Gavin R Flematti

List of Publications by Year
in descending order

70 papers	5,714 citations	117453 34 h-index	95083 68 g-index
74 all docs	74 docs citations	74 times ranked	3275 citing authors

#	Article	IF	Citations
1	Three Chemically Distinct Floral Ecotypes in Drakaea livida, an Orchid Pollinated by Sexual Deception of Thynnine Wasps. Plants, 2022, 11, 260.	1.6	5
2	Drakolide Structure-activity Relationships for Sexual Attraction of Zeleboria Wasp Pollinator. Journal of Chemical Ecology, 2022, 48, 323-336.	0.9	2
3	Desmethyl butenolides are optimal ligands for karrikin receptor proteins. New Phytologist, 2021, 230, 1003-1016.	3.5	29
4	An unusual tricosatriene is crucial for male fungus gnat attraction and exploitation by sexually deceptive Pterostylis orchids. Current Biology, 2021, 31, 1954-1961.e7.	1.8	19
5	Pyroxasulfone-Resistant Annual Ryegrass (<i>Lolium rigidum</i>) Has Enhanced Capacity for Glutathione Transferase-Mediated Pyroxasulfone Conjugation. Journal of Agricultural and Food Chemistry, 2021, 69, 6414-6422.	2.4	9
6	A Specific Blend of Drakolide and Hydroxymethylpyrazines: An Unusual Pollinator Sexual Attractant Used by the Endangered Orchid <i>Drakaea micrantha</i>. Angewandte Chemie - International Edition, 2020, 59, 1124-1128.	7.2	13
7	Structureâ€“Function Analysis of SMAX1 Reveals Domains That Mediate Its Karrikin-Induced Proteolysis and Interaction with the Receptor KAI2. Plant Cell, 2020, 32, 2639-2659.	3.1	90
8	Divergent receptor proteins confer responses to different karrikins in two ephemeral weeds. Nature Communications, 2020, 11, 1264.	5.8	29
9	A Specific Blend of Drakolide and Hydroxymethylpyrazines: An Unusual Pollinator Sexual Attractant Used by the Endangered Orchid <i>Drakaea micrantha</i>. Angewandte Chemie, 2020, 132, 1140-1144.	1.6	1
10	Structure Reassignment of Echinosulfone A and the Echinosulfonic Acids Aâ€“D Supported by Single-Crystal X-ray Diffraction and Density Functional Theory Analysis. Journal of Natural Products, 2020, 83, 105-110.	1.5	14
11	Floral Volatiles for Pollinator Attraction and Speciation in Sexually Deceptive Orchids. , 2020, , 271-295.		7
12	Investigation of an Unusual Crystal Habit of Hydrochlorothiazide Reveals Large Polar Enantiopure Domains and a Possible Crystal Nucleation Mechanism. Angewandte Chemie, 2019, 131, 10361-10365.	1.6	5
13	Investigation of an Unusual Crystal Habit of Hydrochlorothiazide Reveals Large Polar Enantiopure Domains and a Possible Crystal Nucleation Mechanism. Angewandte Chemie - International Edition, 2019, 58, 10255-10259.	7.2	7
14	2-(Tetrahydrofuran-2-yl)acetic Acid and Ester Derivatives as Long-Range Pollinator Attractants in the Sexually Deceptive Orchid Cryptostylis ovata. Journal of Natural Products, 2019, 82, 1107-1113.	1.5	11
15	Albanitriles Aâ€“G: Antiprotozoal Polyacetylene Nitriles from a <i>Mycale</i> Marine Sponge. Journal of Natural Products, 2019, 82, 3450-3455.	1.5	12
16	Structure-Activity Studies of Semiochemicals from the Spider Orchid Caladenia plicata for Sexual Deception. Journal of Chemical Ecology, 2018, 44, 436-443.	0.9	9
17	(Methylthio)phenol semiochemicals are exploited by deceptive orchids as sexual attractants for Campylothynnus thynnine wasps. FÃ¬toterapÃ¬Ã¢, 2018, 126, 78-82.	1.1	12
18	Antibacterial compounds from the Australian native plant Eremophila glabra. FÃ¬toterapÃ¬Ã¢, 2018, 126, 45-52.	1.1	16

