Eric T Kool

List of Publications by Year in Descending Order

175 papers	10,739 citations	56 h-index	100 g-index
191 ext. papers	11,949 ext. citations	12.5 avg, IF	6.82 L-index

#	Paper	IF	Citations
175	DNA Tiling Enables Precise Acylation-Based Labeling and Control of mRNA. *Angewandte Chemie*, **2021**, 133, 27002	3.6	0
174	DNA Tiling Enables Precise Acylation-Based Labeling and Control of mRNA. *Angewandte Chemie - International Edition*, **2021**, 60, 26798-26805	16.4	2
173	OGG1 co-inhibition antagonizes the tumor-inhibitory effects of targeting MTH1. *Redox Biology*, **2021**, 40, 101848	11.3	2
172	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	4.9	0
171	Control of RNA with quinone methide reversible acylating reagents. *Organic and Biomolecular Chemistry*, **2021**, 19, 8367-8376	3.9	1
170	Reimagining high-throughput profiling of reactive cysteines for cell-based screening of large electrophile libraries. *Nature Biotechnology*, **2021**, 39, 630-641	44.5	37
169	An Excimer Clamp for Measuring Damaged-Base Excision by the DNA Repair Enzyme NTH1. *Angewandte Chemie - International Edition*, **2020**, 59, 7450-7455	16.4	2
168	An Excimer Clamp for Measuring Damaged-Base Excision by the DNA Repair Enzyme NTH1. *Angewandte Chemie*, **2020**, 132, 7520-7525	3.6	0
167	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	6.1	3
166	The chemistry and applications of RNA 2ROH acylation. *Nature Reviews Chemistry*, **2020**, 4, 22-37	34.6	21
165	Small Substrate or Large? Debate Over the Mechanism of Glycation Adduct Repair by DJ-1. *Cell Chemical Biology*, **2020**, 27, 1117-1123	8.2	9
164	Site-Selective RNA Functionalization via DNA-Induced Structure. *Journal of the American Chemical Society*, **2020**, 142, 16357-16363	16.4	9
163	Trapping Transient RNA Complexes by Chemically Reversible Acylation. *Angewandte Chemie*, **2020**, 132, 22201-22206	3.6	0
162	Trapping Transient RNA Complexes by Chemically Reversible Acylation. *Angewandte Chemie - International Edition*, **2020**, 59, 22017-22022	16.4	5
161	Designer Fluorescent Adenines Enable Real-Time Monitoring of MUTYH Activity. *ACS Central Science*, **2020**, 6, 1735-1742	16.8	1
160	Small-Molecule Inhibitor of 8-Oxoguanine DNA Glycosylase 1 Regulates Inflammatory Responses during Infection. *Journal of Immunology*, **2020**, 205, 2231-2242	5.3	6
159	Polymerase synthesis of four-base DNA from two stable dimeric nucleotides. *Nucleic Acids Research* , **2019**, 47, 9495-9501	20.1	6

158	Polymerase-amplified release of ATP (POLARA) for detecting single nucleotide variants in RNA and DNA. *Chemical Science*, **2019**, 10, 3264-3270	9.4	10
157	RNA structure maps across mammalian cellular compartments. *Nature Structural and Molecular Biology*, **2019**, 26, 322-330	17.6	99
156	Fluorescent reporter assays provide direct, accurate, quantitative measurements of MGMT status in human cells. *PLoS ONE*, **2019**, 14, e0208341	3.7	8
155	Simple alkanoyl acylating agents for reversible RNA functionalization and control. *Chemical Communications*, **2019**, 55, 5135-5138	5.8	12
154	Increased MTH1-specific 8-oxodGTPase activity is a hallmark of cancer in colon, lung and pancreatic tissue. *DNA Repair*, **2019**, 83, 102644	4.3	9
153	Polyacetate and Polycarbonate RNA: Acylating Reagents and Properties. *Organic Letters*, **2019**, 21, 5413-5416	6.2	8
152	Dual Inhibitors of 8-Oxoguanine Surveillance by OGG1 and NUDT1. *ACS Chemical Biology*, **2019**, 14, 2606-2615	4.9	9
151	Reversible RNA acylation for control of CRISPR-Cas9 gene editing. *Chemical Science*, **2019**, 11, 1011-1016	9.4	22
