Eric T Kool

List of Publications by Year
in descending order

181 papers	13,032 citations	25014 57 h-index	26591 107 g-index
191 all docs	191 docs citations	191 times ranked	10902 citing authors

#	Article	IF	Citations
1	Fluorescence Imaging of Mitochondrial DNA Base Excision Repair Reveals Dynamics of Oxidative Stress Responses. Angewandte Chemie, 2022, 134, .	1.6	4
2	Fluorescence Imaging of Mitochondrial DNA Base Excision Repair Reveals Dynamics of Oxidative Stress Responses. Angewandte Chemie - International Edition, 2022, 61, .	7.2	11
3	Conjugation of RNA <i>via</i> 2â€²-OH acylation: Mechanisms determining nucleotide reactivity. Chemical Communications, 2022, 58, 3693-3696.	2.2	5
4	Integrating transcription-factor abundance with chromatin accessibility in human erythroid lineage commitment. Cell Reports Methods, 2022, 2, 100188.	1.4	9
5	Microbial byproducts determine reproductive fitness of free-living and parasitic nematodes. Cell Host and Microbe, 2022, 30, 786-797.e8.	5.1	9
6	Mechanism-Based Strategy for Optimizing HaloTag Protein Labeling. Jacs Au, 2022, 2, 1324-1337.	3.6	7
7	Acylation probing of â€œgenericâ€•RNA libraries reveals critical influence of loop constraints on reactivity. Cell Chemical Biology, 2022, 29, 1341-1352.e8.	2.5	9
8	Enhancing Repair of Oxidative DNA Damage with Small-Molecule Activators of MTH1. ACS Chemical Biology, 2022, 17, 2074-2087.	1.6	4
9	Inhibition by Tetrahydroquinoline Sulfonamide Derivatives of the Activity of Human 8-Oxoguanine DNA Glycosylase (OGG1) for Several Products of Oxidatively induced DNA Base Lesions. ACS Chemical Biology, 2021, 16, 45-51.	1.6	3
10	Control of RNA with quinone methide reversible acylating reagents. Organic and Biomolecular Chemistry, 2021, 19, 8367-8376.	1.5	5
11	OGG1 co-inhibition antagonizes the tumor-inhibitory effects of targeting MTH1. Redox Biology, 2021, 40, 101848.	3.9	6
12	Reimagining high-throughput profiling of reactive cysteines for cell-based screening of large electrophile libraries. Nature Biotechnology, 2021, 39, 630-641.	9.4	142
13	DNA tiling enables precise acylationâ€based labeling and control of mRNA. Angewandte Chemie, 2021, 133, 27002.	1.6	1
14	DNA Tiling Enables Precise Acylationâ€Based Labeling and Control of mRNA. Angewandte Chemie - International Edition, 2021, 60, 26798-26805.	7.2	17
15	Reversible RNA acylation for control of CRISPRâ€“Cas9 gene editing. Chemical Science, 2020, 11, 1011-1016.	3.7	37
16	A fluorescent hydrazone exchange probe of pyridoxal phosphate for the assessment of vitamin B6 status. Chemical Communications, 2020, 56, 317-320.	2.2	10
17	The Existence of MTH1-independent 8-oxodGTPase Activity in Cancer Cells as a Compensatory Mechanism against On-target Effects of MTH1 Inhibitors. Molecular Cancer Therapeutics, 2020, 19, 432-446.	1.9	11
18	The chemistry and applications ofÂRNA 2â€²-OH acylation. Nature Reviews Chemistry, 2020, 4, 22-37.	13.8	48

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19	Small Substrate or Large? Debate Over the Mechanism of Glycation Adduct Repair by DJ-1. Cell Chemical Biology, 2020, 27, 1117-1123.	2.5	27
20	Site-Selective RNA Functionalization via DNA-Induced Structure. Journal of the American Chemical Society, 2020, 142, 16357-16363.	6.6	24
21	Trapping Transient RNA Complexes by Chemically Reversible Acylation. Angewandte Chemie, 2020, 132, 22201-22206.	1.6	2
