

Jyoti Chattopadhyaya

List of Publications by Year in descending order

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182
papers

5,765
citations

76322

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all docs

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	A large-scale chemical modification screen identifies design rules to generate siRNAs with high activity, high stability and low toxicity. <i>Nucleic Acids Research</i> , 2009, 37, 2867-2881.	14.5	315
2	How do the gauche and anomeric effects drive the pseudorotational equilibrium of the pentofuranose moiety of nucleosides?. <i>Journal of the American Chemical Society</i> , 1993, 115, 9734-9746.	13.7	205
3	A screen of chemical modifications identifies position-specific modification by UNA to most potently reduce siRNA off-target effects. <i>Nucleic Acids Research</i> , 2010, 38, 5761-5773.	14.5	157
4	Structure and toxicity of a peptide hepatotoxin from the cyanobacterium <i>Oscillatoria agardhii</i> . <i>Toxicol</i> , 1989, 27, 1021-1034.	1.6	149
5	A New Generalized Karplus-Type Equation Relating Vicinal Proton-Fluorine Coupling Constants to H ^α -C ^α -C ^β -F Torsion Angles. <i>Journal of Organic Chemistry</i> , 1998, 63, 4967-4984.	3.2	145
6	Design, synthesis and biological evaluation of novel triazole, urea and thiourea derivatives of quinoline against <i>Mycobacterium tuberculosis</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 4681-4692.	3.0	128
7	Allele-Selective Inhibition of Mutant <i>Huntingtin</i> Expression with Antisense Oligonucleotides Targeting the Expanded CAG Repeat. <i>Biochemistry</i> , 2010, 49, 10166-10178.	2.5	127
8	A critical survey of the structure-function of the antisense oligo/RNA heteroduplex as substrate for RNase H. <i>Journal of Proteomics</i> , 2001, 48, 189-208.	2.4	112
9	Rapid and quantitative recovery of DNA fragments from gels by displacement electrophoresis (isotachopheresis). <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1984, 782, 120-126.	2.4	107
10	Novel quinoline and naphthalene derivatives as potent antimycobacterial agents. <i>European Journal of Medicinal Chemistry</i> , 2010, 45, 1854-1867.	5.5	98
11	Design, synthesis, biological evaluation and molecular modelling studies of novel quinoline derivatives against <i>Mycobacterium tuberculosis</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 2830-2841.	3.0	96
12	Inhibition of the reverse transcriptase from HIV by 3 ^{azido} -2-deoxythymidine triphosphate and its threo analogue. <i>Antiviral Research</i> , 1987, 7, 139-149.	4.1	91
13	The pKa's of 2 ^{Hydroxyl} Group in Nucleosides and Nucleotides. <i>Journal of the American Chemical Society</i> , 2001, 123, 2893-2894.	13.7	91
14	How Does the 2 ^{Hydroxy} Group Drive the Pseudorotational Equilibrium in Nucleoside and Nucleotide by the Tuning of the 3 ^{Gauche} Effect?. <i>Journal of the American Chemical Society</i> , 1994, 116, 6558-6560.	13.7	79
15	Five- and Six-Membered Conformationally Locked 2 ⁴ -Carbocyclicribo-Thymidines: Synthesis, Structure, and Biochemical Studies. <i>Journal of the American Chemical Society</i> , 2007, 129, 8362-8379.	13.7	78
16	Some observations relating to phosphorylation methods in oligonucleotide synthesis. <i>Tetrahedron Letters</i> , 1979, 20, 5059-5062.	1.4	73
17	How do the energetics of the stereoelectronic gauche and anomeric effects modulate the conformation of nucleos(t)ides?. <i>Pure and Applied Chemistry</i> , 1996, 68, 2137-2144.	1.9	72
