

Eric T Kool

List of Publications by Year in descending order

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181
papers

13,032
citations

24978

57
h-index

26548

107
g-index

191
all docs

191
docs citations

191
times ranked

10902
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural imprints in vivo decode RNA regulatory mechanisms. <i>Nature</i> , 2015, 519, 486-490.	13.7	639
2	Hydrogen Bonding, Base Stacking, and Steric Effects in DNA Replication. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2001, 30, 1-22.	18.3	461
3	Oximes and Hydrazones in Bioconjugation: Mechanism and Catalysis. <i>Chemical Reviews</i> , 2017, 117, 10358-10376.	23.0	450
4	Factors Contributing to Aromatic Stacking in Water: Evaluation in the Context of DNA. <i>Journal of the American Chemical Society</i> , 2000, 122, 2213-2222.	6.6	446
5	RNA SHAPE analysis in living cells. <i>Nature Chemical Biology</i> , 2013, 9, 18-20.	3.9	366
6	Replacing the Nucleobases in DNA with Designer Molecules. <i>Accounts of Chemical Research</i> , 2002, 35, 936-943.	7.6	353
7	Active Site Tightness and Substrate Fit in DNA Replication. <i>Annual Review of Biochemistry</i> , 2002, 71, 191-219.	5.0	353
8	<i>Escherichia coli</i> RNA Polymerase Activity Observed Using Atomic Force Microscopy. <i>Biochemistry</i> , 1997, 36, 461-468.	1.2	341
9	Structure and Thermodynamics of N ⁶ -Methyladenosine in RNA: A Spring-Loaded Base Modification. <i>Journal of the American Chemical Society</i> , 2015, 137, 2107-2115.	6.6	331
10	DNA-Multichromophore Systems. <i>Chemical Reviews</i> , 2012, 112, 4221-4245.	23.0	292
11	Experimental Measurement of Aromatic Stacking Affinities in the Context of Duplex DNA. <i>Journal of the American Chemical Society</i> , 1996, 118, 8182-8183.	6.6	275
12	The Discovery of Rolling Circle Amplification and Rolling Circle Transcription. <i>Accounts of Chemical Research</i> , 2016, 49, 2540-2550.	7.6	251
13	Fluorescent nucleobases as tools for studying DNA and RNA. <i>Nature Chemistry</i> , 2017, 9, 1043-1055.	6.6	251
14	A specific partner for abasic damage in DNA. <i>Nature</i> , 1999, 399, 704-708.	13.7	249
15	Fluorescent DNA base replacements: reporters and sensors for biological systems. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 4265.	1.5	239
16	Naphthalene, Phenanthrene, and Pyrene as DNA Base Analogues: Synthesis, Structure, and Fluorescence in DNA. <i>Journal of the American Chemical Society</i> , 1996, 118, 7671-7678.	6.6	217
17	Selective and Stable DNA Base Pairing without Hydrogen Bonds. <i>Journal of the American Chemical Society</i> , 1998, 120, 6191-6192.	6.6	203
18	RNA structure maps across mammalian cellular compartments. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 322-330.	3.6	183

