Daisuke Miyoshi

List of Publications by Year
in descending order

110 papers	5,556 citations	81743 39 h-index	79541 73 g-index
118 all docs	118 docs citations	118 times ranked	5274 citing authors

#	Article	IF	Citations
1	Photodynamic therapy targeting nucleic acid G-quadruplexes. Journal of the Society of Japanese Women Scientists, 2022, 22, 25-35.	0.0	0
2	Significant structural change in human c-Myc promoter G-quadruplex upon peptide binding in potassium. RSC Advances, 2022, 12, 7594-7604.	1.7	8
3	Artificial turn-on riboswitch to control target gene expression using a wild-type riboswitch splicing mechanism. Journal of Bioscience and Bioengineering, 2021, 131, 115-123.	1.1	0
4	Combined Effects of Methylated Cytosine and Molecular Crowding on the Thermodynamic Stability of DNA Duplexes. International Journal of Molecular Sciences, 2021, 22, 947.	1.8	7
5	Detection of Intracellular Reactive Oxidative Species Using the Fluorescent Probe Hydroxyphenyl Fluorescein. Methods in Molecular Biology, 2021, 2274, 207-215.	0.4	2
6	Intramolecular G-quadruplex-hairpin loop structure competition of a GC-rich exon region in the TMPRSS2 gene. Chemical Communications, 2021, 58, 48-51.	2.2	4
7	Photosensitizers Based on G-Quadruplex Ligand for Cancer Photodynamic Therapy. Genes, 2020, 11, 1340.	1.0	25
8	RNA phase separationâ€“mediated direction of molecular trafficking under conditions of molecular crowding. Biophysical Reviews, 2020, 12, 669-676.	1.5	12
9	Hydroxyl groups in cosolutes regulate the G-quadruplex topology of telomeric DNA. Biochemical and Biophysical Research Communications, 2020, 525, 177-183.	1.0	4
10	Metal sensitive and DNA concentration dependent structural rearrangement of short oligonucleotide into large suprastructures. Journal of Biomolecular Structure and Dynamics, 2019, 37, 2211-2218.	2.0	2
11	Osmolyte-Enhanced Protein Synthesis Activity of a Reconstituted Translation System. ACS Synthetic Biology, 2019, 8, 557-567.	1.9	8
12	Selective recognition of human telomeric G-quadruplex with designed peptide via hydrogen bonding followed by base stacking interactions. RSC Advances, 2019, 9, 40255-40262.	1.7	12
13	An anionic phthalocyanine decreases NRAS expression by breaking down its RNA G-quadruplex. Nature Communications, 2018, 9, 2271.	5.8	55
14	Unexpected Position-Dependent Effects of Ribose G-Quartets in G-Quadruplexes. Journal of the American Chemical Society, 2017, 139, 7768-7779.	6.6	30
15	Highly Sensitive Telomerase Assay Insusceptible to Telomerase and Polymerase Chain Reaction Inhibitors for Cervical Cancer Screening Using Scraped Cells. Analytical Chemistry, 2017, 89, 6948-6953.	3.2	12
16	Selective and Robust Stabilization of Triplex DNA Structures Using Cationic Comb-type Copolymers. Journal of Physical Chemistry B, 2017, 121, 4015-4022.	1.2	13
17	Cell and Molecular Mechanics in Health and Disease. BioMed Research International, 2017, 2017, 1-2.	0.9	2
18	DNA G-Wire Formation Using an Artificial Peptide is Controlled by Protease Activity. Molecules, 2017, 22, 1991.	1.7	15

