Martin Egli

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Chirality matters: stereo-defined phosphorothioate linkages at the termini of small interfering RNAs improve pharmacology <i>in vivo</i>. Nucleic Acids Research, 2022, 50, 1221-1240.	6.5	29
2	First prediction of sequence-specific recognition of double-helix nucleic acids by proteins. Nature Reviews Molecular Cell Biology, 2022, , .	16.1	2
3	How the Î±-helix got its name. Nature Reviews Molecular Cell Biology, 2022, , .	16.1	6
4	RNAs Containing Carbocyclic Ribonucleotides. Organic Letters, 2022, 24, 525-530.	2.4	3
5	From bench to bedside: Improving the clinical safety of GalNAcâ€“siRNA conjugates using seed-pairing destabilization. Nucleic Acids Research, 2022, 50, 6656-6670.	6.5	28
6	Hiding in plain sight: three chemically distinct<i>Î±</i>-helix types. Quarterly Reviews of Biophysics, 2022, 55, .	2.4	10
7	Ned Seeman and the prediction of amino acid-base pair motifs mediating sequence-specific recognition of nucleic acid duplexes by proteins. Biophysical Journal, 2022, , .	0.2	2
8	EWALD: A macromolecular diffractometer for the second target station. Review of Scientific Instruments, 2022, 93, .	0.6	4
9	Supramolecular Architecture through Self-Organization of Janus-Faced Homoazanucleosides. Journal of Organic Chemistry, 2021, 86, 367-378.	1.7	4
10	Overcoming GNA/RNA base-pairing limitations using isonucleotides improves the pharmacodynamic activity of ESC+ÂGalNAc-siRNAs. Nucleic Acids Research, 2021, 49, 10851-10867.	6.5	13
11	Silencing of Oncogenic KRAS by Mutant-Selective Small Interfering RNA. ACS Pharmacology and Translational Science, 2021, 4, 703-712.	2.5	7
12	siRNAs containing 2â€²-fluorinated <i>Northern</i>-methanocarbacyclic (2â€²-F-NMC) nucleotides: <i>in vitro</i> and <i>in vivo</i> RNAi activity and inability of mitochondrial polymerases to incorporate 2â€²-F-NMCÂNTPs. Nucleic Acids Research, 2021, 49, 2435-2449.	6.5	12
13	Beyond ribose and phosphate: Selected nucleic acid modifications for structureâ€“function investigations and therapeutic applications. Beilstein Journal of Organic Chemistry, 2021, 17, 908-931.	1.3	20
14	Water structure around a left-handed Z-DNA fragment analyzed by cryo neutron crystallography. Nucleic Acids Research, 2021, 49, 4782-4792.	6.5	10
15	Small circular interfering RNAs (sciRNAs) as a potent therapeutic platform for gene-silencing. Nucleic Acids Research, 2021, 49, 10250-10264.	6.5	7
16	Enzymatic bypass and the structural basis of miscoding opposite the DNA adduct 1,N2-ethenodeoxyguanosine by human DNA translesion polymerase Î·. Journal of Biological Chemistry, 2021, 296, 100642.	1.6	6
17	Recognition of DNA adducts by edited and unedited forms of DNA glycosylase NEIL1. DNA Repair, 2020, 85, 102741.	1.3	20
18	Synthesis, chirality-dependent conformational and biological properties of siRNAs containing 5â€²-(R)- and 5â€²-(S)-C-methyl-guanosine. Nucleic Acids Research, 2020, 48, 10101-10124.	6.5	15

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19	The Enzymeâ€Free Release of Nucleotides from Phosphoramidates Depends Strongly on the Amino Acid. Angewandte Chemie, 2020, 132, 20329-20335.	1.6	2
20	The Enzymeâ€Free Release of Nucleotides from Phosphoramidates Depends Strongly on the Amino Acid. Angewandte Chemie - International Edition, 2020, 59, 20154-20160.	7.2	17
21	Incorporating a Thiophosphate Modification into a Common RNA Tetraloop Motif Causes an Unanticipated Stability Boost. Biochemistry, 2020, 59, 4627-4637.	1.2	6
22	Chimeric siRNAs with chemically modified pentofuranose and hexopyranose nucleotides: altritol-nucleotide (ANA) containing GalNAcâ€“siRNA conjugates: in vitro and in vivo RNAi activity and resistance to 5â€²-exonuclease. Nucleic Acids Research, 2020, 48, 4028-4040.	6.5	27
23	Characterization of rare NEIL1 variants found in East Asian populations. DNA Repair, 2019, 79, 32-39.	1.3	9
24	Synthesis and Biophysical Characterization of RNAs Containing 2â€²-Fluorinated Northern Methanocarbacyclic Nucleotides. Organic Letters, 2019, 21, 1963-1967.	2.4	14
25	Human DNA polymerase Î· has reverse transcriptase activity in cellular environments. Journal of Biological Chemistry, 2019, 294, 6073-6081.	1.6	36
26	Re-Engineering RNA Molecules into Therapeutic Agents. Accounts of Chemical Research, 2019, 52, 1036-1047.	7.6	106
27	5â€²-Morpholino modification of the sense strand of an siRNA makes it a more effective passenger. Chemical Communications, 2019, 55, 5139-5142.	2.2	21