150	A fluorescent hydrazone exchange probe of pyridoxal phosphate for the assessment of vitamin B6 status. *Chemical Communications*, **2019**, 56, 317-320	5.8	7
149	Ultrafast Oxime Formation Enables Efficient Fluorescence Light-up Measurement of DNA Base Excision. *Journal of the American Chemical Society*, **2019**, 141, 19379-19388	16.4	9
148	RNA Control by Photoreversible Acylation. *Journal of the American Chemical Society*, **2018**, 140, 3491-3495	16.4	36
147	RNA Cloaking by Reversible Acylation. *Angewandte Chemie*, **2018**, 130, 3113-3117	3.6	6
146	Potent and Selective Inhibitors of 8-Oxoguanine DNA Glycosylase. *Journal of the American Chemical Society*, **2018**, 140, 2105-2114	16.4	30
145	RNA Cloaking by Reversible Acylation. *Angewandte Chemie - International Edition*, **2018**, 57, 3059-3063	16.4	32
144	ATP-Linked Chimeric Nucleotide as a Specific Luminescence Reporter of Deoxyuridine Triphosphatase. *Bioconjugate Chemistry*, **2018**, 29, 1614-1621	6.3	0
143	Fluorescence Probes for ALKBH2 Allow the Measurement of DNA Alkylation Repair and Drug Resistance Responses. *Angewandte Chemie*, **2018**, 130, 13078-13082	3.6	7
142	Fluorescence Probes for ALKBH2 Allow the Measurement of DNA Alkylation Repair and Drug Resistance Responses. *Angewandte Chemie - International Edition*, **2018**, 57, 12896-12900	16.4	18
141	Fluorescent Probes of DNA Repair. *ACS Chemical Biology*, **2018**, 13, 1721-1733	4.9	22

140	Water-Soluble Leaving Group Enables Hydrophobic Functionalization of RNA. *Organic Letters*, **2018**, 20, 6587-6590	6.2	4
139	Exceptionally rapid oxime and hydrazone formation promoted by catalytic amine buffers with low toxicity. *Chemical Science*, **2018**, 9, 5252-5259	9.4	43
138	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	11.5	13
137	Chemical and structural effects of base modifications in messenger RNA. *Nature*, **2017**, 541, 339-346	50.4	118
136	DNA as an environmental sensor: detection and identification of pesticide contaminants in water with fluorescent nucleobases. *Organic and Biomolecular Chemistry*, **2017**, 15, 1801-1809	3.9	15
135	Color-Change Photoswitching of an Alkynylpyrene Excimer Dye. *Angewandte Chemie*, **2017**, 129, 6597-6601	5.6	5
134	Color-Change Photoswitching of an Alkynylpyrene Excimer Dye. *Angewandte Chemie - International Edition*, **2017**, 56, 6497-6501	16.4	21
133	Oximes and Hydrazones in Bioconjugation: Mechanism and Catalysis. *Chemical Reviews*, **2017**, 117, 10358-10376	53.0	909
132	Fluorogenic Templated Reaction Cascades for RNA Detection. *Journal of the American Chemical Society*, **2017**, 139, 5405-5411	16.4	27
131	Fluorescent nucleobases as tools for studying DNA and RNA. *Nature Chemistry*, **2017**, 9, 1043-1055	17.6	170
130	Measuring deaminated nucleotide surveillance enzyme ITPA activity with an ATP-releasing nucleotide chimera. *Nucleic Acids Research*, **2017**, 45, 11515-11524	20.1	5
129	Luminescent Carbon Dot Mimics Assembled on DNA. *Journal of the American Chemical Society*, **2017**, 139, 13147-13155	16.4	25
128	Fingerprints of Modified RNA Bases from Deep Sequencing Profiles. *Journal of the American Chemical Society*, **2017**, 139, 17074-17081	16.4	25
127	Comparison of SHAPE reagents for mapping RNA structures inside living cells. *Rna*, **2017**, 23, 169-174	5.8	48
126	Light-Up "Channel Dyes" for Haloalkane-Based Protein Labeling in Vitro and in Bacterial Cells. *Bioconjugate Chemistry*, **2016**, 27, 2839-2843	6.3	15