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19	Effects of trimethylamine N-oxide and urea on DNA duplex and G-quadruplex. Science and Technology of Advanced Materials, 2016, 17, 753-759.	2.8	24
20	A reversible Bâ€“A transition of DNA duplexes induced by synthetic cationic copolymers. Chemical Communications, 2016, 52, 7446-7449.	2.2	13
21	Reevaluation of the stability of G-quadruplex structures under crowding conditions. Biochimie, 2016, 121, 204-208.	1.3	30
22	DNA structures under molecular crowding conditions with a phosphorylcholine derivative (MPC). Transactions of the Materials Research Society of Japan, 2015, 40, 99-102.	0.2	2
23	Effects of Cosolvents on the Folding and Catalytic Activities of the Hammerhead Ribozyme. ChemBioChem, 2015, 16, 1803-1810.	1.3	23
24	Stabilization of DNA Structures with Poly(ethylene sodium phosphate). Journal of Physical Chemistry B, 2015, 119, 11969-11977.	1.2	8
25	A mRNA-Responsive G-Quadruplex-Based Drug Release System. Sensors, 2015, 15, 9388-9403.	2.1	13
26	Effects of background anionic compounds on the activity of the hammerhead ribozyme in Mg2+-unsaturated solutions. Journal of Biological Inorganic Chemistry, 2015, 20, 1049-1058.	1.1	7
27	A fluorescent probe for detection of an intracellular prognostic indicator in early-stage cancer. Chemical Communications, 2015, 51, 1479-1482.	2.2	10
28	Dangling Ends Perturb the Stability of RNA Duplexes Responsive to Surrounding Conditions. ChemMedChem, 2014, 9, 2150-2155.	1.6	4
29	Reduced Graphene Oxide Upconversion Nanoparticle Hybrid for Electrochemiluminescent Sensing of a Prognostic Indicator in Earlyâ€Stage Cancer. Small, 2014, 10, 330-336.	5.2	59
30	A simple â€œadd and measureâ€•FRET-based telomeric tandem repeat sequence detection and telomerase assay method. Organic and Biomolecular Chemistry, 2014, 12, 936-941.	1.5	7
31	In Vitro Assays Predictive of Telomerase Inhibitory Effect of G-Quadruplex Ligands in Cell Nuclei. Journal of Physical Chemistry B, 2014, 118, 2605-2614.	1.2	16
32	Hammerhead ribozyme activity and oligonucleotide duplex stability in mixed solutions of water and organic compounds. FEBS Open Bio, 2014, 4, 643-650.	1.0	27
33	Drastic Stabilization of Parallel DNA Hybridizations by a Polylysine Combâ€Type Copolymer with Hydrophilic Graft Chain. ChemMedChem, 2014, 9, 2156-2163.	1.6	13
34	Effects of Molecular Crowding on the Structures, Interactions, and Functions of Nucleic Acids. Chemical Reviews, 2014, 114, 2733-2758.	23.0	430
35	Multiple and Cooperative Binding of Fluorescence Light-up Probe Thioflavin T with Human Telomere DNA G-Quadruplex. Biochemistry, 2013, 52, 5620-5628.	1.2	96
36	Sequence and Solvent Effects on Telomeric DNA Bimolecular G-Quadruplex Folding Kinetics. Journal of Physical Chemistry B, 2013, 117, 12391-12401.	1.2	27