22	Trapping Transient RNA Complexes by Chemically Reversible Acylation. Angewandte Chemie - International Edition, 2020, 59, 22017-22022.	7.2	12
23	Designer Fluorescent Adenines Enable Real-Time Monitoring of MUTYH Activity. ACS Central Science, 2020, 6, 1735-1742.	5.3	13
24	Small-Molecule Inhibitor of 8-Oxoguanine DNA Glycosylase 1 Regulates Inflammatory Responses during <i>Pseudomonas aeruginosa</i> Infection. Journal of Immunology, 2020, 205, 2231-2242.	0.4	25
25	An Excimer Clamp for Measuring Damagedâ€Base Excision by the DNA Repair Enzyme NTH1. Angewandte Chemie - International Edition, 2020, 59, 7450-7455.	7.2	9
26	An Excimer Clamp for Measuring Damagedâ€Base Excision by the DNA Repair Enzyme NTH1. Angewandte Chemie, 2020, 132, 7520-7525.	1.6	4
27	Increased MTH1-specific 8-oxodGTPase activity is a hallmark of cancer in colon, lung and pancreatic tissue. DNA Repair, 2019, 83, 102644.	1.3	18
28	Polyacetate and Polycarbonate RNA: Acylating Reagents and Properties. Organic Letters, 2019, 21, 5413-5416.	2.4	15
29	Dual Inhibitors of 8-Oxoguanine Surveillance by OGG1 and NUDT1. ACS Chemical Biology, 2019, 14, 2606-2615.	1.6	16
30	Polymerase synthesis of four-base DNA from two stable dimeric nucleotides. Nucleic Acids Research, 2019, 47, 9495-9501.	6.5	10
31	Polymerase-amplified release of ATP (POLARA) for detecting single nucleotide variants in RNA and DNA. Chemical Science, 2019, 10, 3264-3270.	3.7	10
32	RNA structure maps across mammalian cellular compartments. Nature Structural and Molecular Biology, 2019, 26, 322-330.	3.6	183
33	Fluorescent reporter assays provide direct, accurate, quantitative measurements of MGMT status in human cells. PLoS ONE, 2019, 14, e0208341.	1.1	15
34	Simple alkanoyl acylating agents for reversible RNA functionalization and control. Chemical Communications, 2019, 55, 5135-5138.	2.2	22
35	Ultrafast Oxime Formation Enables Efficient Fluorescence Light-up Measurement of DNA Base Excision. Journal of the American Chemical Society, 2019, 141, 19379-19388.	6.6	30
36	RNA Control by Photoreversible Acylation. Journal of the American Chemical Society, 2018, 140, 3491-3495.	6.6	60

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37	RNA Cloaking by Reversible Acylation. Angewandte Chemie, 2018, 130, 3113-3117.	1.6	9
38	Potent and Selective Inhibitors of 8-Oxoguanine DNA Glycosylase. Journal of the American Chemical Society, 2018, 140, 2105-2114.	6.6	55
39	RNA Cloaking by Reversible Acylation. Angewandte Chemie - International Edition, 2018, 57, 3059-3063.	7.2	51
40	ATP-Linked Chimeric Nucleotide as a Specific Luminescence Reporter of Deoxyuridine Triphosphatase. Bioconjugate Chemistry, 2018, 29, 1614-1621.	1.8	2
41	Fluorescent Probes of DNA Repair. ACS Chemical Biology, 2018, 13, 1721-1733.	1.6	35
42	Water-Soluble Leaving Group Enables Hydrophobic Functionalization of RNA. Organic Letters, 2018, 20, 6587-6590.	2.4	7
43	Exceptionally rapid oxime and hydrazone formation promoted by catalytic amine buffers with low toxicity. Chemical Science, 2018, 9, 5252-5259.	3.7	66
44	Aldehyde dehydrogenase 3A1 activation prevents radiation-induced xerostomia by protecting salivary stem cells from toxic aldehydes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6279-6284.	3.3	23
45	Fluorescence Probes for ALKBH2 Allow the Measurement of DNA Alkylation Repair and Drug Resistance Responses. Angewandte Chemie, 2018, 130, 13078-13082.	1.6	8
