Bunta Watanabe

List of Publications by Year in descending order

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		279798	243625
48 papers	2,034 citations	23 h-index	44 g-index

48 all docs	48 docs citations	48 times ranked	2542 citing authors

#	Article	IF	Citations
1	Tandem Gene Duplication of Dioxygenases Drives the Structural Diversity of Steroidal Glycoalkaloids in the Tomato Clade. Plant and Cell Physiology, 2022, 63, 981-990.	3.1	5
2	The biosynthetic pathway of potato solanidanes diverged from that of spirosolanes due to evolution of a dioxygenase. Nature Communications, 2021, 12, 1300.	12.8	25
3	Synthesis of deuteriumâ€labeled cinnamic acids: Understanding the volatile benzenoid pathway in the flowers of the Japanese loquat <scp>Eriobotrya japonica</scp>. Journal of Labelled Compounds and Radiopharmaceuticals, 2021, 64, 403-416.	1.0	4
4	Synthesis and structural confirmation of calibagenin and saxosterol. Tetrahedron, 2021, 91, 132194.	1.9	0
5	Characterization of Câ€26 aminotransferase, indispensable for steroidal glycoalkaloid biosynthesis. Plant Journal, 2021, 108, 81-92.	5.7	7
6	Identification of Î±-Tomatine 23-Hydroxylase Involved in the Detoxification of a Bitter Glycoalkaloid. Plant and Cell Physiology, 2020, 61, 21-28.	3.1	29
7	Two BAHD Acyltransferases Catalyze the Last Step in the Shikonin/Alkannin Biosynthetic Pathway. Plant Physiology, 2020, 184, 753-761.	4.8	21
8	Characterization of melanin and optimal conditions for pigment production by an endophytic fungus, Spissiomyces endophytica SDBR-CMU319. PLoS ONE, 2019, 14, e0222187.	2.5	64
9	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
10	Structural insights into a key step of brassinosteroid biosynthesis and its inhibition. Nature Plants, 2019, 5, 589-594.	9.3	42
11	Synthesis and inhibitory activity of mechanism-based 4-coumaroyl-CoA ligase inhibitors. Bioorganic and Medicinal Chemistry, 2018, 26, 2466-2474.	3.0	7
12	Generation of Î±-solanine-free hairy roots of potato by CRISPR/Cas9 mediated genome editing of the St16DOX gene. Plant Physiology and Biochemistry, 2018, 131, 70-77.	5.8	150
13	Novel steroidal saponins from Dioscorea esculenta (Togedokoro). Bioscience, Biotechnology and Biochemistry, 2017, 81, 2253-2260.	1.3	7
14	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
15	A Dioxygenase Catalyzes Steroid 16Î±-Hydroxylation in Steroidal Glycoalkaloid Biosynthesis. Plant Physiology, 2017, 175, 120-133.	4.8	52
16	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
17	Brassinolide-like activity of castasterone analogs with varied side chains against rice lamina inclination. Bioorganic and Medicinal Chemistry, 2017, 25, 4566-4578.	3.0	10
18	Synthesis and Functional Assessment of a Novel Fatty Acid Probe, Ï‰-Ethynyl Eicosapentaenoic Acid Analog, to Analyze the in Vivo Behavior of Eicosapentaenoic Acid. Bioconjugate Chemistry, 2017, 28, 2077-2085.	3.6	12

