

Daniel F Klessig

List of Publications by Year in descending order

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83
papers

17,170
citations

20817

60
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56724

83
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85
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85
docs citations

85
times ranked

12877
citing authors

#	ARTICLE	IF	CITATIONS
1	Salicylic Acid, a Multifaceted Hormone to Combat Disease. <i>Annual Review of Phytopathology</i> , 2009, 47, 177-206.	7.8	1,995
2	Methyl Salicylate Is a Critical Mobile Signal for Plant Systemic Acquired Resistance. <i>Science</i> , 2007, 318, 113-116.	12.6	831
3	MAPK cascades in plant defense signaling. <i>Trends in Plant Science</i> , 2001, 6, 520-527.	8.8	676
4	Salicylic Acid Biosynthesis and Metabolism. <i>The Arabidopsis Book</i> , 2011, 9, e0156.	0.5	597
5	Nitric oxide: comparative synthesis and signaling in animal and plant cells. <i>Trends in Plant Science</i> , 2001, 6, 177-183.	8.8	528
6	Characterization of a Salicylic Acid-Insensitive Mutant (sai1) of <i>Arabidopsis thaliana</i> , Identified in a Selective Screen Utilizing the SA-Inducible Expression of the tms2 Gene. <i>Molecular Plant-Microbe Interactions</i> , 1997, 10, 69-78.	2.6	493
7	Nitric oxide: a new player in plant signalling and defence responses. <i>Current Opinion in Plant Biology</i> , 2004, 7, 449-455.	7.1	475
8	Rapid Avr9- and Cf-9-Dependent Activation of MAP Kinases in Tobacco Cell Cultures and Leaves: Convergence of Resistance Gene, Elicitor, Wound, and Salicylate Responses. <i>Plant Cell</i> , 1999, 11, 273-287.	6.6	458
9	NPR1 Differentially Interacts with Members of the TGA/OBF Family of Transcription Factors That Bind an Element of the PR-1 Gene Required for Induction by Salicylic Acid. <i>Molecular Plant-Microbe Interactions</i> , 2000, 13, 191-202.	2.6	448
10	Salicylic Acid and Disease Resistance in Plants. <i>Critical Reviews in Plant Sciences</i> , 1999, 18, 547-575.	5.7	446
11	Systemic Acquired Resistance and Salicylic Acid: Past, Present, and Future. <i>Molecular Plant-Microbe Interactions</i> , 2018, 31, 871-888.	2.6	350
12	The tobacco salicylic acid-binding protein 3 (SABP3) is the chloroplast carbonic anhydrase, which exhibits antioxidant activity and plays a role in the hypersensitive defense response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 11640-11645.	7.1	343
13	Nitric Oxide Inhibition of Tobacco Catalase and Ascorbate Peroxidase. <i>Molecular Plant-Microbe Interactions</i> , 2000, 13, 1380-1384.	2.6	335
14	Members of the Arabidopsis HRT/RPP8 Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens. <i>Plant Cell</i> , 2000, 12, 663-676.	6.6	330
15	NO synthesis and signaling in plants – where do we stand?. <i>Physiologia Plantarum</i> , 2010, 138, 372-383.	5.2	297
16	SOS – too many signals for systemic acquired resistance?. <i>Trends in Plant Science</i> , 2012, 17, 538-545.	8.8	292
17	A Gain-of-Function Mutation in an Arabidopsis Toll Interleukin1 Receptor – Nucleotide Binding Site – Leucine-Rich Repeat Type R Gene Triggers Defense Responses and Results in Enhanced Disease Resistance. <i>Plant Cell</i> , 2002, 14, 3149-3162.	6.6	281
18	Structural and biochemical studies identify tobacco SABP2 as a methyl salicylate esterase and implicate it in plant innate immunity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1773-1778.	7.1	275

