Benedetta Mattei

List of Publications by Year
in descending order

52 papers	2,674 citations	218592 26 h-index	197736 49 g-index
54 all docs	54 docs citations	54 times ranked	2871 citing authors

#	Article	IF	Citations
1	Binding of 14-3-3 Protein to the Plasma Membrane H+-ATPase AHA2 Involves the Three C-terminal Residues Tyr946-Thr-Val and Requires Phosphorylation of Thr947. Journal of Biological Chemistry, 1999, 274, 36774-36780.	1.6	311
2	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.	3.5	214
3	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.	3.3	195
4	Polygalacturonases, polygalacturonase-inhibiting proteins and pectic oligomers in plantâ€“pathogen interactions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1696, 237-244.	1.1	180
5	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.	3.3	131
6	Four Arabidopsis berberine bridge enzymeâ€like proteins are specific oxidases that inactivate the elicitorâ€active oligogalacturonides. Plant Journal, 2018, 94, 260-273.	2.8	114
7	Polygalacturonase-Inhibiting Proteins (PGIPs) with Different Specificities Are Expressed in Phaseolus vulgaris. Molecular Plant-Microbe Interactions, 1997, 10, 852-860.	1.4	112
8	Cell wall traits that influence plant development, immunity, and bioconversion. Plant Journal, 2019, 97, 134-147.	2.8	106
9	TwoArabidopsis thalianagenes encode functional pectin methylesterase inhibitors1. FEBS Letters, 2004, 557, 199-203.	1.3	97
10	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.	2.3	88
11	Manipulation of Î²â€carotene levels in tomato fruits results in increased ABA content and extended shelf life. Plant Biotechnology Journal, 2020, 18, 1185-1199.	4.1	81
12	An Arabidopsis berberine bridge enzymeâ€like protein specifically oxidizes cellulose oligomers and plays a role in immunity. Plant Journal, 2019, 98, 540-554.	2.8	80
13	No Evidence for Binding Between Resistance Gene Product Cf-9 of Tomato and Avirulence Gene Product AVR9 of Cladosporium fulvum. Molecular Plant-Microbe Interactions, 2001, 14, 867-876.	1.4	78
14	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.	1.4	69
15	Identification by 2â€D DIGE of apoplastic proteins regulated by oligogalacturonides in <i>Arabidopsis thaliana</i>. Proteomics, 2008, 8, 1042-1054.	1.3	63
16	Secondary Structure and Post-Translational Modifications of the Leucine-Rich Repeat Protein PGIP (Polygalacturonase-Inhibiting Protein) fromPhaseolus vulgarisâ€. Biochemistry, 2001, 40, 569-576.	1.2	62
17	Targeted Modification of Homogalacturonan by Transgenic Expression of a Fungal Polygalacturonase Alters Plant Growth. Plant Physiology, 2004, 135, 1294-1304.	2.3	59
18	Functional expression in bacteria and plants of an scFv antibody fragment against tospoviruses. Immunotechnology: an International Journal of Immunological Engineering, 1999, 4, 189-201.	2.4	57