125	A Chimeric ATP-Linked Nucleotide Enables Luminescence Signaling of Damage Surveillance by MTH1, a Cancer Target. *Journal of the American Chemical Society*, **2016**, 138, 9005-8	16.4	11
124	The Discovery of Rolling Circle Amplification and Rolling Circle Transcription. *Accounts of Chemical Research*, **2016**, 49, 2540-2550	24.3	143
123	ATP-Releasing Nucleotides: Linking DNA Synthesis to Luciferase Signaling. *Angewandte Chemie - International Edition*, **2016**, 55, 2087-91	16.4	12

122	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, 3820-8	20.1	4
121	Dark Hydrazone Fluorescence Labeling Agents Enable Imaging of Cellular Aldehydic Load. *ACS Chemical Biology*, **2016**, 11, 2312-9	4.9	32
120	Efficient synthesis of fluorescent alkynyl C-nucleosides via Sonogashira coupling for the preparation of DNA-based polyfluorophores. *Organic and Biomolecular Chemistry*, **2016**, 14, 6407-12	3.9	9
119	7SK-BAF axis controls pervasive transcription at enhancers. *Nature Structural and Molecular Biology*, **2016**, 23, 231-8	17.6	60
118	Epigenetics: A new methyl mark on messengers. *Nature*, **2016**, 530, 423-4	50.4	7
117	Fluorescence Monitoring of the Oxidative Repair of DNA Alkylation Damage by ALKBH3, a Prostate Cancer Marker. *Journal of the American Chemical Society*, **2016**, 138, 3647-50	16.4	41
116	Fluorogenic Real-Time Reporters of DNA Repair by MGMT, a Clinical Predictor of Antitumor Drug Response. *PLoS ONE*, **2016**, 11, e0152684	3.7	17
115	DNA polymerase specializes in incorporating synthetic expanded-size (xDNA) nucleotides. *Nucleic Acids Research*, **2016**, 44, 9381-9392	20.1	13
114	Fluorescent C-Nucleosides and their Oligomeric Assemblies **2016**, 320-355		
113	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	11.5	18
112	Organocatalytic removal of formaldehyde adducts from RNA and DNA bases. *Nature Chemistry*, **2015**, 7, 752-8	17.6	32
111	Structural imprints in vivo decode RNA regulatory mechanisms. *Nature*, **2015**, 519, 486-90	50.4	454
110	Pattern-Based Detection of Anion Pollutants in Water with DNA Polyfluorophores. *Chemical Science*, **2015**, 6, 2575-2583	9.4	33
109	In Vitro Fluorogenic Real-Time Assay of the Repair of Oxidative DNA Damage. *ChemBioChem*, **2015**, 16, 1637-46	3.8	20
108	Structure and thermodynamics of N6-methyladenosine in RNA: a spring-loaded base modification. *Journal of the American Chemical Society*, **2015**, 137, 2107-15	16.4	244
107	New organocatalyst scaffolds with high activity in promoting hydrazone and oxime formation at neutral pH. *Organic Letters*, **2015**, 17, 274-7	6.2	70
106	Large-scale detection of metals with a small set of fluorescent DNA-like chemosensors. *Journal of the American Chemical Society*, **2014**, 136, 14576-82	16.4	51
105	Fast alpha nucleophiles: structures that undergo rapid hydrazone/oxime formation at neutral pH. *Organic Letters*, **2014**, 16, 1454-7	6.2	58

104	Pattern-based detection of toxic metals in surface water with DNA polyfluorophores. *Angewandte Chemie - International Edition*, **2014**, 53, 5361-5	16.4	61
103	Pattern-Based Detection of Toxic Metals in Surface Water with DNA Polyfluorophores. *Angewandte Chemie*, **2014**, 126, 5465-5469	3.6	7
102	RNA structural analysis by evolving SHAPE chemistry. *Wiley Interdisciplinary Reviews RNA*, **2014**, 5, 867-81	9.3	44
101	Chapter 1:Designer bases, base pairs, and genetic sets: biochemical and biological activity **2014**, 1-30		5
100	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, 5863-70	20.1	13
99	Molecular basis of transcriptional fidelity and DNA lesion-induced transcriptional mutagenesis. *DNA Repair*, **2014**, 19, 71-83	4.3	23