28	Enhanced Dispersion and Polarization Interactions Achieved through Dithiophosphate Group Incorporation Yield a Dramatic Binding Affinity Increase for an RNA Aptamerâ€“Thrombin Complex. Journal of the American Chemical Society, 2019, 141, 4445-4452.	6.6	19
29	Molecular Dynamics Simulation of Homo-DNA: The Role of Crystal Packing in Duplex Conformation. Crystals, 2019, 9, 532.	1.0	4
30	Labelâ€Free Electrophoretic Mobility Shift Assay (EMSA) for Measuring Dissociation Constants of Proteinâ€RNA Complexes. Current Protocols in Nucleic Acid Chemistry, 2019, 76, e70.	0.5	23
31	Crystal structures of thrombin in complex with chemically modified thrombin DNA aptamers reveal the origins of enhanced affinity. Nucleic Acids Research, 2018, 46, 4819-4830.	6.5	53
32	Facile Synthesis, Geometry, and 2â€²-Substituent-Dependent in Vivo Activity of 5â€²-(<i>E</i>)- and 5â€²-(<i>Z</i>)-Vinylphosphonate-Modified siRNA Conjugates. Journal of Medicinal Chemistry, 2018, 61, 734-744.	2.9	36
33	A Single Amide Linkage in the Passenger Strand Suppresses Its Activity and Enhances Guide Strand Targeting of siRNAs. ACS Chemical Biology, 2018, 13, 533-536.	1.6	23
34	Comparative analysis of inosine-substituted duplex DNA by circular dichroism and X-ray crystallography. Journal of Biomolecular Structure and Dynamics, 2018, 36, 2753-2772.	2.0	2
35	Inherent steroid 17Î±,20-lyase activity in defunct cytochrome P450 17A enzymes. Journal of Biological Chemistry, 2018, 293, 541-556.	1.6	23
36	Cryo-neutron crystallographic data collection and preliminary refinement of left-handed Z-DNA d(CGCGCG). Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 603-609.	0.4	5

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37	Structural basis for the synergy of 4â€²- and 2â€²-modifications on siRNA nuclease resistance, thermal stability and RNAi activity. Nucleic Acids Research, 2018, 46, 8090-8104.	6.5	32
38	Functional analysis of human cytochrome P450 21A2 variants involved in congenital adrenal hyperplasia. Journal of Biological Chemistry, 2017, 292, 10767-10778.	1.6	32
39	Chirality Dependent Potency Enhancement and Structural Impact of Glycol Nucleic Acid Modification on siRNA. Journal of the American Chemical Society, 2017, 139, 8537-8546.	6.6	64
40	Architecture and mechanism of the central gear in an ancient molecular timer. Journal of the Royal Society Interface, 2017, 14, 20161065.	1.5	7
41	Human DNA polymerase Î· accommodates RNA for strand extension. Journal of Biological Chemistry, 2017, 292, 18044-18051.	1.6	28
42	Amide linkages mimic phosphates in RNA interactions with proteins and are well tolerated in the guide strand of short interfering RNAs. Nucleic Acids Research, 2017, 45, 8142-8155.	6.5	33
43	Origins of the enhanced affinity of RNAâ€“protein interactions triggered by RNA phosphorodithioate backbone modification. Chemical Communications, 2017, 53, 10508-10511.	2.2	14
44	4â€²-<i>C</i>-Methoxy-2â€²-deoxy-2â€²-fluoro Modified Ribonucleotides Improve Metabolic Stability and Elicit Efficient RNAi-Mediated Gene Silencing. Journal of the American Chemical Society, 2017, 139, 14542-14555.	6.6	49
45	Phosphorus SAD Phasing for Nucleic Acid Structures: Limitations and Potential. Crystals, 2016, 6, 125.	1.0	3
46	Structural and Kinetic Analysis of Miscoding Opposite the DNA Adduct 1,N6-Ethenodeoxyadenosine by Human Translesion DNA Polymerase Î·. Journal of Biological Chemistry, 2016, 291, 14134-14145.	1.6	12
47	Diffraction Techniques in Structural Biology. Current Protocols in Nucleic Acid Chemistry, 2016, 65, 7.13.1-7.13.41.	0.5	11
48	In Situ Proteolysis for Crystallization of Membrane Bound Cytochrome P450 17A1 and 17A2 Proteins from Zebrafish. Current Protocols in Protein Science, 2016, 84, 29.16.1-29.16.19.	2.8	4
49	Determining Functional Aptamerâ€Protein Interaction by Biolayer Interferometry. Current Protocols in Nucleic Acid Chemistry, 2016, 67, 7.25.1-7.25.15.	0.5	19
50	The structural diversity of artificial genetic polymers. Nucleic Acids Research, 2016, 44, 1007-1021.	6.5	134
51	Kinetic and Structural Impact of Metal Ions and Genetic Variations on Human DNA Polymerase Î¹. Journal of Biological Chemistry, 2016, 291, 21063-21073.	1.6	11
52	Mechanism of Errorâ€Free Bypass of the Environmental Carcinogen <i>N</i>â€(2â€²â€Deoxyguanosinâ€8â€yl)â€3â€aminobenzanthrone Adduct by Human DNA Polymeraseâ€…Î·. ChemBioChem, 2016, 17, 2033-2037.	1.3	6
53	Evoking picomolar binding in RNA by a single phosphorodithioate linkage. Nucleic Acids Research, 2016, 44, 8052-8064.	6.5	94
54	Structural Insights into Conformation Differences between DNA/TNA and RNA/TNA Chimeric Duplexes. ChemBioChem, 2016, 17, 1705-1708.	1.3	31

