Akinori Kuzuya

List of Publications by Year
in descending order

121 papers	2,669 citations	218592 26 h-index	206029 48 g-index
127 all docs	127 docs citations	127 times ranked	2380 citing authors

#	Article	IF	Citations
1	Preparation of hyaluronic acid-coated polymeric micelles for nasal vaccine delivery. Biomaterials Science, 2022, 10, 1920-1928.	2.6	15
2	Modeling Protein Molecules at the Mesoscale: for Structural Study of Artificial Muscle. Seibutsu Butsuri, 2022, 62, 58-61.	0.0	0
3	Cooperative cargo transportation by a swarm of molecular machines. Science Robotics, 2022, 7, eabm0677.	9.9	28
4	Synthesis of degradable double network gels using a hydrolysable cross-linker. Polymer Chemistry, 2022, 13, 3756-3762.	1.9	3
5	Molecular Cybernetics: Challenges toward Cellular Chemical Artificial Intelligence. Advanced Functional Materials, 2022, 32, .	7.8	23
6	Postoperative Adhesion Prevention Using a Biodegradable Temperature-Responsive Injectable Polymer System and Concomitant Effects of the Chymase Inhibitor. ACS Applied Bio Materials, 2021, 4, 3079-3088.	2.3	9
7	Cellular therapy for myocardial ischemia using a temperature-responsive biodegradable injectable polymer system with adipose-derived stem cells. Science and Technology of Advanced Materials, 2021, 22, 627-642.	2.8	15
8	Temperature-responsive biodegradable injectable polymers with tissue adhesive properties. Acta Biomaterialia, 2021, 135, 318-330.	4.1	8
9	Molecular Swarm Robot Realized by the Intelligence of a Biomolecular Motor System and DNA. Seibutsu Butsuri, 2021, 61, 330-331.	0.0	1
10	Reactive-Oxygen-Species-Mediated Surface Oxidation of Single-Molecule DNA Origami by an Atomic Force Microscope Tip-Mounted C60 Photocatalyst. ACS Nano, 2021, , .	7.3	0
11	Thermal properties and degradation of enantiomeric copolyesteramides poly(lactic acid-co-alanine)s. Polymer Degradation and Stability, 2020, 171, 109047.	2.7	8
12	Stereocomplex crystallization, homocrystallization, and polymorphism of enantiomeric copolyesteramides poly(lactic acidâ€•<i>co</i> â€•alanine)s from the melt. Polymer Crystallization, 2020, 3, e10094.	0.5	4
13	Modeling a Microtubule Filaments Mesh Structure from Confocal Microscopy Imaging. Micromachines, 2020, 11, 844.	1.4	4
14	Versatile Cell-Specific Ligand Arrangement System onto Desired Compartments of Biodegradable Matrices for Site-Selective Cell Adhesion Using DNA Tags. Biomacromolecules, 2020, 21, 3713-3723.	2.6	1
15	An intermolecular-split G-quadruplex DNAzyme sensor for dengue virus detection. RSC Advances, 2020, 10, 33040-33051.	1.7	12
16	Single-Molecule AFM Study of DNA Damage by ¹O₂ Generated from Photoexcited C₆₀. Journal of Physical Chemistry Letters, 2020, 11, 7819-7826.	2.1	10
17	Sustained Drug-Releasing Systems Using Temperature-Responsive Injectable Polymers Containing Liposomes. ACS Symposium Series, 2020, , 35-45.	0.5	3
18	Cellular attachment behavior on biodegradable polymer surface immobilizing endothelial cell-specific peptide. Journal of Biomaterials Science, Polymer Edition, 2020, 31, 1475-1488.	1.9	6