46	Fluorescence Probes for ALKBH2 Allow the Measurement of DNA Alkylation Repair and Drug Resistance Responses. Angewandte Chemie - International Edition, 2018, 57, 12896-12900.	7.2	23
47	Chemical and structural effects of base modifications in messenger RNA. Nature, 2017, 541, 339-346.	13.7	156
48	DNA as an environmental sensor: detection and identification of pesticide contaminants in water with fluorescent nucleobases. Organic and Biomolecular Chemistry, 2017, 15, 1801-1809.	1.5	18
49	Colorâ€Change Photoswitching of an Alkynylpyrene Excimer Dye. Angewandte Chemie, 2017, 129, 6597-6601.	1.6	7
50	Colorâ€Change Photoswitching of an Alkynylpyrene Excimer Dye. Angewandte Chemie - International Edition, 2017, 56, 6497-6501.	7.2	34
51	Oximes and Hydrazones in Bioconjugation: Mechanism and Catalysis. Chemical Reviews, 2017, 117, 10358-10376.	23.0	450
52	Fluorogenic Templated Reaction Cascades for RNA Detection. Journal of the American Chemical Society, 2017, 139, 5405-5411.	6.6	38
53	Fluorescent nucleobases as tools for studying DNA and RNA. Nature Chemistry, 2017, 9, 1043-1055.	6.6	251
54	Measuring deaminated nucleotide surveillance enzyme ITPA activity with an ATP-releasing nucleotide chimera. Nucleic Acids Research, 2017, 45, 11515-11524.	6.5	9

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55	Luminescent Carbon Dot Mimics Assembled on DNA. Journal of the American Chemical Society, 2017, 139, 13147-13155.	6.6	33
56	Fingerprints of Modified RNA Bases from Deep Sequencing Profiles. Journal of the American Chemical Society, 2017, 139, 17074-17081.	6.6	35
57	Comparison of SHAPE reagents for mapping RNA structures inside living cells. Rna, 2017, 23, 169-174.	1.6	62
58	DNA polymerase Î¸ specializes in incorporating synthetic expanded-size (xDNA) nucleotides. Nucleic Acids Research, 2016, 44, gkw721.	6.5	19
59	Kinetic selection vs. free energy of DNA base pairing in control of polymerase fidelity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2277-85.	3.3	32
60	Light-Up â€œChannel Dyesâ€•for Haloalkane-Based Protein Labeling in Vitro and in Bacterial Cells. Bioconjugate Chemistry, 2016, 27, 2839-2843.	1.8	25
61	A Chimeric ATP-Linked Nucleotide Enables Luminescence Signaling of Damage Surveillance by MTH1, a Cancer Target. Journal of the American Chemical Society, 2016, 138, 9005-9008.	6.6	19
62	The Discovery of Rolling Circle Amplification and Rolling Circle Transcription. Accounts of Chemical Research, 2016, 49, 2540-2550.	7.6	251
63	ATPâ€Releasing Nucleotides: Linking DNA Synthesis to Luciferase Signaling. Angewandte Chemie - International Edition, 2016, 55, 2087-2091.	7.2	14
64	Functional interplay between NTP leaving group and base pair recognition during RNA polymerase II nucleotide incorporation revealed by methylene substitution. Nucleic Acids Research, 2016, 44, 3820-3828.	6.5	4
65	Dark Hydrazone Fluorescence Labeling Agents Enable Imaging of Cellular Aldehydic Load. ACS Chemical Biology, 2016, 11, 2312-2319.	1.6	40
66	Efficient synthesis of fluorescent alkynyl C-nucleosides via Sonogashira coupling for the preparation of DNA-based polyfluorophores. Organic and Biomolecular Chemistry, 2016, 14, 6407-6412.	1.5	12
67	7SK-BAF axis controls pervasive transcription at enhancers. Nature Structural and Molecular Biology, 2016, 23, 231-238.	3.6	92
68	A new methyl mark on messengers. Nature, 2016, 530, 423-424.	13.7	8
69	Fluorescence Monitoring of the Oxidative Repair of DNA Alkylation Damage by ALKBH3, a Prostate Cancer Marker. Journal of the American Chemical Society, 2016, 138, 3647-3650.	6.6	50