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55	<i>O</i>⁶-2â€²-Deoxyguanosine-butylene-<i>O</i>⁶-2â€²-deoxyguanosine DNA Interstrand Cross-Links Are Replication-Blocking and Mutagenic DNA Lesions. Chemical Research in Toxicology, 2016, 29, 1872-1882.	1.7	1
56	Limits of RNA 2â€²-OH Mimicry by Fluorine: Crystal Structure ofBacillus haloduransRNase H Bound to a 2â€²-FRNA:DNA Hybrid. Biochemistry, 2016, 55, 5321-5325.	1.2	13
57	Mechanisms of Insertion of dCTP and dTTP Opposite the DNA Lesion O6-Methyl-2â€²-deoxyguanosine by Human DNA Polymerase Î·. Journal of Biological Chemistry, 2016, 291, 24304-24313.	1.6	21
58	Recent Structural Insights into Cytochrome P450 Function. Trends in Pharmacological Sciences, 2016, 37, 625-640.	4.0	248
59	A. Sigel, H. Sigel, R. K. O. Sigel (Eds): The alkali metal ions: their role for life. Volume 16 of metal ions in life sciences. Transition Metal Chemistry, 2016, 41, 613-614.	0.7	0
60	5â€²-<i>C</i>-Malonyl RNA: Small Interfering RNAs Modified with 5â€²-Monophosphate Bioisostere Demonstrate Gene Silencing Activity. ACS Chemical Biology, 2016, 11, 953-960.	1.6	19
61	Mechanism of Ribonucleotide Incorporation by Human DNA Polymerase Î·. Journal of Biological Chemistry, 2016, 291, 3747-3756.	1.6	40
62	Structural Basis of Duplex Thermodynamic Stability and Enhanced Nuclease Resistance of 5â€²-<i>C</i>-Methyl Pyrimidine-Modified Oligonucleotides. Journal of Organic Chemistry, 2016, 81, 2261-2279.	1.7	36
63	Generating Crystallographic Models of DNA Dodecamers from Structures of RNase H:DNA Complexes. Methods in Molecular Biology, 2016, 1320, 111-126.	0.4	3
64	Structure and function of the translesion DNA polymerases and interactions with damaged DNA. Perspectives in Science, 2015, 4, 24-31.	0.6	6
65	Calorimetry of Nucleic Acids. Current Protocols in Nucleic Acid Chemistry, 2015, 63, 7.4.1-7.4.12.	0.5	5
66	Human Cytochrome P450 21A2, the Major Steroid 21-Hydroxylase. Journal of Biological Chemistry, 2015, 290, 13128-13143.	1.6	74
67	Backbone Flexibility Influences Nucleotide Incorporation by Human Translesion DNA Polymerase Î· opposite Intrastrand Cross-Linked DNA. Biochemistry, 2015, 54, 7449-7456.	1.2	3
68	Proteinâ€“Protein Interactions in the Cyanobacterial Circadian Clock: Structure of KaiA Dimer in Complex with C-Terminal KaiC Peptides at 2.8 Ã… Resolution. Biochemistry, 2015, 54, 4575-4578.	1.2	34
69	Structural and Kinetic Basis of Steroid 17Î±,20-Lyase Activity in Teleost Fish Cytochrome P450 17A1 and Its Absence in Cytochrome P450 17A2. Journal of Biological Chemistry, 2015, 290, 3248-3268.	1.6	54
70	Biochemistry That Times the Day. Biochemistry, 2015, 54, 104-109.	1.2	4
71	Structural and Biophysical Methods to Analyze Clock Function and Mechanism. Methods in Enzymology, 2015, 551, 223-266.	0.4	6
72	Research Resource: Correlating Human Cytochrome P450 21A2 Crystal Structure and Phenotypes of Mutations in Congenital Adrenal Hyperplasia. Molecular Endocrinology, 2015, 29, 1375-1384.	3.7	17

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73	Structural Basis for Error-Free Bypass of the 5-<i>N</i>-Methylformamidopyrimidine-dG Lesion by Human DNA Polymerase Î· and <i>Sulfolobus solfataricus</i> P2 Polymerase IV. Journal of the American Chemical Society, 2015, 137, 7011-7014.	6.6	15
74	Structural and Kinetic Analysis of Nucleoside Triphosphate Incorporation Opposite an Abasic Site by Human Translesion DNA Polymerase Î·. Journal of Biological Chemistry, 2015, 290, 8028-8038.	1.6	45
75	Roles of Residues Arg-61 and Gln-38 of Human DNA Polymerase Î· in Bypass of Deoxyguanosine and 7,8-Dihydro-8-oxo-2â€²-deoxyguanosine. Journal of Biological Chemistry, 2015, 290, 15921-15933.	1.6	37
76	An arginine tetrad as mediator of input-dependent and input-independent ATPases in the clock protein KaiC. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 1375-1390.	2.5	18
77	Amides are excellent mimics of phosphate internucleoside linkages and are well tolerated in short interfering RNAs. Nucleic Acids Research, 2014, 42, 6542-6551.	6.5	48
78	Crystal structure, stability and Ago2 affinity of phosphorodithioate-modified RNAs. RSC Advances, 2014, 4, 64901-64904.	1.7	24
79	2â€²-OMe-phosphorodithioate-modified siRNAs show increased loading into the RISC complex and enhanced anti-tumour activity. Nature Communications, 2014, 5, 3459.	5.8	103
80	Intricate Protein-Protein Interactions in the Cyanobacterial Circadian Clock. Journal of Biological Chemistry, 2014, 289, 21267-21275.	1.6	21
81	Metabolic Compensation and Circadian Resilience in Prokaryotic Cyanobacteria. Annual Review of Biochemistry, 2014, 83, 221-247.	5.0	47
