

# Hiroshi Kawaide

## List of Publications by Year in descending order

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90  
papers

5,852  
citations

94433

37  
h-index

76900

74  
g-index

91  
all docs

91  
docs citations

91  
times ranked

6280  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	Hormonal Diterpenoids Distinct to Gibberellins Regulate Protonema Differentiation in the Moss <i>Physcomitrium patens</i> . Plant and Cell Physiology, 2020, 61, 1861-1868.	3.1	5
4	Assays of Protonemal Growth Responses in <i>Physcomitrella patens</i> Under Blue- and Red-Light Stimuli. Methods in Molecular Biology, 2019, 1924, 35-43.	0.9	4
5	Conversion of Mevalonate 3-Kinase into 5-Phosphomevalonate 3-Kinase by Single Amino Acid Mutations. Applied and Environmental Microbiology, 2019, 85, .	3.1	6
6	Effect of Secondary Metabolites of Tomato ( <i>Solanum lycopersicum</i> ) on Chemotaxis of <i>Ralstonia solanacearum</i> , Pathogen of Bacterial Wilt Disease. Journal of Agricultural and Food Chemistry, 2019, 67, 1807-1813.	5.2	16
7	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
8	Phytotoxin produced by the netted scab pathogen, <i>Streptomyces turgidiscabies</i> strain 65, isolated in Sweden. Journal of General Plant Pathology, 2018, 84, 108-117.	1.0	11
9	Characterization of moss ent-kaurene oxidase (CYP701B1) using a highly purified preparation. Journal of Biochemistry, 2018, 163, 69-76.	1.7	2
10	An Ancestral Gibberellin in a Moss <i>Physcomitrella patens</i> . Molecular Plant, 2018, 11, 1097-1100.	8.3	39
11	Bioassay-guided isolation of a novel chemoattractant for <i>Ralstonia solanacearum</i> in tomato root exudates. Journal of General Plant Pathology, 2018, 84, 20-26.	1.0	5
12	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
13	Ethyl $\beta$ -D-glucoside: a novel chemoattractant of <i>Ralstonia solanacearum</i> isolated from tomato root exudates by a bioassay-guided fractionation. Bioscience, Biotechnology and Biochemistry, 2018, 82, 2049-2052.	1.3	6
14	Modified mevalonate pathway of the archaeon <i>Aeropyrum pernix</i> 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
15	Effects of concanamycins produced by <i>Streptomyces scabies</i> on lesion type of common scab of potato. Journal of General Plant Pathology, 2017, 83, 78-82.	1.0	19
16	Biochemical synthesis of uniformly <sup>13</sup> C-labeled diterpene hydrocarbons and their bioconversion to diterpenoid phytoalexins in planta. Bioscience, Biotechnology and Biochemistry, 2017, 81, 1176-1184.	1.3	5
17	A Single Amino Acid Mutation Converts (R)-5-Diphosphomevalonate Decarboxylase into a Kinase. Journal of Biological Chemistry, 2017, 292, 2457-2469.	3.4	11
18	HpDTC1, a Stress-Inducible Bifunctional Diterpene Cyclase Involved in Momilactone Biosynthesis, Functions in Chemical Defence in the Moss <i>Hypnum plumaeforme</i> . Scientific Reports, 2016, 6, 25316.	3.3	31

