

Michiko Kimoto

List of Publications by Year in descending order

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papers

3,133
citations

147726

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168321

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58
all docs

58
docs citations

58
times ranked

1703
citing authors

#	ARTICLE	IF	CITATIONS
1	Dye-€Conjugated Spinach RNA by Genetic Alphabet Expansion. Chemistry - A European Journal, 2022, 28, .	1.7	9
2	Cognate base-€pair selectivity of hydrophobic unnatural bases in <scp>DNA</scp> ligation by <scp>T4 DNA</scp> ligase. Biopolymers, 2021, 112, e23407.	1.2	9
3	High-affinity five/six-letter DNA aptamers with superior specificity enabling the detection of dengue NS1 protein variants beyond the serotype identification. Nucleic Acids Research, 2021, 49, 11407-11424.	6.5	29
4	Uptake mechanisms of cell-internalizing nucleic acid aptamers for applications as pharmacological agents. RSC Medicinal Chemistry, 2021, 12, 1640-1649.	1.7	8
5	Genetic alphabet expansion technology by creating unnatural base pairs. Chemical Society Reviews, 2020, 49, 7602-7626.	18.7	74
6	Sanger Gap Sequencing for Genetic Alphabet Expansion of DNA. ChemBioChem, 2020, 21, 2287-2296.	1.3	5
7	New Research Area, Xenobiology, by Integrating Chemistry and Biology. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2020, 78, 465-475.	0.0	0
8	Molecular affinity rulers: systematic evaluation of DNA aptamers for their applicabilities in ELISA. Nucleic Acids Research, 2019, 47, 8362-8374.	6.5	47
9	DNA Sequencing Method Including Unnatural Bases for DNA Aptamer Generation by Genetic Alphabet Expansion. ACS Synthetic Biology, 2019, 8, 1401-1410.	1.9	17
10	Genetic Alphabet Expansion Provides Versatile Specificities and Activities of Unnatural-Base DNA Aptamers Targeting Cancer Cells. Molecular Therapy - Nucleic Acids, 2019, 14, 158-170.	2.3	39
11	Genetic alphabet expansion biotechnology by creating unnatural base pairs. Current Opinion in Biotechnology, 2018, 51, 8-15.	3.3	36
12	DNA aptamer generation by ExSELEX using genetic alphabet expansion with a mini-hairpin DNA stabilization method. Biochimie, 2018, 145, 15-21.	1.3	33
13	Visual Detection of Amplified DNA by Polymerase Chain Reaction Using a Genetic Alphabet Expansion System. Journal of the American Chemical Society, 2018, 140, 14038-14041.	6.6	41
14	Creation of unnatural base pairs for genetic alphabet expansion toward synthetic xenobiology. Current Opinion in Chemical Biology, 2018, 46, 108-114.	2.8	46
15	Crystal structure of Deep Vent DNA polymerase. Biochemical and Biophysical Research Communications, 2017, 483, 52-57.	1.0	12
16	Structural Basis for Expansion of the Genetic Alphabet with an Artificial Nucleobase Pair. Angewandte Chemie - International Edition, 2017, 56, 12000-12003.	7.2	30
17	High-Affinity DNA Aptamer Generation Targeting von Willebrand Factor A1-Domain by Genetic Alphabet Expansion for Systematic Evolution of Ligands by Exponential Enrichment Using Two Types of Libraries Composed of Five Different Bases. Journal of the American Chemical Society, 2017, 139, 324-334.	6.6	114
18	Genetic alphabet expansion transcription generating functional RNA molecules containing a five-letter alphabet including modified unnatural and natural base nucleotides by thermostable T7 RNA polymerase variants. Chemical Communications, 2017, 53, 12309-12312.	2.2	21

