Hiroshi Kawaide

List of Publications by Year
in descending order

90	5,852	94433 37	76900 74
papers	citations	h-index	g-index

91	91	91	6280
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The main auxin biosynthesis pathway in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18512-18517.	7.1	827
2	Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis. Plant Cell, 2000, 12, 1117-1126.	6.6	507
3	Repressing a Repressor. Plant Cell, 2001, 13, 1555-1566.	6.6	412
4	Analysis of the Expression of CLA1, a Gene That Encodes the 1-Deoxyxylulose 5-Phosphate Synthase of the 2-C-Methyl-d-Erythritol-4-Phosphate Pathway in Arabidopsis. Plant Physiology, 2000, 124, 95-104.	4.8	254
5	Phytochrome Regulates Gibberellin Biosynthesis during Germination of Photoblastic Lettuce Seeds. Plant Physiology, 1998, 118, 1517-1523.	4.8	226
6	The GA2 Locus of Arabidopsis thalianaEncodes ent-Kaurene Synthase of Gibberellin Biosynthesis. Plant Physiology, 1998, 116, 1271-1278.	4.8	197
7	Identification and functional analysis of bifunctionalent-kaurene synthase from the mossPhyscomitrella patens. FEBS Letters, 2006, 580, 6175-6181.	2.8	181
8	CYP714B1 and CYP714B2 encode gibberellin 13-oxidases that reduce gibberellin activity in rice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1947-1952.	7.1	175
9	The Role of ABI3 and FUS3 Loci in Arabidopsis thaliana on Phase Transition from Late Embryo Development to Germination. Developmental Biology, 2000, 220, 412-423.	2.0	170
10	ent-Kaurene Synthase from the FungusPhaeosphaeria sp. L487. Journal of Biological Chemistry, 1997, 272, 21706-21712.	3.4	144
11	Distinct Characteristics of Indole-3-Acetic Acid and Phenylacetic Acid, Two Common Auxins in Plants. Plant and Cell Physiology, 2015, 56, 1641-1654.	3.1	142
12	Abscisic acid in the thermoinhibition of lettuce seed germination and enhancement of its catabolism by gibberellin. Journal of Experimental Botany, 2003, 55, 111-118.	4.8	130
13	Biochemical and Molecular Analyses of Gibberellin Biosynthesis in Fungi. Bioscience, Biotechnology and Biochemistry, 2006, 70, 583-590.	1.3	126
14	Regulation of gibberellin biosynthesis genes during flower and early fruit development of tomato. Plant Journal, 1999, 17, 241-250.	5.7	123
15	Overexpression of AtCPS and AtKS in Arabidopsis Confers Increased ent-Kaurene Production But No Increase in Bioactive Gibberellins. Plant Physiology, 2003, 132, 830-839.	4.8	119
16	Arabidopsis CYP94B3 Encodes Jasmonyl-l-Isoleucine 12-Hydroxylase, a Key Enzyme in the Oxidative Catabolism of Jasmonate. Plant and Cell Physiology, 2011, 52, 1757-1765.	3.1	109
17	Genome-Based Discovery of an Unprecedented Cyclization Mode in Fungal Sesterterpenoid Biosynthesis. Journal of the American Chemical Society, 2016, 138, 10011-10018.	13.7	105
18	UGT74D1 Catalyzes the Glucosylation of 2-Oxindole-3-Acetic Acid in the Auxin Metabolic Pathway in Arabidopsis. Plant and Cell Physiology, 2014, 55, 218-228.	3.1	99

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19	Endogenous Diterpenes Derived from ent-Kaurene, a Common Gibberellin Precursor, Regulate Protonema Differentiation of the Moss Physcomitrella patens Â Â Â. Plant Physiology, 2010, 153, 1085-1097.	4.8	96