18	Measurement of Nucleobase pKa Values in Model Mononucleotides Shows RNA ^{RNA} Duplexes To Be More Stable than DNA ^{DNA} Duplexes. <i>Journal of the American Chemical Society</i> , 2004, 126, 2862-2869.	13.7	70

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19	An analysis of the inhibition of replication of HOV and MULV by some 3'-blocked pyrimidine analogs. <i>Biochemical Pharmacology</i> , 1989, 38, 109-119.	4.4	69
20	Conformationally Constrained 2'-N,4'-C-Ethylene-Bridged Thymidine (Aza-ENA-T): Synthesis, Structure, Physical, and Biochemical Studies of Aza-ENA-T-Modified Oligonucleotides. <i>Journal of the American Chemical Society</i> , 2006, 128, 15173-15187.	13.7	68
21	New syntheses of 2',3'-dideoxy-2',3'-di-substituted & -2'-mono-substituted uridines & adenosines by Michael addition reactions. <i>Tetrahedron</i> , 1988, 44, 6705-6722.	1.9	67
22	Computational and NMR study of quaternary ammonium ion conformations in solution. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 4640-4647.	2.8	62
23	Quantitation of the Anomeric Effect in Adenosine and Guanosine by Comparison of the Thermodynamics of the Pseudorotational Equilibrium of the Pentofuranose Moiety in N- and C-Nucleosides. <i>Journal of the American Chemical Society</i> , 1994, 116, 8033-8037.	13.7	59
24	Conformationally-constrained indeno[2,1-c]quinolines – a new class of anti-mycobacterial agents. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 2180.	2.8	59
25	Conformation of two 4'-thio-2'-deoxynucleoside analogs studied by 5000-MHz proton NMR spectroscopy and x-ray crystallography. <i>Journal of the American Chemical Society</i> , 1992, 114, 9936-9943.	13.7	56
26	Synthesis of [Ru(phen)2dppz]2+-Tethered Oligo-DNA and Studies on the Metallointercalation Mode into the DNA Duplex. <i>Journal of the American Chemical Society</i> , 2001, 123, 3551-3562.	13.7	54
27	Synthesis of the DNA-[Ru(tpy)(dppz)(CH3CN)]2+Conjugates and Their Photo Cross-Linking Studies with the Complementary DNA Strand. <i>Journal of the American Chemical Society</i> , 2002, 124, 13416-13433.	13.7	52
28	Michael addition reactions of 2'-ene-3'-phenylselenone of uridine. New synthesis of 2',3'-dideoxy-ribo-aziridino-, 2',3'-dideoxy-2',3'-ribo-cyclopropyl- & 2',2'-O-anhydro-3'-deoxy-3'-amino-uridine derivatives. <i>Tetrahedron</i> , 1989, 45, 4507-4522.	1.9	50
29	2-(4-Tolylsulfonyl)ethoxymethyl (TEM) – a new 2'-OH protecting group for solid-supported RNA synthesis. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 333-343.	2.8	50
30	Allele-selective inhibition of ataxin-3 (ATX3) expression by antisense oligomers and duplex RNAs. <i>Biological Chemistry</i> , 2011, 392, 315-25.	2.5	49
31	Synthesis of Conformationally Locked Carba-LNAs through Intramolecular Free-Radical Addition to C4-N. Electrostatic and Steric Implication of the Carba-LNA Substituents in the Modified Oligos for Nuclease and Thermodynamic Stabilities. <i>Journal of Organic Chemistry</i> , 2009, 74, 6534-6554.	3.2	47
32	New stereocontrolled synthesis of isomeric C-branched-2'-D-nucleosides by intramolecular free-radical cyclization-opening reactions based on temporary silicon connection. <i>Tetrahedron</i> , 1992, 48, 349-370.	1.9	46
33	Modulation of Pyrene Fluorescence in DNA Probes Depends upon the Nature of the Conformationally Restricted Nucleotide. <i>Journal of Organic Chemistry</i> , 2008, 73, 2829-2842.	3.2	46