70	Fluorogenic Real-Time Reporters of DNA Repair by MGMT, a Clinical Predictor of Antitumor Drug Response. PLoS ONE, 2016, 11, e0152684.	1.1	22
71	In Vitro Fluorogenic Realâ€Time Assay of the Repair of Oxidative DNA Damage. ChemBioChem, 2015, 16, 1637-1646.	1.3	26
72	Structure and Thermodynamics of N⁶-Methyladenosine in RNA: A Spring-Loaded Base Modification. Journal of the American Chemical Society, 2015, 137, 2107-2115.	6.6	331

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73	New Organocatalyst Scaffolds with High Activity in Promoting Hydrazone and Oxime Formation at Neutral pH. Organic Letters, 2015, 17, 274-277.	2.4	83
74	Organocatalytic removal of formaldehyde adducts from RNA and DNA bases. Nature Chemistry, 2015, 7, 752-758.	6.6	41
75	Structural imprints in vivo decode RNA regulatory mechanisms. Nature, 2015, 519, 486-490.	13.7	639
76	Pattern-based detection of anion pollutants in water with DNA polyfluorophores. Chemical Science, 2015, 6, 2575-2583.	3.7	35
77	<scp>RNA</scp> structural analysis by evolving <scp>SHAPE</scp> chemistry. Wiley Interdisciplinary Reviews RNA, 2014, 5, 867-881.	3.2	54
78	Chapter 1. Designer bases, base pairs, and genetic sets: biochemical and biological activity. Synthetic Biology, 2014, , 1-30.	0.2	5
79	Dissecting the chemical interactions and substrate structural signatures governing RNA polymerase II trigger loop closure by synthetic nucleic acid analogues. Nucleic Acids Research, 2014, 42, 5863-5870.	6.5	17
80	Molecular basis of transcriptional fidelity and DNA lesion-induced transcriptional mutagenesis. DNA Repair, 2014, 19, 71-83.	1.3	28
81	Large-Scale Detection of Metals with a Small Set of Fluorescent DNA-Like Chemosensors. Journal of the American Chemical Society, 2014, 136, 14576-14582.	6.6	55
82	Fast Alpha Nucleophiles: Structures that Undergo Rapid Hydrazone/Oxime Formation at Neutral pH. Organic Letters, 2014, 16, 1454-1457.	2.4	63
83	Patternâ€Based Detection of Toxic Metals in Surface Water with DNA Polyfluorophores. Angewandte Chemie - International Edition, 2014, 53, 5361-5365.	7.2	68
84	Water-Soluble Organocatalysts for Hydrazone and Oxime Formation. Journal of Organic Chemistry, 2013, 78, 1184-1189.	1.7	162
85	Fast Hydrazone Reactants: Electronic and Acid/Base Effects Strongly Influence Rate at Biological pH. Journal of the American Chemical Society, 2013, 135, 17663-17666.	6.6	139
86	DNA-polyfluorophore chemosensors for environmental remediation: vapor-phase identification of petroleum products in contaminated soil. Chemical Science, 2013, 4, 3184.	3.7	20
87	RNA SHAPE analysis in living cells. Nature Chemical Biology, 2013, 9, 18-20.	3.9	366
88	Identification of a Selective Polymerase Enables Detection of N⁶-Methyladenosine in RNA. Journal of the American Chemical Society, 2013, 135, 19079-19082.	6.6	92
89	Importance of <i>ortho</i> Proton Donors in Catalysis of Hydrazone Formation. Organic Letters, 2013, 15, 1646-1649.	2.4	88
90	Chemical fidelity of an RNA polymerase ribozyme. Chemical Science, 2013, 4, 2804.	3.7	30

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91	Genetically Encoded Multispectral Labeling of Proteins with Polyfluorophores on a DNA Backbone. Journal of the American Chemical Society, 2013, 135, 6184-6191.	6.6	56
92	Monitoring eukaryotic and bacterial UDG repair activity with DNA-multifluorophore sensors. Nucleic Acids Research, 2013, 41, e127-e127.	6.5	28
