Felice Cervone

List of Publications by Year
in descending order

106 papers	9,255 citations	30070 54 h-index	39675 94 g-index
108 all docs	108 docs citations	108 times ranked	6539 citing authors

#	Article	IF	Citations
1	A domain swap approach reveals a role of the plant wall-associated kinase 1 (WAK1) as a receptor of oligogalacturonides. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9452-9457.	7.1	638
2	Oligogalacturonides: plant damage-associated molecular patterns and regulators of growth and development. Frontiers in Plant Science, 2013, 4, 49.	3.6	401
3	Plant cell wall dynamics and wall-related susceptibility in plantÃ¢â,¬â€œpathogen interactions. Frontiers in Plant Science, 2014, 5, 228.	3.6	348
4	Overexpression of Pectin Methylesterase Inhibitors in Arabidopsis Restricts Fungal Infection by Botrytis cinerea Â. Plant Physiology, 2007, 143, 1871-1880.	4.8	329
5	THEROLE OFPOLYGALACTURONASE-INHIBITINGPROTEINS(PGIPS)INDEFENSEAGAINSTPATHOGENICFUNGI. Annual Review of Phytopathology, 2001, 39, 313-335.	7.8	325
6	Wounding in the plant tissue: the defense of a dangerous passage. Frontiers in Plant Science, 2014, 5, 470.	3.6	279
7	Host-Pathogen Interactions. Plant Physiology, 1989, 90, 542-548.	4.8	262
8	Extracellular H2O2 Induced by Oligogalacturonides Is Not Involved in the Inhibition of the Auxin-Regulated rolB Gene Expression in Tobacco Leaf Explants. Plant Physiology, 2000, 122, 1379-1386.	4.8	248
9	Tandemly Duplicated Arabidopsis Genes That Encode Polygalacturonase-Inhibiting Proteins Are Regulated Coordinately by Different Signal Transduction Pathways in Response to Fungal Infection. Plant Cell, 2003, 15, 93-106.	6.6	240
10	The specificity of polygalacturonase-inhibiting protein (PGIP): a single amino acid substitution in the solvent-exposed Î²-strand/Î²-turn region of the leucine-rich repeats (LRRs) confers a new recognition capability. EMBO Journal, 1999, 18, 2352-2363.	7.8	214
11	Methyl esterification of pectin plays a role during plantâ€“pathogen interactions and affects plant resistance to diseases. Journal of Plant Physiology, 2012, 169, 1623-1630.	3.5	213
12	Structural Basis for the Interaction between Pectin Methylesterase and a Specific Inhibitor Protein. Plant Cell, 2005, 17, 849-858.	6.6	207
13	The crystal structure of polygalacturonase-inhibiting protein (PGIP), a leucine-rich repeat protein involved in plant defense. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10124-10128.	7.1	195
14	Engineering the cell wall by reducing de-methyl-esterified homogalacturonan improves saccharification of plant tissues for bioconversion. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 616-621.	7.1	192
15	Plant immunity triggered by engineered in vivo release of oligogalacturonides, damage-associated molecular patterns. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5533-5538.	7.1	179
16	Polygalacturonase inhibiting proteins: players in plant innate immunity?. Trends in Plant Science, 2006, 11, 65-70.	8.8	153
17	Plant neurobiology: no brain, no gain?. Trends in Plant Science, 2007, 12, 135-136.	8.8	146
18	Pectin Methylesterase Is Induced in <i>Arabidopsis</i> upon Infection and Is Necessary for a Successful Colonization by Necrotrophic Pathogens. Molecular Plant-Microbe Interactions, 2011, 24, 432-440.	2.6	146

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19	Purification and Characterization of a Polygalacturonase-Inhibiting Protein from <i>Phaseolus vulgaris</i> L.. Plant Physiology, 1987, 85, 631-637.	4.8	131
20	Structural requirements of endopolygalacturonase for the interaction with PGIP (polygalacturonase-inhibiting protein). Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 13425-13430.	7.1	131
21	Competitive inhibition of the auxinâ€induced elongation by Î±â€Dâ€oligogalacturonides in pea stem segments. Physiologia Plantarum, 1988, 72, 499-504.	5.2	125