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19	Reversible changes in the orientation of gold nanorod arrays on polymer brushes. Nanoscale Advances, 2020, 2, 3798-3803.	2.2	14
20	DNA Switch: Toehold-Mediated DNA Isothermal Amplification for Dengue Serotyping. SLAS Discovery, 2019, 24, 68-76.	1.4	4
21	Application of DNA Quadruplex Hydrogels Prepared from Polyethylene Glycol-Oligodeoxynucleotide Conjugates to Cell Culture Media. Polymers, 2019, 11, 1607.	2.0	7
22	Communicationâ€"DNA Quadruplex Hydrogel Beads Showing Peroxidase Activity. Journal of the Electrochemical Society, 2019, 166, B3271-B3273.	1.3	2
23	Artificial Smooth Muscle Model Composed of Hierarchically Ordered Microtubule Asters Mediated by DNA Origami Nanostructures. Nano Letters, 2019, 19, 3933-3938.	4.5	51
24	Bulk pH-Responsive DNA Quadruplex Hydrogels Prepared by Liquid-Phase, Large-Scale DNA Synthesis. ACS Macro Letters, 2018, 7, 295-299.	2.3	19
25	DNA-assisted swarm control in a biomolecular motor system. Nature Communications, 2018, 9, 453.	5.8	110
26	Synthesis, stereocomplex crystallization and homo-crystallization of enantiomeric poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	1.9	25
27	Preparation of Biodegradable Oligo(lactide)s-Grafted Dextran Nanogels for Efficient Drug Delivery by Controlling Intracellular Traffic. International Journal of Molecular Sciences, 2018, 19, 1606.	1.8	9
28	Control of swarming of molecular robots. Scientific Reports, 2018, 8, 11756.	1.6	31
29	(Invited) DNA Quadruplex Hydrogels: An Application of Synthetic DNA As Bulk Material. ECS Meeting Abstracts, 2018, , .	0.0	0
30	Preparation of DNA Quadruplex Nanogels and Their Application to DDS Carriers. ECS Meeting Abstracts, 2018, , .	0.0	0
31	Micro-IPN Conversion of DNA Quadruplex Gel for Enhanced Gel-State Lifetime in Water. ECS Meeting Abstracts, 2018, , .	0.0	0
32	â€œDNA Origami Traffic Lightsâ€•with a Split Aptamer Sensor for a Bicolor Fluorescence Readout. Nano Letters, 2017, 17, 2467-2472.	4.5	81
33	Extemporaneously preparative biodegradable injectable polymer systems exhibiting temperature-responsive irreversible gelation. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1427-1443.	1.9	7
34	Biodegradable injectable polymer systems exhibiting a longer and controllable duration time of the gel state. Biomaterials Science, 2017, 5, 1304-1314.	2.6	10
35	Injectable and biodegradable temperature-responsive mixed polymer systems providing variable gel-forming pH regions. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1158-1171.	1.9	1
36	Synthesis and Temperature-Responsiveness of Poly(ethylene glycol)-like Biodegradable Poly(ether-ester)s. ACS Symposium Series, 2017, , 93-104.	0.5	0

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37	Site-Selective RNA Activation by Acridine-Modified Oligodeoxynucleotides in Metal-Ion Catalyzed Hydrolysis: A Comprehensive Study. ACS Omega, 2017, 2, 5370-5377.	1.6	6
38	Intelligent, Biodegradable, and Selfâ€Healing Hydrogels Utilizing DNA Quadruplexes. Chemistry - an Asian Journal, 2017, 12, 2388-2392.	1.7	27
39	Analysis of the sol-to-gel transition behavior of temperature-responsive injectable polymer systems by fluorescence resonance energy transfer. Polymer Journal, 2017, 49, 677-684.	1.3	11
40	Allosteric control of nanomechanical DNA origami pinching devices for enhanced target binding. Chemical Communications, 2017, 53, 8276-8279.	2.2	5
41	Biodegradable Injectable Polymer Systems Exhibiting Temperature-Responsive Irreversible Sol-to-Gel Transition by Covalent Bond Formation. ACS Biomaterials Science and Engineering, 2017, 3, 56-67.	2.6	44
42	Peptide Drug Release Behavior from Biodegradable Temperature-Responsive Injectable Hydrogels Exhibiting Irreversible Gelation. Gels, 2017, 3, 38.	2.1	11
43	Hydrogels Utilizing G-Quadruplexes. MOJ Polymer Science, 2017, 1, .	0.3	1
44	Stereocomplex- and homo-crystallization of blends from 2-armed poly(l-lactide) and poly(d-lactide) with identical and opposite chain directional architectures and of 2-armed stereo diblock poly(lactide). Polymer, 2016, 96, 167-181.	1.8	17
45	Crosslinked duplex DNA nanogels that target specified proteins. Science and Technology of Advanced Materials, 2016, 17, 285-292.	2.8	20
46	A DNA aptamer recognising a malaria protein biomarker can function as part of a DNA origami assembly. Scientific Reports, 2016, 6, 21266.	1.6	82
47	Automatic Recognition of DNA Pliers in Atomic Force Microscopy Images. New Generation Computing, 2015, 33, 253-270.	2.5	2
48	Encapsulation of a gold nanoparticle in a DNA origami container. Polymer Journal, 2015, 47, 177-182.	1.3	15
49	The effects of molecular structure on sol-to-gel transition of biodegradable poly(depsipeptide-<i>co</i>-lactide)-<i>g</i>-PEG copolymers. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 444-454.	1.9	4
50	Instant preparation of a biodegradable injectable polymer formulation exhibiting a temperature-responsive solâ€"gel transition. Polymer Journal, 2014, 46, 632-635.	1.3	24
51	Impact of Core-Forming Segment Structure on Drug Loading in Biodegradable Polymeric Micelles Using PEG-<i>b</i>-Poly(lactide-<i>co</i>-depsipeptide) Block Copolymers. BioMed Research International, 2014, 2014, 1-10.	0.9	6
52	Nanomechanical DNA Origami pH Sensors. Sensors, 2014, 14, 19329-19335.	2.1	49
53	Precise structure control of three-state nanomechanical DNA origami devices. Methods, 2014, 67, 250-255.	1.9	12
54	A macromolecular prodrugâ€type injectable polymer composed of poly(depsipeptideâ€<i>co</i>â€lactide)â€<i>g</i>â€PEG for sustained release of drugs. Polymers for Advanced Technologies, 2014, 25, 1226-1233.	1.6	6