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19	Systemic acquired resistance: the elusive signal(s). <i>Current Opinion in Plant Biology</i> , 2008, 11, 436-442.	7.1	271
20	High-affinity salicylic acid-binding protein 2 is required for plant innate immunity and has salicylic acid-stimulated lipase activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 16101-16106.	7.1	268
21	The Arabidopsis <i>ssi1</i> Mutation Restores Pathogenesis-Related Gene Expression in <i>npr1</i> Plants and Renders Defensin Gene Expression Salicylic Acid Dependent. <i>Plant Cell</i> , 1999, 11, 191-206.	6.6	267
22	Uncoupling PR Gene Expression from NPR1 and Bacterial Resistance: Characterization of the Dominant Arabidopsis <i>cpr6-1</i> Mutant. <i>Plant Cell</i> , 1998, 10, 557-569.	6.6	266
23	AtNOS/AtNOA1 Is a Functional Arabidopsis thaliana cGTPase and Not a Nitric-oxide Synthase. <i>Journal of Biological Chemistry</i> , 2008, 283, 32957-32967.	3.4	266
24	Activation of the Tobacco SIP Kinase by Both a Cell Wall-Derived Carbohydrate Elicitor and Purified Proteinaceous Elicitins from <i>Phytophthora</i> spp. <i>Plant Cell</i> , 1998, 10, 435-449.	6.6	257
25	Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but NPR1, Ethylene, and Jasmonate Independent. <i>Plant Cell</i> , 2000, 12, 677-690.	6.6	254
26	Overexpression of Pto Activates Defense Responses and Confers Broad Resistance. <i>Plant Cell</i> , 1999, 11, 15-29.	6.6	252
27	DAMPs, MAMPs, and NAMPs in plant innate immunity. <i>BMC Plant Biology</i> , 2016, 16, 232.	3.6	251
28	Identification of likely orthologs of tobacco salicylic acid-binding protein 2 and their role in systemic acquired resistance in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2008, 56, 445-456.	5.7	215
29	Salicylic acid and plant disease resistance. <i>Plant Journal</i> , 1992, 2, 643-654.	5.7	213
30	A Harpin Binding Site in Tobacco Plasma Membranes Mediates Activation of the Pathogenesis-Related Gene HIN1 Independent of Extracellular Calcium but Dependent on Mitogen-Activated Protein Kinase Activity. <i>Plant Cell</i> , 2001, 13, 1079-1093.	6.6	213
31	Silencing of the Mitogen-Activated Protein Kinase MPK6 Compromises Disease Resistance in Arabidopsis. <i>Plant Cell</i> , 2004, 16, 897-907.	6.6	211
32	Nitric Oxide Modulates the Activity of Tobacco Aconitase. <i>Plant Physiology</i> , 2000, 122, 573-582.	4.8	207
33	The Chimeric Arabidopsis CYCLIC NUCLEOTIDE-GATED ION CHANNEL11/12 Activates Multiple Pathogen Resistance Responses. <i>Plant Cell</i> , 2006, 18, 747-763.	6.6	201
34	Conserved nematode signalling molecules elicit plant defenses and pathogen resistance. <i>Nature Communications</i> , 2015, 6, 7795.	12.8	196
35	A recessive mutation in the Arabidopsis <i>SSI2</i> gene confers SA- and NPR1-independent expression of PR genes and resistance against bacterial and oomycete pathogens. <i>Plant Journal</i> , 2001, 25, 563-574.	5.7	193
36	Probenazole induces systemic acquired resistance in Arabidopsis with a novel type of action. <i>Plant Journal</i> , 2001, 25, 149-157.	5.7	178