98	Water-soluble organocatalysts for hydrazone and oxime formation. *Journal of Organic Chemistry*, **2013**, 78, 1184-9	4.2	146
97	Fast hydrazone reactants: electronic and acid/base effects strongly influence rate at biological pH. *Journal of the American Chemical Society*, **2013**, 135, 17663-6	16.4	122
96	DNA-polyfluorophore Chemosensors for Environmental Remediation: Vapor-phase Identification of Petroleum Products in Contaminated Soil. *Chemical Science*, **2013**, 4, 3184-3190	9.4	18
95	RNA SHAPE analysis in living cells. *Nature Chemical Biology*, **2013**, 9, 18-20	11.7	288
94	Identification of a selective polymerase enables detection of N(6)-methyladenosine in RNA. *Journal of the American Chemical Society*, **2013**, 135, 19079-82	16.4	75
93	Importance of ortho proton donors in catalysis of hydrazone formation. *Organic Letters*, **2013**, 15, 1646-8	6.2	84
92	Chemical fidelity of an RNA polymerase ribozyme. *Chemical Science*, **2013**, 4, 2804	9.4	22
91	Genetically encoded multispectral labeling of proteins with polyfluorophores on a DNA backbone. *Journal of the American Chemical Society*, **2013**, 135, 6184-91	16.4	42
90	Monitoring eukaryotic and bacterial UDG repair activity with DNA-multifluorophore sensors. *Nucleic Acids Research*, **2013**, 41, e127	20.1	22
89	Selective fluorogenic chemosensors for distinct classes of nucleases. *ChemBioChem*, **2013**, 14, 440-4	3.8	11
88	Direct fluorescence monitoring of DNA base excision repair. *Angewandte Chemie - International Edition*, **2012**, 51, 1689-92	16.4	64
87	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, 1653-61	16.4	32

86	Fluorescent DNAs printed on paper: sensing food spoilage and ripening in the vapor phase. *Chemical Science*, **2012**, 3, 2542	9.4	42
85	Dissecting chemical interactions governing RNA polymerase II transcriptional fidelity. *Journal of the American Chemical Society*, **2012**, 134, 8231-40	16.4	31
84	Fluorescence quenchers for hydrazone and oxime orthogonal bioconjugation. *Bioconjugate Chemistry*, **2012**, 23, 1969-80	6.3	30
83	DNA-multichromophore systems. *Chemical Reviews*, **2012**, 112, 4221-45	68.1	263
82	DNA Polyfluorophores for Real-Time Multicolor Tracking of Dynamic Biological Systems. *Angewandte Chemie*, **2012**, 124, 7288-7292	3.6	4
81	DNA polyfluorophores for real-time multicolor tracking of dynamic biological systems. *Angewandte Chemie - International Edition*, **2012**, 51, 7176-80	16.4	26
80	Amplified microRNA detection by templated chemistry. *Nucleic Acids Research*, **2012**, 40, e65	20.1	104
79	DNA polyfluorophores as highly diverse chemosensors of toxic gases. *Chemical Science*, **2011**, 2, 1910	9.4	28
78	Fluorescent DNA-based enzyme sensors. *Chemical Society Reviews*, **2011**, 40, 5756-70	58.5	129
77	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, 2168-75	4.8	42
76	Differentiating a diverse range of volatile organic compounds with polyfluorophore sensors built on a DNA scaffold. *Chemistry - A European Journal*, **2011**, 17, 174-83	4.8	25
75	The components of xRNA: synthesis and fluorescence of a full genetic set of size-expanded ribonucleosides. *Organic Letters*, **2011**, 13, 676-9	6.2	38
74	Fluorescent xDNA nucleotides as efficient substrates for a template-independent polymerase. *Nucleic Acids Research*, **2011**, 39, 1586-94	20.1	34
73	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, 3493-8	11.5	59
72	Probing the interaction of archaeal DNA polymerases with deaminated bases using X-ray crystallography and non-hydrogen bonding isosteric base analogues. *Biochemistry*, **2010**, 49, 5772-81	3.2	24