34	An Electrochemical Probe of DNA Stacking in an Antisense Oligonucleotide Containing a C3'-endo-Locked Sugar. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 3402-3405.	13.8	45
35	Synthesis and Structure of Novel Conformationally Constrained 1',2'-Azetidine-Fused Bicyclic Pyrimidine Nucleosides: Their Incorporation into Oligo-DNAs and Thermal Stability of the Heteroduplexes. <i>Journal of Organic Chemistry</i> , 2006, 71, 299-314.	3.2	45
36	Fine Tuning of Electrostatics around the Internucleotidic Phosphate through Incorporation of Modified 2',4'-Carbocyclic-LNAs and -ENAs Leads to Significant Modulation of Antisense Properties. <i>Journal of Organic Chemistry</i> , 2009, 74, 118-134.	3.2	44

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37	Structural properties of modified deoxyadenosine structures in solution. Impact of the gauche and anomeric effects on the furanose conformation. <i>Canadian Journal of Chemistry</i> , 1987, 65, 2089-2094.	1.1	43
38	Synthesis of 1 ² H ₂ , 2 ³ H ₂ , 3 ⁴ H ₂ , 4 ⁵ H ₂ , 5 ⁶ H ₂ -2H ₆ -1 ² -D-ribose nucleosides and 1 ² H ₂ , 2 ³ H ₂ , 3 ⁴ H ₂ , 4 ⁵ H ₂ , 5 ⁶ H ₂ -2H ₇ -1 ² -D-2 ³ -D selective suppression of proton resonances in partially-deuterated oligo-DNA, oligo-RNA and in 2,5A core (1H-NMR window). <i>Tetrahedron</i> , 1992, 48, 9033-9072.	1.9	42
39	Synthesis and antimycobacterial activity of prodrugs of indeno[2,1-c]quinoline derivatives. <i>European Journal of Medicinal Chemistry</i> , 2011, 46, 1306-1324.	5.5	42
40	Intramolecular cyclization-trapping of carbon radicals by olefins as means to functionalize 2 ³ - and 3 ⁴ -carbons in 1 ² -D-nucleosides. <i>Tetrahedron</i> , 1991, 47, 2237-2254.	1.9	41
41	Intramolecular Free-Radical Cyclization Reactions on Pentose Sugars for the Synthesis of Carba-LNA and Carba-ENA and the Application of Their Modified Oligonucleotides as Potential RNA Targeted Therapeutics. <i>Chemical Reviews</i> , 2012, 112, 3808-3832.	47.7	41
42	Significant pKa Perturbation of Nucleobases Is an Intrinsic Property of the Sequence Context in DNA and RNA. <i>Journal of the American Chemical Society</i> , 2004, 126, 8674-8681.	13.7	40
43	2-(Trimethylsilyl)ethyl chloroformate: A convenient reagent for protection of hydroxyl function. <i>Tetrahedron Letters</i> , 1981, 22, 969-972.	1.4	39
44	The effect of protecting groups of the nucleobase and the sugar moieties on the acidic hydrolysis of the glycosidic bond of 2deoxyadenosine: a kinetic study. <i>Tetrahedron</i> , 1987, 43, 4453-4461.	1.9	39
45	Synthesis of C-branched spermine tethered oligo-DNA and the thermal stability of the duplexes and triplexes. <i>Tetrahedron</i> , 1996, 52, 12275-12290.	1.9	39
46	Synthesis, Physicochemical and Biochemical Studies of 1 ² -Oxetane Constrained Adenosine and Guanosine Modified Oligonucleotides, and Their Comparison with Those of the Corresponding Cytidine and Thymidine Analogues. <i>Journal of the American Chemical Society</i> , 2004, 126, 11484-11499.	13.7	38
47	In vivo efficacy and off-target effects of Locked Nucleic Acid (LNA) and Unlocked Nucleic Acid (UNA) modified siRNA and small internally segmented interfering RNA (sisRNA) in mice bearing human tumor xenografts. <i>Artificial DNA, PNA & XNA</i> , 2010, 1, 36-44.	1.4	38
48	Synthesis and structure of azole-fused indeno[2,1-c]quinolines and their anti-mycobacterial properties. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 5661.	2.8	38