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37	Thermodynamics-Hydration Relationships within Loops That Affect G-Quadruplexes under Molecular Crowding Conditions. Journal of Physical Chemistry B, 2013, 117, 963-972.	1.2	22
38	Study on effects of molecular crowding on G-quadruplex-ligand binding and ligand-mediated telomerase inhibition. Methods, 2013, 64, 19-27.	1.9	33
39	A Highly Sensitive Telomerase Activity Assay that Eliminates False-Negative Results Caused by PCR Inhibitors. Molecules, 2013, 18, 11751-11767.	1.7	8
40	Hydration Changes upon DNA Folding Studied by Osmotic Stress Experiments. Biophysical Journal, 2012, 102, 2808-2817.	0.2	47
41	Beads-on-a-String Structure of Long Telomeric DNAs under Molecular Crowding Conditions. Journal of the American Chemical Society, 2012, 134, 20060-20069.	6.6	96
42	Molecular Crowding and Hydration Regulating of G-Quadruplex Formation. Topics in Current Chemistry, 2012, 330, 87-110.	4.0	34
43	Dimerization of Nucleic Acid Hairpins in the Conditions Caused by Neutral Cosolutes. Journal of Physical Chemistry B, 2012, 116, 7406-7415.	1.2	26
44	Aptamer carbon nanodot sandwich used for fluorescent detection of protein. Analyst, The, 2012, 137, 5483.	1.7	85
45	Specific Binding of Anionic Porphyrin and Phthalocyanine to the G-Quadruplex with a Variety of in Vitro and in Vivo Applications. Molecules, 2012, 17, 10586-10613.	1.7	71
46	Structural and Functional Characterization of RecG Helicase under Dilute and Molecular Crowding Conditions. Journal of Nucleic Acids, 2012, 2012, 1-8.	0.8	0
47	Phthalocyanines: a new class of G-quadruplex-ligands with many potential applications. Chemical Communications, 2012, 48, 6203.	2.2	106
48	Detection of a Prognostic Indicator in Earlyâ€Stage Cancer Using Functionalized Grapheneâ€Based Peptide Sensors. Advanced Materials, 2012, 24, 125-131.	11.1	136
49	Thermodynamic stability of Hoogsteen and Watsonâ€“Crick base pairs in the presence of histone H3-mimicking peptide. Chemical Communications, 2011, 47, 2790.	2.2	18
50	Effect of Locked Nucleic Acid Modifications on the Thermal Stability of Noncanonical DNA Structure. Biochemistry, 2011, 50, 7414-7425.	1.2	14
51	Measurements of the Binding of a Large Protein Using a Substrate Density-Controlled DNA Chip. Analytical Chemistry, 2011, 83, 6368-6372.	3.2	17
52	G-Quartet, G-Quadruplex, and G-Wire Regulated by Chemical Stimuli. Methods in Molecular Biology, 2011, 749, 93-104.	0.4	8
53	The Effects of Molecular Crowding on the Structure and Stability of G-Quadruplexes with an Abasic Site. Journal of Nucleic Acids, 2011, 2011, 1-9.	0.8	17
54	Synthesis and Application of Functional Nucleic Acids. Journal of Nucleic Acids, 2011, 2011, 1-2.	0.8	4

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55	Rational Design of a New IMP Aptamer Based on a TPP Riboswitch and a Hypoxanthine Aptamer. Chemistry Letters, 2011, 40, 1313-1314.	0.7	1
56	Label-free colorimetric and quantitative detection of cancer marker protein using noncrosslinking aggregation of Au/Ag nanoparticles induced by target-specific peptide probe. Biosensors and Bioelectronics, 2011, 26, 4804-4809.	5.3	38
57	Utilization of Salmon Milt DNA Against UV Damage. Applied Biochemistry and Biotechnology, 2010, 160, 2458-2466.	1.4	5
58	Ultrasensitive and Selective Detection of a Prognostic Indicator in Earlyâ€Stage Cancer Using Graphene Oxide and Carbon Nanotubes. Advanced Functional Materials, 2010, 20, 3967-3971.	7.8	130
59	Ultrasensitive and Selective Detection of a Prognostic Indicator in Early-Stage Cancer Using Graphene Oxide and Carbon Nanotubes. Advanced Functional Materials, 2010, 20, 3966-3966.	7.8	94
60	A rapid and sensitive â€œadd-mix-measureâ€•assay for multiple proteinases based on one gold nanoparticleâ€“peptideâ€“fluorophore conjugate. Biosensors and Bioelectronics, 2010, 26, 743-747.	5.3	24
61	Development of new functional nanostructures consisting of both DNA duplex and quadruplex. Chemical Communications, 2010, 46, 7772.	2.2	48
62	Monomorphic RNA G-Quadruplex and Polymorphic DNA G-Quadruplex Structures Responding to Cellular Environmental Factors. Biochemistry, 2010, 49, 4554-4563.	1.2	130
63	Anionic phthalocyanines targeting G-quadruplexes and inhibiting telomerase activity in the presence of excessive DNA duplexes. Chemical Communications, 2010, 46, 5740.	2.2	56
64	Sole and Stable RNA Duplexes of G-Rich Sequences Located in the 5â€²-Untranslated Region of Protooncogenes. Biochemistry, 2010, 49, 7190-7201.	1.2	11
65	Thermal stability and hydration state of DNA G-quadruplex regulated by loop regions. Nucleic Acids Symposium Series, 2009, 53, 237-238.	0.3	7
66	DNA junction structure stabilized by molecular crowding conditions. Nucleic Acids Symposium Series, 2009, 53, 59-60.	0.3	3
67	An approach to peptide-based ATP receptors by a combination of random selection, rational design, and molecular imprinting. Biosensors and Bioelectronics, 2009, 25, 563-567.	5.3	12
68	Stabilization of Three-Way Junctions of DNA under Molecular Crowding Conditions. Journal of the American Chemical Society, 2009, 131, 9268-9280.	6.6	61
69	Hydration of Watsonâ^'Crick Base Pairs and Dehydration of Hoogsteen Base Pairs Inducing Structural Polymorphism under Molecular Crowding Conditions. Journal of the American Chemical Society, 2009, 131, 3522-3531.	6.6	127
70	Riboswitches for Enhancing Target Gene Expression in Eukaryotes. ChemBioChem, 2008, 9, 1040-1043.	1.3	12
71	Regulation of Telomerase Activity by the Thermodynamic Stability of a DNAâ‹…RNA Hybrid. Angewandte Chemie - International Edition, 2008, 47, 9034-9038.	7.2	30
72	Smallâ€Moleculeâ€Directed Assembly: A Gold Nanoparticleâ€Based Strategy for Screening of Homoâ€Adenine DNA Duplex Binders. Advanced Materials, 2008, 20, 706-710.	11.1	53