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19	Water-Soluble Organocatalysts for Hydrazone and Oxime Formation. <i>Journal of Organic Chemistry</i> , 2013, 78, 1184-1189.	1.7	162
20	Nonenzymatic autoligation in direct three-color detection of RNA and DNA point mutations. <i>Nature Biotechnology</i> , 2001, 19, 148-152.	9.4	159
21	Chemical and structural effects of base modifications in messenger RNA. <i>Nature</i> , 2017, 541, 339-346.	13.7	156
22	Fluorescent DNA-based enzyme sensors. <i>Chemical Society Reviews</i> , 2011, 40, 5756.	18.7	150
23	Rolling-Circle RNA Synthesis: Circular Oligonucleotides as Efficient Substrates for T7 RNA Polymerase. <i>Journal of the American Chemical Society</i> , 1995, 117, 7818-7819.	6.6	147
24	Efficient Nucleic Acid Detection by Templated Reductive Quencher Release. <i>Journal of the American Chemical Society</i> , 2009, 131, 16021-16023.	6.6	145
25	Reimagining high-throughput profiling of reactive cysteines for cell-based screening of large electrophile libraries. <i>Nature Biotechnology</i> , 2021, 39, 630-641.	9.4	142
26	Fast Hydrazone Reactants: Electronic and Acid/Base Effects Strongly Influence Rate at Biological pH. <i>Journal of the American Chemical Society</i> , 2013, 135, 17663-17666.	6.6	139
27	Solution structure of a DNA duplex containing a replicable difluorotoluene-adenine pair. <i>Nature Structural Biology</i> , 1998, 5, 954-959.	9.7	130
28	Libraries of Composite Polyfluors Built from Fluorescent Deoxyribosides. <i>Journal of the American Chemical Society</i> , 2002, 124, 11590-11591.	6.6	115
29	Functional Hydrogen-Bonding Map of the Minor Groove Binding Tracks of Six DNA Polymerases. <i>Biochemistry</i> , 2000, 39, 12979-12988.	1.2	114
30	Polyfluorophores on a DNA Backbone: A Multicolor Set of Labels Excited at One Wavelength. <i>Journal of the American Chemical Society</i> , 2009, 131, 3923-3933.	6.6	113
31	Structural effects in the recognition of DNA by circular oligonucleotides. <i>Journal of the American Chemical Society</i> , 1992, 114, 3523-3527.	6.6	111
32	Amplified microRNA detection by templated chemistry. <i>Nucleic Acids Research</i> , 2012, 40, e65-e65.	6.5	110
33	Quenched Auto-Ligating DNAs: Multicolor Identification of Nucleic Acids at Single Nucleotide Resolution. <i>Journal of the American Chemical Society</i> , 2004, 126, 1081-1087.	6.6	109
34	Destabilizing Universal Linkers for Signal Amplification in Self-Ligating Probes for RNA. <i>Journal of the American Chemical Society</i> , 2004, 126, 13980-13986.	6.6	99
35	Replication of non-hydrogen bonded bases by DNA polymerases: A mechanism for steric matching. , 1998, 48, 3-17.		94
36	Quenching of Fluorescent Nucleobases by Neighboring DNA: The "Insulator" Concept. <i>ChemBioChem</i> , 2008, 9, 279-285.	1.3	93

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37	Modified DNA Analogues That Sense Light Exposure with Color Changes. <i>Journal of the American Chemical Society</i> , 2004, 126, 12748-12749.	6.6	92
38	Identification of a Selective Polymerase Enables Detection of N ⁶ -Methyladenosine in RNA. <i>Journal of the American Chemical Society</i> , 2013, 135, 19079-19082.	6.6	92
39	7SK-BAF axis controls pervasive transcription at enhancers. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 231-238.	3.6	92
40	Circular Oligonucleotides: New Concepts in Oligonucleotide Design. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 1996, 25, 1-28.	18.3	91
41	The difluorotoluene debate—a decade later. <i>Chemical Communications</i> , 2006, , 3665-3675.	2.2	91
42	Importance of <i>ortho</i> Proton Donors in Catalysis of Hydrazone Formation. <i>Organic Letters</i> , 2013, 15, 1646-1649.	2.4	88
43	Fluorescence of Size-Expanded DNA Bases: Reporting on DNA Sequence and Structure with an Unnatural Genetic Set. <i>Journal of the American Chemical Society</i> , 2008, 130, 3989-3999.	6.6	87
44	Requirement of Watson-Crick Hydrogen Bonding for DNA Synthesis by Yeast DNA Polymerase δ . <i>Molecular and Cellular Biology</i> , 2003, 23, 5107-5112.	1.1	83
45	Palm Mutants in DNA Polymerases δ and ϵ Alter DNA Replication Fidelity and Translesion Activity. <i>Molecular and Cellular Biology</i> , 2004, 24, 2734-2746.	1.1	83
46	New Organocatalyst Scaffolds with High Activity in Promoting Hydrazone and Oxime Formation at Neutral pH. <i>Organic Letters</i> , 2015, 17, 274-277.	2.4	83
47	Structural Optimization of Non-Nucleotide Loop Replacements for Duplex and Triplex DNAs. <i>Journal of the American Chemical Society</i> , 1995, 117, 5635-5646.	6.6	82
48	Recognition of DNA, RNA, and Proteins by Circular Oligonucleotides. <i>Accounts of Chemical Research</i> , 1998, 31, 502-510.	7.6	81
49	High-fidelity in vivo replication of DNA base shape mimics without Watson-Crick hydrogen bonds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 4469-4473.	3.3	77
50	Multispectral labeling of antibodies with polyfluorophores on a DNA backbone and application in cellular imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 3493-3498.	3.3	77
51	Oligomeric Fluorescent Labels for DNA. <i>Bioconjugate Chemistry</i> , 2005, 16, 528-534.	1.8	76
52	Evolving a Polymerase for Hydrophobic Base Analogues. <i>Journal of the American Chemical Society</i> , 2009, 131, 14827-14837.	6.6	73
53	Direct Fluorescence Monitoring of DNA Base Excision Repair. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1689-1692.	7.2	71
54	Integrity of duplex structures without hydrogen bonding: DNA with pyrene paired at abasic sites. <i>Nucleic Acids Research</i> , 2002, 30, 5561-5569.	6.5	69