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55	Orthogonal enzyme arrays on a DNA origami scaffold bearing size-tunable wells. Nanoscale, 2014, 6, 9122-9126.	2.8	33
56	Nanomechanical Molecular Devices made of DNA Origami. Accounts of Chemical Research, 2014, 47, 1742-1749.	7.6	74
57	Design of Biodegradable Injectable Polymers Exhibiting Temperature-Responsive Sol-Gel Transition. Advances in Science and Technology, 2012, 86, 9-16.	0.2	2
58	DNAâ€“Gold Conjugates: Formation of 1D and 2D Gold Nanoparticle Arrays by Divalent DNAâ€“Gold Nanoparticle Conjugates (Small 15/2012). Small, 2012, 8, 2445-2445.	5.2	0
59	DNA nanostructures as scaffolds for metal nanoparticles. Polymer Journal, 2012, 44, 452-460.	1.3	22
60	Nanomechanical DNA origami devices as versatile molecular sensors. , 2012, , .		1
61	Clear-cut observation of PNA invasion using nanomechanical DNA origami devices. Chemical Communications, 2012, 48, 11361.	2.2	35
62	Enzyme Treatment-Free and Ligation-Independent Cloning Using Caged Primers in Polymerase Chain Reactions. Molecules, 2012, 17, 328-340.	1.7	7
63	Formation of 1D and 2D Gold Nanoparticle Arrays by Divalent DNAâ€“Gold Nanoparticle Conjugates. Small, 2012, 8, 2335-2340.	5.2	27
64	Photoswitching of Site-Selective RNA Scission by Sequential Incorporation of Azobenzene and Acridine Residues in a DNA Oligomer. Journal of Nucleic Acids, 2011, 2011, 1-8.	0.8	5
65	Nanomechanical DNA origami 'single-molecule beacons' directly imaged by atomic force microscopy. Nature Communications, 2011, 2, 449.	5.8	247
66	Dethreading of Deoxyribonucleotides through Î±â€Cyclodextrin. Chemistry - an Asian Journal, 2010, 5, 2177-2180.	1.7	6
67	Programmed Nanopatterning of Organic/Inorganic Nanoparticles Using Nanometerâ€Scale Wells Embedded in a DNA Origami Scaffold. Small, 2010, 6, 2664-2667.	5.2	27
68	Asymmetric Secondary and Tertiary Streptavidin/DNA Complexes Selectively Formed in a Nanometer-Scale DNA Well. Bioconjugate Chemistry, 2010, 21, 338-344.	1.8	16
69	Discrete and Active Enzyme Nanoarrays on DNA Origami Scaffolds Purified by Affinity Tag Separation. Journal of the American Chemical Society, 2010, 132, 9937-9939.	6.6	76
70	DNA origami: Fold, stick, and beyond. Nanoscale, 2010, 2, 310-322.	2.8	136
71	Stepwise and reversible nanopatterning of proteins on a DNA origami scaffold. Chemical Communications, 2010, 46, 5127.	2.2	59
72	Blunt-ended DNA stacking interactions in a 3-helix motif. Chemical Communications, 2010, 46, 4905.	2.2	36