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19	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
20	Structure-activity relationship studies of insect and plant steroid hormones. Journal of Pesticide Sciences, 2015, 40, 146-151.	1.4	5
21	Structure-activity relationship studies of insect and plant steroid hormones. Japanese Journal of Pesticide Science, 2015, 40, 157-162.	0.0	0
22	Synthesis and inhibitory activity of substrate-analog fructosyl peptide oxidase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3910-3913.	2.2	3
23	Stereospecific Inhibitory Effects of CCG-1423 on the Cellular Events Mediated by Myocardin-Related Transcription Factor A. PLoS ONE, 2015, 10, e0136242.	2.5	15
24	RPEL Proteins Are the Molecular Targets for CCG-1423, an Inhibitor of Rho Signaling. PLoS ONE, 2014, 9, e89016.	2.5	78
25	Structural basis for gating mechanisms of a eukaryotic P-glycoprotein homolog. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4049-4054.	7.1	163
26	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
27	Enhancement of production of eugenol and its glycosides in transgenic aspen plants via genetic engineering. Biochemical and Biophysical Research Communications, 2013, 436, 73-78.	2.1	28
28	Steroidal glycoalkaloid profiling and structures of glycoalkaloids in wild tomato fruit. Phytochemistry, 2013, 95, 145-157.	2.9	85
29	Occurrence of a Bacterial Membrane Microdomain at the Cell Division Site Enriched in Phospholipids with Polyunsaturated Hydrocarbon Chains. Journal of Biological Chemistry, 2012, 287, 24113-24121.	3.4	18
30	CYP90A1/CPD, a Brassinosteroid Biosynthetic Cytochrome P450 of Arabidopsis, Catalyzes C-3 Oxidation. Journal of Biological Chemistry, 2012, 287, 31551-31560.	3.4	133
31	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
32	Rice CYP90D2 and CYP90D3 catalyze C-23 hydroxylation of brassinosteroids inÂvitro. Plant Physiology and Biochemistry, 2012, 58, 220-226.	5.8	44
33	A detailed biochemical characterization of phosphopantothenate synthetase, a novel enzyme involved in coenzyme A biosynthesis in the Archaea. Extremophiles, 2012, 16, 819-828.	2.3	17
34	Characterization of raspberry ketone/zingerone synthase, catalyzing the alpha, beta-hydrogenation of phenylbutenones in raspberry fruits. Biochemical and Biophysical Research Communications, 2011, 412, 104-108.	2.1	42
35	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
36	Structureâ€“activity relationship of uniconazole, a potent inhibitor of ABA 8â€²-hydroxylase, with a focus on hydrophilic functional groups and conformation. Bioorganic and Medicinal Chemistry, 2008, 16, 3141-3152.	3.0	23

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37	Synthesis of ponasterone A derivatives with various steroid skeleton moieties and evaluation of their binding to the ecdysone receptor of Kc cells. Steroids, 2008, 73, 1452-1464.	1.8	25
38	Identification of crinosterol from astigamatid mitesâ˜†. Insect Biochemistry and Molecular Biology, 2007, 37, 506-511.	2.7	5
39	Arabidopsis CYP90B1 catalyses the early C-22 hydroxylation of C27, C28and C29sterols. Plant Journal, 2006, 45, 765-774.	5.7	152
40	Synthesis of 26,27-bisnorcastasterone analogs and analysis of conformationâ€“activity relationship for brassinolide-like activity. Bioorganic and Medicinal Chemistry, 2006, 14, 1761-1770.	3.0	22
41	Tomato cytochrome P450 CYP734A7 functions in brassinosteroid catabolism. Phytochemistry, 2006, 67, 1895-1906.	2.9	71
42	CYP724B2 and CYP90B3 Function in the Early C-22 Hydroxylation Steps of Brassinosteroid Biosynthetic Pathway in Tomato. Bioscience, Biotechnology and Biochemistry, 2006, 70, 2071-2080.	1.3	80
43	C-23 Hydroxylation by Arabidopsis CYP90C1 and CYP90D1 Reveals a Novel Shortcut in Brassinosteroid Biosynthesis. Plant Cell, 2006, 18, 3275-3288.	6.6	205
44	Cytochrome P450 CYP710A Encodes the Sterol C-22 Desaturase in Arabidopsis and Tomato. Plant Cell, 2006, 18, 1008-1022.	6.6	159
45	A simple synthesis of 6-deoxoteasterone and its 20-epimer. Tetrahedron Letters, 2004, 45, 2767-2769.	1.4	9
46	Synthesis of Brassinosteroids of Varying Acyl Side Chains and Evaluation of Their Brassinolide-like Activity. Bioscience, Biotechnology and Biochemistry, 2004, 68, 1097-1105.	1.3	26
47	Stereoselective synthesis of (22R)- and (22S)-castasterone/ponasterone A hybrid compounds and evaluation of their molting hormone activity. Steroids, 2004, 69, 483-493.	1.8	28
48	Synthesis of a Castasterone/Ponasterone Hybrid Compound and Evaluation of Its Molting Hormone-Like Activity. Journal of Pesticide Sciences, 2003, 28, 188-193.	1.4	15