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55	Pattern-Based Detection of Toxic Metals in Surface Water with DNA Polyfluorophores. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5361-5365.	7.2	68
56	Exceptionally rapid oxime and hydrazone formation promoted by catalytic amine buffers with low toxicity. <i>Chemical Science</i> , 2018, 9, 5252-5259.	3.7	66
57	Fast Alpha Nucleophiles: Structures that Undergo Rapid Hydrazone/Oxime Formation at Neutral pH. <i>Organic Letters</i> , 2014, 16, 1454-1457.	2.4	63
58	Comparison of SHAPE reagents for mapping RNA structures inside living cells. <i>Rna</i> , 2017, 23, 169-174.	1.6	62
59	Oligodeoxyfluorosides: strong sequence dependence of fluorescence emission. <i>Tetrahedron</i> , 2007, 63, 3427-3433.	1.0	61
60	RNA Control by Photoreversible Acylation. <i>Journal of the American Chemical Society</i> , 2018, 140, 3491-3495.	6.6	60
61	Molecular recognition by circular oligonucleotides. Strong binding of single-stranded DNA and RNA. <i>Journal of the Chemical Society Chemical Communications</i> , 1991, 1991, 1161.	2.0	58
62	Polyfluorophores on a DNA Backbone: Sensors of Small Molecules in the Vapor Phase. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7025-7029.	7.2	58
63	Genetically Encoded Multispectral Labeling of Proteins with Polyfluorophores on a DNA Backbone. <i>Journal of the American Chemical Society</i> , 2013, 135, 6184-6191.	6.6	56
64	Probing the Requirements for Recognition and Catalysis in Fpg and MutY with Nonpolar Adenine Isosteres. <i>Journal of the American Chemical Society</i> , 2003, 125, 16235-16242.	6.6	55
65	Large-Scale Detection of Metals with a Small Set of Fluorescent DNA-Like Chemosensors. <i>Journal of the American Chemical Society</i> , 2014, 136, 14576-14582.	6.6	55
66	Potent and Selective Inhibitors of 8-Oxoguanine DNA Glycosylase. <i>Journal of the American Chemical Society</i> , 2018, 140, 2105-2114.	6.6	55
67	Efficient Replication Bypass of Size-Expanded DNA Base Pairs in Bacterial Cells. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4524-4527.	7.2	54
68	<sc>RNA</sc> structural analysis by evolving <sc>SHAPE</sc> chemistry. <i>Wiley Interdisciplinary Reviews RNA</i> , 2014, 5, 867-881.	3.2	54
69	Evidence for a Watson-Crick Hydrogen Bonding Requirement in DNA Synthesis by Human DNA Polymerase β . <i>Molecular and Cellular Biology</i> , 2005, 25, 7137-7143.	1.1	53
70	A Porphyrin C-Nucleoside Incorporated into DNA. <i>Organic Letters</i> , 2002, 4, 4377-4380.	2.4	52
71	RNA Cloaking by Reversible Acylation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3059-3063.	7.2	51
72	Fluorescence Monitoring of the Oxidative Repair of DNA Alkylation Damage by ALKBH3, a Prostate Cancer Marker. <i>Journal of the American Chemical Society</i> , 2016, 138, 3647-3650.	6.6	50