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19	Genome-Based Discovery of an Unprecedented Cyclization Mode in Fungal Sesterterpenoid Biosynthesis. <i>Journal of the American Chemical Society</i> , 2016, 138, 10011-10018.	13.7	105
20	Characterization and evolutionary analysis of ent-kaurene synthase like genes from the wild rice species <i>Oryza rufipogon</i> . <i>Biochemical and Biophysical Research Communications</i> , 2016, 480, 402-408.	2.1	12
21	Evolutionary trajectory of phytoalexin biosynthetic gene clusters in rice. <i>Plant Journal</i> , 2016, 87, 293-304.	5.7	76
22	Analysis of ent-kaurenoic acid by ultra-performance liquid chromatography-tandem mass spectrometry. <i>Biochemistry and Biophysics Reports</i> , 2015, 2, 103-107.	1.3	6
23	Formation and Dissociation of the BSS1 Protein Complex Regulates Plant Development via Brassinosteroid Signaling. <i>Plant Cell</i> , 2015, 27, 375-390.	6.6	40
24	Hormonal diterpenoids derived from ent-kaurenoic acid are involved in the blue-light avoidance response of <i>Physcomitrella patens</i> . <i>Plant Signaling and Behavior</i> , 2015, 10, e989046.	2.4	12
25	Distinct Characteristics of Indole-3-Acetic Acid and Phenylacetic Acid, Two Common Auxins in Plants. <i>Plant and Cell Physiology</i> , 2015, 56, 1641-1654.	3.1	142
26	(R)-Mevalonate 3-Phosphate Is an Intermediate of the Mevalonate Pathway in <i>Thermoplasma acidophilum</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 15957-15967.	3.4	40
27	Molecular evolution of the substrate specificity of ent-kaurene synthases to adapt to gibberellin biosynthesis in land plants. <i>Biochemical Journal</i> , 2014, 462, 539-546.	3.7	23
28	CYP94B3 activity against jasmonic acid amino acid conjugates and the elucidation of 12-O- $\beta$ -glucopyranosyl-jasmonoyl-l-isoleucine as an additional metabolite. <i>Phytochemistry</i> , 2014, 99, 6-13.	2.9	25
29	UGT74D1 Catalyzes the Glucosylation of 2-Oxindole-3-Acetic Acid in the Auxin Metabolic Pathway in <i>Arabidopsis</i> . <i>Plant and Cell Physiology</i> , 2014, 55, 218-228.	3.1	99
30	Blue-light irradiation up-regulates the ent-kaurene synthase gene and affects the avoidance response of protonemal growth in <i>Physcomitrella patens</i> . <i>Planta</i> , 2014, 240, 117-124.	3.2	17
31	CYP714B1 and CYP714B2 encode gibberellin 13-oxidases that reduce gibberellin activity in rice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 1947-1952.	7.1	175
32	Mevalonate-Dependent Enzymatic Synthesis of Amorphadiene Driven by an ATP-Regeneration System Using Polyphosphate Kinase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2012, 76, 1558-1560.	1.3	16
33	Gibberellin Biosynthetic Inhibitors Make Human Malaria Parasite <i>Plasmodium falciparum</i> Cells Swell and Rupture to Death. <i>PLoS ONE</i> , 2012, 7, e32246.	2.5	7
34	Involvement of the CYP78A Subfamily of Cytochrome P450 Monooxygenases in Protonema Growth and Gametophore Formation in the Moss <i>Physcomitrella patens</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2011, 75, 331-336.	1.3	28
35	Effect of Pamamycin-607 on Secondary Metabolite Production by <i>Streptomyces</i> spp.. <i>Bioscience, Biotechnology and Biochemistry</i> , 2011, 75, 1722-1726.	1.3	12
36	The main auxin biosynthesis pathway in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 18512-18517.	7.1	827

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37	Identification of the single amino acid involved in quenching the $\epsilon$ -kauranyl cation by a water molecule in $\epsilon$ -kaurane synthase of <i>Physcomitrella patens</i> . FEBS Journal, 2011, 278, 123-133.	4.7	47
38	The CYP701B1 of <i>Physcomitrella patens</i> is an $\epsilon$ -kaurane oxidase that resists inhibition by uniconazole-P. FEBS Letters, 2011, 585, 1879-1883.	2.8	43
39	Enzymatic Total Synthesis of Gibberellin A4 from Acetate. Bioscience, Biotechnology and Biochemistry, 2011, 75, 128-135.	1.3	11
40	Enzymatic <sup>13</sup> C Labeling and Multidimensional NMR Analysis of Miltiradiene Synthesized by Bifunctional Diterpene Cyclase in <i>Selaginella moellendorffii</i> . Journal of Biological Chemistry, 2011, 286, 42840-42847.	3.4	40
41	Arabidopsis CYP94B3 Encodes Jasmonyl-Isoleucine 12-Hydroxylase, a Key Enzyme in the Oxidative Catabolism of Jasmonate. Plant and Cell Physiology, 2011, 52, 1757-1765.	3.1	109
42	Antibacterial activity of alkyl gallates and related compounds against <i>Ralstonia solanacearum</i> . Journal of Pesticide Sciences, 2011, 36, 240-242.	1.4	13
43	Physiological role of germicidins in spore germination and hyphal elongation in <i>Streptomyces coelicolor</i> A3(2). Journal of Antibiotics, 2011, 64, 607-611.	2.0	52
44	The chloroplast protein BPG2 functions in brassinosteroid-mediated posttranscriptional accumulation of chloroplast rRNA. Plant Journal, 2010, 61, 409-422.	5.7	63
45	Endogenous Diterpenes Derived from $\epsilon$ -kaurane, a Common Gibberellin Precursor, Regulate Protonema Differentiation of the Moss <i>Physcomitrella patens</i> . Plant Physiology, 2010, 153, 1085-1097.	4.8	96
46	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
47	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
48	Functional Identification of a Rice $\epsilon$ -kaurane Oxidase, OsKO2, Using the <i>Pichia pastoris</i> Expression System. Bioscience, Biotechnology and Biochemistry, 2008, 72, 3285-3288.	1.3	24
49	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
50	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
51	Corrigendum to "Identification and functional analysis of bifunctional $\epsilon$ -kaurane synthase from the moss <i>Physcomitrella patens</i> " [FEBS Lett. 580 (2006) 6175-6181]. FEBS Letters, 2007, 581, 2748-2748.	2.8	1
52	Momilactone A and B as Allelochemicals from Moss <i>Hypnum plumaeforme</i> : First Occurrence in Bryophytes. Bioscience, Biotechnology and Biochemistry, 2007, 71, 3127-3130.	1.3	55
53	Isolation and Characterization of a Spore Germination Inhibitor from <i>Streptomyces</i> sp. CB-1-1, a Phytopathogen Causing Root Tumor of Melon. Bioscience, Biotechnology and Biochemistry, 2007, 71, 986-992.	1.3	9
54	Structural Determination of Hypnosin, a Spore Germination Inhibitor of Phytopathogenic <i>Streptomyces</i> sp. Causing Root Tumor in Melon ( <i>Cucumis</i> sp.). Journal of Agricultural and Food Chemistry, 2007, 55, 10622-10627.	5.2	4