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19	Industrial Use of Cell Wall Degrading Enzymes: The Fine Line Between Production Strategy and Economic Feasibility. Frontiers in Bioengineering and Biotechnology, 2020, 8, 356.	2.0	49
20	The sorcin-annexin VII calcium-dependent interaction requires the sorcin N-terminal domain. FEBS Letters, 2000, 471, 197-200.	1.3	45
21	A family 11 xylanase from the pathogen Botrytis cinerea is inhibited by plant endoxylanase inhibitors XIP-I and TAXI-I. Biochemical and Biophysical Research Communications, 2005, 337, 160-166.	1.0	43
22	Comprehensive Analysis of the Membrane Phosphoproteome Regulated by Oligogalacturonides in Arabidopsis thaliana. Frontiers in Plant Science, 2016, 7, 1107.	1.7	43
23	Pectin Methylesterase from Kiwi and Kaki Fruits:Â Purification, Characterization, and Role of pH in the Enzyme Regulation and Interaction with the Kiwi Proteinaceous Inhibitor. Journal of Agricultural and Food Chemistry, 2004, 52, 7700-7703.	2.4	30
24	A proteomic approach to verifyin vivo expression of a novel Î³-gliadin containing an extra cysteine residue. Proteomics, 2006, 6, 1908-1914.	1.3	29
25	The Grapevine VvPMEI1 Gene Encodes a Novel Functional Pectin Methylesterase Inhibitor Associated to Grape Berry Development. PLoS ONE, 2015, 10, e0133810.	1.1	29
26	Exploring the potential of microalgae in the recycling of dairy wastes. Bioresource Technology Reports, 2020, 12, 100604.	1.5	27
27	Sensitive detection and measurement of oligogalacturonides in Arabidopsis. Frontiers in Plant Science, 2015, 06, 258.	1.7	26
28	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
29	Three aspartic acid residues of polygalacturonase-inhibiting protein (PGIP) fromPhaseolus vulgarisare critical for inhibition ofFusarium phyllophilumPG. Plant Biology, 2009, 11, 738-743.	1.8	18
30	The COP9 signalosome is involved in the regulation of lipid metabolism and of transition metals uptake in <i>SaccharomycesÂcerevisiae</i>. FEBS Journal, 2014, 281, 175-190.	2.2	17
31	Changes in the microsomal proteome of tomato fruit during ripening. Scientific Reports, 2019, 9, 14350.	1.6	17
32	Peer Reviewed: Biomolecular Interaction Analysis and MS. Analytical Chemistry, 2004, 76, 18 A-25 A.	3.2	16
33	Cell wall hydrolases act in concert during aerenchyma development in sugarcane roots. Annals of Botany, 2019, 124, 1067-1089.	1.4	15
34	Characterization of a membrane-associated apoplastic lipoxygenase in Phaseolus vulgaris L.. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1748, 9-19.	1.1	14
35	A Combined Proteomics, Metabolomics and In Vivo Analysis Approach for the Characterization of Probiotics in Large-Scale Production. Biomolecules, 2020, 10, 157.	1.8	14
36	Recognition and signalling in the cell wall: The case of endopolygalacturonase, PGIP and oligogalacturonides. Plant Biosystems, 2005, 139, 24-27.	0.8	12

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37	The plasma membraneâ€“associated Ca²⁺â€bindingâ€‰protein,<scp>PCaP1,</scp>is required for oligogalacturonide and flagellinâ€induced priming and immunity. Plant, Cell and Environment, 2021, 44, 3078-3093.	2.8	12
38	Camalexin Quantification in Arabidopsis thaliana Leaves Infected with Botrytis cinerea. Bio-protocol, 2015, 5, .	0.2	11
39	Oligogalacturonide-induced changes in the nuclear proteome of Arabidopsis thaliana. International Journal of Mass Spectrometry, 2007, 268, 277-283.	0.7	10
40	Variability in Probiotic Formulations Revealed by Proteomics and Physico-chemistry Approach in Relation to the Gut Permeability. Probiotics and Antimicrobial Proteins, 2020, 12, 1193-1202.	1.9	10
41	Ectopic suicide inhibition of thioredoxin glutathione reductase. Free Radical Biology and Medicine, 2020, 147, 200-211.	1.3	10
42	A molecular dynamics-guided mutagenesis identifies two aspartic acid residues involved in the pH-dependent activity of OG-OXIDASE 1. Plant Physiology and Biochemistry, 2021, 169, 171-182.	2.8	9
43	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.	1.4	9
44	The role of polygalacturonase, PGIP and pectin oligomers in fungal infection. Progress in Biotechnology, 1996, , 191-205.	0.2	8
45	Proteomics in Deciphering the Auxin Commitment in the <i>Arabidopsis thaliana</i> Root Growth. Journal of Proteome Research, 2013, 12, 4685-4701.	1.8	8
46	Methods of Isolation and Characterization of Oligogalacturonide Elicitors. Methods in Molecular Biology, 2017, 1578, 25-38.	0.4	8
47	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
48	Preliminary X-ray crystallographic analysis of a plant defence protein, the polygalacturonase-inhibiting protein from Phaseolus vulgaris. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 98-100.	2.5	4
49	A role for oxidative stress in the Citrus limon/Phoma tracheiphila interaction. Plant Pathology, 2007, 57, 070924013950005-???.	1.2	4
50	Studies on plant inhibitors of pectin modifying enzymes: Polygalacturonase-inhibiting protein (PGIP) and pectin methylesterase inhibtior (PMEI). Special Publication - Royal Society of Chemistry, 0, , 160-168.	0.0	2
51	Analysis of the Interaction between<i>Phaseolus</i>PGIP and fungal Endopolygalacturonases Using Biosensor Technology. Giornale Botanico Italiano (Florence, Italy: 1962), 1995, 129, 1118-1119.	0.0	0
52	Analysis of the interaction between PGIP from Phaseolus vulgaris L. and fungal endopolygalacturonases using biosensor technology. Progress in Biotechnology, 1996, 14, 775-782.	0.2	0