49	Chemical synthesis and molecular cloning of a STOP oligonucleotide encoding an UGA translation terminator in all three reading frames. <i>Gene</i> , 1983, 24, 15-27.	2.2	37
50	Synthesis of new 2',3'-dideoxy-2',3'-fused-heterocyclic uridines, & some 2', 3'-ene-2'-substituted uridines from easily accessible 2',3'-ene-3'-phenylselenonyl uridine. <i>Tetrahedron</i> , 1990, 46, 3037-3060.	1.9	37
51	Structure of a hepatotoxic pentapeptide from the cyanobacterium <i>Nodularia spumigena</i> . <i>Toxicon</i> , 1990, 28, 535-540.	1.6	37
52	Stereoisomeric Selectivity of Human Deoxyribonucleoside Kinases. <i>Biochemistry</i> , 1999, 38, 16993-16999.	2.5	37
53	New antiprotozoal agents: Their synthesis and biological evaluations. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 2750-2758.	2.2	37
54	Synthesis of new 2 ³ , 3 ⁴ -modified uridine derivatives from 2 ³ , 3 ⁴ -ene-2 ³ -phenylselenonyl uridine by Michael addition reactions. <i>Tetrahedron</i> , 1991, 47, 3431-3450.	1.9	36

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55	Structural analysis of 2â€²,3â€²-dideoxyinosine, 2â€²,3â€²-dideoxyadenosine, 2â€²,3â€²-dideoxyguanosine and 2â€²,3â€²-dideoxycytidine by 500-MHz 1H-NMR spectroscopy and ab-initio molecular orbital calculations. <i>Journal of Proteomics</i> , 1992, 25, 253-272.	2.4	36
56	Antisense oligonucleotides with oxetane-constrained cytidine enhance heteroduplex stability, and elicit satisfactory RNase H response as well as showing improved resistance to both exo and endonucleases. Electronic supplementary information (ESI) available: RNA cleavage kinetics. See http://www.rsc.org/suppdata/ob/b2/b210163gl . <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 81-92.	2.8	35
57	Acidic hydrolysis of 6-substituted 9-(2-deoxy- β -D-pentofuranosyl) purines and their 9-(1-alkoxyethyl) counter-parts: kinetics and mechanism.1. <i>Tetrahedron</i> , 1987, 43, 1133-1140.	1.9	33
58	3-N-Acyl Uridines: Preparation and Properties of a New Class of Uracil Protecting Group.. <i>Acta Chemica Scandinavica</i> , 1983, 37b, 147-150.	0.7	33
59	An efficient synthesis of γ -nucleoside (wyosine) by regiospecific methylation of n4-desmethylwyosine using organozinc reagent. <i>Tetrahedron Letters</i> , 1987, 28, 3275-3278.	1.4	32
60	Structure and reactivity of wyosine (γ -nucleoside) and its derivatives. Chemical, kinetic and spectroscopic studies. <i>Tetrahedron</i> , 1988, 44, 1273-1290.	1.9	32
61	Comparative structural studies of [3.1.0]-fused 2',3'-modified .beta.-D-nucleosides by x-ray crystallography, NMR spectroscopy, and molecular mechanics calculations. <i>Journal of Organic Chemistry</i> , 1991, 56, 6884-6892.	3.2	32
62	The synthesis and conformation of 2â€²- and 3â€²-hypermodified tricyclic nucleosides and their use in the synthesis of novel 2â€²- or 3â€²-isomeric 4(7)-substituted isoxazolidine-nucleosides. <i>Tetrahedron</i> , 1994, 50, 4921-4936.	1.9	32
63	Free-Radical Ring Closure to Conformationally Locked β -Carba-LNAs and Synthesis of Their Oligos: Nuclease Stability, Target RNA Specificity, and Elicitation of RNase H. <i>Journal of Organic Chemistry</i> , 2010, 75, 6122-6140.	3.2	31
64	Dipyrido[3,2-a:2â€²,3â€²-c]phenazine-Tethered Oligo-DNA: Synthesis and Thermal Stability of Their DNAâ€¦DNA and DNAâ€¦RNA Duplexes and DNAâ€¦DNAâ€¦DNA Triplexes. <i>Helvetica Chimica Acta</i> , 1999, 82, 2186-2200.	1.6	30
65	A Convergent Regiospecific Synthesis of the Lariat-Trinucleotides and A ^{2â€²p} 5â€²G and A ^{2â€²p} Nucleotides, 1987, 6, 209-226.	0.5	29