20	Genetic Evidence for the Role of Isopentenyl Diphosphate Isomerases in the Mevalonate Pathway and Plant Development in Arabidopsis. Plant and Cell Physiology, 2008, 49, 604-616.	3.1	90
21	The gene encoding tobacco gibberellin 3beta-hydroxylase is expressed at the site of GA action during stem elongation and flower organ development. Plant Journal, 1999, 20, 15-24.	5.7	89
22	Evolutionary trajectory of phytoalexin biosynthetic gene clusters in rice. Plant Journal, 2016, 87, 293-304.	5.7	76
23	Genomic evidence for convergent evolution of gene clusters for momilactone biosynthesis in land plants. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12472-12480.	7.1	73
24	The chloroplast protein BPG2 functions in brassinosteroidâ€mediated postâ€transcriptional accumulation of chloroplast rRNA. Plant Journal, 2010, 61, 409-422.	5.7	63
25	Functional Analysis of the Two Interacting Cyclase Domains in ent-Kaurene Synthase from the FungusPhaeosphaeria sp. L487 and a Comparison with Cyclases from Higher Plants. Journal of Biological Chemistry, 2000, 275, 2276-2280.	3.4	61
26	Cloning of a Full-length cDNA Encodingent-Kaurene Synthase fromGibberella fujikuroi: Functional Analysis of a Bifunctional Diterpene Cyclase. Bioscience, Biotechnology and Biochemistry, 2000, 64, 660-664.	1.3	60
27	Momilactone A and B as Allelochemicals from MossHypnum plumaeforme: First Occurrence in Bryophytes. Bioscience, Biotechnology and Biochemistry, 2007, 71, 3127-3130.	1.3	55
28	Cloning and Functional Expression of cDNA Encoding Aphidicolan-16Î²-ol Synthase:Â A Key Enzyme Responsible for Formation of an Unusual Diterpene Skeleton in Biosynthesis of Aphidicolin. Journal of the American Chemical Society, 2001, 123, 5154-5155.	13.7	53
29	Physiological role of germicidins in spore germination and hyphal elongation in Streptomyces coelicolor A3(2). Journal of Antibiotics, 2011, 64, 607-611.	2.0	52
30	Identification of the single amino acid involved in quenching the entâ€kauranyl cation by a water molecule in entâ€kaurene synthase of Physcomitrella patens. FEBS Journal, 2011, 278, 123-133.	4.7	47
31	Germination of photoblastic lettuce seeds is regulated via the control of endogenous physiologically active gibberellin content, rather than of gibberellin responsiveness. Journal of Experimental Botany, 2008, 59, 3383-3393.	4.8	44
32	Antisense and chemical suppression of the nonmevalonate pathway affects ent -kaurene biosynthesis in Arabidopsis. Planta, 2002, 215, 339-344.	3.2	43
33	The CYP701B1 of Physcomitrella patens is an ent -kaurene oxidase that resists inhibition by uniconazole-P. FEBS Letters, 2011, 585, 1879-1883.	2.8	43
34	Enzymatic 13C Labeling and Multidimensional NMR Analysis of Miltiradiene Synthesized by Bifunctional Diterpene Cyclase in Selaginella moellendorffii. Journal of Biological Chemistry, 2011, 286, 42840-42847.	3.4	40
35	(R)-Mevalonate 3-Phosphate Is an Intermediate of the Mevalonate Pathway in Thermoplasma acidophilum. Journal of Biological Chemistry, 2014, 289, 15957-15967.	3.4	40
36	Formation and Dissociation of the BSS1 Protein Complex Regulates Plant Development via Brassinosteroid Signaling. Plant Cell, 2015, 27, 375-390.	6.6	40