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73	Interaction and Solvation Energies of Nonpolar DNA Base Analogues and Their Role in Polymerase Insertion Fidelity. <i>Journal of Biomolecular Structure and Dynamics</i> , 1999, 16, 1119-1134.	2.0	49
74	The chemistry and applications of RNA 2'-OH acylation. <i>Nature Reviews Chemistry</i> , 2020, 4, 22-37.	13.8	48
75	A Highly Effective Nonpolar Isostere of Deoxyguanosine: Synthesis, Structure, Stacking, and Base Pairing. <i>Journal of Organic Chemistry</i> , 2002, 67, 5869-5875.	1.7	47
76	Dynamics of Nucleotide Incorporation: Snapshots Revealed by 2-Aminopurine Fluorescence Studies. <i>Biochemistry</i> , 2006, 45, 2836-2844.	1.2	47
77	Significance of Nucleobase Shape Complementarity and Hydrogen Bonding in the Formation and Stability of the Closed Polymerase-DNA Complex. <i>Biochemistry</i> , 2001, 40, 3215-3221.	1.2	46
78	Polyfluorophore Excimers and Exciplexes as FRET Donors in DNA. <i>Bioconjugate Chemistry</i> , 2009, 20, 2371-2380.	1.8	46
79	Two Successive Reactions on a DNA Template: A Strategy for Improving Background Fluorescence and Specificity in Nucleic Acid Detection. <i>Chemistry - A European Journal</i> , 2011, 17, 2168-2175.	1.7	44
80	Fluorescent DNAs printed on paper: sensing food spoilage and ripening in the vapor phase. <i>Chemical Science</i> , 2012, 3, 2542.	3.7	44
81	Pyrene Nucleotide as a Mechanistic Probe: Evidence for a Transient Abasic Site-like Intermediate in the Bypass of Dipyrimidine Photoproducts by T7 DNA Polymerase. <i>Biochemistry</i> , 2000, 39, 14603-14610.	1.2	42
82	Importance of Hydrogen Bonding for Efficiency and Specificity of the Human Mitochondrial DNA Polymerase. <i>Journal of Biological Chemistry</i> , 2008, 283, 14402-14410.	1.6	41
83	Organocatalytic removal of formaldehyde adducts from RNA and DNA bases. <i>Nature Chemistry</i> , 2015, 7, 752-758.	6.6	41
84	The Components of xRNA: Synthesis and Fluorescence of a Full Genetic Set of Size-Expanded Ribonucleosides. <i>Organic Letters</i> , 2011, 13, 676-679.	2.4	40
85	Dark Hydrazone Fluorescence Labeling Agents Enable Imaging of Cellular Aldehydic Load. <i>ACS Chemical Biology</i> , 2016, 11, 2312-2319.	1.6	40
86	Tightening the Belt on Polymerases: Evaluating the Physical Constraints on Enzyme Substrate Size. <i>Angewandte Chemie - International Edition</i> , 1999, 38, 3654-3657.	7.2	39
87	Enzymatic Synthesis of Fluorescent Oligomers Assembled on a DNA Backbone. <i>ChemBioChem</i> , 2006, 7, 669-672.	1.3	38
88	Fluorescent xDNA nucleotides as efficient substrates for a template-independent polymerase. <i>Nucleic Acids Research</i> , 2011, 39, 1586-1594.	6.5	38
89	Surprising Repair Activities of Nonpolar Analogs of 8-oxoG Expose Features of Recognition and Catalysis by Base Excision Repair Glycosylases. <i>Journal of the American Chemical Society</i> , 2012, 134, 1653-1661.	6.6	38
90	Fluorogenic Templated Reaction Cascades for RNA Detection. <i>Journal of the American Chemical Society</i> , 2017, 139, 5405-5411.	6.6	38

