Christopher I Keeling

List of Publications by Year
in descending order

66 papers	5,276 citations	109321 35 h-index	110387 64 g-index
70 all docs	70 docs citations	70 times ranked	5108 citing authors

#	Article	IF	Citations
1	Genes, enzymes and chemicals of terpenoid diversity in the constitutive and induced defence of conifers against insects and pathogens*. New Phytologist, 2006, 170, 657-675.	7.3	593
2	Terpenoid biomaterials. Plant Journal, 2008, 54, 656-669.	5.7	423
3	Assembling the 20 Gb white spruce (<i>Picea glauca</i>) genome from whole-genome shotgun sequencing data. Bioinformatics, 2013, 29, 1492-1497.	4.1	356
4	The effect of queen pheromones on worker honey bee ovary development. Die Naturwissenschaften, 2003, 90, 477-480.	1.6	288
5	Diterpene resin acids in conifers. Phytochemistry, 2006, 67, 2415-2423.	2.9	284
6	Draft genome of the mountain pine beetle, Dendroctonus ponderosae Hopkins, a major forest pest. Genome Biology, 2013, 14, R27.	9.6	260
7	Antennal transcriptome analysis of the chemosensory gene families in the tree killing bark beetles, Ips typographus and Dendroctonus ponderosae (Coleoptera: Curculionidae: Scolytinae). BMC Genomics, 2013, 14, 198.	2.8	216
8	Improved white spruce (<i>Picea glauca</i>) genome assemblies and annotation of large gene families of conifer terpenoid and phenolic defense metabolism. Plant Journal, 2015, 83, 189-212.	5.7	200
9	New components of the honey bee (Apis mellifera L.) queen retinue pheromone. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4486-4491.	7.1	179
10	Functional plasticity of paralogous diterpene synthases involved in conifer defense. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1085-1090.	7.1	178
11	Insights into Conifer Giga-Genomes. Plant Physiology, 2014, 166, 1724-1732.	4.8	164
12	Transcriptome mining, functional characterization, and phylogeny of a large terpene synthase gene family in spruce (Piceaspp.). BMC Plant Biology, 2011, 11, 43.	3.6	120
13	Biosynthesis of Sandalwood Oil: Santalum album CYP76F Cytochromes P450 Produce Santalols and Bergamotol. PLoS ONE, 2013, 8, e75053.	2.5	117
14	An integrated genomic, proteomic and biochemical analysis of (+)â€3â€carene biosynthesis in Sitka spruce (<i>Picea sitchensis</i>) genotypes that are resistant or susceptible to white pine weevil. Plant Journal, 2011, 65, 936-948.	5.7	116
15	Identification and Functional Characterization of Monofunctional<i>ent</i>-Copalyl Diphosphate and<i>ent</i>-Kaurene Synthases in White Spruce Reveal Different Patterns for Diterpene Synthase Evolution for Primary and Secondary Metabolism in Gymnosperms. Plant Physiology, 2010, 152, 1197-1208.	4.8	99
16	Transcriptome and full-length cDNA resources for the mountain pine beetle, Dendroctonus ponderosae Hopkins, a major insect pest of pine forests. Insect Biochemistry and Molecular Biology, 2012, 42, 525-536.	2.7	93
17	Toxicity of Pine Monoterpenes to Mountain Pine Beetle. Scientific Reports, 2017, 7, 8858.	3.3	85
18	Isolation of cDNAs and functional characterisation of two multi-product terpene synthase enzymes from sandalwood, Santalum album L.. Archives of Biochemistry and Biophysics, 2008, 477, 121-130.	3.0	72