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37	Cloning and Molecular Analyses of a Gibberellin 20-Oxidase Gene Expressed Specifically in Developing Seeds of Watermelon. Plant Physiology, 1999, 121, 373-382.	4.8	39
38	An Ancestral Gibberellin in a Moss Physcomitrella patens. Molecular Plant, 2018, 11, 1097-1100.	8.3	39
39	Modified mevalonate pathway of the archaeon Aeropyrum pernix proceeds via trans -anhydromevalonate 5-phosphate. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10034-10039.	7.1	39
40	Accumulation of Gibberellin A1and the Metabolism of Gibberellin A9to Gibberellin A1in aPhaeosphaeriasp. L487 Culture. Bioscience, Biotechnology and Biochemistry, 1993, 57, 1403-1405.	1.3	37
41	Deactivation of Gibberellin by 2-Oxidation during Germination of Photoblastic Lettuce Seeds. Bioscience, Biotechnology and Biochemistry, 2003, 67, 1551-1558.	1.3	32
42	HpDTC1, a Stress-Inducible Bifunctional Diterpene Cyclase Involved in Momilactone Biosynthesis, Functions in Chemical Defence in the Moss Hypnum plumaeforme. Scientific Reports, 2016, 6, 25316.	3.3	31
43	Arabidopsis CYP85A2 Catalyzes Lactonization Reactions in the Biosynthesis of 2-Deoxy-7-oxalactone Brassinosteroids. Bioscience, Biotechnology and Biochemistry, 2008, 72, 2110-2117.	1.3	29
44	Phytotoxin produced by Streptomyces sp. causing potato russet scab in Japan. Journal of General Plant Pathology, 2005, 71, 364-369.	1.0	28
45	Involvement of the CYP78A Subfamily of Cytochrome P450 Monooxygenases in Protonema Growth and Gametophore Formation in the MossPhyscomitrella patens. Bioscience, Biotechnology and Biochemistry, 2011, 75, 331-336.	1.3	28
46	CYP94B3 activity against jasmonic acid amino acid conjugates and the elucidation of 12-O-Î²-glucopyranosyl-jasmonoyl-l-isoleucine as an additional metabolite. Phytochemistry, 2014, 99, 6-13.	2.9	25
47	Functional Identification of a Riceent-Kaurene Oxidase, OsKO2, Using thePichia pastorisExpression System. Bioscience, Biotechnology and Biochemistry, 2008, 72, 3285-3288.	1.3	24
48	Molecular evolution of the substrate specificity of ent-kaurene synthases to adapt to gibberellin biosynthesis in land plants. Biochemical Journal, 2014, 462, 539-546.	3.7	23
49	CND41, a chloroplast nucleoid protein that regulates plastid development, causes reduced gibberellin content and dwarfism in tobacco. Physiologia Plantarum, 2003, 117, 130-136.	5.2	22
50	Relationship between Response to and Production of the Aerial Mycelium-inducing Substances Pamamycin-607 and A-factor. Bioscience, Biotechnology and Biochemistry, 2003, 67, 803-808.	1.3	20
51	Effects of concanamycins produced by Streptomyces scabies on lesion type of common scab of potato. Journal of General Plant Pathology, 2017, 83, 78-82.	1.0	19
52	Blue-light irradiation up-regulates the ent-kaurene synthase gene and affects the avoidance response of protonemal growth in Physcomitrella patens. Planta, 2014, 240, 117-124.	3.2	17
53	Oxidation of 3-, 7-, and 12-hydroxyl Groups of Cholic Acid by an AlkalophilicBacillussp.. Bioscience, Biotechnology and Biochemistry, 1994, 58, 1002-1006.	1.3	16
54	Mevalonate-Dependent Enzymatic Synthesis of Amorphadiene Driven by an ATP-Regeneration System Using Polyphosphate Kinase. Bioscience, Biotechnology and Biochemistry, 2012, 76, 1558-1560.	1.3	16