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55	Isolation and structural properties of aerial mycelium differentiation-inhibitory substances against <i>Streptomyces scabiei</i> causing potato common scab. <i>Journal of Pesticide Sciences</i> , 2007, 32, 131-134.	1.4	1
56	Biochemical and Molecular Analyses of Gibberellin Biosynthesis in Fungi. <i>Bioscience, Biotechnology and Biochemistry</i> , 2006, 70, 583-590.	1.3	126
57	Identification and functional analysis of bifunctional ent-kaurene synthase from the moss <i>Physcomitrella patens</i> . <i>FEBS Letters</i> , 2006, 580, 6175-6181.	2.8	181
58	Anthranilic Acid, a Spore Germination Inhibitor of Phytopathogenic <i>Streptomyces</i> sp. B-9-1 Causing Root Tumor of Melon. <i>Nihon Hosenkin Gakkai Shi = Actinomycetologica</i> , 2005, 19, 48-54.	0.3	10
59	Nitrogen Incorporation in the Biosynthetic Pathway of the Nitrogen-containing Polyketide, Pamamycin in <i>Streptomyces alboniger</i> . <i>Journal of Antibiotics</i> , 2005, 58, 722-730.	2.0	7
60	Phytotoxin produced by <i>Streptomyces</i> sp. causing potato russet scab in Japan. <i>Journal of General Plant Pathology</i> , 2005, 71, 364-369.	1.0	28
61	Biosynthetic Origin of the Carbon Skeleton and Nitrogen Atom of Pamamycin-607, a Nitrogen-Containing Polyketide. <i>Bioscience, Biotechnology and Biochemistry</i> , 2005, 69, 315-320.	1.3	14
62	3,5-Dihydroxy-2-methyl-4-pyridone, a novel gibberellin biosynthesis inhibitor, causes dwarfism in tobacco. <i>Nippon Nogeikagaku Kaishi</i> , 2004, 76, 1195-1208.	0.5	0
63	Phytotoxin Produced by <i>Streptomyces cheloniumii</i> Causing Potato Russet Scab. <i>ACS Symposium Series</i> , 2004, , 239-245.	0.5	0
64	CND41, a chloroplast nucleoid protein that regulates plastid development, causes reduced gibberellin content and dwarfism in tobacco. <i>Physiologia Plantarum</i> , 2003, 117, 130-136.	5.2	22
65	Deactivation of Gibberellin by 2-Oxidation during Germination of Photoblastic Lettuce Seeds. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 1551-1558.	1.3	32
66	Relationship between Response to and Production of the Aerial Mycelium-inducing Substances Pamamycin-607 and A-factor. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 803-808.	1.3	20
67	Abscisic acid in the thermoinhibition of lettuce seed germination and enhancement of its catabolism by gibberellin. <i>Journal of Experimental Botany</i> , 2003, 55, 111-118.	4.8	130
68	Overexpression of AtCPS and AtKS in <i>Arabidopsis</i> Confers Increased ent-Kaurene Production But No Increase in Bioactive Gibberellins. <i>Plant Physiology</i> , 2003, 132, 830-839.	4.8	119
69	Cloning of Gibberellin 3-Hydroxylase cDNA and Analysis of Endogenous Gibberellins in the Developing Seeds in Watermelon. <i>Plant and Cell Physiology</i> , 2002, 43, 152-158.	3.1	12
70	3,5-Dihydroxy-2-methyl-4-pyridone, a novel gibberellin biosynthesis inhibitor, causes dwarfism in tobacco. <i>Nippon Nogeikagaku Kaishi</i> , 2002, 76, 1195-1208.	0.5	0
71	Antisense and chemical suppression of the nonmevalonate pathway affects ent-kaurene biosynthesis in <i>Arabidopsis</i> . <i>Planta</i> , 2002, 215, 339-344.	3.2	43
72	Cloning and Functional Expression of cDNA Encoding Aphidicolan-16 $\beta$ -ol Synthase: A Key Enzyme Responsible for Formation of an Unusual Diterpene Skeleton in Biosynthesis of Aphidicolin. <i>Journal of the American Chemical Society</i> , 2001, 123, 5154-5155.	13.7	53