82	Kinetics, Structure, and Mechanism of 8-Oxo-7,8-dihydro-2â€²-deoxyguanosine Bypass by Human DNA Polymerase Î·. Journal of Biological Chemistry, 2014, 289, 16867-16882.	1.6	81
83	Loopâ€“Loop Interactions Regulate KaiA-Stimulated KaiC Phosphorylation in the Cyanobacterial KaiABC Circadian Clock. Biochemistry, 2013, 52, 1208-1220.	1.2	28
84	Synthesis, Duplex Stabilization and Structural Properties of a Fluorinated Carbocyclic LNA Analogue. ChemBioChem, 2013, 14, 58-62.	1.3	19
85	CryoEM and Molecular Dynamics of the Circadian KaiBâ€“KaiC Complex Indicates That KaiB Monomers Interact with KaiC and Block ATP Binding Clefts. Journal of Molecular Biology, 2013, 425, 3311-3324.	2.0	36
86	Nature of KaiB-KaiC binding in the cyanobacterial circadian oscillator. Cell Cycle, 2013, 12, 810-817.	1.3	19
87	A circadian clock nanomachine that runs without transcription or translation. Current Opinion in Neurobiology, 2013, 23, 732-740.	2.0	28
88	Structure, stability and function of 5-chlorouracil modified A:U and G:U base pairs. Nucleic Acids Research, 2013, 41, 2689-2697.	6.5	18
89	Basis of Miscoding of the DNA Adduct N2,3-Ethenoguanine by Human Y-family DNA Polymerases. Journal of Biological Chemistry, 2012, 287, 35516-35526.	1.6	32
90	2â€²â€Fluoro RNA Shows Increased Watsonâ€“Crick Hâ€Bonding Strength and Stacking Relative to RNA: Evidence from NMR and Thermodynamic Data. Angewandte Chemie - International Edition, 2012, 51, 11863-11866.	7.2	73

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91	Structure and nuclease resistance of 2â€²,4â€²-constrained 2â€²-O-methoxyethyl (cMOE) and 2â€²-O-ethyl (cEt) modified DNAs. Chemical Communications, 2012, 48, 8195.	2.2	66
92	Insights from Crystal Structures into the Opposite Effects on RNA Affinity Caused by the S- and R-6â€²-Methyl Backbone Modifications of 3â€²-Fluoro Hexitol Nucleic Acid. Biochemistry, 2012, 51, 7-9.	1.2	15
93	Crystal Structure of the Redox-Active Cofactor Dibromothymoquinone Bound to Circadian Clock Protein KaiA and Structural Basis for Dibromothymoquinoneâ€™s Ability to Prevent Stimulation of KaiC Phosphorylation by KaiA. Biochemistry, 2012, 51, 8050-8052.	1.2	12
94	The Conformationally Constrained <i>N</i>-Methanocarba-dT Analogue Adopts an Unexpected C4â€²-<i>exo</i> Sugar Pucker in the Structure of a DNA Hairpin. Biochemistry, 2012, 51, 2639-2641.	1.2	17
95	A Nucleotide-Analogue-Induced Gain of Function Corrects the Error-Prone Nature of Human DNA Polymerase iota. Journal of the American Chemical Society, 2012, 134, 10698-10705.	6.6	7
96	Differential Furanose Selection in the Active Sites of Archaeal DNA Polymerases Probed by Fixed-Conformation Nucleotide Analogues. Biochemistry, 2012, 51, 9234-9244.	1.2	5
97	The Steric Hypothesis for DNA Replication and Fluorine Hydrogen Bonding Revisited in Light of Structural Data. Accounts of Chemical Research, 2012, 45, 1237-1246.	7.6	34
98	Dephosphorylation of the Core Clock Protein KaiC in the Cyanobacterial KaiABC Circadian Oscillator Proceeds via an ATP Synthase Mechanism. Biochemistry, 2012, 51, 1547-1558.	1.2	65
99	Synthesis and Antisense Properties of Fluoro Cyclohexenyl Nucleic Acid (F-CeNA), a Nuclease Stable Mimic of 2â€²-Fluoro RNA. Journal of Organic Chemistry, 2012, 77, 5074-5085.	1.7	41
100	Replication of <i>N</i>²,3â€Ethenoguanine by DNA Polymerases. Angewandte Chemie - International Edition, 2012, 51, 5466-5469.	7.2	30
101	Altering the Electrostatic Potential in the Major Groove: Thermodynamic and Structural Characterization of 7-Deaza-2â€²-deoxyadenosine:dT Base Pairing in DNA. Journal of Physical Chemistry B, 2011, 115, 13925-13934.	1.2	17
102	Synthesis, Improved Antisense Activity and Structural Rationale for the Divergent RNA Affinities of 3â€²-Fluoro Hexitol Nucleic Acid (FHNA and Ara-FHNA) Modified Oligonucleotides. Journal of the American Chemical Society, 2011, 133, 16642-16649.	6.6	69
103	The Cyanobacterial Circadian System: From Biophysics to Bioevolution. Annual Review of Biophysics, 2011, 40, 143-167.	4.5	112
104	Combined SAXS/EM Based Models of the S. elongatus Post-Translational Circadian Oscillator and its Interactions with the Output His-Kinase SasA. PLoS ONE, 2011, 6, e23697.	1.1	34
105	Unique Geneâ€Silencing and Structural Properties of 2â€²â€Fluoroâ€Modified siRNAs. Angewandte Chemie - International Edition, 2011, 50, 2284-2288.	7.2	147
106	Unexpected origins of the enhanced pairing affinity of 2â€²-fluoro-modified RNA. Nucleic Acids Research, 2011, 39, 3482-3495.	6.5	153
107	Use of Chromophoric Ligands to Visually Screen Coâ€Crystals of Putative Proteinâ€Nucleic Acid Complexes. Current Protocols in Nucleic Acid Chemistry, 2011, 46, Unit 7.15.1-8.	0.5	5