93	Selective Fluorogenic Chemosensors for Distinct Classes of Nucleases. ChemBioChem, 2013, 14, 440-444.	1.3	13
94	Amplified microRNA detection by templated chemistry. Nucleic Acids Research, 2012, 40, e65-e65.	6.5	110
95	Surprising Repair Activities of Nonpolar Analogs of 8-oxoG Expose Features of Recognition and Catalysis by Base Excision Repair Glycosylases. Journal of the American Chemical Society, 2012, 134, 1653-1661.	6.6	38
96	Fluorescent DNAs printed on paper: sensing food spoilage and ripening in the vapor phase. Chemical Science, 2012, 3, 2542.	3.7	44
97	Dissecting Chemical Interactions Governing RNA Polymerase II Transcriptional Fidelity. Journal of the American Chemical Society, 2012, 134, 8231-8240.	6.6	34
98	Fluorescence Quenchers for Hydrazone and Oxime Orthogonal Bioconjugation. Bioconjugate Chemistry, 2012, 23, 1969-1980.	1.8	36
99	DNA-Multichromophore Systems. Chemical Reviews, 2012, 112, 4221-4245.	23.0	292
100	DNA Polyfluorophores for Realâ€Time Multicolor Tracking of Dynamic Biological Systems. Angewandte Chemie - International Edition, 2012, 51, 7176-7180.	7.2	29
101	Direct Fluorescence Monitoring of DNA Base Excision Repair. Angewandte Chemie - International Edition, 2012, 51, 1689-1692.	7.2	71
102	Nonpolar nucleosides alter RNA Polymerase II NTP specificity by disrupting hydrogen bonding and base stacking. FASEB Journal, 2012, 26, .	0.2	0
103	The Components of xRNA: Synthesis and Fluorescence of a Full Genetic Set of Size-Expanded Ribonucleosides. Organic Letters, 2011, 13, 676-679.	2.4	40
104	DNA polyfluorophores as highly diverse chemosensors of toxic gases. Chemical Science, 2011, 2, 1910.	3.7	31
105	Fluorescent DNA-based enzyme sensors. Chemical Society Reviews, 2011, 40, 5756.	18.7	150
106	Two Successive Reactions on a DNA Template: A Strategy for Improving Background Fluorescence and Specificity in Nucleic Acid Detection. Chemistry - A European Journal, 2011, 17, 2168-2175.	1.7	44
107	Differentiating a Diverse Range of Volatile Organic Compounds with Polyfluorophore Sensors Built on a DNA Scaffold. Chemistry - A European Journal, 2011, 17, 174-183.	1.7	26
108	Fluorescent xDNA nucleotides as efficient substrates for a template-independent polymerase. Nucleic Acids Research, 2011, 39, 1586-1594.	6.5	38

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109	Multispectral labeling of antibodies with polyfluorophores on a DNA backbone and application in cellular imaging. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3493-3498.	3.3	77
110	Polyfluorophores on a DNA Backbone: Sensors of Small Molecules in the Vapor Phase. Angewandte Chemie - International Edition, 2010, 49, 7025-7029.	7.2	58
111	Probing the Interaction of Archaeal DNA Polymerases with Deaminated Bases Using X-ray Crystallography and Non-Hydrogen Bonding Isosteric Base Analogues. Biochemistry, 2010, 49, 5772-5781.	1.2	25
112	Efficient Replication Bypass of Sizeâ€Expanded DNA Base Pairs in Bacterial Cells. Angewandte Chemie - International Edition, 2009, 48, 4524-4527.	7.2	54
113	Polyfluorophore Excimers and Exciplexes as FRET Donors in DNA. Bioconjugate Chemistry, 2009, 20, 2371-2380.	1.8	46
114	Polyfluorophores on a DNA Backbone: A Multicolor Set of Labels Excited at One Wavelength. Journal of the American Chemical Society, 2009, 131, 3923-3933.	6.6	113
115	Efficient Nucleic Acid Detection by Templated Reductive Quencher Release. Journal of the American Chemical Society, 2009, 131, 16021-16023.	6.6	145