22	An update on polygalacturonase-inhibiting protein (PGIP), a leucine-rich repeat protein that protects crop plants against pathogens. Frontiers in Plant Science, 2015, 6, 146.	3.6	125
23	Cloning and characterization of the gene encoding the endopolygalacturonase-inhibiting protein (PGIP) of Phaseolus vulgaris L.. Plant Journal, 1992, 2, 367-373.	5.7	115
24	Four Arabidopsis berberine bridge enzymeâ€like proteins are specific oxidases that inactivate the elicitorâ€active oligogalacturonides. Plant Journal, 2018, 94, 260-273.	5.7	114
25	Polygalacturonase-Inhibiting Proteins (PGIPs) with Different Specificities Are Expressed in Phaseolus vulgaris. Molecular Plant-Microbe Interactions, 1997, 10, 852-860.	2.6	112
26	Transgenic Expression of a Fungal endo-Polygalacturonase Increases Plant Resistance to Pathogens and Reduces Auxin Sensitivity. Plant Physiology, 2008, 146, 323-324.	4.8	112
27	Cell wall traits that influence plant development, immunity, and bioconversion. Plant Journal, 2019, 97, 134-147.	5.7	106
28	Polygalacturonase-inhibiting protein accumulates in Phaseolus vulgaris L. in response to wounding, elicitors and fungal infection. Plant Journal, 1994, 5, 625-634.	5.7	105
29	Extracellular DAMPs in Plants and Mammals: Immunity, Tissue Damage and Repair. Trends in Immunology, 2018, 39, 937-950.	6.8	105
30	Elicitation of Necrosis in Vigna unguiculata Walp. by Homogeneous Aspergillus niger Endo-Polygalacturonase and by Î±-d-Galacturonate Oligomers. Plant Physiology, 1987, 85, 626-630.	4.8	102
31	TwoArabidopsis thalianagenes encode functional pectin methylesterase inhibitors1. FEBS Letters, 2004, 557, 199-203.	2.8	97
32	Engineering plant resistance by constructing chimeric receptors that recognize damageâ€associated molecular patterns (DAMPs). FEBS Letters, 2011, 585, 1521-1528.	2.8	95
33	Cloning and characterization of the gene encoding the endo polygalacturonase-inhibiting protein (PGIP) of Phaseolus vulgaris L.. Plant Journal, 1992, 2, 367-373.	5.7	95
34	Oligogalacturonides inhibit the formation of roots on tobacco explants. Plant Journal, 1993, 4, 207-213.	5.7	91
35	Oligogalacturonides Prevent Rhizogenesis in rolB-Transformed Tobacco Explants by Inhibiting Auxin-Induced Expression of the rolB Gene.. Plant Cell, 1996, 8, 477-487.	6.6	88
36	Polygalacturonase-inhibiting protein (PGIP) in plant defence: a structural view. Phytochemistry, 2006, 67, 528-533.	2.9	88

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37	Polygalacturonase-Inhibiting Protein Interacts with Pectin through a Binding Site Formed by Four Clustered Residues of Arginine and Lysine. Plant Physiology, 2006, 141, 557-564.	4.8	88
38	Antisense Expression of the Arabidopsis thaliana AtPGIP1 Gene Reduces Polygalacturonase-Inhibiting Protein Accumulation and Enhances Susceptibility to Botrytis cinerea. Molecular Plant-Microbe Interactions, 2006, 19, 931-936.	2.6	87
39	Polygalacturonase, PGIP and oligogalacturonides in cell-cell communication. Biochemical Society Transactions, 1994, 22, 394-397.	3.4	86
40	Can Phaseolus PGIP inhibit pectic enzymes from microbes and plants?. Phytochemistry, 1990, 29, 447-449.	2.9	85
41	An Arabidopsis berberine bridge enzymeâ€like protein specifically oxidizes cellulose oligomers and plays a role in immunity. Plant Journal, 2019, 98, 540-554.	5.7	80
42	GRP-3andKAPP,encoding interactors of WAK1, negatively affect defense responses induced by oligogalacturonides and local response to wounding. Journal of Experimental Botany, 2016, 67, 1715-1729.	4.8	77
43	Targeted Mutants of Cochliobolus carbonum Lacking the Two Major Extracellular Polygalacturonases. Applied and Environmental Microbiology, 1998, 64, 1497-1503.	3.1	76