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91	Reversible RNA acylation for control of CRISPR-Cas9 gene editing. <i>Chemical Science</i> , 2020, 11, 1011-1016.	3.7	37
92	DNA Polymerase Catalysis in the Absence of Watson-Crick Hydrogen Bonds: A Analysis by Single-Turnover Kinetics. <i>Biochemistry</i> , 2006, 45, 890-898.	1.2	36
93	Fluorescence Quenchers for Hydrazone and Oxime Orthogonal Bioconjugation. <i>Bioconjugate Chemistry</i> , 2012, 23, 1969-1980.	1.8	36
94	Unnatural substrates reveal the importance of 8-oxoguanine for in vivo mismatch repair by MutY. <i>Nature Chemical Biology</i> , 2008, 4, 51-58.	3.9	35
95	Pattern-based detection of anion pollutants in water with DNA polyfluorophores. <i>Chemical Science</i> , 2015, 6, 2575-2583.	3.7	35
96	Fingerprints of Modified RNA Bases from Deep Sequencing Profiles. <i>Journal of the American Chemical Society</i> , 2017, 139, 17074-17081.	6.6	35
97	Fluorescent Probes of DNA Repair. <i>ACS Chemical Biology</i> , 2018, 13, 1721-1733.	1.6	35
98	New, stronger nucleophiles for nucleic acid-templated chemistry: Synthesis and application in fluorescence detection of cellular RNA. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 56-64.	1.4	34
99	Dissecting Chemical Interactions Governing RNA Polymerase II Transcriptional Fidelity. <i>Journal of the American Chemical Society</i> , 2012, 134, 8231-8240.	6.6	34
100	Color-Change Photoswitching of an Alkynylpyrene Excimer Dye. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6497-6501.	7.2	34
101	Luminescent Carbon Dot Mimics Assembled on DNA. <i>Journal of the American Chemical Society</i> , 2017, 139, 13147-13155.	6.6	33
102	Kinetic selection vs. free energy of DNA base pairing in control of polymerase fidelity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E2277-85.	3.3	32
103	Hydrolysis of RNA/DNA hybrids containing nonpolar pyrimidine isosteres defines regions essential for HIV type 1 polypurine tract selection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 11279-11284.	3.3	31
104	DNA polyfluorophores as highly diverse chemosensors of toxic gases. <i>Chemical Science</i> , 2011, 2, 1910.	3.7	31
105	Chemical fidelity of an RNA polymerase ribozyme. <i>Chemical Science</i> , 2013, 4, 2804.	3.7	30
106	Ultrafast Oxime Formation Enables Efficient Fluorescence Light-up Measurement of DNA Base Excision. <i>Journal of the American Chemical Society</i> , 2019, 141, 19379-19388.	6.6	30
107	Strong Binding of Single-stranded DNA by Stem-loop Oligonucleotides. <i>Journal of Biomolecular Structure and Dynamics</i> , 1992, 10, 141-152.	2.0	29
108	DNA Polyfluorophores for Real-Time Multicolor Tracking of Dynamic Biological Systems. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7176-7180.	7.2	29