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73	Molecular crowding effects on structure and stability of DNA. Biochimie, 2008, 90, 1040-1051.	1.3	234
74	Cationic Porphyrin Induced a Telomeric DNA to G-Quadruplex Form in Water. Bioinorganic Chemistry and Applications, 2008, 2008, 1-5.	1.8	6
75	Thermodynamics of DNA structures under molecular crowding conditions with neutral and positive charged cosolutes. Nucleic Acids Symposium Series, 2008, 52, 413-414.	0.3	1
76	Effects of cosolutes on the thermodynamic stability of parallel DNA duplex and triplex. Nucleic Acids Symposium Series, 2007, 51, 167-168.	0.3	1
77	Conformational switch of a functional nanowire based on the DNA G-quadruplex. Nucleic Acids Symposium Series, 2007, 51, 251-252.	0.3	9
78	Artificial G-Wire Switch with 2,2â€˜-Bipyridine Units Responsive to Divalent Metal Ions. Journal of the American Chemical Society, 2007, 129, 5919-5925.	6.6	117
79	Regulation of DNA nucleases by molecular crowding. Nucleic Acids Research, 2007, 35, 4086-4093.	6.5	75
80	Molecular Imprinting under Molecular Crowding Conditions:Â An Aid to the Synthesis of a High-Capacity Polymeric Sorbent for Triazine Herbicides. Analytical Chemistry, 2007, 79, 1749-1757.	3.2	66
81	Hydration Regulates The Thermodynamic Stability Of Dna Structures Under Molecular Crowding Conditions. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 589-595.	0.4	16
82	Synthesis, structure and thermal stability of fully hydrophobic porphyrinâ€“DNA conjugates. Tetrahedron Letters, 2007, 48, 8514-8517.	0.7	19
83	Characterization of Structure and Stability of Long Telomeric DNA G-Quadruplexes. Journal of the American Chemical Society, 2006, 128, 15461-15468.	6.6	166
84	Hydration Regulates Thermodynamics of G-Quadruplex Formation under Molecular Crowding Conditions. Journal of the American Chemical Society, 2006, 128, 7957-7963.	6.6	301
85	A DNA Duplex with Extremely Enhanced Thermal Stability Based on Controlled Immobilization on Gold Nanoparticles. Nano Letters, 2006, 6, 491-495.	4.5	48
86	What Regulates Biological Reactions? Genetic Information or Environmental Conditions?. Kobunshi, 2006, 55, 322-325.	0.0	1
87	Effect of molecular crowding on DNA polymerase activity. Biotechnology Journal, 2006, 1, 440-446.	1.8	70
88	DNA Logic Gates Based on Structural Polymorphism of Telomere DNA Molecules Responding to Chemical Input Signals. Angewandte Chemie - International Edition, 2006, 45, 7716-7719.	7.2	138
89	Properties of long human telomeric DNAs under cell-mimicking conditions. Nucleic Acids Symposium Series, 2006, 50, 207-208.	0.3	4
90	Factors regulating thermodynamic stability of DNA structures under molecular crowding conditions. Nucleic Acids Symposium Series, 2006, 50, 203-204.	0.3	3