71	Polyfluorophores on a DNA Backbone: Sensors of Small Molecules in the Vapor Phase. *Angewandte Chemie*, **2010**, 122, 7179-7183	3.6	10
70	Polyfluorophores on a DNA backbone: sensors of small molecules in the vapor phase. *Angewandte Chemie - International Edition*, **2010**, 49, 7025-9	16.4	54
69	Efficient replication bypass of size-expanded DNA base pairs in bacterial cells. *Angewandte Chemie - International Edition*, **2009**, 48, 4524-7	16.4	47

68	Polyfluorophore excimers and exciplexes as FRET donors in DNA. *Bioconjugate Chemistry*, **2009**, 20, 2371-80	4.4	44
67	Polyfluorophores on a DNA backbone: a multicolor set of labels excited at one wavelength. *Journal of the American Chemical Society*, **2009**, 131, 3923-33	16.4	107
66	Efficient nucleic acid detection by templated reductive quencher release. *Journal of the American Chemical Society*, **2009**, 131, 16021-3	16.4	134
65	Evolving a polymerase for hydrophobic base analogues. *Journal of the American Chemical Society*, **2009**, 131, 14827-37	16.4	64
64	Unnatural substrates reveal the importance of 8-oxoguanine for in vivo mismatch repair by MutY. *Nature Chemical Biology*, **2008**, 4, 51-8	11.7	28
63	Fluorescence of size-expanded DNA bases: reporting on DNA sequence and structure with an unnatural genetic set. *Journal of the American Chemical Society*, **2008**, 130, 3989-99	16.4	82
62	Visualization of long human telomere mimics by single-molecule fluorescence imaging. *Journal of Physical Chemistry B*, **2008**, 112, 13184-7	3.4	11
61	Importance of hydrogen bonding for efficiency and specificity of the human mitochondrial DNA polymerase. *Journal of Biological Chemistry*, **2008**, 283, 14402-10	5.4	38
60	Base pair hydrogen bonds are essential for proofreading selectivity by the human mitochondrial DNA polymerase. *Journal of Biological Chemistry*, **2008**, 283, 14411-6	5.4	14
59	Quenching of fluorescent nucleobases by neighboring DNA: the "insulator" concept. *ChemBioChem*, **2008**, 9, 279-85	3.8	86
58	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	3.4	33
57	Oligodeoxyfluorosides: Strong Sequence Dependence of Fluorescence Emission. *Tetrahedron*, **2007**, 63, 3427-3433	2.4	59
56	The model student: what chemical model systems can teach us about biology **2007**, 3, 70-3		24
55	Site-directed mutagenesis in the fingers subdomain of HIV-1 reverse transcriptase reveals a specific role for the beta3-beta4 hairpin loop in dNTP selection. *Journal of Molecular Biology*, **2007**, 365, 38-49	6.5	18
54	Enzymatic synthesis of fluorescent oligomers assembled on a DNA backbone. *ChemBioChem*, **2006**, 7, 669-72	3.8	38
53	New designs for DNA bases: expanded DNAs and oligofluorosides. *Nucleic Acids Symposium Series*, **2006**, 15-6		9
52	Nonpolar nucleobase analogs illuminate requirements for site-specific DNA cleavage by vaccinia topoisomerase. *Journal of Biological Chemistry*, **2006**, 281, 35914-21	5.4	9
51	DNA polymerase catalysis in the absence of Watson-Crick hydrogen bonds: analysis by single-turnover kinetics. *Biochemistry*, **2006**, 45, 890-8	3.2	35

50	Fluorescent DNA base replacements: Reporters and sensors for biological systems. *Organic and Biomolecular Chemistry*, **2006**, 4, 4265-74	3.9	231
49	The difluorotoluene debate--a decade later. *Chemical Communications*, **2006**, 3665-75	5.8	88
48	Dynamics of nucleotide incorporation: snapshots revealed by 2-aminopurine fluorescence studies. *Biochemistry*, **2006**, 45, 2836-44	3.2	45