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109	Monitoring eukaryotic and bacterial UDG repair activity with DNA-multifluorophore sensors. <i>Nucleic Acids Research</i> , 2013, 41, e127-e127.	6.5	28
110	Molecular basis of transcriptional fidelity and DNA lesion-induced transcriptional mutagenesis. <i>DNA Repair</i> , 2014, 19, 71-83.	1.3	28
111	The model student: what chemical model systems can teach us about biology. , 2007, 3, 70-73.		27
112	Small Substrate or Large? Debate Over the Mechanism of Glycation Adduct Repair by DJ-1. <i>Cell Chemical Biology</i> , 2020, 27, 1117-1123.	2.5	27
113	DNA-€Erkennung durch makrocyclische Oligoether-€Oligodesoxynucleotid-€Hybridverbindungen. <i>Angewandte Chemie</i> , 1992, 104, 1686-1689.	1.6	26
114	Differentiating a Diverse Range of Volatile Organic Compounds with Polyfluorophore Sensors Built on a DNA Scaffold. <i>Chemistry - A European Journal</i> , 2011, 17, 174-183.	1.7	26
115	In Vitro Fluorogenic Real-Time Assay of the Repair of Oxidative DNA Damage. <i>ChemBioChem</i> , 2015, 16, 1637-1646.	1.3	26
116	Probing the Interaction of Archaeal DNA Polymerases with Deaminated Bases Using X-ray Crystallography and Non-Hydrogen Bonding Isosteric Base Analogues. <i>Biochemistry</i> , 2010, 49, 5772-5781.	1.2	25
117	Light-Up -€Channel Dyes-€for Haloalkane-Based Protein Labeling in Vitro and in Bacterial Cells. <i>Bioconjugate Chemistry</i> , 2016, 27, 2839-2843.	1.8	25
118	Small-Molecule Inhibitor of 8-Oxoguanine DNA Glycosylase 1 Regulates Inflammatory Responses during <i>Pseudomonas aeruginosa</i> Infection. <i>Journal of Immunology</i> , 2020, 205, 2231-2242.	0.4	25
119	Site-Selective RNA Functionalization via DNA-Induced Structure. <i>Journal of the American Chemical Society</i> , 2020, 142, 16357-16363.	6.6	24
120	Aldehyde dehydrogenase 3A1 activation prevents radiation-induced xerostomia by protecting salivary stem cells from toxic aldehydes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6279-6284.	3.3	23
121	Fluorescence Probes for ALKBH2 Allow the Measurement of DNA Alkylation Repair and Drug Resistance Responses. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12896-12900.	7.2	23
122	Solvent pH, and ionic effects on the binding of single-stranded DNA by circular oligodeoxynucleotides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1994, 4, 965-970.	1.0	22
123	Simple alkanoyl acylating agents for reversible RNA functionalization and control. <i>Chemical Communications</i> , 2019, 55, 5135-5138.	2.2	22
124	Fluorogenic Real-Time Reporters of DNA Repair by MGMT, a Clinical Predictor of Antitumor Drug Response. <i>PLoS ONE</i> , 2016, 11, e0152684.	1.1	22
125	Yeast Pol I - Holds a Cis-Syn Thymine Dimer Loosely in the Active Site during Elongation Opposite the 3'-T of the Dimer, but Tightly Opposite the 5'-T. <i>Biochemistry</i> , 2003, 42, 9431-9437.	1.2	21
126	DNA-polyfluorophore chemosensors for environmental remediation: vapor-phase identification of petroleum products in contaminated soil. <i>Chemical Science</i> , 2013, 4, 3184.	3.7	20