44	Cloning and characterization of a gene encoding the endopolygalacturonase of Fusarium moniliforme. Mycological Research, 1993, 97, 497-505.	2.5	72
45	Mutagenesis of Endopolygalacturonase from<i>Fusarium moniliforme:</i>Histidine Residue 234 Is Critical for Enzymatic and Macerating Activities and Not for Binding to Polygalacturonase-Inhibiting Protein (PGIP). Molecular Plant-Microbe Interactions, 1996, 9, 617.	2.6	69
46	Integration of evolutionary and desolvation energy analysis identifies functional sites in a plant immunity protein. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7666-7671.	7.1	68
47	Transgenic expression of pectin methylesterase inhibitors limits tobamovirus spread in tobacco and <scp>A</scp>rabidopsis. Molecular Plant Pathology, 2014, 15, 265-274.	4.2	67
48	Identification by 2â€D DIGE of apoplastic proteins regulated by oligogalacturonides in <i>Arabidopsis thaliana</i>. Proteomics, 2008, 8, 1042-1054.	2.2	63
49	A functional pectin methylesterase inhibitor protein (SolyPMEI) is expressed during tomato fruit ripening and interacts with PME-1. Plant Molecular Biology, 2012, 79, 429-442.	3.9	63
50	Secondary Structure and Post-Translational Modifications of the Leucine-Rich Repeat Protein PGIP (Polygalacturonase-Inhibiting Protein) fromPhaseolus vulgarisâ€. Biochemistry, 2001, 40, 569-576.	2.5	62
51	A Polygalacturonase-Inhibiting Protein in the Flowers of Phaseolus vulgaris L.. Journal of Plant Physiology, 1990, 136, 513-518.	3.5	60
52	Targeted Modification of Homogalacturonan by Transgenic Expression of a Fungal Polygalacturonase Alters Plant Growth. Plant Physiology, 2004, 135, 1294-1304.	4.8	59
53	Expression and localization of polygalacturonase during the outgrowth of lateral roots in Allium porrum L.. Planta, 1992, 188, 164-172.	3.2	58
54	A leucine-rich repeat receptor-like protein kinase (LRPKm1) gene is induced in Malus x domestica by Venturia inaequalis infection and salicylic acid treatment. Plant Molecular Biology, 1999, 40, 945-957.	3.9	58

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55	The Arabidopsis NUCLEUS- AND PHRAGMOPLAST-LOCALIZED KINASE1-Related Protein Kinases Are Required for Elicitor-Induced Oxidative Burst and Immunity. Plant Physiology, 2014, 165, 1188-1202.	4.8	57
56	Fusarium moniliforme secretes four endopolygalacturonases derived from a single gene product. Physiological and Molecular Plant Pathology, 1993, 43, 453-462.	2.5	56
57	The Arabidopsis thaliana Class III Peroxidase AtPRX71 Negatively Regulates Growth under Physiological Conditions and in Response to Cell Wall Damage.. Plant Physiology, 2015, 169, pp.01464.2015.	4.8	56
58	Cytological localization of thePGIP genes in the embryo suspensor cells ofPhaseolus vulgavis L. Theoretical and Applied Genetics, 1993, 87, 369-373.	3.6	54
59	Endopolygalacturonase Is Not Required for Pathogenicity of Cochliobolus carbonum on Maize. Plant Cell, 1990, 2, 1191.	6.6	53
60	The Polygalacturonase-Inhibiting Protein PGIP2 of Phaseolus vulgaris Has Evolved a Mixed Mode of Inhibition of Endopolygalacturonase PG1 of Botrytis cinerea. Plant Physiology, 2005, 139, 1380-1388.	4.8	53
61	Endopolygalacturonase from the maize pathogen Cochliobolus carbonum. Physiological and Molecular Plant Pathology, 1990, 36, 351-359.	2.5	47
62	Crystal structure of the endopolygalacturonase from the phytopathogenic fungus <i>Colletotrichum lupini</i> and its interaction with polygalacturonaseâ€inhibiting proteins. Proteins: Structure, Function and Bioinformatics, 2008, 70, 294-299.	2.6	45
63	The promoter of a gene encoding a polygalacturonase-inhibiting protein of Phaseolus vulgaris L. is activated by wounding but not by elicitors or pathogen infection. Planta, 1998, 205, 165-174.	3.2	44
64	Analysis of pectin mutants and natural accessions of Arabidopsis highlights the impact of de-methyl-esterified homogalacturonan on tissue saccharification. Biotechnology for Biofuels, 2013, 6, 163.	6.2	44