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73	Title is missing!. Journal of the Robotics Society of Japan, 2010, 28, 1155-1157.	0.0	0
74	Restriction enzyme treatment/ligation independent cloning using caged primers for PCR. Nucleic Acids Symposium Series, 2009, 53, 75-76.	0.3	2
75	Precisely Programmed and Robust 2D Streptavidin Nanoarrays by Using Periodical Nanometerâ€Scale Wells Embedded in DNA Origami Assembly. ChemBioChem, 2009, 10, 1811-1815.	1.3	120
76	Efficient Guest Inclusion by Î²-Cyclodextrin Attached to the Ends of DNA Oligomers upon Hybridization to Various DNA Conjugates. Bioconjugate Chemistry, 2009, 20, 1643-1649.	1.8	25
77	Precise Site-Selective Termination of DNA Replication by Caging The 3-Position of Thymidine and Its Application to Polymerase Chain Reaction. Bioconjugate Chemistry, 2009, 20, 1924-1929.	1.8	11
78	Design and construction of a box-shaped 3D-DNA origami. Chemical Communications, 2009, , 4182.	2.2	162
79	Efficient Site-selective RNA Activation and Scission Achieved by Geometry Control of Acridine Intercalation in RNA/DNA Heteroduplex. Chemistry Letters, 2009, 38, 432-433.	0.7	4
80	Siteâ€Selective Blocking of PCR by a Caged Nucleotide Leading to Direct Creation of Desired Sticky Ends in The Products. ChemBioChem, 2008, 9, 2120-2126.	1.3	21
81	Accommodation of a Single Protein Guest in Nanometerâ€Scale Wells Embedded in a â€œDNA Nanotapeâ€. Angewandte Chemie - International Edition, 2008, 47, 3400-3402.	7.2	31
82	Single-Molecule Accommodation of Streptavidin in Nanometer-Scale Wells Formed in DNA Nanostructures. Nucleic Acids Symposium Series, 2008, 52, 681-682.	0.3	29
83	Coupling Across a DNA Helical Turn Yields a Hybrid DNA/Organic Catenane Doubly Tailed with Functional Termini. Journal of the American Chemical Society, 2008, 130, 10882-10883.	6.6	56
84	Direct Preparation of Sticky-Ended Duplexes within PCR by Using Caged Primers. Nucleic Acids Symposium Series, 2008, 52, 467-468.	0.3	0
85	Synthesis of Photo-Responsive Acridine-Modified DNA and Its Application to Site-Selective RNA Scission. Nucleosides, Nucleotides and Nucleic Acids, 2008, 27, 1175-1185.	0.4	7
86	Site-selective Termination of DNA Replication by Using a Caged Template. Chemistry Letters, 2008, 37, 584-585.	0.7	9
87	DNA/Î±-Cyclodextrinâ€"Rotaxane Conjugate as a New Supramolecular Material. Chemistry Letters, 2008, 37, 996-997.	0.7	1
88	Site-Selective Artificial Ribonucleases and their Applications. Current Organic Chemistry, 2007, 11, 1450-1459.	0.9	20
89	A Robust DNA Framework for Single Molecule Observation with Atomic Force Microscope. Nucleic Acids Symposium Series, 2007, 51, 331-332.	0.3	0
90	Photocontrol of site-selective RNA scission. Nucleic Acids Symposium Series, 2007, 51, 205-206.	0.3	0

