

Masayasu Kuwahara

List of Publications by Year in descending order

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1,821
citations

236612

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264894

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63
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docs citations

63
times ranked

1442
citing authors

#	ARTICLE	IF	CITATIONS
1	Modified DNA Aptamer That Binds the (R)-Isomer of a Thalidomide Derivative with High Enantioselectivity. <i>Journal of the American Chemical Society</i> , 2007, 129, 1456-1464.	6.6	153
2	Systematic characterization of 2'-deoxynucleoside- 5'-triphosphate analogs as substrates for DNA polymerases by polymerase chain reaction and kinetic studies on enzymatic production of modified DNA. <i>Nucleic Acids Research</i> , 2006, 34, 5383-5394.	6.5	152
3	Molecular Evolution of Functional Nucleic Acids with Chemical Modifications. <i>Molecules</i> , 2010, 15, 5423-5444.	1.7	114
4	Efficacy of Base-Modification on Target Binding of Small Molecule DNA Aptamers. <i>Journal of the American Chemical Society</i> , 2013, 135, 9412-9419.	6.6	92
5	Sialyllactose-binding modified DNA aptamer bearing additional functionality by SELEX. <i>Bioorganic and Medicinal Chemistry</i> , 2004, 12, 1111-1120.	1.4	83
6	Seconds-resolved pharmacokinetic measurements of the chemotherapeutic irinotecan <i>in situ</i> in the living body. <i>Chemical Science</i> , 2019, 10, 8164-8170.	3.7	74
7	Systematic analysis of enzymatic DNA polymerization using oligo-DNA templates and triphosphate analogs involving 2',4'-bridged nucleosides. <i>Nucleic Acids Research</i> , 2008, 36, 4257-4265.	6.5	73
8	Capillary Electrophoresis-Systematic Evolution of Ligands by Exponential Enrichment Selection of Base- and Sugar-Modified DNA Aptamers: Target Binding Dominated by 2'-O-,4'-C-Methylene-Bridged/Locked Nucleic Acid Primer. <i>Analytical Chemistry</i> , 2013, 85, 4961-4967.	3.2	60
9	Arginine-modified DNA Aptamers That Show Enantioselective Recognition of the Dicarboxylic Acid Moiety of Glutamic Acid. <i>Analytical Sciences</i> , 2008, 24, 167-172.	0.8	56
10	In vitro selection of BNA (LNA) aptamers. <i>Artificial DNA, PNA & XNA</i> , 2013, 4, 39-48.	1.4	56
11	Minimal Thioflavin T Modifications Improve Visual Discrimination of Guanine-Quadruplex Topologies and Alter Compound-Induced Topological Structures. <i>Analytical Chemistry</i> , 2014, 86, 12078-12084.	3.2	50
12	Direct PCR amplification of various modified DNAs having amino acids: Convenient preparation of DNA libraries with high-potential activities for in vitro selection. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 2518-2526.	1.4	48
13	2',4'-BNA/LNA aptamers: CE-SELEX using a DNA-based library of full-length 2'-O-,4'-C-methylene-bridged/linked bicyclic ribonucleotides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 1288-1292.	1.0	48
14	Selection, Characterization and Application of Artificial DNA Aptamer Containing Appended Bases with Sub-nanomolar Affinity for a Salivary Biomarker. <i>Scientific Reports</i> , 2017, 7, 42716.	1.6	48
15	Design and Optimization of Camptothecin Conjugates of Triple Helix-forming Oligonucleotides for Sequence-specific DNA Cleavage by Topoisomerase I. <i>Journal of Biological Chemistry</i> , 2002, 277, 3132-3140.	1.6	46
16	Nucleic Acid with Guanidinium Modification Exhibits Efficient Cellular Uptake. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 6682-6685.	7.2	43
17	Chemico-enzymatic synthesis of a new fluorescent-labeled DNA by PCR with a thymidine nucleotide analogue bearing an acridone derivative. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 776-779.	1.0	40
18	DNA Polymerase Variants with High Processivity and Accuracy for Encoding and Decoding Locked Nucleic Acid Sequences. <i>Journal of the American Chemical Society</i> , 2020, 142, 21530-21537.	6.6	40