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37	How does the multifaceted plant hormone salicylic acid combat disease in plants and are similar mechanisms utilized in humans?. <i>BMC Biology</i> , 2017, 15, 23.	3.8	171
38	The Pathogen-Inducible Nitric Oxide Synthase (iNOS) in Plants Is a Variant of the P Protein of the Glycine Decarboxylase Complex. <i>Cell</i> , 2003, 113, 469-482.	28.9	159
39	Tobacco Transcription Factor WRKY1 Is Phosphorylated by the MAP Kinase SIPK and Mediates HR-Like Cell Death in Tobacco. <i>Molecular Plant-Microbe Interactions</i> , 2005, 18, 1027-1034.	2.6	157
40	Inactive Methyl Indole-3-Acetic Acid Ester Can Be Hydrolyzed and Activated by Several Esterases Belonging to the <i>At</i> MES Esterase Family of <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2008, 147, 1034-1045.	4.8	152
41	Multiple levels of tobacco WIPK activation during the induction of cell death by fungal elicitors. <i>Plant Journal</i> , 2000, 23, 339-347.	5.7	149
42	Aconitase plays a role in regulating resistance to oxidative stress and cell death in <i>Arabidopsis</i> and <i>Nicotiana benthamiana</i> . <i>Plant Molecular Biology</i> , 2007, 63, 273-287.	3.9	148
43	Environmentally sensitive, SA-dependent defense responses in the <i>cpr22</i> mutant of <i>Arabidopsis</i> . <i>Plant Journal</i> , 2001, 26, 447-459.	5.7	147
44	Activation of the Tobacco SIP Kinase by Both a Cell Wall-Derived Carbohydrate Elicitor and Purified Proteinaceous Elicitins from <i>Phytophthora</i> spp. <i>Plant Cell</i> , 1998, 10, 435.	6.6	122
45	Identification of multiple salicylic acid-binding proteins using two high throughput screens. <i>Frontiers in Plant Science</i> , 2014, 5, 777.	3.6	119
46	Multiple Targets of Salicylic Acid and Its Derivatives in Plants and Animals. <i>Frontiers in Immunology</i> , 2016, 7, 206.	4.8	118
47	The Lesion-Mimic Mutant <i>cpr22</i> Shows Alterations in Abscisic Acid Signaling and Abscisic Acid Insensitivity in a Salicylic Acid-Dependent Manner. <i>Plant Physiology</i> , 2010, 152, 1901-1913.	4.8	117
48	Benzothiadiazole, an inducer of plant defenses, inhibits catalase and ascorbate peroxidase. <i>Phytochemistry</i> , 1998, 47, 651-657.	2.9	116
49	The Extent to Which Methyl Salicylate Is Required for Signaling Systemic Acquired Resistance Is Dependent on Exposure to Light after Infection. <i>Plant Physiology</i> , 2011, 157, 2216-2226.	4.8	112
50	Abscisic Acid Deficiency Antagonizes High-Temperature Inhibition of Disease Resistance through Enhancing Nuclear Accumulation of Resistance Proteins SNC1 and RPS4 in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 1271-1284.	6.6	104
51	Aspirin's Active Metabolite Salicylic Acid Targets High Mobility Group Box 1 to Modulate Inflammatory Responses. <i>Molecular Medicine</i> , 2015, 21, 526-535.	4.4	97
52	<i>Methyl Esterase 1</i> (<i>StMES1</i>) Is Required for Systemic Acquired Resistance in Potato. <i>Molecular Plant-Microbe Interactions</i> , 2010, 23, 1151-1163.	2.6	88
53	Use of a Synthetic Salicylic Acid Analog to Investigate the Roles of Methyl Salicylate and Its Esterases in Plant Disease Resistance. <i>Journal of Biological Chemistry</i> , 2009, 284, 7307-7317.	3.4	87
54	Interconnection between Methyl Salicylate and Lipid-Based Long-Distance Signaling during the Development of Systemic Acquired Resistance in <i>Arabidopsis</i> and Tobacco. <i>Plant Physiology</i> , 2011, 155, 1762-1768.	4.8	86