65	Differential accumulation of PGIP (polygalacturonase-inhibiting protein) mRNA in two near-isogenic lines ofPhaseolus vulgarisL. upon infection withColletotrichum lindemuthianum. Physiological and Molecular Plant Pathology, 1996, 48, 83-89.	2.5	43
66	Immune responses induced by oligogalacturonides are differentially affected by AvrPto and loss of BAK1/BKK1 and PEPR1/PEPR2. Molecular Plant Pathology, 2017, 18, 582-595.	4.2	42
67	Host-pathogen interactions. XXXVII. Abilities of the Polygalacturonase-inhibiting proteins from four cultivars of Phaseolus vulgaris to inhibit the endopolygalacturonases from three races of Colletotrichum lindemuthianum. Physiological and Molecular Plant Pathology, 1990, 36, 421-435.	2.5	41
68	Dampening the DAMPs: How Plants Maintain the Homeostasis of Cell Wall Molecular Patterns and Avoid Hyper-Immunity. Frontiers in Plant Science, 2020, 11, 613259.	3.6	39
69	Structural Resolution of the Complex between a Fungal Polygalacturonase and a Plant Polygalacturonase-Inhibiting Protein by Small-Angle X-Ray Scattering Â. Plant Physiology, 2011, 157, 599-607.	4.8	38
70	Elicitation of phenylalanine ammonia-lyase in Daucus carota by oligogalacturonides released from sodium polypectate by homogeneous polygalacturonase. Plant Science, 1987, 51, 147-150.	3.6	36
71	A gene for plant protection: expression of a bean polygalacturonase inhibitor in tobacco confers a strong resistance against Rhizoctonia solani and two oomycetes. Frontiers in Plant Science, 2012, 3, 268.	3.6	34
72	Endopolygalacturonase from Rhizoctonia fragariae Purification and characterization of two isoenzymes. Biochimica Et Biophysica Acta - Biomembranes, 1977, 482, 379-385.	2.6	32

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73	Developmental and pathogen-induced accumulation of transcripts of polygalacturonase-inhibiting protein in Phaseolus vulgaris L.. Planta, 1997, 202, 284-292.	3.2	32
74	Bacterial endopectate lyase: evidence that plant cell wall pH prevents tissue maceration and increases the half-life of elicitor-active oligogalacturonides. Physiological and Molecular Plant Pathology, 1991, 39, 335-344.	2.5	31
75	A lower content of de-methylesterified homogalacturonan improves enzymatic cell separation and isolation of mesophyll protoplasts in Arabidopsis. Phytochemistry, 2015, 112, 188-194.	2.9	29
76	Controlled expression of pectic enzymes in Arabidopsis thaliana enhances biomass conversion without adverse effects on growth. Phytochemistry, 2015, 112, 221-230.	2.9	27
77	Sensitive detection and measurement of oligogalacturonides in Arabidopsis. Frontiers in Plant Science, 2015, 06, 258.	3.6	26
78	A Polygalacturonase-Inhibiting Protein in Alfalfa Callus Cultures. Journal of Plant Physiology, 1988, 133, 364-366.	3.5	24
79	The Interaction betweenEndopolygalacturonase fromFusarium moniliformeand PGIP fromPhaseolus vulgarisStudied by Surface Plasmon Resonance and Mass Spectrometry. Comparative and Functional Genomics, 2001, 2, 359-364.	2.0	23
80	A Single Amino-Acid Substitution Allows Endo-Polygalacturonase of Fusarium verticillioides to Acquire Recognition by PGIP2 from Phaseolus vulgaris. PLoS ONE, 2013, 8, e80610.	2.5	23
81	Polygalacturonase-Inhibiting Proteins (PGIPs): Their Role in Specificity and Defense against Pathogenic Fungi. , 1997, , 76-93.		22
82	Simple procedures for the separation and identification of bovine milk whey proteins. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1973, 295, 555-563.	1.7	21
83	An EFRâ€Cfâ€9 chimera confers enhanced resistance to bacterial pathogens by SOBIR1â€•and BAK1â€dependent recognition of elf18. Molecular Plant Pathology, 2019, 20, 751-764.	4.2	19
84	Pectinolytic activity in some ericoid mycorrhizal fungi. Transactions of the British Mycological Society, 1988, 91, 537-539.	0.6	18
