Takayuki Katoh

List of Publications by Year
in descending order

55 papers	3,347 citations	201674 27 h-index	168389 53 g-index
59 all docs	59 docs citations	59 times ranked	3608 citing authors

#	Article	IF	Citations
1	In Vitro Selection of Thioether-Closed Macrocyclic Peptide by Means of the. Methods in Molecular Biology, 2022, 2371, 247-259.	0.9	1
2	In Vitro Selection of Foldamer-Like Macrocyclic Peptides Containing 2-Aminobenzoic Acid and 3-Aminothiophene-2-Carboxylic Acid. Journal of the American Chemical Society, 2022, 144, 2069-2072.	13.7	15
3	OUP accepted manuscript. Nucleic Acids Research, 2022, , .	14.5	7
4	In Vitro Genetic Code Reprogramming for the Expansion of Usable Noncanonical Amino Acids. Annual Review of Biochemistry, 2022, 91, 221-243.	11.1	14
5	Development of Bioactive Foldamers Using Ribosomally Synthesized Nonstandard Peptide Libraries. Bulletin of the Chemical Society of Japan, 2021, 94, 549-557.	3.2	3
6	In Vitro Selection of Macrocyclic <scp>d</scp>/<scp>l</scp>-Hybrid Peptides against Human EGFR. Journal of the American Chemical Society, 2021, 143, 5680-5684.	13.7	21
7	Macrocyclic peptides exhibit antiviral effects against influenza virus HA and prevent pneumonia in animal models. Nature Communications, 2021, 12, 2654.	12.8	21
8	Uniform affinity-tuning of N-methyl-aminoacyl-tRNAs to EF-Tu enhances their multiple incorporation. Nucleic Acids Research, 2021, 49, 10807-10817.	14.5	16
9	Consecutive Ribosomal Incorporation of Î±-Aminoxy/Î±-Hydrazino Acids with <scp>l</scp>/<scp>d</scp>-Configurations into Nascent Peptide Chains. Journal of the American Chemical Society, 2021, 143, 18844-18848.	13.7	19
10	Ribosomal synthesis and de novo discovery of bioactive foldamer peptides containing cyclic Î²-amino acids. Nature Chemistry, 2020, 12, 1081-1088.	13.6	86
11	Ribosomal Elongation of Aminobenzoic Acid Derivatives. Journal of the American Chemical Society, 2020, 142, 16518-16522.	13.7	35
12	Methodologies for Backbone Macrocyclic Peptide Synthesis Compatible With Screening Technologies. Frontiers in Chemistry, 2020, 8, 447.	3.6	29
13	An aminoacylation ribozyme evolved from a natural tRNA-sensing T-box riboswitch. Nature Chemical Biology, 2020, 16, 702-709.	8.0	25
14	Ribosomal Elongation of Cyclic Î³-Amino Acids using a Reprogrammed Genetic Code. Journal of the American Chemical Society, 2020, 142, 4965-4969.	13.7	53
15	Improved Stability of siRNA-Loaded Lipid Nanoparticles Prepared with a PEG-Monoacyl Fatty Acid Facilitates Ligand-Mediated siRNA Delivery. Molecular Pharmaceutics, 2020, 17, 1397-1404.	4.6	22
16	A Case Study on the Keap1 Interaction with Peptide Sequence Epitopes Selected by the Peptidomic mRNA Display. ChemBioChem, 2019, 20, 2089-2100.	2.6	1
17	Flexizyme-catalyzed synthesis of 3â€²-aminoacyl-NH-tRNAs. Nucleic Acids Research, 2019, 47, e54-e54.	14.5	14
18	Engineering Translation Components Improve Incorporation of Exotic Amino Acids. International Journal of Molecular Sciences, 2019, 20, 522.	4.1	16