108	The many twists and turns of DNA: template, telomere, tool, and target. Current Opinion in Structural Biology, 2010, 20, 262-275.	2.6	28

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109	Crystallographic Studies of Chemically Modified Nucleic Acids: A Backward Glance. Chemistry and Biodiversity, 2010, 7, 60-89.	1.0	40
110	Selective Modulation of DNA Polymerase Activity by Fixedâ€Conformation Nucleoside Analogues. Angewandte Chemie, 2010, 122, 7643-7647.	1.6	1
111	Selective Modulation of DNA Polymerase Activity by Fixedâ€Conformation Nucleoside Analogues. Angewandte Chemie - International Edition, 2010, 49, 7481-7485.	7.2	15
112	Metal-ion dependence of the active-site conformation of the translesion DNA polymerase Dpo4 from<i>Sulfolobus solfataricus</i>. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 1013-1018.	0.7	11
113	Structural Basis for Proficient Incorporation of dTTP Opposite O6-Methylguanine by Human DNA Polymerase Î¹. Journal of Biological Chemistry, 2010, 285, 40666-40672.	1.6	49
114	Diffraction Techniques in Structural Biology. Current Protocols in Nucleic Acid Chemistry, 2010, 41, Unit 7.13.	0.5	7
115	An Exocyclic Methylene Group Acts As a Bioisostere of the 2â€²-Oxygen Atom in LNA. Journal of the American Chemical Society, 2010, 132, 14942-14950.	6.6	82
116	On Stacking. , 2010, , 177-196.		6
117	Intramolecular Regulation of Phosphorylation Status of the Circadian Clock Protein KaiC. PLoS ONE, 2009, 4, e7509.	1.1	33
118	Structures of KaiC Circadian Clock Mutant Proteins: A New Phosphorylation Site at T426 and Mechanisms of Kinase, ATPase and Phosphatase. PLoS ONE, 2009, 4, e7529.	1.1	42
119	Versatility of Y-family Sulfolobus solfataricus DNA Polymerase Dpo4 in Translesion Synthesis Past Bulky N2-Alkylguanine Adducts. Journal of Biological Chemistry, 2009, 284, 3563-3576.	1.6	61
120	Structural and Functional Elucidation of the Mechanism Promoting Error-prone Synthesis by Human DNA Polymerase Îº Opposite the 7,8-Dihydro-8-oxo-2â€²-deoxyguanosine Adduct. Journal of Biological Chemistry, 2009, 284, 22467-22480.	1.6	78
121	Pairing Geometry of the Hydrophobic Thymine Analogue 2,4-Difluorotoluene in Duplex DNA as Analyzed by X-ray Crystallography. Journal of the American Chemical Society, 2009, 131, 12548-12549.	6.6	29
122	Interplay of Structure, Hydration and Thermal Stability in Formacetal Modified Oligonucleotides: RNA May Tolerate Nonionic Modifications Better than DNA. Journal of the American Chemical Society, 2009, 131, 14932-14937.	6.6	25
123	A conformational transition in the structure of a 2â€²-thiomethyl-modified DNA visualized at high resolution. Chemical Communications, 2009, , 2017.	2.2	19
124	Structural Aspects of the Cyanobacterial KaiABC Circadian Clock. , 2009, , 121-140.		5
125	Structure and activity of human DNA polymerase kappa bypass of 8â€oxoG. FASEB Journal, 2009, 23, 838.1.	0.2	0
126	Structural Insights into a Circadian Oscillator. Science, 2008, 322, 697-701.	6.0	72

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127	Structural model of the circadian clock KaiBâ€“KaiC complex and mechanism for modulation of KaiC phosphorylation. EMBO Journal, 2008, 27, 1767-1778.	3.5	58
128	Crystal structure of tricyclo-DNA: an unusual compensatory change of two adjacent backbone torsion angles. Chemical Communications, 2008, , 883-885.	2.2	33
129	A Bridging Water Anchors the Tethered 5-(3-Aminopropyl)-2â€²-deoxyuridine Amine in the DNA Major Groove Proximate to the N+2 CÂ·G Base Pair: Implications for Formation of Interstrand 5â€²-GNC-3â€² Cross-Links by Nitrogen Mustards,. Biochemistry, 2008, 47, 7147-7157.	1.2	15
130	Effects of <i>N²,N²</i>-dimethylguanosine on RNA structure and stability: Crystal structure of an RNA duplex with tandem m²₂G:A pairs. Rna, 2008, 14, 2125-2135.	1.6	37
131	Insights into RNA/DNA hybrid recognition and processing by RNase H from the crystal structure of a non-specific enzyme-dsDNA complex. Cell Cycle, 2008, 7, 2562-2569.	1.3	25
132	Molecular Basis of Selectivity of Nucleoside Triphosphate Incorporation Opposite O6-Benzylguanine by Sulfolobus solfataricus DNA Polymerase Dpo4. Journal of Biological Chemistry, 2007, 282, 13573-13584.	1.6	58
133	Elucidating the Ticking of an In Vitro Circadian Clockwork. PLoS Biology, 2007, 5, e93.	2.6	126
134	Sulfolobus solfataricus DNA Polymerase Dpo4 Is Partially Inhibited by â€œWobbleâ€•Pairing between O6-Methylguanine and Cytosine, but Accurate Bypass Is Preferred. Journal of Biological Chemistry, 2007, 282, 1456-1467.	1.6	79