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19	Antimicrobial Activity of Several Cineole-Rich Western Australian Eucalyptus Essential Oils. Microorganisms, 2018, 6, 122.	1.6	33
20	Aurantoside C Targets and Induces Apoptosis in Triple Negative Breast Cancer Cells. Marine Drugs, 2018, 16, 361.	2.2	19
21	Crambescidin 800, Isolated from the Marine Sponge Monanchora viridis, Induces Cell Cycle Arrest and Apoptosis in Triple-Negative Breast Cancer Cells. Marine Drugs, 2018, 16, 53.	2.2	30
22	An allelic series at the <i><scp>KARRIKIN INSENSITIVE</scp>Â2</i> locus of <i>Arabidopsis thaliana</i> decouples ligand hydrolysis and receptor degradation from downstream signalling. Plant Journal, 2018, 96, 75-89.	2.8	41
23	The Spider Orchid <i>Caladenia crebra</i> Produces Sulfurous Pheromone Mimics to Attract its Male Wasp Pollinator. Angewandte Chemie - International Edition, 2017, 56, 8455-8458.	7.2	31
24	Complex Sexual Deception in an Orchid Is Achieved by Co-opting Two Independent Biosynthetic Pathways for Pollinator Attraction. Current Biology, 2017, 27, 1867-1877.e5.	1.8	67
25	Assaying Germination and Seedling Responses of Arabidopsis to Karrikins. Methods in Molecular Biology, 2017, 1497, 29-36.	0.4	9
26	Reporter Gene-Facilitated Detection of Compounds in Arabidopsis Leaf Extracts that Activate the Karrikin Signaling Pathway. Frontiers in Plant Science, 2016, 7, 1799.	1.7	48
27	Pollination by sexual deception â€" it takes chemistry to work. Current Opinion in Plant Biology, 2016, 32, 37-46.	3.5	84
28	Access to 1,2,3,4-Tetraoxygenated Benzenes via a Double Baeyerâ€"Villiger Reaction of Quinizarin Dimethyl Ether: Application to the Synthesis of Bioactive Natural Products from <i>Antrodia camphorata</i>. Journal of Organic Chemistry, 2016, 81, 3127-3135.	1.7	11
29	Stereospecificity in strigolactone biosynthesis and perception. Planta, 2016, 243, 1361-1373.	1.6	95
30	<i>LATERAL BRANCHING OXIDOREDUCTASE</i> acts in the final stages of strigolactone biosynthesis in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6301-6306.	3.3	219
31	A new selective fluorescent probe based on tamoxifen. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 4879-4883.	1.0	13
32	Hit-to-Lead Optimization of a Novel Class of Potent, Broad-Spectrum Trypanosomacides. Journal of Medicinal Chemistry, 2016, 59, 9686-9720.	2.9	30
33	Bioactive fractions from the pasture legume Biserrula pelecinus L. have an anti-methanogenic effect against key rumen methanogens. Anaerobe, 2016, 39, 173-182.	1.0	8
34	Identification of the Cat Attractants Isodihydronepetalactone and Isoiridomyrmecin from Acalypha indica. Australian Journal of Chemistry, 2016, 69, 169.	0.5	11
35	Karrikins Identified in Biochars Indicate Post-Fire Chemical Cues Can Influence Community Diversity and Plant Development. PLoS ONE, 2016, 11, e0161234.	1.1	48
36	What are karrikins and how were they â€˜discoveredâ€™ by plants?. BMC Biology, 2015, 13, 108.	1.7	84