116	Evolving a Polymerase for Hydrophobic Base Analogues. Journal of the American Chemical Society, 2009, 131, 14827-14837.	6.6	73
117	Quenching of Fluorescent Nucleobases by Neighboring DNA: The â€œInsulatorâ€•Concept. ChemBioChem, 2008, 9, 279-285.	1.3	93
118	New, stronger nucleophiles for nucleic acid-templated chemistry: Synthesis and application in fluorescence detection of cellular RNA. Bioorganic and Medicinal Chemistry, 2008, 16, 56-64.	1.4	34
119	Unnatural substrates reveal the importance of 8-oxoguanine for in vivo mismatch repair by MutY. Nature Chemical Biology, 2008, 4, 51-58.	3.9	35
120	Fluorescence of Size-Expanded DNA Bases:â€‰ Reporting on DNA Sequence and Structure with an Unnatural Genetic Set. Journal of the American Chemical Society, 2008, 130, 3989-3999.	6.6	87
121	Visualization of Long Human Telomere Mimics by Single-Molecule Fluorescence Imaging. Journal of Physical Chemistry B, 2008, 112, 13184-13187.	1.2	12
122	Importance of Hydrogen Bonding for Efficiency and Specificity of the Human Mitochondrial DNA Polymerase. Journal of Biological Chemistry, 2008, 283, 14402-14410.	1.6	41
123	Base Pair Hydrogen Bonds Are Essential for Proofreading Selectivity by the Human Mitochondrial DNA Polymerase. Journal of Biological Chemistry, 2008, 283, 14411-14416.	1.6	16
124	Site-directed Mutagenesis in the Fingers Subdomain of HIV-1 Reverse Transcriptase Reveals a Specific Role for the Î²3â€“Î²4 Hairpin Loop in dNTP Selection. Journal of Molecular Biology, 2007, 365, 38-49.	2.0	18
125	Oligodeoxyfluorosides: strong sequence dependence of fluorescence emission. Tetrahedron, 2007, 63, 3427-3433.	1.0	61
126	The model student: what chemical model systems can teach us about biology. , 2007, 3, 70-73.		27

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127	DNA Polymerase Catalysis in the Absence of Watsonâ^'Crick Hydrogen Bonds:Â Analysis by Single-Turnover Kineticsâ€. Biochemistry, 2006, 45, 890-898.	1.2	36
128	Fluorescent DNA base replacements: reporters and sensors for biological systems. Organic and Biomolecular Chemistry, 2006, 4, 4265.	1.5	239
129	The difluorotoluene debateâ€"a decade later. Chemical Communications, 2006, , 3665-3675.	2.2	91
130	Dynamics of Nucleotide Incorporation:Â Snapshots Revealed by 2-Aminopurine Fluorescence Studiesâ€. Biochemistry, 2006, 45, 2836-2844.	1.2	47
131	Enzymatic Synthesis of Fluorescent Oligomers Assembled on a DNA Backbone. ChemBioChem, 2006, 7, 669-672.	1.3	38
132	New designs for DNA bases: Expanded DNAs and oligofluorosides. Nucleic Acids Symposium Series, 2006, 50, 15-16.	0.3	10
133	Nonpolar Nucleobase Analogs Illuminate Requirements for Site-specific DNA Cleavage by Vaccinia Topoisomerase. Journal of Biological Chemistry, 2006, 281, 35914-35921.	1.6	9
134	Evidence for a Watson-Crick Hydrogen Bonding Requirement in DNA Synthesis by Human DNA Polymerase Îº. Molecular and Cellular Biology, 2005, 25, 7137-7143.	1.1	53
135	Oligomeric Fluorescent Labels for DNA. Bioconjugate Chemistry, 2005, 16, 528-534.	1.8	76
136	Palm Mutants in DNA Polymerases Î± and Î· Alter DNA Replication Fidelity and Translesion Activity. Molecular and Cellular Biology, 2004, 24, 2734-2746.	1.1	83
137	Modified DNA Analogues That Sense Light Exposure with Color Changes. Journal of the American Chemical Society, 2004, 126, 12748-12749.	6.6	92