#	Article	IF	Citations
19	How the Mountain Pine Beetle (Dendroctonus ponderosae) Breached the Canadian Rocky Mountains. Molecular Biology and Evolution, 2014, 31, 1803-1815.	8.9	70
20	Genomic content of chemosensory genes correlates with host range in wood-boring beetles (Dendroctonus ponderosae, Agrilus planipennis, and Anoplophora glabripennis). BMC Genomics, 2019, 20, 690.	2.8	69
21	Coordinated gene expression for pheromone biosynthesis in the pine engraver beetle, Ips pini (Coleoptera: Scolytidae). Die Naturwissenschaften, 2004, 91, 324-8.	1.6	67
22	Functional genomics of mountain pine beetle (Dendroctonus ponderosae) midguts and fat bodies. BMC Genomics, 2010, 11, 215.	2.8	63
23	Global and comparative proteomic profiling of overwintering and developing mountain pine beetle, Dendroctonus ponderosae (Coleoptera: Curculionidae), larvae. Insect Biochemistry and Molecular Biology, 2012, 42, 890-901.	2.7	61
24	CYP345E2, an antenna-specific cytochrome P450 from the mountain pine beetle, Dendroctonus ponderosae Hopkins, catalyses the oxidation of pine host monoterpene volatiles. Insect Biochemistry and Molecular Biology, 2013, 43, 1142-1151.	2.7	61
25	Microarray expression profiling and functional characterization of AtTPS genes: Duplicated Arabidopsis thaliana sesquiterpene synthase genes At4g13280 and At4g13300 encode root-specific and wound-inducible (Z)-Î³-bisabolene synthases. Archives of Biochemistry and Biophysics, 2006, 448, 104-116.	3.0	60
26	Hymenopteran Semiochemicals. Topics in Current Chemistry, 2004, 239, 133-177.	4.0	57
27	Transcriptome resources and functional characterization of monoterpene synthases for two host species of the mountain pine beetle, lodgepole pine (Pinus contorta) and jack pine (Pinus banksiana). BMC Plant Biology, 2013, 13, 80.	3.6	57
28	Disentangling Detoxification: Gene Expression Analysis of Feeding Mountain Pine Beetle Illuminates Molecular-Level Host Chemical Defense Detoxification Mechanisms. PLoS ONE, 2013, 8, e77777.	2.5	57
29	Effects of juvenile hormone on gene expression in the pheromone-producing midgut of the pine engraver beetle, Ips pini. Insect Molecular Biology, 2006, 15, 207-216.	2.0	55
30	Targeted isolation, sequence assembly and characterization of two white spruce (Picea glauca) BAC clones for terpenoid synthase and cytochrome P450 genes involved in conifer defence reveal insights into a conifer genome. BMC Plant Biology, 2009, 9, 106.	3.6	55
31	The Primary Diterpene Synthase Products of Picea abies Levopimaradiene/Abietadiene Synthase (PaLAS) Are Epimers of a Thermally Unstable Diterpenol. Journal of Biological Chemistry, 2011, 286, 21145-21153.	3.4	52
32	Comparison of gene representation in midguts from two phytophagous insects, Bombyx mori and Ips pini, using expressed sequence tags. Gene, 2003, 316, 127-136.	2.2	46
33	The cytochrome P450 CYP6DE1 catalyzes the conversion of Î±-pinene into the mountain pine beetle aggregation pheromone trans-verbenol. Scientific Reports, 2019, 9, 1477.	3.3	46
34	Monoterpenyl esters in juvenile mountain pine beetle and sex-specific release of the aggregation pheromone <i>trans</i> -verbenol. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3652-3657.	7.1	41
35	Frontalin pheromone biosynthesis in the mountain pine beetle, <i>Dendroctonus ponderosae</i> , and the role of isoprenyl diphosphate synthases. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18838-18843.	7.1	40
36	Permanent Genetic Resources added to Molecular Ecology Resources Database 1 December 2010â€“31 January 2011. Molecular Ecology Resources, 2011, 11, 586-589.	4.8	38