135	Backbone-base inclination as a fundamental determinant of nucleic acid self- and cross-pairing. Nucleic Acids Research, 2007, 35, 6611-6624.	6.5	30
136	Insights from Crystallographic Studies into the Structural and Pairing Properties of Nucleic Acid Analogs and Chemically Modified DNA and RNA Oligonucleotides. Annual Review of Biophysics and Biomolecular Structure, 2007, 36, 281-305.	18.3	56
137	Crystal structure, stability and in vitro RNAi activity of oligoribonucleotides containing the ribo-difluorotoluyl nucleotide: insights into substrate requirements by the human RISC Ago2 enzyme. Nucleic Acids Research, 2007, 35, 6424-6438.	6.5	48
138	Hydrogen Bonding of 7,8-Dihydro-8-oxodeoxyguanosine with a Charged Residue in the Little Finger Domain Determines Miscoding Events in Sulfolobus solfataricus DNA Polymerase Dpo4. Journal of Biological Chemistry, 2007, 282, 19831-19843.	1.6	71
139	Structure and Activity of Y-class DNA Polymerase DPO4 from Sulfolobus solfataricus with Templates Containing the Hydrophobic Thymine Analog 2,4-Difluorotoluene. Journal of Biological Chemistry, 2007, 282, 36421-36433.	1.6	27
140	Lone Pairâ^'Aromatic Interactions:â€‰ To Stabilize or Not to Stabilize. Accounts of Chemical Research, 2007, 40, 197-205.	7.6	524
141	The long and winding road to the structure of homo-DNA. Chemical Society Reviews, 2007, 36, 31-45.	18.7	32
142	A left-handed supramolecular assembly around a right-handed screw axis in the crystal structure of homo-DNA. Chemical Communications, 2007, , 1447.	2.2	4
143	Crystallization and preliminary X-ray analysis ofEscherichia coliRNase HIâ€“dsRNA complexes. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 84-88.	0.7	6
144	Selenium modification of nucleic acids: preparation of phosphoroselenoate derivatives for crystallographic phasing of nucleic acid structures. Nature Protocols, 2007, 2, 640-646.	5.5	21

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145	Selenium modification of nucleic acids: preparation of oligonucleotides with incorporated 2â€²-SeMe-uridine for crystallographic phasing of nucleic acid structures. Nature Protocols, 2007, 2, 647-651.	5.5	23
146	The role of Arg332 in Dpo4â€catalyzed bypass of 7,8â€dihydroâ€2â€²â€oxodeoxyguanosine. FASEB Journal, 2007, 21, A272.	0.2	0
147	Gene Silencing Activity of siRNAs with a Ribo-difluorotoluyl Nucleotide. ACS Chemical Biology, 2006, 1, 176-183.	1.6	81
148	Crystal Structure of Homo-DNA and Nature's Choice of Pentose over Hexose in the Genetic System. Journal of the American Chemical Society, 2006, 128, 10847-10856.	6.6	94
149	RNA-Binding Affinities and Crystal Structure of Oligonucleotides Containing Five-Atom Amide-Based Backbone Structuresâ€,â€¡. Biochemistry, 2006, 45, 8048-8057.	1.2	32
150	2â€˜-Fluoroarabino- and Arabinonucleic Acid Show Different Conformations, Resulting in Deviating RNA Affinities and Processing of Their Heteroduplexes with RNA by RNase Hâ€,â€¡. Biochemistry, 2006, 45, 4141-4152.	1.2	46
151	Analysis of KaiAâ€“KaiC protein interactions in the cyano-bacterial circadian clock using hybrid structural methods. EMBO Journal, 2006, 25, 2017-2028.	3.5	101
152	Efficient and High Fidelity Incorporation of dCTP Opposite 7,8-Dihydro-8-oxodeoxyguanosine by Sulfolobus solfataricus DNA Polymerase Dpo4. Journal of Biological Chemistry, 2006, 281, 2358-2372.	1.6	118
153	Efficient and High Fidelity Incorporation of dCTP Opposite 7,8â€Dihydroâ€8â€oxodeoxyguanosine by Sulfolobus solfataricus DNA Polymerase Dpo4. FASEB Journal, 2006, 20, A39.	0.2	0
154	Syntheses of 4'-thioribonucleosides and thermodynamic stability and crystal structure of RNA oligomers with incorporated 4'-thiocytosine. Nucleic Acids Research, 2005, 33, 3965-3975.	6.5	33
155	DNA Adduct Bypass Polymerization by Sulfolobus solfataricus DNA Polymerase Dpo4. Journal of Biological Chemistry, 2005, 280, 29750-29764.	1.6	138
156	Stabilizing contributions of sulfur-modified nucleotides: crystal structure of a DNA duplex with 2'-O-[2-(methoxy)ethyl]-2-thiothymidines. Nucleic Acids Research, 2005, 33, 5297-5307.	6.5	23
157	Probing the Influence of Stereoelectronic Effects on the Biophysical Properties of Oligonucleotides:â€‰ Comprehensive Analysis of the RNA Affinity, Nuclease Resistance, and Crystal Structure of Ten 2â€˜-O-Ribonucleic Acid Modifications,. Biochemistry, 2005, 44, 9045-9057.	1.2	104
158	Crystal Structure of a Luteoviral RNA Pseudoknot and Model for a Minimal Ribosomal Frameshifting Motif,. Biochemistry, 2005, 44, 11315-11322.	1.2	61
159	Identification of key phosphorylation sites in the circadian clock protein KaiC by crystallographic and mutagenetic analyses. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13933-13938.	3.3	136