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73	Repressing a Repressor. <i>Plant Cell</i> , 2001, 13, 1555-1566.	6.6	412
74	Functional Analysis of the Two Interacting Cyclase Domains in ent-Kaurene Synthase from the Fungus <i>Phaeosphaeria</i> sp. L487 and a Comparison with Cyclases from Higher Plants. <i>Journal of Biological Chemistry</i> , 2000, 275, 2276-2280.	3.4	61
75	Cloning of a Full-length cDNA Encoding ent-Kaurene Synthase from <i>Gibberella fujikuroi</i> : Functional Analysis of a Bifunctional Diterpene Cyclase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2000, 64, 660-664.	1.3	60
76	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 <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2000, 124, 95-104.	4.8	254
77	The Role of ABI3 and FUS3 Loci in <i>Arabidopsis thaliana</i> on Phase Transition from Late Embryo Development to Germination. <i>Developmental Biology</i> , 2000, 220, 412-423.	2.0	170
78	Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2000, 12, 1117-1126.	6.6	507
79	Cloning and Molecular Analyses of a Gibberellin 20-Oxidase Gene Expressed Specifically in Developing Seeds of Watermelon. <i>Plant Physiology</i> , 1999, 121, 373-382.	4.8	39
80	Regulation of gibberellin biosynthesis genes during flower and early fruit development of tomato. <i>Plant Journal</i> , 1999, 17, 241-250.	5.7	123
81	The gene encoding tobacco gibberellin 3beta-hydroxylase is expressed at the site of GA action during stem elongation and flower organ development. <i>Plant Journal</i> , 1999, 20, 15-24.	5.7	89
82	Phytochrome Regulates Gibberellin Biosynthesis during Germination of Photoblastic Lettuce Seeds. <i>Plant Physiology</i> , 1998, 118, 1517-1523.	4.8	226
83	The GA2 Locus of <i>Arabidopsis thaliana</i> Encodes ent-Kaurene Synthase of Gibberellin Biosynthesis. <i>Plant Physiology</i> , 1998, 116, 1271-1278.	4.8	197
84	Daminozide and prohexadione have similar modes of action as inhibitors of the late stages of gibberellin metabolism. <i>Physiologia Plantarum</i> , 1997, 101, 309-313.	5.2	3
85	ent-Kaurene Synthase from the Fungus <i>Phaeosphaeria</i> sp. L487. <i>Journal of Biological Chemistry</i> , 1997, 272, 21706-21712.	3.4	144
86	Isolation and stereocontrolled synthesis of a 17-hydroxy-16 $\beta$ ,17-dihydrogibberellin, GA82. <i>Tetrahedron Letters</i> , 1995, 36, 5917-5920.	1.4	3
87	Oxidation of 3-, 7-, and 12-hydroxyl Groups of Cholic Acid by an Alkalophilic <i>Bacillus</i> sp.. <i>Bioscience, Biotechnology and Biochemistry</i> , 1994, 58, 1002-1006.	1.3	16
88	Identification of Gibberellins A <sub>4</sub> , A <sub>9</sub> , and A <sub>24</sub> from <i>Phaeosphaeria</i> sp. L487 Cultured in a Chemically Defined Medium. <i>Bioscience, Biotechnology and Biochemistry</i> , 1994, 58, 438-439.	1.3	14
89	Accumulation of Gibberellin A1 and the Metabolism of Gibberellin A9 to Gibberellin A1 in a <i>Phaeosphaeria</i> sp. L487 Culture. <i>Bioscience, Biotechnology and Biochemistry</i> , 1993, 57, 1403-1405.	1.3	37
90	Endogenous Gibberellins in Mature Pollen of <i>Lilium longiflorum</i> . <i>Agricultural and Biological Chemistry</i> , 1991, 55, 277-278.	0.3	0