#	Article	IF	Citations
37	Quantitative metabolome, proteome and transcriptome analysis of midgut and fat body tissues in the mountain pine beetle, Dendroctonus ponderosae Hopkins, and insights into pheromone biosynthesis. Insect Biochemistry and Molecular Biology, 2016, 70, 170-183.	2.7	37
38	Seasonal shifts in accumulation of glycerol biosynthetic gene transcripts in mountain pine beetle,<i>Dendroctonus ponderosae</i>Hopkins (Coleoptera: Curculionidae), larvae. PeerJ, 2017, 5, e3284.	2.0	37
39	Proteomics Indicators of the Rapidly Shifting Physiology from Whole Mountain Pine Beetle, Dendroctonus ponderosae (Coleoptera: Curculionidae), Adults during Early Host Colonization. PLoS ONE, 2014, 9, e110673.	2.5	30
40	Mandibular gland component analysis in the head extracts of Apis cerana and Apis nigrocincta. Apidologie, 2001, 32, 243-252.	2.0	27
41	Queen and pheromonal factors influencing comb construction by simulated honey bee (Apis mellifera) Tj ETQq1 1 0.784314 rgBT /Overl	1.2	25
42	Gene discovery for the bark beetle-vectored fungal tree pathogen Grosmannia clavigera. BMC Genomics, 2010, 11, 536.	2.8	25
43	Cytochromes P450: terpene detoxification and pheromone production in bark beetles. Current Opinion in Insect Science, 2021, 43, 97-102.	4.4	25
44	Gene expression analysis of overwintering mountain pine beetle larvae suggests multiple systems involved in overwintering stress, cold hardiness, and preparation for spring development. PeerJ, 2016, 4, e2109.	2.0	23
45	Isolation, endocrine regulation and mRNA distribution of the 3-hydroxy-3-methylglutaryl coenzyme A synthase (HMG-S) gene from the pine engraver, Ips pini (Coleoptera: Scolytidae). Insect Molecular Biology, 2006, 15, 187-195.	2.0	22
46	Immunofluorescence localization of levopimaradiene/abietadiene synthase in methyl jasmonate treated stems of Sitka spruce (Picea sitchensis) shows activation of diterpenoid biosynthesis in cortical and developing traumatic resin ducts. Phytochemistry, 2010, 71, 1695-1699.	2.9	21
47	Cytochromes P450 Preferentially Expressed in Antennae of the Mountain Pine Beetle. Journal of Chemical Ecology, 2019, 45, 178-186.	1.8	20
48	Functions of mountain pine beetle cytochromes P450 CYP6DJ1, CYP6BW1 and CYP6BW3 in the oxidation of pine monoterpenes and diterpene resin acids. PLoS ONE, 2019, 14, e0216753.	2.5	16
49	Title is missing!. Journal of Chemical Ecology, 2000, 26, 667-677.	1.8	15
50	Changes in the intramolecular stable carbon isotope ratios with age of the European cave bear (Ursus) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.0	15
51	Quantitative analysis of the mandibular gland components of the dwarf honey bee (Apis florea) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.0	11
52	Chromosomeâ€level genome assembly reveals genomic architecture of northern range expansion in the mountain pine beetle, <i>Dendroctonus ponderosae</i> Hopkins (Coleoptera: Curculionidae). Molecular Ecology Resources, 2022, 22, 1149-1167.	4.8	11
53	STABLE CARBON ISOTOPE MEASUREMENTS OF THE CARBOXYL CARBONS IN BONE COLLAGEN. Archaeometry, 1999, 41, 151-164.	1.3	9
54	Antennally mediated negative feedback regulation of pheromone production in the pine engraver beetle, Ips pini. Die Naturwissenschaften, 2006, 94, 61-64.	1.6	8

#	Article	IF	Citations
55	Bark Beetle Research in the Postgenomic Era. Advances in Insect Physiology, 2016, 50, 265-293.	2.7	8
56	Some Insights into the Remarkable Metabolism of the Bark Beetle Midgut. Recent Advances in Phytochemistry, 2005, , 57-78.	0.5	7
57	A scientific note on the aliphatic esters in queen honey bees. Apidologie, 2005, 36, 559-560.	2.0	7
58	Preparative chiral liquid chromatography for enantiomeric separation of pheromones. Journal of Chemical Ecology, 2001, 27, 487-497.	1.8	6
59	LINEATIN ENANTIOMER PREFERENCE, FLIGHT PERIODS, AND EFFECT OF PHEROMONE CONCENTRATION AND TRAP LENGTH ON THREE SYMPATRIC SPECIES OF <i>TRYPODENDRON</i> (COLEOPTERA: SCOLYTIDAE). Canadian Entomologist, 2000, 132, 877-887.	0.8	5
60	Isolation, endocrine regulation and transcript distribution of a putative primary JH-responsive gene from the pine engraver, Ips pini (Coleoptera: Scolytidae). Insect Biochemistry and Molecular Biology, 2008, 38, 256-267.	2.7	4
61	Resin vesicles in conifer seeds: morphology and allelopathic effects. Canadian Journal of Forest Research, 2018, 48, 1515-1525.	1.7	4
62	The genome of the forest insect pest <i>Pissodes strobi</i> reveals genome expansion and evidence of a <i>Wolbachia</i> endosymbiont. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	4
63	Pheromone production in bark beetles. , 2021, , 123-162.		3
64	The Spruce Budworm Genome: Reconstructing the Evolutionary History of Antifreeze Proteins. Genome Biology and Evolution, 2022, 14, .	2.5	3
65	Biomarkers and gene copy number variation for terpenoid traits associated with insect resistance in Sitka spruce: An integrated genomic, proteomic, and biochemical analysis of (+)-3-carene biosynthesis. BMC Proceedings, 2011, 5, .	1.6	1
66	Targeted Isolation Sequence Assembly and Characterization of White Spruce. , 2011, , 5-20.		0