160	Nucleic acid crystallography: current progress. Current Opinion in Chemical Biology, 2004, 8, 580-591.	2.8	59
161	â€œDeoxyribo Nanonucleic Acidâ€• Chemistry and Biology, 2004, 11, 1027-1029.	6.2	4
162	Structural Rationalization of a Large Difference in RNA Affinity Despite a Small Difference in Chemistry between Two 2â€˜-O-Modified Nucleic Acid Analogues. Journal of the American Chemical Society, 2004, 126, 15006-15007.	6.6	30

#	Article	IF	Citations
163	2â€˜-O-[2-(Guanidinium)ethyl]-Modified Oligonucleotides:â€‰ Stabilizing Effect on Duplex and Triplex Structuresâ€. Organic Letters, 2004, 6, 1971-1974.	2.4	55
164	Visualizing a Circadian Clock Protein. Molecular Cell, 2004, 15, 375-388.	4.5	179
165	Lattice- and Sequence-Dependent Binding of Mg2+ in the Crystal Structure of a B-DNA Dodecamer. ACS Symposium Series, 2004, , 87-109.	0.5	7
166	Structural Basis for Recognition of Guanosine by a Synthetic Tricyclic Cytosine Analogue: Guanidinium G-Clamp. Helvetica Chimica Acta, 2003, 86, 966-978.	1.0	22
167	Structure and Function of the Ribosomal Frameshifting Pseudoknot RNA from Beet Western Yellow Virus. Helvetica Chimica Acta, 2003, 86, 1709-1727.	1.0	6
168	Why Does TNA Cross-Pair More Strongly with RNA Than with DNA? An Answer From X-ray Analysis. Angewandte Chemie - International Edition, 2003, 42, 5893-5895.	7.2	63
169	Waterâ^'Nucleobase â€œStackingâ€:â€‰ Hâ^'Ï€ and Lone Pairâ^'Ï€ Interactions in the Atomic Resolution Crystal Structure of an RNA Pseudoknot. Journal of the American Chemical Society, 2003, 125, 8998-8999.	6.6	125
170	2â€˜-O-[2-[2-(N,N-Dimethylamino)ethoxy]ethyl] Modified Oligonucleotides:â€‰ Symbiosis of Charge Interaction Factors and Stereoelectronic Effectsâ€¡. Organic Letters, 2003, 5, 2017-2020.	2.4	37
171	Face-to-Face and Edge-to-Face Ï€â^'Ï€ Interactions in a Synthetic DNA Hairpin with a Stilbenediether Linker. Journal of the American Chemical Society, 2003, 125, 10842-10849.	6.6	64
172	Metal ions and flexibility in a viral RNA pseudoknot at atomic resolution. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4302-4307.	3.3	116
173	Crystal Structure of a B-Form DNA Duplex Containing (l)-Î±-Threofuranosyl (3â€˜â†'2â€˜) Nucleosides:Â A Four-Carbon Sugar Is Easily Accommodated into the Backbone of DNA. Journal of the American Chemical Society, 2002, 124, 13716-13721.	6.6	63
174	2â€˜-O-[2-(Methylthio)ethyl]-Modified Oligonucleotide:Â An Analogue of 2â€˜-O-[2-(Methoxy)-ethyl]-Modified Oligonucleotide with Improved Protein Binding Properties and High Binding Affinity to Target RNAâ€. Biochemistry, 2002, 41, 11642-11648.	1.2	33
175	Internal Derivatization of Oligonucleotides with Selenium for X-ray Crystallography Using MAD. Journal of the American Chemical Society, 2002, 124, 24-25.	6.6	99
176	Covalent incorporation of selenium into oligonucleotides for X-ray crystal structure determination via MAD: proof of principle. Biochimie, 2002, 84, 849-858.	1.3	66
177	Selenium-Assisted Nucleic Acid Crystallography:Â Use of Phosphoroselenoates for MAD Phasing of a DNA Structure. Journal of the American Chemical Society, 2002, 124, 14910-14916.	6.6	83
178	Direct Observation of a Cytosine Analogue that Forms Five Hydrogen Bonds to Guanosine: Guanidino G-Clamp. Angewandte Chemie - International Edition, 2002, 41, 115-117.	7.2	54
179	DNA-Cation Interactions. Chemistry and Biology, 2002, 9, 277-286.	6.2	181
180	X-ray crystal structure of a locked nucleic acid (LNA) duplex composed of a palindromic 10-mer DNA strand containing one LNA thymine monomer. Chemical Communications, 2001, , 651-652.	2.2	45

#	Article	IF	Citations
181	STUDIES OF A CHEMICALLY MODIFIED OLIGODEOXYNUCLEOTIDE CONTAINING A 5-ATOM AMIDE BACKBONE WHICH EXHIBITS IMPROVED BINDING TO RNA. Nucleosides, Nucleotides and Nucleic Acids, 2001, 20, 991-994.	0.4	25
182	Crystal structures of the catalytic domain of human protein kinase associated with apoptosis and tumor suppression. Nature Structural Biology, 2001, 8, 899-907.	9.7	96
183	Detection of alkali metal ions in DNA crystals using state-of-the-art X-ray diffraction experiments. Nucleic Acids Research, 2001, 29, 1208-1215.	6.5	148
184	The structure of the <i>yrdC</i> gene product from <i>Escherichia coli</i> reveals a new fold and suggests a role in RNA binding. Protein Science, 2000, 9, 2557-2566.	3.1	74
185	Crystal structure of an RNA duplex containing phenyl-ribonucleotides, hydrophobic isosteres of the natural pyrimidines. Rna, 2000, 6, 1516-1528.	1.6	8
186	Structural Basis of Cleavage by RNase H of Hybrids of Arabinonucleic Acids and RNA,. Biochemistry, 2000, 39, 3525-3532.	1.2	48