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91	Six-Helix and Eight-Helix DNA Nanotubes Assembled from Half-Tubes. Nano Letters, 2007, 7, 1757-1763.	4.5	114
92	Lanthanide ions as versatile catalyst in biochemistry: Efficient site-selective scission of RNA by free lanthanide ions. Journal of Alloys and Compounds, 2006, 408-412, 396-399.	2.8	8
93	Simultaneous genotyping of indels and SNPs by mass spectroscopy. Journal of the American Society for Mass Spectrometry, 2006, 17, 3-8.	1.2	16
94	Site-selective RNA scission by PNA-Lu(III) hybrid system. Nucleic Acids Symposium Series, 2006, 50, 267-268.	0.3	0
95	Cooperation of metal-ion fixation and target-site activation for efficient site-selective RNA scission. Journal of Biological Inorganic Chemistry, 2005, 10, 270-274.	1.1	5
96	Design of Phosphoramidite Monomer for Optimal Incorporation of Functional Intercalator to Main Chain of Oligonucleotide. Bioconjugate Chemistry, 2005, 16, 306-311.	1.8	17
97	DNA, PNA, and Their Derivatives for Precise Genotyping of SNPs. Mini-Reviews in Organic Chemistry, 2004, 1, 125-131.	0.6	5
98	Simultaneous use of highly acidic acridine and rigid chiral linker for efficient site-selective RNA scission. Nucleic Acids Symposium Series, 2004, 48, 219-220.	0.3	1
99	Crucial role of linker portion in acridine-bearing oligonucleotides for highly efficient site-selective RNA scission. Tetrahedron Letters, 2004, 45, 3703-3706.	0.7	12
100	Selective Activation of Two Sites in RNA by Acridine-Bearing Oligonucleotides for Clipping of Designated RNA Fragments. Journal of the American Chemical Society, 2004, 126, 1430-1436.	6.6	22
101	Noncovalent Combination of Oligoamine and Oligonucleotide as Totally Organic Site-selective RNA Cutter. Chemistry Letters, 2004, 33, 1012-1013.	0.7	1
102	Site-selective RNA scission at two sites for precise genotyping of SNPs by mass spectrometryElectronic supplementary information (ESI) available: 1: confirmation of two-site RNA scission; 2: simultaneous analysis of the two SNP sites in APOE. See http://www.rsc.org/suppdata/cc/b3/b300368j/AK and RM have contributed equally to this work. This work was supported by the Biooriented Technology Research Advancement Institution. The support by a Grant-in-Aid for Scientific Research from the Ministry of Education,. Chemical Communications, 2003, , 770-771.	2.2	4
103	Tandem site-selective RNA scission utilizing acridine-DNA conjugates. Nucleic Acids Symposium Series, 2003, 3, 167-168.	0.3	0
104	Stereochemically Pure Acridine-modified DNA for Site-selective Activation and Scission of RNA. Chemistry Letters, 2003, 32, 464-465.	0.7	4
105	Novel approach for SNP genotyping based on site-selective RNA scission. Nucleic Acids Symposium Series, 2002, 2, 129-130.	0.3	3
106	Site-Selective Activation of RNA Leading to Sequence-Selective RNA Cutters. Bulletin of the Chemical Society of Japan, 2002, 75, 2547-2554.	2.0	4
107	Metal Ion-Induced Site-Selective RNA Hydrolysis by Use of Acridine-Bearing Oligonucleotide as Cofactor. Journal of the American Chemical Society, 2002, 124, 6887-6894.	6.6	61
108	Conjugation of Various Acridines to DNA for Site-Selective RNA Scission by Lanthanide Ion. Bioconjugate Chemistry, 2002, 13, 365-369.	1.8	32

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109	A highly acidic acridine for efficient site-selective activation of RNA leading to an eminent ribozyme mimic. Tetrahedron Letters, 2002, 43, 8249-8252.	0.7	22
110	Sequence-Selective Artificial Ribonucleases. Methods in Enzymology, 2001, 341, 455-468.	0.4	22
111	New Ribozyme-Mimics Employing Mg(II) Ion As Catalytic Center. Chemistry Letters, 2001, 30, 584-585.	0.7	3
112	Site-selective artificial ribonuclease using pinpoint RNA activation. Nucleic Acids Symposium Series, 2001, 1, 131-132.	0.3	1
113	Sequence-Selective RNA Scission by Non-Covalent Combination of Acridine-Tethered DNA and Lanthanide(III) Ion. Chemistry Letters, 2000, 29, 1378-1379.	0.7	4
114	Non-covalent ternary systems (DNA-acridine hybrid/DNA/lanthanide(iii)) for efficient and site-selective RNA scission. Chemical Communications, 2000, , 2019-2020.	2.2	6
115	Non-Covalent Combinations of Lanthanide(III) Ion and Two DNA Oligomers for Sequence-Selective RNA Scission. Chemistry Letters, 1999, 28, 1035-1036.	0.7	4
116	Conjugates of a Dinuclear Zinc(II) Complex and DNA Oligomers as Novel Sequence-Selective Artificial Ribonucleases. Angewandte Chemie - International Edition, 1998, 37, 3284-3286.	7.2	60
117	Conjugates of a Dinuclear Zinc(II) Complex and DNA Oligomers as Novel Sequence-Selective Artificial Ribonucleases. , 1998, 37, 3284.		1
118	Conjugates of a Dinuclear Zinc(II) Complex and DNA Oligomers as Novel Sequence-Selective Artificial Ribonucleases. Angewandte Chemie - International Edition, 1998, 37, 3284-3286.	7.2	2
119	Molecular Design for a Pinpoint RNA Scission. Interposition of Oligoamines between Two DNA Oligomers1. Journal of Organic Chemistry, 1997, 62, 846-852.	1.7	50
120	Polyion-complex-coated biodegradable polymeric micelles exhibiting cell-specific uptake and dual-stimuli-responsive degradation. Frontiers in Bioengineering and Biotechnology, 0, 4, .	2.0	0
121	Biodegradable injectable polymer systems exhibiting temperature-responsive covalent hydrogel formation for medical use. Frontiers in Bioengineering and Biotechnology, 0, 4, .	2.0	0