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37	Identification of hydroxymethylpyrazines using mass spectrometry. Journal of Mass Spectrometry, 2015, 50, 987-993.	0.7	5
38	A <i>Selaginella moellendorffii</i> Ortholog of KARRIKIN INSENSITIVE2 Functions in Arabidopsis Development but Cannot Mediate Responses to Karrikins or Strigolactones. Plant Cell, 2015, 27, 1925-1944.	3.1	122
39	Substrate-Induced Degradation of the Î±/Î²-Fold Hydrolase KARRIKIN INSENSITIVE2 Requires a Functional Catalytic Triad but Is Independent of MAX2. Molecular Plant, 2015, 8, 814-817.	3.9	63
40	Destabilization of strigolactone receptor DWARF14 by binding of ligand and E3-ligase signaling effector DWARF3. Cell Research, 2015, 25, 1219-1236.	5.7	152
41	The karrikin response system of <scp>A</scp>rabidopsis. Plant Journal, 2014, 79, 623-631.	2.8	102
42	Discovery of pyrazines as pollinator sex pheromones and orchid semiochemicals: implications for the evolution of sexual deception. New Phytologist, 2014, 203, 939-952.	3.5	93
43	Rice cytochrome P450 MAX1 homologs catalyze distinct steps in strigolactone biosynthesis. Nature Chemical Biology, 2014, 10, 1028-1033.	3.9	340
44	Strigolactone Hormones and Their Stereoisomers Signal through Two Related Receptor Proteins to Induce Different Physiological Responses in Arabidopsis Â. Plant Physiology, 2014, 165, 1221-1232.	2.3	260
45	Karrikin and Cyanohydrin Smoke Signals Provide Clues to New Endogenous Plant Signaling Compounds. Molecular Plant, 2013, 6, 29-37.	3.9	101
46	The origins and mechanisms of karrikin signalling. Current Opinion in Plant Biology, 2013, 16, 667-673.	3.5	55
47	Carlactoneâ€independent seedling morphogenesis inÂArabidopsis. Plant Journal, 2013, 76, 1-9.	2.8	115
48	The Structure of the Karrikin-Insensitive Protein (KAI2) in Arabidopsis thaliana. PLoS ONE, 2013, 8, e54758.	1.1	54
49	Sharing of Pyrazine Semiochemicals between Genera of Sexually Deceptive Orchids. Natural Product Communications, 2013, 8, 1934578X1300800.	0.2	3
50	Karrikins force a rethink of strigolactone mode of action. Plant Signaling and Behavior, 2012, 7, 969-972.	1.2	21
51	Specialisation within the DWARF14 protein family confers distinct responses to karrikins and strigolactones in <i>Arabidopsis</i>. Development (Cambridge), 2012, 139, 1285-1295.	1.2	477
52	Solar irradiation of the seed germination stimulant karrikinolide produces two novel head-to-head cage dimers. Organic and Biomolecular Chemistry, 2012, 10, 4069.	1.5	7
53	Discovery of Tetrasubstituted Pyrazines As Semiochemicals in a Sexually Deceptive Orchid. Journal of Natural Products, 2012, 75, 1589-1594.	1.5	49
54	Regulation of Seed Germination and Seedling Growth by Chemical Signals from Burning Vegetation. Annual Review of Plant Biology, 2012, 63, 107-130.	8.6	242

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55	Investigation of volatile organic biomarkers derived from Plasmodium falciparum in vitro. Malaria Journal, 2012, 11, 314.	0.8	13
56	The Discovery of 2-Hydroxymethyl-3-(3-methylbutyl)-5-methylpyrazine: A Semiochemical in Orchid Pollination. Organic Letters, 2012, 14, 2576-2578.	2.4	53
57	Exploring the molecular mechanism of karrikins and strigolactones. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 3743-3746.	1.0	78
58	Production of the Seed Germination Stimulant Karrikinolide from Combustion of Simple Carbohydrates. Journal of Agricultural and Food Chemistry, 2011, 59, 1195-1198.	2.4	37
59	Burning vegetation produces cyanohydrins that liberate cyanide and stimulate seed germination. Nature Communications, 2011, 2, 360.	5.8	98
60	F-box protein MAX2 has dual roles in karrikin and strigolactone signaling in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8897-8902.	3.3	394
61	The synthesis and biological evaluation of labelled karrikinolides for the elucidation of the mode of action of the seed germination stimulant. Tetrahedron, 2011, 67, 152-157.	1.0	14
62	Karrikins enhance light responses during germination and seedling development in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7095-7100.	3.3	223
63	Structureâ˘Activity Relationship of Karrikin Germination Stimulants. Journal of Agricultural and Food Chemistry, 2010, 58, 8612-8617.	2.4	35
64	Karrikins: A new family of plant growth regulators in smoke. Plant Science, 2009, 177, 252-256.	1.7	175
65	Karrikins Discovered in Smoke Trigger Arabidopsis Seed Germination by a Mechanism Requiring Gibberellic Acid Synthesis and Light Â Â. Plant Physiology, 2009, 149, 863-873.	2.3	254
66	Identification of Alkyl Substituted 2<i>H</i>-Furo[2,3-<i>c</i>]pyran-2-ones as Germination Stimulants Present in Smoke. Journal of Agricultural and Food Chemistry, 2009, 57, 9475-9480.	2.4	129
67	Preparation of 2H-Furo[2,3-c]pyran-2-one Derivatives and Evaluation of Their Germination-Promoting Activity. Journal of Agricultural and Food Chemistry, 2007, 55, 2189-2194.	2.4	84
68	Synthesis of the seed germination stimulant 3-methyl-2H-furo[2,3-c]pyran-2-one. Tetrahedron Letters, 2005, 46, 5719-5721.	0.7	97
69	A Compound from Smoke That Promotes Seed Germination. Science, 2004, 305, 977-977.	6.0	595
70	A Merry Dance Across the Ï€-Cloud: Tracking the Transformation of a 2,7-Substituted Dihydropyrene Through a Thermally Stimulated Single-Crystal-to-Single-Crystal Reaction. Crystal Growth and Design, 0, , .	1.4	2