66	Regiospecific synthesis of 2'-deoxy-2',2' -dideuterio nucleosides. <i>Tetrahedron</i> , 1987, 43, 2355-2368.	1.9	29
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73	Synthesis of 2'-deoxy-2'(-)-deuterio and 2'-deoxy-2'(r)-deuterio- \hat{I}^2 -d-nucleosides. Tetrahedron, 1986, 42, 5427-5441.	1.9	27
74	The Strength of the Anomeric Effect in Adenosine, Guanosine, and in Their 2 \hat{A}^{\sim} -Deoxy Counterparts is Medium-Dependent. Journal of Organic Chemistry, 1997, 62, 8800-8808.	3.2	27
75	The pKa of the Internucleotidic 2 \hat{A}^{\sim} -Hydroxyl Group in Diribonucleoside (3 \hat{A}^{\sim} - \hat{A}^{\sim} '5 \hat{A}^{\sim}) Monophosphates. Journal of Organic Chemistry, 2003, 68, 1906-1910.	3.2	27
76	Intra- and intermolecular nucleophilic phosphorous - sulfur bond cleavage. The reaction of fluoride ion with O-aryl-O, S-dialkylphosphorothioates, & the degradation of phosphorothioate linkage in di-ribonucleotides by the vicinal 2 \hat{A}^{\sim} -hydroxyl group.. Tetrahedron, 1989, 45, 7523-7544.	1.9	26
77	A 270 mhz 1H -NMR study of two \hat{A}^{\sim} -branched \hat{A}^{\sim} -ribonucleotides A3' $\hat{p}5'$ u2' $\hat{p}5'$ g and A3' $\hat{p}5'$ u2' $\hat{p}5'$ g which are products of pre-mRNA processing (\hat{A}^{\sim} -splicing \hat{A}^{\sim}) reactions. Tetrahedron, 1987, 43, 947-958.	1.9	25
78	Synthesis of 2 \hat{A}^{\sim} - and 3 \hat{A}^{\sim} -spiro-isoxazolidine derivatives of thymidine & their conversions to 2 \hat{A}^{\sim} ,3 \hat{A}^{\sim} -dideoxy-2 \hat{A}^{\sim} ,3 \hat{A}^{\sim} -didehydro-3 \hat{A}^{\sim} -substituted nucleosides by radical promoted fragmentation.. Tetrahedron, 1993, 49, 10133-10156.	1.9	25
79	Diastereospecific synthesis of 2 \hat{A}^{\sim} - or 3 \hat{A}^{\sim} -c-branched nucleosides through intramolecular free-radical capture by silicon-tethered acetylene. Tetrahedron, 1994, 50, 5255-5272.	1.9	25
80	Oxetane modified, conformationally constrained, antisense oligodeoxyribonucleotides function efficiently as gene silencing molecules. Nucleic Acids Research, 2004, 32, 5791-5799.	14.5	25
81	2 \hat{A}^{\sim} /3 \hat{A}^{\sim} -O-peptidyl Adenosine as a General Base Catalyst of its Own External Peptidyl Transfer: Implications for the Ribosome Catalytic Mechanism. ChemBioChem, 2005, 6, 992-996.	2.6	25
82	Solution structure of lariat RNA by 500 MHz NMR spectroscopy and molecular dynamics studies in water. Journal of Proteomics, 1993, 27, 229-259.	2.4	24
83	Synthesis of 2 \hat{A}^{\sim} ,4 \hat{A}^{\sim} -Propylene-Bridged (Carba-ENA) Thymidine and Its Analogues: The Engineering of Electrostatic and Steric Effects at the Bottom of the Minor Groove for Nuclease and Thermodynamic Stabilities and Elicitation of RNase H. Journal of Organic Chemistry, 2010, 75, 7112-7128.	3.2	24
84	A New stereospecific synthesis of [3.1.0]bicyclic cyclopropano analog of 2'3'-dideoxyuridine. Tetrahedron, 1990, 46, 2587-2592.	1.9	23
85	The self-cleavage of lariat-RNA. Tetrahedron Letters, 1993, 34, 3929-3932.	1.4	23
86	The Solution Conformation of a Carbocyclic Analog of the Dickerson-Drew Dodecamer: Comparison with its own X-ray Structure and that of the NMR Structure of the Native Counterpart. Journal of Biomolecular Structure and Dynamics, 1998, 16, 547-568.	3.5	23
87	Synthesis of furo[2,3-c]pyran- \hat{I}^2 -d-nucleosides by radical-cyclization & their conformational analysis by 500 mhz 1H -nmr spectroscopy. Tetrahedron, 1991, 47, 9675-9690.	1.9	22