47	Oligomeric fluorescent labels for DNA. *Bioconjugate Chemistry*, **2005**, 16, 528-34	6.3	72
46	Evidence for a Watson-Crick hydrogen bonding requirement in DNA synthesis by human DNA polymerase kappa. *Molecular and Cellular Biology*, **2005**, 25, 7137-43	4.8	48
45	Palm mutants in DNA polymerases alpha and eta alter DNA replication fidelity and translesion activity. *Molecular and Cellular Biology*, **2004**, 24, 2734-46	4.8	80
44	Modified DNA analogues that sense light exposure with color changes. *Journal of the American Chemical Society*, **2004**, 126, 12748-9	16.4	89
43	Quenched auto-ligating DNAs: multicolor identification of nucleic acids at single nucleotide resolution. *Journal of the American Chemical Society*, **2004**, 126, 1081-7	16.4	105
42	Destabilizing universal linkers for signal amplification in self-ligating probes for RNA. *Journal of the American Chemical Society*, **2004**, 126, 13980-6	16.4	95
41	Requirement of Watson-Crick hydrogen bonding for DNA synthesis by yeast DNA polymerase eta. *Molecular and Cellular Biology*, **2003**, 23, 5107-12	4.8	78
40	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, 4469-73	11.5	68
39	Yeast pol eta holds a cis-syn thymine dimer loosely in the active site during elongation opposite the 3RT of the dimer, but tightly opposite the 5RT. *Biochemistry*, **2003**, 42, 9431-7	3.2	18
38	Probing the requirements for recognition and catalysis in Fpg and MutY with nonpolar adenine isosteres. *Journal of the American Chemical Society*, **2003**, 125, 16235-42	16.4	49
37	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, 11279-84	11.5	26
36	A highly effective nonpolar isostere of deoxyguanosine: synthesis, structure, stacking, and base pairing. *Journal of Organic Chemistry*, **2002**, 67, 5869-75	4.2	45
35	Libraries of composite polyfluors built from fluorescent deoxyribosides. *Journal of the American Chemical Society*, **2002**, 124, 11590-1	16.4	108
34	Integrity of duplex structures without hydrogen bonding: DNA with pyrene paired at abasic sites. *Nucleic Acids Research*, **2002**, 30, 5561-9	20.1	62
33	A porphyrin C-nucleoside incorporated into DNA. *Organic Letters*, **2002**, 4, 4377-80	6.2	49

32	Replacing the nucleobases in DNA with designer molecules. *Accounts of Chemical Research*, **2002**, 35, 936-43	24.3	328
31	Active site tightness and substrate fit in DNA replication. *Annual Review of Biochemistry*, **2002**, 71, 191-219	19.1	335
30	Nonenzymatic autoligation in direct three-color detection of RNA and DNA point mutations. *Nature Biotechnology*, **2001**, 19, 148-52	44.5	145
29	Chemical and enzymatic methods for preparing circular single-stranded DNAs. *Current Protocols in Nucleic Acid Chemistry*, **2001**, Chapter 5, Unit 5.2	0.5	7
28	Hydrogen bonding, base stacking, and steric effects in dna replication. *Annual Review of Biophysics and Biomolecular Structure*, **2001**, 30, 1-22		400
27	Significance of nucleobase shape complementarity and hydrogen bonding in the formation and stability of the closed polymerase-DNA complex. *Biochemistry*, **2001**, 40, 3215-21	3.2	45
26	Functional hydrogen-bonding map of the minor groove binding tracks of six DNA polymerases. *Biochemistry*, **2000**, 39, 12979-88	3.2	112
25	Factors Contributing to Aromatic Stacking in Water: Evaluation in the Context of DNA. *Journal of the American Chemical Society*, **2000**, 122, 2213-2222	16.4	418
24	Pyrene nucleotide as a mechanistic probe: evidence for a transient abasic site-like intermediate in the bypass of dipyrimidine photoproducts by T7 DNA polymerase. *Biochemistry*, **2000**, 39, 14603-10	3.2	42