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55	Effect of Secondary Metabolites of Tomato (Solanum lycopersicum) on Chemotaxis of Ralstonia solanacearum, Pathogen of Bacterial Wilt Disease. Journal of Agricultural and Food Chemistry, 2019, 67, 1807-1813.	5.2	16
56	Biosynthetic study of conidiation-inducing factor conidiogenone: heterologous production and cyclization mechanism of a key bifunctional diterpene synthase. Bioscience, Biotechnology and Biochemistry, 2019, 83, 192-201.	1.3	15
57	Identification of Gibberellins A₄, A₉, and A₂₄fromPhaeosphaeriasp. L487 Cultured in a Chemically Defined Medium. Bioscience, Biotechnology and Biochemistry, 1994, 58, 438-439.	1.3	14
58	Biosynthetic Origin of the Carbon Skeleton and Nitrogen Atom of Pamamycin-607, a Nitrogen-Containing Polyketide. Bioscience, Biotechnology and Biochemistry, 2005, 69, 315-320.	1.3	14
59	In planta functions of cytochrome P450 monooxygenase genes in the phytocassane biosynthetic gene cluster on rice chromosome 2. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1021-1030.	1.3	14
60	Antibacterial activity of alkyl gallates and related compounds against Ralstonia solanacearum. Journal of Pesticide Sciences, 2011, 36, 240-242.	1.4	13
61	Cloning of Gibberellin 3Î²-Hydroxylase cDNA and Analysis of Endogenous Gibberellins in the Developing Seeds in Watermelon. Plant and Cell Physiology, 2002, 43, 152-158.	3.1	12
62	Effect of Pamamycin-607 on Secondary Metabolite Production byStreptomycesspp.. Bioscience, Biotechnology and Biochemistry, 2011, 75, 1722-1726.	1.3	12
63	Hormonal diterpenoids derived froment-kaurenoic acid are involved in the blue-light avoidance response ofPhyscomitrella patens. Plant Signaling and Behavior, 2015, 10, e989046.	2.4	12
64	Characterization and evolutionary analysis of ent-kaurene synthase like genes from the wild rice species Oryza rufipogon. Biochemical and Biophysical Research Communications, 2016, 480, 402-408.	2.1	12
65	Enzymatic Total Synthesis of Gibberellin A4from Acetate. Bioscience, Biotechnology and Biochemistry, 2011, 75, 128-135.	1.3	11
66	A Single Amino Acid Mutation Converts (R)-5-Diphosphomevalonate Decarboxylase into a Kinase. Journal of Biological Chemistry, 2017, 292, 2457-2469.	3.4	11
67	Phytotoxin produced by the netted scab pathogen, Streptomyces turgidiscabies strain 65, isolated in Sweden. Journal of General Plant Pathology, 2018, 84, 108-117.	1.0	11
68	Anthranilic Acid, a Spore Germination Inhibitor of Phytopathogenic Streptomyces sp. B-9-1 Causing Root Tumor of Melon. Nihon Hosenkin Gakkai Shi = Actinomycetologica, 2005, 19, 48-54.	0.3	10
69	Isolation and Characterization of a Spore Germination Inhibitor fromStreptomycessp. CB-1-1, a Phytopathogen Causing Root Tumor of Melon. Bioscience, Biotechnology and Biochemistry, 2007, 71, 986-992.	1.3	9
70	Nitrogen Incorporation in the Biosynthetic Pathway of the Nitrogen-containing Polyketide, Pamamycin in Streptomyces alboniger. Journal of Antibiotics, 2005, 58, 722-730.	2.0	7
71	Gibberellin Biosynthetic Inhibitors Make Human Malaria Parasite Plasmodium falciparum Cells Swell and Rupture to Death. PLoS ONE, 2012, 7, e32246.	2.5	7