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127	DNA polymerase β specializes in incorporating synthetic expanded-size (xDNA) nucleotides. <i>Nucleic Acids Research</i> , 2016, 44, gkw721.	6.5	19
128	A Chimeric ATP-Linked Nucleotide Enables Luminescence Signaling of Damage Surveillance by MTH1, a Cancer Target. <i>Journal of the American Chemical Society</i> , 2016, 138, 9005-9008.	6.6	19
129	Site-directed Mutagenesis in the Fingers Subdomain of HIV-1 Reverse Transcriptase Reveals a Specific Role for the β 2 β 4 Hairpin Loop in dNTP Selection. <i>Journal of Molecular Biology</i> , 2007, 365, 38-49.	2.0	18
130	DNA as an environmental sensor: detection and identification of pesticide contaminants in water with fluorescent nucleobases. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 1801-1809.	1.5	18
131	Increased MTH1-specific 8-oxodGTPase activity is a hallmark of cancer in colon, lung and pancreatic tissue. <i>DNA Repair</i> , 2019, 83, 102644.	1.3	18
132	Dissecting the chemical interactions and substrate structural signatures governing RNA polymerase II trigger loop closure by synthetic nucleic acid analogues. <i>Nucleic Acids Research</i> , 2014, 42, 5863-5870.	6.5	17
133	DNA Tiling Enables Precise Acylation-Based Labeling and Control of mRNA. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26798-26805.	7.2	17
134	Base Pair Hydrogen Bonds Are Essential for Proofreading Selectivity by the Human Mitochondrial DNA Polymerase. <i>Journal of Biological Chemistry</i> , 2008, 283, 14411-14416.	1.6	16
135	Dual Inhibitors of 8-Oxoguanine Surveillance by OGG1 and NUDT1. <i>ACS Chemical Biology</i> , 2019, 14, 2606-2615.	1.6	16
136	Polyacetate and Polycarbonate RNA: Acylating Reagents and Properties. <i>Organic Letters</i> , 2019, 21, 5413-5416.	2.4	15
137	Fluorescent reporter assays provide direct, accurate, quantitative measurements of MGMT status in human cells. <i>PLoS ONE</i> , 2019, 14, e0208341.	1.1	15
138	ATP-Releasing Nucleotides: Linking DNA Synthesis to Luciferase Signaling. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2087-2091.	7.2	14
139	Selective Fluorogenic Chemosensors for Distinct Classes of Nucleases. <i>ChemBioChem</i> , 2013, 14, 440-444.	1.3	13
140	Designer Fluorescent Adenines Enable Real-Time Monitoring of MUTYH Activity. <i>ACS Central Science</i> , 2020, 6, 1735-1742.	5.3	13
141	Visualization of Long Human Telomere Mimics by Single-Molecule Fluorescence Imaging. <i>Journal of Physical Chemistry B</i> , 2008, 112, 13184-13187.	1.2	12
142	Efficient synthesis of fluorescent alkynyl C-nucleosides via Sonogashira coupling for the preparation of DNA-based polyfluorophores. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6407-6412.	1.5	12
143	Trapping Transient RNA Complexes by Chemically Reversible Acylation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22017-22022.	7.2	12
144	The Existence of MTH1-independent 8-oxodGTPase Activity in Cancer Cells as a Compensatory Mechanism against On-target Effects of MTH1 Inhibitors. <i>Molecular Cancer Therapeutics</i> , 2020, 19, 432-446.	1.9	11

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145	Fluorescence Imaging of Mitochondrial DNA Base Excision Repair Reveals Dynamics of Oxidative Stress Responses. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	11
146	Chemical and Enzymatic Methods for Preparing Circular Single-Stranded DNAs. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2000, 00, Unit 5.2.	0.5	10
147	New designs for DNA bases: Expanded DNAs and oligofluorosides. <i>Nucleic Acids Symposium Series</i> , 2006, 50, 15-16.	0.3	10
148	Polymerase synthesis of four-base DNA from two stable dimeric nucleotides. <i>Nucleic Acids Research</i> , 2019, 47, 9495-9501.	6.5	10
149	Polymerase-amplified release of ATP (POLARA) for detecting single nucleotide variants in RNA and DNA. <i>Chemical Science</i> , 2019, 10, 3264-3270.	3.7	10
150	A fluorescent hydrazone exchange probe of pyridoxal phosphate for the assessment of vitamin B6 status. <i>Chemical Communications</i> , 2020, 56, 317-320.	2.2	10
151	Nonpolar Nucleobase Analogs Illuminate Requirements for Site-specific DNA Cleavage by <i>Vaccinia</i> Topoisomerase. <i>Journal of Biological Chemistry</i> , 2006, 281, 35914-35921.	1.6	9
152	Measuring deaminated nucleotide surveillance enzyme ITPA activity with an ATP-releasing nucleotide chimera. <i>Nucleic Acids Research</i> , 2017, 45, 11515-11524.	6.5	9
153	RNA Cloaking by Reversible Acylation. <i>Angewandte Chemie</i> , 2018, 130, 3113-3117.	1.6	9
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