Jun Hiratake

List of Publications by Year
in descending order

37 papers	1,513 citations	331670 21 h-index	345221 36 g-index
38 all docs	38 docs citations	38 times ranked	1976 citing authors

#	Article	IF	Citations
1	Sensitive Î²-galactosidase-targeting fluorescence probe for visualizing small peritoneal metastatic tumours in vivo. Nature Communications, 2015, 6, 6463.	12.8	334
2	Aminophosphonic and Aminoboronic Acids as Key Elements of a Transition State Analogue Inhibitor of Enzymes. Bioscience, Biotechnology and Biochemistry, 1997, 61, 211-218.	1.3	152
3	Design, Synthesis, and Evaluation of Î³-Phosphono Diester Analogues of Glutamate as Highly Potent Inhibitors and Active Site Probes of Î³-Glutamyl Transpeptidaseâ€. Biochemistry, 2007, 46, 1432-1447.	2.5	96
4	Identification of Catalytic Nucleophile ofEscherichia coliÎ³-Glutamyltranspeptidase by Î³-Monofluorophosphono Derivative of Glutamic Acid:Â N-Terminal Thr-391 in Small Subunit Is the Nucleophileâ€. Biochemistry, 2000, 39, 7764-7771.	2.5	94
5	Crystal structure of Â-glutamylcysteine synthetase: Insights into the mechanism of catalysis by a key enzyme for glutathione homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15052-15057.	7.1	69
6	Directed evolution of Pseudomonas aeruginosa lipase for improved amide-hydrolyzing activity. Protein Engineering, Design and Selection, 2005, 18, 93-101.	2.1	67
7	Mechanism-Based Inactivation of Glutathione Synthetase by Phosphinic Acid Transition-State Analog. Journal of the American Chemical Society, 1994, 116, 12059-12060.	13.7	49
8	Purification, Characterization, and Cloning of a Spodoptera frugiperda Sf9 Î²-N-Acetylhexosaminidase That Hydrolyzes Terminal N-Acetylglucosamine on the N-Glycan Core. Journal of Biological Chemistry, 2006, 281, 19545-19560.	3.4	48
9	Crystal Structures of Î³-Glutamyltranspeptidase in Complex with Azaserine and Acivicin: Novel Mechanistic Implication for Inhibition by Glutamine Antagonists. Journal of Molecular Biology, 2008, 380, 361-372.	4.2	47
10	Î²-d-Glycosylamidines. Bioorganic and Medicinal Chemistry Letters, 2001, 11, 467-470.	2.2	45
11	Preventive Effect of GGsTop, a Novel and Selective Î³-Glutamyl Transpeptidase Inhibitor, on Ischemia/Reperfusion-Induced Renal Injury in Rats. Journal of Pharmacology and Experimental Therapeutics, 2011, 339, 945-951.	2.5	42
12	Design, synthesis and evaluation of transition-state analogue inhibitors of Escherichia coli Î³-glutamylcysteine synthetase. Bioorganic and Medicinal Chemistry, 1998, 6, 1935-1953.	3.0	38
13	A sulfoximine-based inhibitor of human asparagine synthetase kills l-asparaginase-resistant leukemia cells. Bioorganic and Medicinal Chemistry, 2012, 20, 5915-5927.	3.0	37
14	A Potent Transition-State Analogue Inhibitor ofEscherichia coliAsparagine Synthetase A. Journal of the American Chemical Society, 1999, 121, 5799-5800.	13.7	33
15	Emission of 2-phenylethanol from its Î²-d-glucopyranoside and the biogenesis of these compounds from [2H8] l-phenylalanine in rose flowers. Tetrahedron, 2004, 60, 7005-7013.	1.9	30
16	A critical electrostatic interaction mediates inhibitor recognition by human asparagine synthetase. Bioorganic and Medicinal Chemistry, 2009, 17, 6641-6650.	3.0	30
17	Phosphonate-based irreversible inhibitors of human Î³-glutamyl transpeptidase (GGT). GGsTop is a non-toxic and highly selective inhibitor with critical electrostatic interaction with an active-site residue Lys562 for enhanced inhibitory activity. Bioorganic and Medicinal Chemistry, 2016, 24, 5340-5352.	3.0	29
18	Î³-(Monophenyl)phosphono glutamate analogues as mechanism-based inhibitors of Î³-glutamyl transpeptidase. Bioorganic and Medicinal Chemistry, 2006, 14, 6043-6054.	3.0	27