72	Structure-activity Relationship of Pamamycins: Effect of Side Chain Length on Aerial Mycelium-inducing Activity. Journal of Antibiotics, 2008, 61, 98-102.	2.0	6

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73	Analysis of ent-kaurenoic acid by ultra-performance liquid chromatography-tandem mass spectrometry. Biochemistry and Biophysics Reports, 2015, 2, 103-107.	1.3	6
74	Ethyl Î²-<scp>d</scp>-glucoside: a novel chemoattractant of Ralstonia solanacearum isolated from tomato root exudates by a bioassay-guided fractionation. Bioscience, Biotechnology and Biochemistry, 2018, 82, 2049-2052.	1.3	6
75	Conversion of Mevalonate 3-Kinase into 5-Phosphomevalonate 3-Kinase by Single Amino Acid Mutations. Applied and Environmental Microbiology, 2019, 85, .	3.1	6
76	Biochemical synthesis of uniformly 13C-labeled diterpene hydrocarbons and their bioconversion to diterpenoid phytoalexins in planta. Bioscience, Biotechnology and Biochemistry, 2017, 81, 1176-1184.	1.3	5
77	Bioassay-guided isolation of a novel chemoattractant for Ralstonia solanacearum in tomato root exudates. Journal of General Plant Pathology, 2018, 84, 20-26.	1.0	5
78	Hormonal Diterpenoids Distinct to Gibberellins Regulate Protonema Differentiation in the Moss Physcomitrium patens. Plant and Cell Physiology, 2020, 61, 1861-1868.	3.1	5
79	Structural Determination of Hypnosin, a Spore Germination Inhibitor of Phytopathogenic Streptomyces sp. Causing Root Tumor in Melon (Cucumis sp.). Journal of Agricultural and Food Chemistry, 2007, 55, 10622-10627.	5.2	4
80	Assays of Protonemal Growth Responses in Physcomitrella patens Under Blue- and Red-Light Stimuli. Methods in Molecular Biology, 2019, 1924, 35-43.	0.9	4
81	Daminozide and prohexadione have similar modes of action as inhibitors of the late stages of gibberellin metabolism. Physiologia Plantarum, 1997, 101, 309-313.	5.2	3
82	Isolation and stereocontrolled synthesis of a 17-hydroxy-16Î²,17-dihydrogibberellin, GA82. Tetrahedron Letters, 1995, 36, 5917-5920.	1.4	3
83	Characterization of moss ent-kaurene oxidase (CYP701B1) using a highly purified preparation. Journal of Biochemistry, 2018, 163, 69-76.	1.7	2
84	Corrigendum to â€œIdentification and functional analysis of bifunctionalent-kaurene synthase from the mossPhyscomitrella patensâ€•[FEBS Lett. 580 (2006) 6175-6181]. FEBS Letters, 2007, 581, 2748-2748.	2.8	1
85	Isolation and structural properties of aerial mycelium differentiation-inhibitory substances against Streptomyces scabiei causing potato common scab. Journal of Pesticide Sciences, 2007, 32, 131-134.	1.4	1
86	Endogenous Gibberellins in Mature Pollen ofLilium longiflorum. Agricultural and Biological Chemistry, 1991, 55, 277-278.	0.3	0
87	ç³¸çŠ¶èŒç”±æ¥ã®ã‚¸ãƒ™ãƒ¬ãƒªãƒ³ç”Ÿåˆæˆé…µç´ é¤¾åœ¨æ©Ÿèƒ½. Nippon Nogeikagaku Kaishi, 2002, 76, 1195-1198.	0.1	0
88	ç³¸çŠ¶èŒã¨æ‰€å«ã‚ã‚‹ã‚¸ãƒ™ãƒ¬ãƒªãƒ³ç”Ÿåˆæˆé…µç´ ã®æ§‹é€ æ©Ÿèƒ½ã«é–¢ã™ã‚‹ç©¶. Nippon Nogeikagaku Kaishi, 2004, 7	0.0	0
89	Phytotoxin Produced by Streptomyces cheloniumii Causing Potato Russet Scab. ACS Symposium Series, 2004, , 239-245.	0.5	0
90	Discussion in the biosynthesis and function of growth regulators from the evolution of mosses to flowering plants. Japanese Journal of Pesticide Science, 2021, 46, 129-134.	0.0	0