138	Quenched Auto-Ligating DNAs:â€‰ Multicolor Identification of Nucleic Acids at Single Nucleotide Resolution. Journal of the American Chemical Society, 2004, 126, 1081-1087.	6.6	109
139	Destabilizing Universal Linkers for Signal Amplification in Self-Ligating Probes for RNA. Journal of the American Chemical Society, 2004, 126, 13980-13986.	6.6	99
140	Yeast Pol Î· Holds a Cisâ^'Syn Thymine Dimer Loosely in the Active Site during Elongation Opposite the 3â€˜-T of the Dimer, but Tightly Opposite the 5â€˜-Tâ€. Biochemistry, 2003, 42, 9431-9437.	1.2	21
141	Probing the Requirements for Recognition and Catalysis in Fpg and MutY with Nonpolar Adenine Isosteres. Journal of the American Chemical Society, 2003, 125, 16235-16242.	6.6	55
142	Hydrolysis of RNA/DNA hybrids containing nonpolar pyrimidine isosteres defines regions essential for HIV type 1 polypurine tract selection. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11279-11284.	3.3	31
143	Requirement of Watson-Crick Hydrogen Bonding for DNA Synthesis by Yeast DNA Polymerase Î·. Molecular and Cellular Biology, 2003, 23, 5107-5112.	1.1	83
144	High-fidelity in vivo replication of DNA base shape mimics without Watson-Crick hydrogen bonds. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4469-4473.	3.3	77

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145	Integrity of duplex structures without hydrogen bonding: DNA with pyrene paired at abasic sites. Nucleic Acids Research, 2002, 30, 5561-5569.	6.5	69
146	A Porphyrin C-Nucleoside Incorporated into DNA. Organic Letters, 2002, 4, 4377-4380.	2.4	52
147	Replacing the Nucleobases in DNA with Designer Molecules. Accounts of Chemical Research, 2002, 35, 936-943.	7.6	353
148	Active Site Tightness and Substrate Fit in DNA Replication. Annual Review of Biochemistry, 2002, 71, 191-219.	5.0	353
149	A Highly Effective Nonpolar Isostere of Deoxyguanosine:Â Synthesis, Structure, Stacking, and Base Pairing. Journal of Organic Chemistry, 2002, 67, 5869-5875.	1.7	47
150	Libraries of Composite Polyfluors Built from Fluorescent Deoxyribosides. Journal of the American Chemical Society, 2002, 124, 11590-11591.	6.6	115
151	Hydrogen Bonding, Base Stacking, and Steric Effects in DNA Replication. Annual Review of Biophysics and Biomolecular Structure, 2001, 30, 1-22.	18.3	461
152	Significance of Nucleobase Shape Complementarity and Hydrogen Bonding in the Formation and Stability of the Closed Polymeraseâ˘'DNA Complex. Biochemistry, 2001, 40, 3215-3221.	1.2	46
153	Nonenzymatic autoligation in direct three-color detection of RNA and DNA point mutations. Nature Biotechnology, 2001, 19, 148-152.	9.4	159
154	Chemical and Enzymatic Methods for Preparing Circular Singleâ€Stranded DNAs. Current Protocols in Nucleic Acid Chemistry, 2000, 00, Unit 5.2.	0.5	10
155	Functional Hydrogen-Bonding Map of the Minor Groove Binding Tracks of Six DNA Polymerases. Biochemistry, 2000, 39, 12979-12988.	1.2	114
156	Factors Contributing to Aromatic Stacking in Water:â€‰ Evaluation in the Context of DNA. Journal of the American Chemical Society, 2000, 122, 2213-2222.	6.6	446
157	Pyrene Nucleotide as a Mechanistic Probe:â€‰ Evidence for a Transient Abasic Site-like Intermediate in the Bypass of Dipyrimidine Photoproducts by T7 DNA Polymerase. Biochemistry, 2000, 39, 14603-14610.	1.2	42
158	Interaction and Solvation Energies of Nonpolar DNA Base Analogues and Their Role in Polymerase Insertion Fidelity. Journal of Biomolecular Structure and Dynamics, 1999, 16, 1119-1134.	2.0	49