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19	Enzyme inhibitors as chemical tools to study enzyme catalysis: rational design, synthesis, and applications. Chemical Record, 2005, 5, 209-228.	5.8	26
20	Mechanism-based inactivation of E. coli Î³-glutamylcysteine synthetase by phosphinic acid- and sulfoximine-based transition-state analogues. Bioorganic and Medicinal Chemistry Letters, 1996, 6, 1437-1442.	2.2	21
21	Î²-Glycosylamidine as a ligand for affinity chromatography tailored to the glycon substrate specificity of Î²-glycosidases. Carbohydrate Research, 2003, 338, 1477-1490.	2.3	21
22	Highly sensitive active-site titration of lipase in microscale culture media using fluorescent organophosphorus ester. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2003, 1631, 197-205.	2.4	21
23	Glutathione-analogous peptidyl phosphorus esters as mechanism-based inhibitors of Î³-glutamyl transpeptidase for probing cysteinyl-glycine binding site. Bioorganic and Medicinal Chemistry, 2014, 22, 1176-1194.	3.0	20
24	Characterization of Inhibitors Acting at the Synthetase Site of Escherichia coli Asparagine Synthetase B. Biochemistry, 2001, 40, 11168-11175.	2.5	19
25	Inhibiting Glutathione Metabolism in Lung Lining Fluid as a Strategy to Augment Antioxidant Defense. Current Enzyme Inhibition, 2011, 7, 71-78.	0.4	19
26	Crystal Structures of Î²-Primeverosidase in Complex with Disaccharide Amidine Inhibitors. Journal of Biological Chemistry, 2014, 289, 16826-16834.	3.4	16
27	Recognition of a Cysteine Substrate byE. coliÎ³-Glutamylcysteine Synthetase Probed by Sulfoximine-based Transition-state Analogue Inhibitors. Bioscience, Biotechnology and Biochemistry, 2002, 66, 1500-1514.	1.3	15
28	Lactosylamidine-based affinity purification for cellulolytic enzymes EG I and CBH I from Hypocrea jecorina and their properties. Carbohydrate Research, 2010, 345, 2623-2629.	2.3	14
29	Synthesis and Characterization of Intermediate and Transition-State Analogue Inhibitors of Î³-Glutamyl Peptide Ligases. Bioscience, Biotechnology and Biochemistry, 1999, 63, 2248-2251.	1.3	13
30	An improved synthesis of the potent and selective Î³-glutamyl transpeptidase inhibitor GGsTop together with an inhibitory activity evaluation of its potential hydrolysis products. Tetrahedron Letters, 2017, 58, 3700-3703.	1.4	9
31	ATP-Dependent Inactivation ofEscherichia coliÎ³-Glutamylcysteine Synthetase byL-Glutamic Acid Î³-Monohydroxamate. Bioscience, Biotechnology and Biochemistry, 1998, 62, 1455-1457.	1.3	7
32	Involvement of Î³-Glutamyl Transpeptidase in Ischemia/Reperfusion-Induced Cardiac Dysfunction in Isolated Rat Hearts. Biological and Pharmaceutical Bulletin, 2019, 42, 1947-1952.	1.4	7
33	Glycosylamidines as Potent Selective and Easily Accessible Glycosidase Inhibitors and Their Application to Affinity Chromatography. Methods in Enzymology, 2003, 363, 421-444.	1.0	6
34	Î³-Glutamyltranspeptidase and Î³-Glutamyl Peptide Ligases: Fluorophosphonate and Phosphonodifluoromethyl Ketone Analogs as Probes of Tetrahedral Transition State and Î³-Glutamyl-Phosphate Intermediate. Methods in Enzymology, 2002, 354, 272-295.	1.0	4
35	Synthesis and evaluation of the inhibitory activity of the four stereoisomers of the potent and selective human Î³-glutamyl transpeptidase inhibitor GGsTop. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 4920-4924.	2.2	4
36	Expression and Biochemical Characterization of Î²-Primeverosidase and Application of Î²-Primeverosylamidine to Affinity Purification. Bioscience, Biotechnology and Biochemistry, 2008, 72, 376-383.	1.3	3

#	Article	IF	Citations
37	Î³-Glutamyl Transpeptidase and its Precursor. , 2013, , 3712-3719.		1