187	Minor groove RNA triplex in the crystal structure of a ribosomal frameshifting viral pseudoknot. Nature Structural Biology, 1999, 6, 285-292.	9.7	199
188	Crystal structure and improved antisense properties of 2'-O-(2-methoxyethyl)-RNA. Nature Structural Biology, 1999, 6, 535-539.	9.7	155
189	Structure and Photoinduced Electron Transfer in Exceptionally Stable Synthetic DNA Hairpins with Stilbenediether Linkers. Journal of the American Chemical Society, 1999, 121, 9905-9906.	6.6	119
190	The Dickerson-Drew B-DNA Dodecamer Revisited at Atomic Resolution. Journal of the American Chemical Society, 1999, 121, 470-471.	6.6	173
191	A â€œHydrat-Ionâ€•Spine in a B-DNA Minor Groove. Journal of the American Chemical Society, 1999, 121, 3590-3595.	6.6	209
192	Atomic-resolution crystal structures of B-DNA reveal specific influences of divalent metal ions on conformation and packing. Journal of Molecular Biology, 1999, 291, 83-99.	2.0	183
193	X-ray crystallographic analysis of the hydration of A- and B-form DNA at atomic resolution. , 1998, 48, 234.		120
194	Towards the structure-based design of oligonucleotide therapeutics. Advances in Enzyme Regulation, 1998, 38, 181-203.	2.9	9
195	Consequences of Replacing the DNA 3â€˜-Oxygen by an Amino Group:Â High-Resolution Crystal Structure of a Fully Modified N3â€˜ â†' P5â€˜ Phosphoramidate DNA Dodecamer Duplexâ€. Journal of the American Chemical Society, 1998, 120, 269-283.	6.6	112
196	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.	2.0	23
197	Correlating Structure and Stability of DNA Duplexes with Incorporated 2â€˜-O-Modified RNA Analoguesâ€,â€¡. Biochemistry, 1998, 37, 10626-10634.	1.2	57
198	Conformational Preorganization, Hydration, and Nucleic Acid Duplex Stability. Oligonucleotides, 1998, 8, 123-128.	4.4	22

#	Article	IF	Citations
199	Crystal Structures of Oligodeoxyribonucleotides Containing 6â€˜-Î±-Methyl and 6â€˜-Î±-Hydroxy Carbocyclic Thymidines. Journal of the American Chemical Society, 1997, 119, 2396-2403.	6.6	24
200	DNA recognition and bending. Chemistry and Biology, 1997, 4, 643-650.	6.2	61
201	The Role of Backbone Oxygen Atoms in the Organization of Nucleic Acid Tertiary Structure: Zippers, Networks, Clamps, and Câ€Hâ€¦ï¸O Hydrogen Bonds. Chemistry - A European Journal, 1997, 3, 1400-1404.	1.7	35
202	RNA Hydration:â€‰ A Detailed Look,. Biochemistry, 1996, 35, 8489-8494.	1.2	225
203	Synthesis and Structure of 1-Deoxy-1-phenyl-Î²-d-ribofuranose and Its Incorporation into Oligonucleotides. Journal of Organic Chemistry, 1996, 61, 3909-3911.	1.7	45
204	Structural Aspects of Nucleic Acid Analogs and Antisense Oligonucleotides. Angewandte Chemie International Edition in English, 1996, 35, 1894-1909.	4.4	93
205	The Crystal Structure of r(CCCCGGGG) in Two Distinct Lattices. Biochemistry, 1995, 34, 7569-7575.	1.2	65
206	Crystal Structure of a Dimethylene Sulfone-Linked Ribodinucleotide Analog. Journal of the American Chemical Society, 1995, 117, 7249-7250.	6.6	48
207	Stabilizing effects of the RNA 2â€²-substituent: crystal structure of an oligodeoxynucleotide duplex containing 2â€²-O-methylated adenosines. Chemistry and Biology, 1994, 1, 39-45.	6.2	102
208	Comparative studies of high resolution Z-DNA crystal structures Part 1: Common hydration patterns of alternating dC-dG. Journal of Molecular Biology, 1994, 236, 1154-1168.	2.0	50
209	the low-temperature crystal structure of the pure-spermine form of Z-DNA reveals binding of a spermine molecule in the minor groove. Biochemistry, 1994, 33, 1073-1086.	1.2	124
210	Crystal structure of a parallel-stranded duplex of a deoxycytidylyl-(3'-5')-deoxycytidine analog containing intranucleosidyl C(3')-C(5') ethylene bridges. Journal of the American Chemical Society, 1993, 115, 5855-5856.	6.6	40
211	Conformational influence of the ribose 2'-hydroxyl group: Crystal structures of DNA-RNA chimeric duplexes. Biochemistry, 1993, 32, 3221-3237.	1.2	155
212	Large scale chemical synthesis, purification and crystallization of RNA-DNA chimeras. Nucleic Acids Research, 1992, 20, 6695-6699.	6.5	32
213	DNA-nogalamycin interactions. Biochemistry, 1991, 30, 1364-1372.	1.2	96
214	Structure of the pure-spermine form of Z-DNA (magnesium free) at 1-.ANG. resolution. Biochemistry, 1991, 30, 11388-11402.	1.2	102
215	Structure of 11-deoxydaunomycin bound to DNA containing a phosphorothioate. Journal of Molecular Biology, 1990, 215, 313-320.	2.0	36
216	Cryo neutron crystallography demonstrates influence of RNA 2â€²-OH orientation on conformation, sugar pucker and water structure. Nucleic Acids Research, 0, , .	6.5	0