159	A specific partner for abasic damage in DNA. Nature, 1999, 399, 704-708.	13.7	249
160	Tightening the Belt on Polymerases: Evaluating the Physical Constraints on Enzyme Substrate Size. Angewandte Chemie - International Edition, 1999, 38, 3654-3657.	7.2	39
161	Replication of non-hydrogen bonded bases by DNA polymerases: A mechanism for steric matching. , 1998, 48, 3-17.		94
162	Selective and Stable DNA Base Pairing without Hydrogen Bonds. Journal of the American Chemical Society, 1998, 120, 6191-6192.	6.6	203

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163	Recognition of DNA, RNA, and Proteins by Circular Oligonucleotides. Accounts of Chemical Research, 1998, 31, 502-510.	7.6	81
164	Solution structure of a DNA duplex containing a replicable difluorotolueneâ€"adenine pair. Nature Structural Biology, 1998, 5, 954-959.	9.7	130
165	Escherichia coli RNA Polymerase Activity Observed Using Atomic Force Microscopy. Biochemistry, 1997, 36, 461-468.	1.2	341
166	Experimental Measurement of Aromatic Stacking Affinities in the Context of Duplex DNA. Journal of the American Chemical Society, 1996, 118, 8182-8183.	6.6	275
167	Naphthalene, Phenanthrene, and Pyrene as DNA Base Analogues:â€‰ Synthesis, Structure, and Fluorescence in DNA. Journal of the American Chemical Society, 1996, 118, 7671-7678.	6.6	217
168	Topological modification of oligonucleotides for potential inhibition of gene expression. Journal of Computer - Aided Molecular Design, 1996, 4, 61-75.	1.0	3
169	Stabile DNAâ€Schleifen durch Einbau unpolarer und keine WasserstoffbrÃ¼cken bildender Nucleosidâ€Isostere. Angewandte Chemie, 1996, 108, 834-837.	1.6	5
170	Circular Oligonucleotides: New Concepts in Oligonucleotide Design. Annual Review of Biophysics and Biomolecular Structure, 1996, 25, 1-28.	18.3	91
171	Rolling-Circle RNA Synthesis: Circular Oligonucleotides as Efficient Substrates for T7 RNA Polymerase. Journal of the American Chemical Society, 1995, 117, 7818-7819.	6.6	147
172	Structural Optimization of Non-Nucleotide Loop Replacements for Duplex and Triplex DNAs. Journal of the American Chemical Society, 1995, 117, 5635-5646.	6.6	82
173	Topologically Modified Biopolymers: Properties of Synthetic Circular DNAs and RNAs. Trends in Polymer Science, 1995, 3, 396-402.	0.0	0
174	Starke, spezifische Bindung sechs verschiedener DNAâ€Sequenzen an einen konformativ flexiblen DNAâ€Makrocyclus. Angewandte Chemie, 1994, 106, 1057-1059.	1.6	4
175	Solvent pH, and ionic effects on the binding of single-stranded DNA by circular oligodeoxynucleotides. Bioorganic and Medicinal Chemistry Letters, 1994, 4, 965-970.	1.0	22
176	Strong Binding of Single-stranded DNA by Stem-loop Oligonucleotides. Journal of Biomolecular Structure and Dynamics, 1992, 10, 141-152.	2.0	29
177	Structural effects in the recognition of DNA by circular oligonucleotides. Journal of the American Chemical Society, 1992, 114, 3523-3527.	6.6	111
178	DNAâ€Erkennung durch makrocyclische Oligoetherâ€Oligodesoxynucleotidâ€Hybridverbindungen. Angewandte Chemie, 1992, 104, 1686-1689.	1.6	26
179	Molecular recognition by circular oligonucleotides. Strong binding of single-stranded DNA and RNA. Journal of the Chemical Society Chemical Communications, 1991, 1991, 1161.	2.0	58
180	Modified DNA Bases: Probing Base-Pair Recognition by Polymerases. , 0, , 49-74.		3

#	Article	IF	Citations
181	Fluorescent C-Nucleosides and their Oligomeric Assemblies. , 0, , 320-355.		0