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19	Expansion of repertoire of modified DNAs prepared by PCR using KOD Dash DNA polymerase. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 2463.	1.5	38
20	Novel One-Tube-One-Step Real-Time Methodology for Rapid Transcriptomic Biomarker Detection: Signal Amplification by Ternary Initiation Complexes. <i>Analytical Chemistry</i> , 2016, 88, 7137-7144.	3.2	36
21	Real-Time Monitoring of G-Quadruplex Formation during Transcription. <i>Analytical Chemistry</i> , 2016, 88, 1984-1989.	3.2	34
22	Modified DNA Bearing 5-(Methoxycarbonylmethyl)-2'-deoxyuridine: Preparation by PCR with Thermophilic DNA Polymerase and Postsynthetic Derivatization. <i>ChemBioChem</i> , 2003, 4, 584-588.	1.3	32
23	Study on Suitability of KOD DNA Polymerase for Enzymatic Production of Artificial Nucleic Acids Using Base/Sugar Modified Nucleoside Triphosphates. <i>Molecules</i> , 2010, 15, 8229-8240.	1.7	32
24	Substrate properties of C5-Substituted pyrimidine 2'-Deoxynucleoside 5'-Triphosphates for thermostable DNA polymerases during PCR. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2003, 13, 3735-3738.	1.0	30
25	In vitro selection of DNA-based aptamers that exhibit RNA-like conformations using a chimeric oligonucleotide library that contains two different xeno-nucleic acids. <i>Molecular BioSystems</i> , 2015, 11, 71-76.	2.9	30
26	Enzymatic synthesis of labeled DNA by PCR using new fluorescent thymidine nucleotide analogue and superthermophilic KOD dash DNA polymerase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2002, 12, 1167-1170.	1.0	25
27	Smart conferring of nuclease resistance to DNA by 3'-end protection using 2',4'-bridged nucleoside-5'-triphosphates. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 2941-2943.	1.0	25
28	Structural and Affinity Analyses of G-Quadruplex DNA Aptamers for Camptothecin Derivatives. <i>Pharmaceuticals</i> , 2013, 6, 1082-1093.	1.7	20
29	Polymerase-mediated high-density incorporation of amphiphilic functionalities into DNA: Enhancement of nuclease resistance and stability in human serum. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 333-336.	1.0	20
30	Consecutive incorporation of functionalized nucleotides with amphiphilic side chains by novel KOD polymerase mutant. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 530-533.	1.0	19
31	Transcription and reverse transcription of artificial nucleic acids involving backbone modification by template-directed DNA polymerase reactions. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 3782-3788.	1.4	17
32	Fluorescence Polarization-Based Rapid Detection System for Salivary Biomarkers Using Modified DNA Aptamers Containing Base-Appended Bases. <i>Analytical Chemistry</i> , 2020, 92, 1780-1787.	3.2	17
33	A high affinity modified DNA aptamer containing base-appended bases for human β -defensin. <i>Analytical Biochemistry</i> , 2020, 594, 113627.	1.1	17
34	Optimization of pyrosequencing reads by superior successive incorporation efficiency of improved 2'-deoxyadenosine-5'-triphosphate analogs. <i>Analytical Biochemistry</i> , 2011, 416, 8-17.	1.1	15
35	Artificial Specific Binders Directly Recovered from Chemically Modified Nucleic Acid Libraries. <i>Journal of Nucleic Acids</i> , 2012, 2012, 1-13.	0.8	14
36	Development of oligonucleotide-based antagonists of Ebola virus protein 24 inhibiting its interaction with karyopherin alpha 1. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 4456-4463.	1.5	12

