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	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
2	Flexizymes for genetic code reprogramming. Nature Protocols, 2011, 6, 779-790.	12.0	363
3	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
4	Structural basis for the drug extrusion mechanism by a MATE multidrug transporter. Nature, 2013, 496, 247-251.	27.8	225
5	Selection-Based Discovery of Druglike Macrocyclic Peptides. Annual Review of Biochemistry, 2014, 83, 727-752.	11.1	178
6	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
7	Highly selective inhibition of histone demethylases by de novo macrocyclic peptides. Nature Communications, 2017, 8, 14773.	12.8	124
8	Consecutive Elongation of D-Amino Acids in Translation. Cell Chemical Biology, 2017, 24, 46-54.	5.2	101
9	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
10	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
11	Ribosomal synthesis and de novo discovery of bioactive foldamer peptides containing cyclic Î²-amino acids. Nature Chemistry, 2020, 12, 1081-1088.	13.6	86
12	Specific residues at every third position of siRNA shape its efficient RNAi activity. Nucleic Acids Research, 2007, 35, e27.	14.5	85
13	Ribosomal Incorporation of Consecutive Î²-Amino Acids. Journal of the American Chemical Society, 2018, 140, 12159-12167.	13.7	80
14	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
15	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
16	An orthogonal ribosome-tRNA pair via engineering of the peptidyl transferase center. Nature Chemical Biology, 2014, 10, 555-557.	8.0	70
17	Essential structural elements in tRNAPro for EF-P-mediated alleviation of translation stalling. Nature Communications, 2016, 7, 11657.	12.8	68
18	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

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19	Ribosomal Synthesis of Backbone-Cyclic Peptides Compatible with In Vitro Display. Journal of the American Chemical Society, 2019, 141, 2279-2287.	13.7	53
20	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
21	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
22	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
23	Ribosomal synthesis of backbone macrocyclic peptides. Chemical Communications, 2011, 47, 9946.	4.1	37
24	Amino acid substrates impose polyamine, eIF5A, or hypusine requirement for peptide synthesis. Nucleic Acids Research, 2017, 45, 8392-8402.	14.5	36
25	Ribosomal Elongation of Aminobenzoic Acid Derivatives. Journal of the American Chemical Society, 2020, 142, 16518-16522.	13.7	35
26	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
27	Ribosomal Formation of Thioamide Bonds in Polypeptide Synthesis. Journal of the American Chemical Society, 2019, 141, 20004-20008.	13.7	33
28	Methodologies for Backbone Macrocyclic Peptide Synthesis Compatible With Screening Technologies. Frontiers in Chemistry, 2020, 8, 447.	3.6	29
29	Efficient siRNA Delivery by Lipid Nanoparticles Modified with a Nonstandard Macrocyclic Peptide for EpCAM-Targeting. Molecular Pharmaceutics, 2017, 14, 3290-3298.	4.6	28
30	An aminoacylation ribozyme evolved from a natural tRNA-sensing T-box riboswitch. Nature Chemical Biology, 2020, 16, 702-709.	8.0	25
31	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
32	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
33	Macrocyclic peptides exhibit antiviral effects against influenza virus HA and prevent pneumonia in animal models. Nature Communications, 2021, 12, 2654.	12.8	21
34	Charging of tRNAs Using Ribozymes and Selection of Cyclic Peptides Containing Thioethers. Methods in Molecular Biology, 2012, 805, 335-348.	0.9	21
35	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
36	tRNA engineering for manipulating genetic code. RNA Biology, 2018, 15, 453-460.	3.1	17

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37	Engineering Translation Components Improve Incorporation of Exotic Amino Acids. International Journal of Molecular Sciences, 2019, 20, 522.	4.1	16
38	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
39	Simple and rapid synthesis of siRNA derived from in vitro transcribed shRNA. Nucleic Acids Symposium Series, 2003, 3, 249-250.	0.3	15
40	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
41	Thioether Macrocyclic Peptides Selected against TET1 Compact Catalytic Domain Inhibit TET1 Catalytic Activity. ChemBioChem, 2018, 19, 979-985.	2.6	14
42	Flexizyme-catalyzed synthesis of 3â€²-aminoacyl-NH-tRNAs. Nucleic Acids Research, 2019, 47, e54-e54.	14.5	14
43	In Vitro Genetic Code Reprogramming for the Expansion of Usable Noncanonical Amino Acids. Annual Review of Biochemistry, 2022, 91, 221-243.	11.1	14
44	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
45	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
46	Advances in in vitro genetic code reprogramming in 2014â€“2017. Synthetic Biology, 2018, 3, ysy008.	2.2	11
47	A human microRNA precursor binding to folic acid discovered by small RNA transcriptomic SELEX. Rna, 2016, 22, 1918-1928.	3.5	9
48	OUP accepted manuscript. Nucleic Acids Research, 2022, , .	14.5	7
49	tRid, an enabling method to isolate previously inaccessible small RNA fractions. Methods, 2016, 106, 105-111.	3.8	5
50	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
51	Development of Bioactive Foldamers Using Ribosomally Synthesized Nonstandard Peptide Libraries. Bulletin of the Chemical Society of Japan, 2021, 94, 549-557.	3.2	3
52	Preparation of materials for flexizyme reactions and genetic code reprogramming. Protocol Exchange, 0, , .	0.3	3
53	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
54	In Vitro Selection of Thioether-Closed Macrocyclic Peptide by Means of the. Methods in Molecular Biology, 2022, 2371, 247-259.	0.9	1

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55	Drug discovery of non-standard peptide with genetic code reprogramming. Drug Delivery System, 2011, 26, 584-592.	0.0	0