88	New synthesis of 3 \hat{A}^{\sim} -substituted nucleosides. Tetrahedron, 1993, 49, 5189-5202.	1.9	22
89	The tunable transmission of the aromatic character of the aglycone through the anomeric effect in C-nucleosides drives its own sugar conformation: A thermodynamic study. Tetrahedron, 1997, 53, 6433-6464.	1.9	22
90	Synthesis of multiply labelled ribonucleosides for sequence-specific labelling of oligo-RNA. Journal of Labelled Compounds and Radiopharmaceuticals, 2001, 44, 763-783.	1.0	21

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91	Carba-LNA- ⁵ Me C/A/G/T Modified Oligos Show Nucleobase-Specific Modulation of 3'-Exonuclease Activity, Thermodynamic Stability, RNA Selectivity, and RNase H Elicitation: Synthesis and Biochemistry. <i>Journal of Organic Chemistry</i> , 2011, 76, 4408-4431.	3.2	21
92	The 9-Fluorenylmethoxycarbonyl (Fmoc) Group for the Protection of Amino Functions of Cytidine, Adenosine, Guanosine and Their 2'-Deoxysugar Derivatives.. <i>Acta Chemica Scandinavica</i> , 1983, 37b, 263-265.	0.7	21
93	Synthesis of heptameric lariat-RNA modelling the lariat introns of group II and nuclear pre-mRNA processing reaction (splicing). <i>Tetrahedron</i> , 1993, 49, 649-668.	1.9	20
94	The first example of sequence-specific non-uniformly ¹³ C5 labelled RNA: Synthesis of the 29mer HIV-1 TAR RNA with ¹³ C Relaxation Window. <i>Tetrahedron</i> , 1999, 55, 6603-6622.	1.9	20
95	Double Sugar and Phosphate Backbone-Constrained Nucleotides: Synthesis, Structure, Stability, and Their Incorporation into Oligodeoxynucleotides. <i>Journal of Organic Chemistry</i> , 2009, 74, 3248-3265.	3.2	20
96	Design and Divergent Synthesis of Aza Nucleosides from a Chiral Imino Sugar. <i>Journal of Organic Chemistry</i> , 2012, 77, 4671-4678.	3.2	20
97	The quantitation of the competing energetics of the stereoelectronic and steric effects of the 3'-OH and the aglycone in the β - versus α - by ¹ H-NMR. <i>Tetrahedron</i> , 1998, 54, 1867-1900.	1.9	19
98	The Synthesis of Deuterionucleosides. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2000, 19, 1615-1656.	1.1	19
99	The chemical nature of the 2'-substituent in the pentose-sugar dictates the pseudoaromatic character of the nucleobase (pKa) in DNA/RNA. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1675-1686.	2.8	19
100	The effect of metal ion complex formation on acidic depurination of 2'-deoxyadenosine and 2'-deoxyguanosine. <i>Tetrahedron</i> , 1989, 45, 3945-3954.	1.9	18
101	Synthesis of 5'-polyarene-tethered oligo-DNAs and the thermal stability and spectroscopic properties of their duplexes and triplexes. <i>Tetrahedron</i> , 1997, 53, 10409-10432.	1.9	18
102	Facile preparation of the oxetane-nucleosides. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 4362.	2.8	18
103	High-quality oligo-RNA synthesis using the new 2'-O-TEM protecting group by selectively quenching the addition of p-tolyl vinyl sulphone to exocyclic amino functions. <i>Canadian Journal of Chemistry</i> , 2007, 85, 293-301.	1.1	18
104	Unusual radical 6-endo cyclization to carbocyclic-ENA and elucidation of its solution conformation by 600 MHz NMR and ab initio calculations. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 4627.	2.8	18
105	The synthesis of new 3'-bis-substituted-3'-deoxy-3'-dehydro-[3.3.0]-fused thymidines by intramolecular radical trapping by tethered acetylenes. <i>Tetrahedron</i> , 1994, 50, 5273-5278.	1.9	17