#	ARTICLE	IF	CITATIONS
19	Titelbild: Strukturelle Studie zur Erweiterung des genetischen Codes durch ein artifizielles Nucleobasenpaar (Angew. Chem. 39/2017). <i>Angewandte Chemie</i> , 2017, 129, 11815-11815.	1.6	0
20	Strukturelle Studie zur Erweiterung des genetischen Codes durch ein artifizielles Nucleobasenpaar. <i>Angewandte Chemie</i> , 2017, 129, 12162-12166.	1.6	5
21	Evolving Aptamers with Unnatural Base Pairs. <i>Current Protocols in Chemical Biology</i> , 2017, 9, 315-339.	1.7	10
22	Architecture of high-affinity unnatural-base DNA aptamers toward pharmaceutical applications. <i>Scientific Reports</i> , 2016, 5, 18478.	1.6	52
23	Post-ExSELEX stabilization of an unnatural-base DNA aptamer targeting VEGF ₁₆₅ toward pharmaceutical applications. <i>Nucleic Acids Research</i> , 2016, 44, gkw619.	6.5	51
24	High Fidelity, Efficiency and Functionalization of Ds ^ε Px Unnatural Base Pairs in PCR Amplification for a Genetic Alphabet Expansion System. <i>ACS Synthetic Biology</i> , 2016, 5, 1220-1230.	1.9	52
25	DNA Aptamer Generation by Genetic Alphabet Expansion SELEX (ExSELEX) Using an Unnatural Base Pair System. <i>Methods in Molecular Biology</i> , 2016, 1380, 47-60.	0.4	23
26	Site-specific labeling of RNA by combining genetic alphabet expansion transcription and copper-free click chemistry. <i>Nucleic Acids Research</i> , 2015, 43, 6665-6676.	6.5	59
27	Generation of high-affinity DNA aptamers using an expanded genetic alphabet. <i>Nature Biotechnology</i> , 2013, 31, 453-457.	9.4	443
28	Unnatural base pair systems toward the expansion of the genetic alphabet in the central dogma. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , 2012, 88, 345-367.	1.6	67
29	Site-specific functionalization of RNA molecules by an unnatural base pair transcription system via click chemistry. <i>Chemical Communications</i> , 2012, 48, 10835.	2.2	51
30	Site-Specific Incorporation of Functional Components into RNA by an Unnatural Base Pair Transcription System. <i>Molecules</i> , 2012, 17, 2855-2876.	1.7	38
31	Highly specific unnatural base pair systems as a third base pair for PCR amplification. <i>Nucleic Acids Research</i> , 2012, 40, 2793-2806.	6.5	147
32	PCR Amplification and Transcription for Site-Specific Labeling of Large RNA Molecules by a Two-Unnatural-Base-Pair System. <i>Journal of Nucleic Acids</i> , 2012, 2012, 1-8.	0.8	24
33	Natural versus Artificial Creation of Base Pairs in DNA: Origin of Nucleobases from the Perspectives of Unnatural Base Pair Studies. <i>Accounts of Chemical Research</i> , 2012, 45, 2055-2065.	7.6	130
34	Monitoring the site-specific incorporation of dual fluorophore-quencher base analogues for target DNA detection by an unnatural base pair system. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 7504.	1.5	25
35	Site-specific fluorescent probing of RNA molecules by unnatural base-pair transcription for local structural conformation analysis. <i>Nature Protocols</i> , 2010, 5, 1312-1323.	5.5	45
36	A New Unnatural Base Pair System between Fluorophore and Quencher Base Analogues for Nucleic Acid-Based Imaging Technology. <i>Journal of the American Chemical Society</i> , 2010, 132, 15418-15426.	6.6	55

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37	A Unique Fluorescent Base Analogue for the Expansion of the Genetic Alphabet. <i>Journal of the American Chemical Society</i> , 2010, 132, 4988-4989.	6.6	67
38	Site-Specific Incorporation of Extra Components into RNA by Transcription Using Unnatural Base Pair Systems. <i>Methods in Molecular Biology</i> , 2010, 634, 355-369.	0.4	17
39	An unnatural base pair system for efficient PCR amplification and functionalization of DNA molecules. <i>Nucleic Acids Research</i> , 2009, 37, e14-e14.	6.5	165
40	Sequences around the unnatural base pair in DNA templates for efficient replication. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 457-458.	0.3	2
41	Efficient PCR amplification by an unnatural base pair system. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 469-470.	0.3	4
42	An Efficient Unnatural Base Pair for PCR Amplification. <i>Journal of the American Chemical Society</i> , 2007, 129, 15549-15555.	6.6	112
43	Fluorescent probing for RNA molecules by an unnatural base-pair system. <i>Nucleic Acids Research</i> , 2007, 35, 5360-5369.	6.5	65
44	Characterization of fluorescent, unnatural base pairs. <i>Tetrahedron</i> , 2007, 63, 3528-3537.	1.0	34
45	An unnatural hydrophobic base pair system: site-specific incorporation of nucleotide analogs into DNA and RNA. <i>Nature Methods</i> , 2006, 3, 729-735.	9.0	229
46	Site-specific biotinylation of RNA molecules by transcription using unnatural base pairs. <i>Nucleic Acids Research</i> , 2005, 33, e129-e129.	6.5	61
47	Site-Specific Fluorescent Labeling of RNA Molecules by Specific Transcription Using Unnatural Base Pairs. <i>Journal of the American Chemical Society</i> , 2005, 127, 17286-17295.	6.6	102
48	A quantitative, non-radioactive single-nucleotide insertion assay for analysis of DNA replication fidelity by using an automated DNA sequencer. <i>Biotechnology Letters</i> , 2004, 26, 999-1005.	1.1	11
49	Unnatural base pairs mediate the site-specific incorporation of an unnatural hydrophobic component into RNA transcripts. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004, 14, 2593-2596.	1.0	23
50	Site-Specific Incorporation of a Photo-Crosslinking Component into RNA by T7 Transcription Mediated by Unnatural Base Pairs. <i>Chemistry and Biology</i> , 2004, 11, 47-55.	6.2	57
51	A Two-Unnatural-Base-Pair System toward the Expansion of the Genetic Code. <i>Journal of the American Chemical Society</i> , 2004, 126, 13298-13305.	6.6	117
52	An unnatural hydrophobic base, 4-propynylpyrrole-2-carbaldehyde, as an efficient pairing partner of 9-methylimidazo[(4,5)-b]pyridine. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2003, 13, 4515-4518.	1.0	34
53	An Unnatural Hydrophobic Base Pair with Shape Complementarity between Pyrrole-2-carbaldehyde and 9-Methylimidazo[(4,5)-b]pyridine. <i>Journal of the American Chemical Society</i> , 2003, 125, 5298-5307.	6.6	114
54	Synthesis of 6-(2-thienyl)purine nucleoside derivatives that form unnatural base pairs with pyridin-2-one nucleosides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001, 11, 2221-2223.	1.0	57

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55	Genetic Code Engineering by Natural and Unnatural Base Pair Systems for the Site-Specific Incorporation of Non-Standard Amino Acids Into Proteins. <i>Frontiers in Molecular Biosciences</i> , 0, 9, .	1.6	8