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91	Development of molecular logic gates using the structural switch of telomere DNAs. Nucleic Acids Symposium Series, 2006, 50, 315-316.	0.3	2
92	Drastic Effect of a Single Base Difference between Human andTetrahymena Telomere Sequences on Their Structures under Molecular Crowding Conditions. Angewandte Chemie - International Edition, 2005, 44, 3740-3744.	7.2	78
93	Thermodynamic and Kinetic Analyses of Nucleic Acid Structures for Pharmacogenomics. Current Pharmacogenomics and Personalized Medicine: the International Journal for Expert Reviews in Pharmacogenomics, 2005, 3, 217-236.	0.3	0
94	DNA nanowire sensitive to the surrounding condition. Nucleic Acids Symposium Series, 2005, 49, 43-44.	0.3	4
95	SPR Sensor Chip for Detection of Small Molecules Using Molecularly Imprinted Polymer with Embedded Gold Nanoparticles. Analytical Chemistry, 2005, 77, 4282-4285.	3.2	267
96	DNA-Based Biosensor for Monitoring pHin Vitroand in Living Cellsâ€. Biochemistry, 2005, 44, 7125-7130.	1.2	83
97	Roles of Mg2+in TPP-dependent riboswitch. FEBS Letters, 2005, 579, 2583-2588.	1.3	78
98	Duplex Dissociation of Telomere DNAs Induced by Molecular Crowding. Journal of the American Chemical Society, 2004, 126, 165-169.	6.6	169
99	Composite of Au Nanoparticles and Molecularly Imprinted Polymer as a Sensing Material. Analytical Chemistry, 2004, 76, 1310-1315.	3.2	175
100	Structural Polymorphism of Telomeric DNA Regulated by pH and Divalent Cation. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 203-221.	0.4	39
101	Structural Competition Involving G-Quadruplex DNA and Its Complementâ€. Biochemistry, 2003, 42, 11736-11744.	1.2	113
102	Effect of Putrescine and PEG on a Structural Transition of DNA G-Quadruplex. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1591-1594.	0.4	3
103	Structural transition from antiparallel to parallel G-quadruplex of d(G4T4G4) induced by Ca2+. Nucleic Acids Research, 2003, 31, 1156-1163.	6.5	152
104	Novel biomaterials derived from deoxyribozyme and NAPzyme. Macromolecular Symposia, 2003, 201, 245-252.	0.4	0
105	Long RNA Dangling End Has Large Energetic Contribution to Duplex Stability. Journal of the American Chemical Society, 2002, 124, 10367-10372.	6.6	79
106	Molecular Crowding Regulates the Structural Switch of the DNA G-Quadruplexâ€. Biochemistry, 2002, 41, 15017-15024.	1.2	175
107	Effect of divalent cations on antiparallel G-quartet structure of d(G4 T4 G4). FEBS Letters, 2001, 496, 128-133.	1.3	91
108	A Stable DNA Tetraloop and Its Structural Tolerance for Modification. Chemistry Letters, 2001, 30, 258-259.	0.7	3

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109	Development of small peptides recognizing a monosaccharide by combinatorial chemistry. Chemical Communications, 2000, , 2295-2296.	2.2	28
110	Î±â€“Î²Structural Transition of Short Oligopeptides by Water/Organic Solvent Titration. Chemistry Letters, 1999, 28, 637-638.	0.7	9