106	Synthesis of partially-deuterated 2'-deoxyribonucleoside blocks and their incorporation into an oligo-DNA for simplification of overcrowding and selective enhancement of resolution and sensitivity in the ¹ H-NMR spectra. <i>Tetrahedron</i> , 1998, 54, 14487-14514.	1.9	17
107	Conformation-specific cleavage of antisense oligonucleotide-RNA duplexes by RNase H. <i>Perkin Transactions II RSC</i> , 2001, , 402-408.	1.1	17
108	Synthesis of D-Psico- and D-Fructofuranosyl Nucleosides.. <i>Acta Chemica Scandinavica</i> , 1984, 38b, 367-373.	0.7	17

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109	Inhibition of hepatitis B virus DNA polymerase by 3'-azido-3'-deoxythymidine triphosphate but not by its threo analog. <i>Journal of Medical Virology</i> , 1987, 22, 231-236.	5.0	16
110	Synthesis of tetrameric cyclic branched-RNA (lariat) modelling the introns of group II and nuclear pre-mRNA processing reaction (splicing). <i>Tetrahedron</i> , 1991, 47, 9659-9674.	1.9	16
111	Assessment of competing 2'-A ⁵ versus 3'-A ⁵ stackings in solution structure of branched-RNA by 1H- & 31P-NMR spectroscopy. <i>Tetrahedron</i> , 1992, 48, 695-718.	1.9	16
112	The Transmission of the Electronic Character of Guanin-9-yl Drives the Sugar-Phosphate Backbone Torsions in Guanosine 3',5'-Bisphosphate. <i>Angewandte Chemie - International Edition</i> , 1999, 38, 3645-3650.	13.8	16
113	Oxetane modified antisense oligonucleotides promote RNase H cleavage of the complementary RNA strand in the hybrid duplex as efficiently as the native, and offer improved endonuclease resistance. <i>Perkin Transactions II RSC</i> , 2001, , 2074-2083.	1.1	16
114	The 3'-modified antisense oligos promote faster hydrolysis of the target RNA by RNase H than the natural counterpart. <i>Tetrahedron</i> , 2001, 57, 593-606.	1.9	16
115	A Convenient Preparation of N-Protected Nucleosides with the 2,2,2-Trichloro-t-butyloxycarbonyl (TCBOC) Group. Structural Assignment of N,N-bis-TCBOC Guanoside and Its 2'-Deoxy Analogue.. <i>Acta Chemica Scandinavica</i> , 1985, 39b, 761-765.	0.7	16
116	The application of 2-(4-chlorophenyl)-sulfonylthoxycarbonyl (CPSEC) group in the synthesis of a DNA segment using the phosphotriester approach. <i>Tetrahedron Letters</i> , 1981, 22, 4537-4540.	1.4	15
117	New synthesis of 2', 3'-dideoxy-2', 3'-didehydro-3'-substituted thymidines. <i>Tetrahedron</i> , 1993, 49, 10061-10068.	1.9	15
118	The first experimental evidence for a larger medium-dependent flexibility of natural Î±-nucleosides compared to the Î±-nucleosides. <i>Tetrahedron</i> , 1997, 53, 14043-14072.	1.9	15
119	The synthesis and reactivity of new 2-(N,N-diisopropylamino)-3-methylsulfonyl-1,3,2-benzoxazaphospholes. The utility of the 5-chloro analogue in the one-pot synthesis of oligothiophosphates: [ApsppA, ApspppA, ppp5'-A ² ps5'-A, m7CpsppA, Apspppp, Apspp]. <i>Tetrahedron</i> , 1995, 51, 2991-3014.	1.9	14
120	Total Synthesis of 2'-,3'-,4'-,5'-,5'- ² H ₅ -Ribonucleosides: The Key Building Blocks for NMR Structure Elucidation of Large RNA. <i>Journal of Organic Chemistry</i> , 2001, 66, 6560-6570.	3.2	14
121	Lariat formation in splicing of pre-messenger RNA. Conformation and base stacking at the lariat branch point studied using 500-MHz 1H NMR and CD spectroscopy. <i>Recueil Des Travaux Chimiques Des Pays-Bas</i> , 2010, 107, 663-667.	0.0	14
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