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55	Activation of Plant Innate Immunity by Extracellular High Mobility Group Box 3 and Its Inhibition by Salicylic Acid. <i>PLoS Pathogens</i> , 2016, 12, e1005518.	4.7	82
56	High humidity suppresses salicylic acid-mediated cell death and disease resistance upstream of MAP kinase activation, H ₂ O ₂ production and defense gene expression. <i>Plant Journal</i> , 2004, 39, 920-932.	5.7	78
57	Altering Expression of Benzoic Acid/Salicylic Acid Carboxyl Methyltransferase 1 Compromises Systemic Acquired Resistance and PAMP-Triggered Immunity in Arabidopsis. <i>Molecular Plant-Microbe Interactions</i> , 2010, 23, 82-90.	2.6	77
58	CRT1, an Arabidopsis ATPase that Interacts with Diverse Resistance Proteins and Modulates Disease Resistance to Turnip Crinkle Virus. <i>Cell Host and Microbe</i> , 2008, 3, 48-57.	11.0	72
59	Identification of a salicylic acid-responsive element in the promoter of the tobacco pathogenesis-related beta-1,3-glucanase gene, PR-2d. <i>Plant Journal</i> , 1996, 10, 1089-1101.	5.7	71
60	Validation of RNAi silencing specificity using synthetic genes: salicylic acid-binding protein 2 is required for innate immunity in plants. <i>Plant Journal</i> , 2006, 45, 863-868.	5.7	69
61	The combined use of photoaffinity labeling and surface plasmon resonance-based technology identifies multiple salicylic acid-binding proteins. <i>Plant Journal</i> , 2012, 72, 1027-1038.	5.7	62
62	The Structure of YqeH. <i>Journal of Biological Chemistry</i> , 2008, 283, 32968-32976.	3.4	57
63	Salicylic acid binding of mitochondrial alpha-ketoglutarate dehydrogenase E2 affects mitochondrial oxidative phosphorylation and electron transport chain components and plays a role in basal defense against tobacco mosaic virus in tomato. <i>New Phytologist</i> , 2015, 205, 1296-1307.	7.3	55
64	Members of the abscisic acid co-receptor PP2C protein family mediate salicylic acid-abscisic acid crosstalk. <i>Plant Direct</i> , 2017, 1, e00020.	1.9	55
65	Activation of a diverse set of genes during the tobacco resistance response to TMV is independent of salicylic acid; induction of a subset is also ethylene independent. <i>Plant Journal</i> , 2000, 21, 409-418.	5.7	54
66	Plant metabolism of nematode pheromones mediates plant-nematode interactions. <i>Nature Communications</i> , 2020, 11, 208.	12.8	52
67	Salicylic acid-inducible Arabidopsis CK2-like activity phosphorylates TGA2. <i>Plant Molecular Biology</i> , 2005, 57, 541-557.	3.9	49
68	MORC Proteins: Novel Players in Plant and Animal Health. <i>Frontiers in Plant Science</i> , 2017, 8, 1720.	3.6	48
69	Characterization of a tobacco epoxide hydrolase gene induced during the resistance response to TMV. <i>Plant Journal</i> , 1998, 15, 647-656.	5.7	46
70	Salicylic Acid Inhibits the Replication of Tomato bushy stunt virus by Directly Targeting a Host Component in the Replication Complex. <i>Molecular Plant-Microbe Interactions</i> , 2015, 28, 379-386.	2.6	46
71	Non-toxic concentrations of cadmium inhibit systemic movement of turnip vein clearing virus by a salicylic acid-independent mechanism. <i>Plant Journal</i> , 1998, 16, 13-20.	5.7	44
72	Human GAPDH Is a Target of Aspirin's Primary Metabolite Salicylic Acid and Its Derivatives. <i>PLoS ONE</i> , 2015, 10, e0143447.	2.5	44

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73	Differential regulation of TGA transcription factors by post-transcriptional control. <i>Plant Journal</i> , 2002, 32, 641-653.	5.7	32
74	The <i>Arabidopsis</i> Gain-of-Function Mutant <i>ssi4</i> Requires <i>RAR1</i> and <i>SGT1b</i> Differentially for Defense Activation and Morphological Alterations. <i>Molecular Plant-Microbe Interactions</i> , 2008, 21, 40-49.	2.6	30
75	Mimicking the Host Regulation of Salicylic Acid: A Virulence Strategy by the Clubroot Pathogen <i>Plasmodiophora brassicae</i> . <i>Molecular Plant-Microbe Interactions</i> , 2019, 32, 296-305.	2.6	27
76	High CO ₂ and pathogen-driven expression of the carbonic anhydrase β CA3 confers basal immunity in tomato. <i>New Phytologist</i> , 2021, 229, 2827-2843.	7.3	26
77	The search for the salicylic acid receptor led to discovery of the SAR signal receptor. <i>Plant Signaling and Behavior</i> , 2008, 3, 691-692.	2.4	22
78	Plant and Human MORC Proteins Have DNA-Modifying Activities Similar to Type II Topoisomerases, but Require One or More Additional Factors for Full Activity. <i>Molecular Plant-Microbe Interactions</i> , 2017, 30, 87-100.	2.6	22
79	Newly Identified Targets of Aspirin and Its Primary Metabolite, Salicylic Acid. <i>DNA and Cell Biology</i> , 2016, 35, 163-166.	1.9	19
80	Nematode ascaroside enhances resistance in a broad spectrum of plant-pathogen systems. <i>Journal of Phytopathology</i> , 2019, 167, 265-272.	1.0	18
81	A genome-wide screen for human salicylic acid (SA)-binding proteins reveals targets through which SA may influence development of various diseases. <i>Scientific Reports</i> , 2019, 9, 13084.	3.3	16
82	Probenazole induces systemic acquired resistance in <i>Arabidopsis</i> with a novel type of action. <i>Plant Journal</i> , 2001, 25, 149-157.	5.7	11
83	Nematode Signaling Molecules Are Extensively Metabolized by Animals, Plants, and Microorganisms. <i>ACS Chemical Biology</i> , 2021, 16, 1050-1058.	3.4	8