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37	Specific Light-Up System for Protein and Metabolite Targets Triggered by Initiation Complex Formation. <i>Scientific Reports</i> , 2017, 7, 15191.	1.6	11
38	Modified DNA Aptamers for C-Reactive Protein and Lactate Dehydrogenase-5 with Sub-Nanomolar Affinities. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2683.	1.8	11
39	Simultaneous incorporation of three different modified nucleotides during PCR. <i>Nucleic Acids Symposium Series</i> , 2003, 3, 37-38.	0.3	10
40	Non-Equilibrium Capillary Electrophoresis of Equilibrium Mixtures-Based Affinity Separation and Selective Enrichment of a Long-Length DNA Aptamer. <i>Australian Journal of Chemistry</i> , 2016, 69, 1102.	0.5	10
41	Azobenzene-modified DNA aptamers evolved by capillary electrophoresis (CE)-SELEX method. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 31, 127607.	1.0	9
42	Selective incorporation of foreign functionality into fibrin gels through a chemically modified DNA aptamer. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 35-39.	1.0	7
43	<i>In situ</i> condensation of an anti-cancer drug into fibrin gel enabling effective inhibition of tumor cell growth. <i>Chemical Communications</i> , 2019, 55, 11679-11682.	2.2	7
44	Enzymatic incorporation of chemically-modified nucleotides into DNAs. <i>Nucleic Acids Symposium Series</i> , 2002, 2, 83-84.	0.3	6
45	Screening of a glutamic acid-binding aptamer from arginine-modified DNA library. <i>Nucleic Acids Symposium Series</i> , 2005, 49, 81-82.	0.3	5
46	Substrate property and incorporation accuracy of various dATP analogs during enzymatic polymerization using thermostable DNA polymerases. <i>Nucleic Acids Symposium Series</i> , 2006, 50, 31-32.	0.3	5
47	High-Contrast Facile Imaging with Target-Directing Fluorescent Molecular Rotors, the N3-Modified Thioflavin T Derivatives. <i>Biochemistry</i> , 2019, 58, 493-498.	1.2	5
48	Selection of Natural and Base-Modified DNA Aptamers for a Camptothecin Derivative. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2016, 65, 9.10.1-9.10.19.	0.5	4
49	Effects of Modifying Thioflavin T at the N3-Position on Its G4 Binding and Fluorescence Emission. <i>Molecules</i> , 2020, 25, 4936.	1.7	4
50	Comparison study on PCR amplification of modified DNA by using various kinds of polymerase and modified nucleoside triphosphates. <i>Nucleic Acids Symposium Series</i> , 2005, 49, 275-276.	0.3	3
51	Polymerisation of a DNA strand using oligo-DNA template with modified bases, sugars and phosphates. <i>Nucleic Acids Symposium Series</i> , 2007, 51, 55-56.	0.3	3
52	Artificially Created Nucleic Acids and Peptides/Proteins in Chemical Biology. <i>Journal of Nucleic Acids</i> , 2013, 2013, 1-2.	0.8	3
53	Progress in Chemically Modified Nucleic Acid Aptamers. , 2014, , 243-270.		3
54	Cleavage of Supercoiled Plasmid DNA by Phenanthroline-Polyamine Conjugates as a Metal-free Artificial Nuclease. <i>Chemistry Letters</i> , 2013, 42, 86-88.	0.7	2

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55	Effect of backbone-modification of oligodeoxyribonucleic acid on primer extension reactions. Nucleic Acids Symposium Series, 2008, 52, 453-454.	0.3	1
56	Polymerase Reactions that Involve Modified Nucleotides. RNA Technologies, 2016, , 429-453.	0.2	1
57	Bifunctional Aptamer Drug Carrier Enabling Selective and Efficient Incorporation of an Approved Anticancer Drug Irinotecan to Fibrin Gels. Applied Sciences (Switzerland), 2020, 10, 8755.	1.3	1
58	Screening of modified DNA aptamers that recognize DNA secondary structure. Nucleic Acids Symposium Series, 2004, 48, 265-266.	0.3	0
59	Fluorescent properties of acridonyl group in DNA duplex. Nucleic Acids Symposium Series, 2009, 53, 137-138.	0.3	0
60	Specific Amino Acid Sensing Using a Single Acridone-labeled DNA Aptamer. Chemistry Letters, 2012, 41, 917-919.	0.7	0
61	Modified nucleic acid aptamer selections using capillary electrophoresis. Denki Eido, 2015, 59, 88-90.	0.0	0
62	Mechanism of SATIC Method and History of Development. Journal of the Nihon University Medical Association, 2020, 79, 379-382.	0.0	0