85	Three aspartic acid residues of polygalacturonase-inhibiting protein (PGIP) fromPhaseolus vulgarisare critical for inhibition ofFusarium phyllophilumPG. Plant Biology, 2009, 11, 738-743.	3.8	18
86	How do pectin methylesterases and their inhibitors affect the spreading of tobamovirus?. Plant Signaling and Behavior, 2014, 9, e972863.	2.4	17
87	Dansyl chloride binding to proteins quantitative estimation of N-terminal, lysyl, and tyrosyl residues by the radioactive reagent. Analytical Biochemistry, 1974, 57, 38-45.	2.4	16
88	Oligogalacturonides Prevent Rhizogenesis in rolB-Transformed Tobacco Explants by Inhibiting Auxin-Induced Expression of the rolB Gene. Plant Cell, 1996, 8, 477.	6.6	16
89	Reduced Content of Homogalacturonan Does Not Alter the Ion-Mediated Increase in Xylem Hydraulic Conductivity in Tobacco. Plant Physiology, 2007, 143, 1975-1981.	4.8	15
90	The pgip family in soybean and three other legume species: evidence for a birth-and-death model of evolution. BMC Plant Biology, 2014, 14, 189.	3.6	15

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91	Characterization of a membrane-associated apoplastic lipoxygenase in Phaseolus vulgaris L.. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1748, 9-19.	2.3	14
92	Plant immunity by damage-associated molecular patterns (DAMPs). Essays in Biochemistry, 2022, 66, 459-469.	4.7	13
93	The intracellular <scp>ROS</scp> accumulation in elicitorâ€induced immunity requires the multiple organelleâ€targeted Arabidopsis <scp>NPK1</scp>â€related protein kinases. Plant, Cell and Environment, 2021, 44, 931-947.	5.7	11
94	The action of O-methyl-threonine and thiaisoleucine on threonine deaminase purified fromEscherichia coliK-12. FEBS Letters, 1972, 26, 56-60.	2.8	10
95	Oligogalacturonide-induced changes in the nuclear proteome of Arabidopsis thaliana. International Journal of Mass Spectrometry, 2007, 268, 277-283.	1.5	10
96	Combination of Pretreatment with White Rot Fungi and Modification of Primary and Secondary Cell Walls Improves Saccharification. Bioenergy Research, 2015, 8, 175-186.	3.9	10
97	Loss of the Arabidopsis Protein Kinases ANPs Affects Root Cell Wall Composition, and Triggers the Cell Wall Damage Syndrome. Frontiers in Plant Science, 2018, 8, 2234.	3.6	10
98	Dual autogenous regulatory role of threonine deaminase in Escherichia coli K-12. Molecular Genetics and Genomics, 1978, 159, 27-32.	2.4	9
99	Berberine Bridge Enzyme-like Oligosaccharide Oxidases Act as Enzymatic Transducers Between Microbial Glycoside Hydrolases and Plant Peroxidases. Molecular Plant-Microbe Interactions, 2022, 35, 881-886.	2.6	9
100	Enhancing immunity by engineering DAMPs. Oncotarget, 2015, 6, 28523-28524.	1.8	7
101	Isolation and characterization of pectin inducible cDNA clones from the phytopathogenic fungus Fusarium moniliforme. Mycological Research, 1990, 94, 635-640.	2.5	5
102	Crystallization and preliminary X-ray diffraction study of the endo-polygalacturonase from Fusarium moniliforme. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 1359-1361.	2.5	4
103	Extracellular Accumulation of an Auxin-regulated Protein in Phaseolus vulgaris L. Cells is Inhibited by Oligogalacturonides. Journal of Plant Physiology, 1995, 147, 367-370.	3.5	3
104	The Role of the Sulphydryl Groups of Spleen Deoxycytidylate Aminohydrolase. FEBS Journal, 1974, 46, 401-405.	0.2	1
105	Extracellular Accumulation of an Auxin-Regulated Protein in <i>Phaseolus Vulgaris</i> L. Cells is Inhibited by Oligogalacturonides. Giornale Botanico Italiano (Florence, Italy: 1962), 1995, 129, 994-995.	0.0	0
106	The accumulation of PGIP is correlated with the hypersensitive response in racecultivar interactions. Giornale Botanico Italiano (Florence, Italy: 1962), 1995, 129, 1130-1131.	0.0	0