23	Interaction and solvation energies of nonpolar DNA base analogues and their role in polymerase insertion fidelity. *Journal of Biomolecular Structure and Dynamics*, **1999**, 16, 1119-34	3.6	42
22	A specific partner for abasic damage in DNA. *Nature*, **1999**, 399, 704-8	50.4	233
21	Tightening the Belt on Polymerases: Evaluating the Physical Constraints on Enzyme Substrate Size. *Angewandte Chemie - International Edition*, **1999**, 38, 3654-3657	16.4	32
20	Replication of non-hydrogen bonded bases by DNA polymerases: a mechanism for steric matching. *Biopolymers*, **1998**, 48, 3-17	2.2	88
19	Selective and Stable DNA Base Pairing without Hydrogen Bonds. *Journal of the American Chemical Society*, **1998**, 120, 6191-6192	16.4	181
18	Recognition of DNA, RNA, and Proteins by Circular Oligonucleotides. *Accounts of Chemical Research* , **1998**, 31, 502-510	24.3	68
17	Solution structure of a DNA duplex containing a replicable difluorotoluene-adenine pair. *Nature Structural Biology*, **1998**, 5, 954-9		124
16	Escherichia coli RNA polymerase activity observed using atomic force microscopy. *Biochemistry*, **1997**, 36, 461-8	3.2	308
15	Experimental Measurement of Aromatic Stacking Affinities in the Context of Duplex DNA. *Journal of the American Chemical Society*, **1996**, 118, 8182-8183	16.4	253

14	Naphthalene, Phenanthrene, and Pyrene as DNA Base Analogues: Synthesis, Structure, and Fluorescence in DNA. *Journal of the American Chemical Society*, **1996**, 118, 7671-7678	16.4	196
13	Topological modification of oligonucleotides for potential inhibition of gene expression. *Journal of Computer - Aided Molecular Design*, **1996**, 4, 61-75		3
12	Stabile DNA-Schleifen durch Einbau unpolarer und keine Wasserstoffbr□ken bildender Nucleosid-Isostere. *Angewandte Chemie*, **1996**, 108, 834-837	3.6	5
11	Circular oligonucleotides: new concepts in oligonucleotide design. *Annual Review of Biophysics and Biomolecular Structure*, **1996**, 25, 1-28		81
10	Rolling-Circle RNA Synthesis: Circular Oligonucleotides as Efficient Substrates for T7 RNA Polymerase. *Journal of the American Chemical Society*, **1995**, 117, 7818-7819	16.4	118
9	Structural Optimization of Non-Nucleotide Loop Replacements for Duplex and Triplex DNAs. *Journal of the American Chemical Society*, **1995**, 117, 5635-5646	16.4	75
8	Topologically Modified Biopolymers: Properties of Synthetic Circular DNAs and RNAs **1995**, 3, 396-402		
7	Starke, spezifische Bindung sechs verschiedener DNA-Sequenzen an einen konformativ flexiblen DNA-Makrocyclus. *Angewandte Chemie*, **1994**, 106, 1057-1059	3.6	4
6	Solvent, pH, and Ionic Effects on the Binding of Single-Stranded DNA by Circular Oligodeoxynucleotides. *Bioorganic and Medicinal Chemistry Letters*, **1994**, 4, 965-970	2.9	21
5	Strong binding of single-stranded DNA by stem-loop oligonucleotides. *Journal of Biomolecular Structure and Dynamics*, **1992**, 10, 141-52	3.6	26
4	Structural Effects in the Recognition of DNA by Circular Oligonucleotides. *Journal of the American Chemical Society*, **1992**, 114, 3523-3527	16.4	101
3	DNA-Erkennung durch makrocyclische Oligoether-Oligodesoxynucleotid-Hybridverbindungen. *Angewandte Chemie*, **1992**, 104, 1686-1689	3.6	16
2	Molecular Recognition by Circular Oligonucleotides. Strong Binding of Single-stranded DNA and RNA. *Journal of the Chemical Society Chemical Communications*, **1991**, 1991, 1161-1163		49
1	Modified DNA Bases: Probing Base-Pair Recognition by Polymerases49-74		3