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19	Ribosomal Formation of Thioamide Bonds in Polypeptide Synthesis. Journal of the American Chemical Society, 2019, 141, 20004-20008.	13.7	33
20	In vitro expression of genetically encoded non-standard peptides consisting of exotic amino acid building blocks. Current Opinion in Biotechnology, 2019, 58, 28-36.	6.6	12
21	Ribosomal Synthesis of Backbone-Cyclic Peptides Compatible with In Vitro Display. Journal of the American Chemical Society, 2019, 141, 2279-2287.	13.7	53
22	Thioether Macrocyclic Peptides Selected against TET1 Compact Catalytic Domain Inhibit TET1 Catalytic Activity. ChemBioChem, 2018, 19, 979-985.	2.6	14
23	Artificial Division of Codon Boxes for Expansion of the Amino Acid Repertoire of Ribosomal Polypeptide Synthesis. Methods in Molecular Biology, 2018, 1728, 17-47.	0.9	3
24	tRNA engineering for manipulating genetic code. RNA Biology, 2018, 15, 453-460.	3.1	17
25	Advances in in vitro genetic code reprogramming in 2014â€“2017. Synthetic Biology, 2018, 3, ysy008.	2.2	11
26	Ribosomal Incorporation of Consecutive Î²-Amino Acids. Journal of the American Chemical Society, 2018, 140, 12159-12167.	13.7	80
27	Genetic code expansion via integration of redundant amino acid assignment by finely tuning tRNA pools. Current Opinion in Chemical Biology, 2018, 46, 212-218.	6.1	13
28	Highly selective inhibition of histone demethylases by de novo macrocyclic peptides. Nature Communications, 2017, 8, 14773.	12.8	124
29	Consecutive Elongation of D-Amino Acids in Translation. Cell Chemical Biology, 2017, 24, 46-54.	5.2	101
30	Efficient siRNA Delivery by Lipid Nanoparticles Modified with a Nonstandard Macrocyclic Peptide for EpCAM-Targeting. Molecular Pharmaceutics, 2017, 14, 3290-3298.	4.6	28
31	Amino acid substrates impose polyamine, eIF5A, or hypusine requirement for peptide synthesis. Nucleic Acids Research, 2017, 45, 8392-8402.	14.5	36
32	Logical engineering of D-arm and T-stem of tRNA that enhances d-amino acid incorporation. Nucleic Acids Research, 2017, 45, 12601-12610.	14.5	76
33	tRid, an enabling method to isolate previously inaccessible small RNA fractions. Methods, 2016, 106, 105-111.	3.8	5
34	A human microRNA precursor binding to folic acid discovered by small RNA transcriptomic SELEX. Rna, 2016, 22, 1918-1928.	3.5	9
35	Essential structural elements in tRNAPro for EF-P-mediated alleviation of translation stalling. Nature Communications, 2016, 7, 11657.	12.8	68
36	Expanding the amino acid repertoire of ribosomal polypeptide synthesis via the artificial division of codon boxes. Nature Chemistry, 2016, 8, 317-325.	13.6	96

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37	A Fluorescent Imaging Probe Based on a Macrocyclic Scaffold That Binds to Cellular EpCAM. Journal of Molecular Evolution, 2015, 81, 210-217.	1.8	33
38	Destabilization of microRNAs in human cells by 3â€² deadenylation mediated by PARN and CUGBP1. Nucleic Acids Research, 2015, 43, 7521-7534.	14.5	74
39	Selection-Based Discovery of Druglike Macrocyclic Peptides. Annual Review of Biochemistry, 2014, 83, 727-752.	11.1	178
40	An orthogonal ribosome-tRNA pair via engineering of the peptidyl transferase center. Nature Chemical Biology, 2014, 10, 555-557.	8.0	70
41	Structural basis for the drug extrusion mechanism by a MATE multidrug transporter. Nature, 2013, 496, 247-251.	27.8	225
42	A Macrocyclic Peptide that Serves as a Cocrystallization Ligand and Inhibits the Function of a MATE Family Transporter. Molecules, 2013, 18, 10514-10530.	3.8	44
43	Selective thioether macrocyclization of peptides having the N-terminal 2-chloroacetyl group and competing two or three cysteine residues in translation. Organic and Biomolecular Chemistry, 2012, 10, 5783.	2.8	51
44	Charging of tRNAs Using Ribozymes and Selection of Cyclic Peptides Containing Thioethers. Methods in Molecular Biology, 2012, 805, 335-348.	0.9	21
45	Ribosomal synthesis of backbone macrocyclic peptides. Chemical Communications, 2011, 47, 9946.	4.1	37
46	Drug discovery of non-standard peptide with genetic code reprogramming. Drug Delivery System, 2011, 26, 584-592.	0.0	0
47	Flexizymes for genetic code reprogramming. Nature Protocols, 2011, 6, 779-790.	12.0	363
48	Natural Product-Like Macrocyclic N-Methyl-Peptide Inhibitors against a Ubiquitin Ligase Uncovered from a Ribosome-Expressed De Novo Library. Chemistry and Biology, 2011, 18, 1562-1570.	6.0	274
49	Actin-binding protein ABP140 is a methyltransferase for 3-methylcytidine at position 32 of tRNAs in Saccharomyces cerevisiae. Rna, 2011, 17, 1111-1119.	3.5	62
50	Selective stabilization of mammalian microRNAs by 3â€² adenylation mediated by the cytoplasmic poly(A) polymerase GLD-2. Genes and Development, 2009, 23, 433-438.	5.9	378
51	Biogenesis of glutaminyl-mt tRNA ^{Gln} in human mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16209-16214.	7.1	93
52	Specific residues at every third position of siRNA shape its efficient RNAi activity. Nucleic Acids Research, 2007, 35, e27.	14.5	85
53	Human Mitochondrial mRNAs Are Stabilized with Polyadenylation Regulated by Mitochondria-specific Poly(A) Polymerase and Polynucleotide Phosphorylase. Journal of Biological Chemistry, 2005, 280, 19721-19727.	3.4	162
54	Simple and rapid synthesis of siRNA derived from in vitro transcribed shRNA. Nucleic Acids Symposium Series, 2003, 3, 249-250.	0.3	15

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55	Preparation of materials for flexizyme reactions and genetic code reprogramming. Protocol Exchange, 0, , .	0.3	3