroxylamine mutagenesis: Role of tautomerism, conformation and proton exchange on base pairing between the promutagen N6 methoxyadenosine and uridine. Biophysical Chemistry, 1993, 46, 207-215.	2.8	9
53	Interaction Between Yeast Eukaryotic Initiation Factor elF4E and mRNA 5′ Cap Analogues Differs from That for Murine elF4E. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1711-1714.	1.1	9
54	Synthesis of, and Conformational Studies on, 2-Trifluoromethyl, Substituted Benzimidazole Ribofuranosides. Nucleosides & Nucleotides, 1982, 1, 275-287.	0.5	8

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55	Tautomerism, acid-base properties and conformation of methylated analogues of the promutagenic N4-hydroxycytosine. Biophysical Chemistry, 1998, 71, 87-98.	2.8	8
56	Thermodynamics of Molecular Recognition of mRNA 5′ Cap by Yeast Eukaryotic Initiation Factor 4E. Journal of Physical Chemistry B, 2011, 115, 8746-8754.	2.6	8
57	Synthesis of m22,7GTP- and m32,2,7GTP-Sepharose 4B: New affinity resins for isolation of cap binding proteins. Collection of Czechoslovak Chemical Communications, 1993, 58, 132-137.	1.0	8
58	Structure and conformation of the cyclic phosphate of Ganciclovir, a broad-spectrum antiviral agent. Biochimica Et Biophysica Acta - General Subjects, 1994, 1200, 55-63.	2.4	7
59	Stacking efficiency and flexibility analysis of aromatic amino acids in capâ€binding proteins. Proteins: Structure, Function and Bioinformatics, 2008, 71, 2026-2037.	2.6	7
60	Solution Conformation of Benzimidazole Nucleosides with the Aid of Model Analogues. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1981, 36, 126-134.	1.4	6
61	Solution Conformations of Some Acyclo Nucleoside and Nucleotide Analogues of Antiviral Acyclonucleosides, and Their Substrate/Inhibitor Properties in Several Enzyme Systems. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1988, 43, 231-242.	1.4	6
62	Anodic decarboxylative oxidation of carboxymethyluracil and -thymine isomers. Tetrahedron, 1997, 53, 2609-2616.	1.9	6
63	Thermodynamics and conformational changes related to binding of eIF4E protein to mRNA 5′ cap. Journal of Physics Condensed Matter, 2005, 17, S1483-S1494.	1.8	6
64	NOVEL DINUCLEOSIDE 5′,5′-TRIPHOSPHATE CAP ANALOGUES. SYNTHESIS AND AFFINITY FOR MURINE TRANSLATION FACTOR eIF4E. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 629-633.	1.1	6
65	SYNTHESIS AND ENZYMATIC CHARACTERIZATION OF METHYLENE ANALOGS OF ADENOSINE 5′-TETRAPHOSPHATE (P4A). Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 589-593.	1.1	6
66	Dynamical insight into Caenorhabditis elegans elF4E recognition specificity for mono-and trimethylated structures of mRNA $5\hat{a} \in ^2$ cap. Journal of Molecular Modeling, 2011, 17, 727-737.	1.8	6
67	Monophosphates and Cyclic Phosphates of Some Antiviral Acyclonucleosides: Synthesis, Conformation and Substrate/Inhibitor Properties in Some Enzyme Systems. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1990, 45, 293-299.	1.4	5
68	Spectroscopic studies on association of mRNA cap-analogues with human translation factor eIF4E. From modelling of interactions to inhibitory properties. , 1999, , .		5
69	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
70	Pyrimidine Homoribonucleosides: Synthesis, Solution Conformation, and Some Biological Properties. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1987, 42, 589-598.	1.4	4
71	Influence of the Length of the Phosphate Chain in mRNA $5\hat{a}\in^2$ Cap Analogues on Their Interaction with Eukaryotic Initiation Factor 4E. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1707-1710.	1.1	4
72	DEAGGREGATION OF eIF4E INDUCED BY mRNA 5′ CAP BINDING. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 507-511.	1.1	4

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73	Solid State and Solution Structure and Conformation of The Antiviral Acyclonucleoside 9-[4-Hydroxy-2-(hydroxymethyl)-butyl]guanine. Nucleosides & Nucleotides, 1995, 14, 1359-1377.	0.5	3
74	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
75	Synthesis of (sup (b) 3 (b) (sup H and (sup (b) 13 (b) (sup C Labeled Mrna Cap Dinucleotidesâ€"Useful Tools for Nmr, Biochemical, and Biological Studies. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1315-1319.	1.1	3
76	Interactions of 2'-O-methyl oligoribonucleotides with the RNA models of the 30S subunit A-site. PLoS ONE, 2018, 13, e0191138.	2.5	3
77	Tricyclic Nucleobase Analogs and Their Ribosides as Substrates and Inhibitors of Purine-Nucleoside Phosphorylases III. Aminopurine Derivatives. Molecules, 2020, 25, 681.	3.8	3
78	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
79	One- and two-dimensional 1H-NMR investigations of two 19-base-pair analogues of the tet operator. FEBS Journal, 1987, 169, 603-609.	0.2	2
80	Binding Studies of Eukaryotic Initiation Factor elF4E with Novel mRNA Dinucleotide Cap Analogues. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1703-1706.	1.1	2
81	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
82	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
83	Novel Electrochemically Derived Dimers of Methylated Uracils. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1997, 52, 742-748.	0.7	1
84	Partial Molar Volumes of mRNA 5′ Cap Analogues. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1553-1556.	1.1	1
85	Assignment of the Absolute Configuration of P-Chiral 5â€2Mrna Cap Analogues Containing Phosphorothioate Moiety. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 1301-1305.	1.1	1
86	Conformation of 3′-Substituted 2′,3′-Dideoxyribonucleosides in Aqueous Solution; Nucleoside Analogues with Potential Antiviral Activity. Nucleosides & Nucleotides, 1991, 10, 567-568.	0.5	0
87	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
88	Brief Methodological Survey of the Photochemistry of Nucleic Acid Constituents and Analogues, and Some Biological Applications, Including Photo-Affinity Labeling. , 1991, , 115-133.		0