Christophe Rothan

List of Publications by Year
in descending order

82 papers	8,253 citations	66336 42 h-index	62593 80 g-index
86 all docs	86 docs citations	86 times ranked	9020 citing authors

#	Article	IF	Citations
1	The tomato genome sequence provides insights into fleshy fruit evolution. Nature, 2012, 485, 635-641.	27.8	2,860
2	Mapping QTLs controlling fruit quality in peach (Prunus persica (L.) Batsch). Theoretical and Applied Genetics, 1999, 98, 18-31.	3.6	226
3	Vitamin Deficiencies in Humans: Can Plant Science Help?. Plant Cell, 2012, 24, 395-414.	6.6	212
4	Candidate genes and QTLs for sugar and organic acid content in peach [Prunus persica (L.) Batsch]. Theoretical and Applied Genetics, 2002, 105, 145-159.	3.6	199
5	Gene and Metabolite Regulatory Network Analysis of Early Developing Fruit Tissues Highlights New Candidate Genes for the Control of Tomato Fruit Composition and Development Â Â Â. Plant Physiology, 2009, 149, 1505-1528.	4.8	199
6	GDPâ€<scp>d</scp>â€mannose 3,5â€epimerase (GME) plays a key role at the intersection of ascorbate and nonâ€cellulosic cellâ€wall biosynthesis in tomato. Plant Journal, 2009, 60, 499-508.	5.7	197
7	Silencing of the Mitochondrial Ascorbate Synthesizing Enzyme <scp>l</scp>-Galactono-1,4-Lactone Dehydrogenase Affects Plant and Fruit Development in Tomato. Plant Physiology, 2007, 145, 1408-1422.	4.8	184
8	A genetic map of candidate genes and QTLs involved in tomato fruit size and composition. Journal of Experimental Botany, 2004, 55, 1671-1685.	4.8	179
9	Tomato TILLING Technology: Development of a Reverse Genetics Tool for the Efficient Isolation of Mutants from Micro-Tom Mutant Libraries. Plant and Cell Physiology, 2011, 52, 1994-2005.	3.1	178
10	Tomato GDSL1 Is Required for Cutin Deposition in the Fruit Cuticle. Plant Cell, 2012, 24, 3119-3134.	6.6	175
11	Molecular and Biochemical Characterization of the Involvement of Cyclin-Dependent Kinase A during the Early Development of Tomato Fruit. Plant Physiology, 1999, 121, 857-869.	4.8	171
12	Changes in Transcriptional Profiles Are Associated with Early Fruit Tissue Specialization in Tomato. Plant Physiology, 2005, 139, 750-769.	4.8	167
13	Candidate Genes and Quantitative Trait Loci Affecting Fruit Ascorbic Acid Content in Three Tomato Populations. Plant Physiology, 2007, 143, 1943-1953.	4.8	166
14	The tomato <scp>S</scp>l<scp>SHINE</scp>3 transcription factor regulates fruit cuticle formation and epidermal patterning. New Phytologist, 2013, 197, 468-480.	7.3	156
15	Genetic linkage map of peach [Prunus persica (L.) Batsch] using morphological and molecular markers. Theoretical and Applied Genetics, 1998, 97, 888-895.	3.6	148
16	Quantitative metabolic profiles of tomato flesh and seeds during fruit development: complementary analysis with ANN and PCA. Metabolomics, 2007, 3, 273-288.	3.0	119
17	Isolation and characterization of six peach cDNAs encoding key proteins in organic acid metabolism and solute accumulation: involvement in regulating peach fruit acidity. Physiologia Plantarum, 2002, 114, 259-270.	5.2	113
18	Identification of the carotenoid modifying gene <i><scp>PALE YELLOW PETAL</scp> 1</i> as an essential factor in xanthophyll esterification and yellow flower pigmentation in tomato (<i><scp>S</scp>olanum lycopersicum</i>). Plant Journal, 2014, 79, 453-465.	5.7	112

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19	Unleashing meiotic crossovers in crops. Nature Plants, 2018, 4, 1010-1016.	9.3	110
20	Trait discovery and editing in tomato. Plant Journal, 2019, 97, 73-90.	5.7	101
21	Flexible Tools for Gene Expression and Silencing in Tomato Â Â. Plant Physiology, 2009, 151, 1729-1740.	4.8	100
22	A diminution in ascorbate oxidase activity affects carbon allocation and improves yield in tomato under water deficit. Plant, Cell and Environment, 2013, 36, 159-175.	5.7	93
23	SNP Discovery and Linkage Map Construction in Cultivated Tomato. DNA Research, 2010, 17, 381-391.	3.4	87
24	A Specific Gibberellin 20-Oxidase Dictates the Flowering-Runnering Decision in Diploid Strawberry. Plant Cell, 2017, 29, 2168-2182.	6.6	83
25	Down-regulation of a single auxin efflux transport protein in tomato induces precocious fruit development. Journal of Experimental Botany, 2012, 63, 4901-4917.	4.8	82
26	The expression of cell proliferation-related genes in early developing flowers is affected by a fruit load reduction in tomato plants. Journal of Experimental Botany, 2006, 57, 961-970.	4.8	81
27	Analyses of Tomato Fruit Brightness Mutants Uncover Both Cutin-Deficient and Cutin-Abundant Mutants and a New Hypomorphic Allele of <i>GDSL Lipase</i> Â Â Â. Plant Physiology, 2014, 164, 888-906.	4.8	81
28	PFRU, a single dominant locus regulates the balance between sexual and asexual plant reproduction in cultivated strawberry. Journal of Experimental Botany, 2013, 64, 1837-1848.	4.8	79
29	The glycerol-3-phosphate acyltransferase GPAT6 from tomato plays a central role in fruit cutin biosynthesis. Plant Physiology, 2016, 171, pp.00409.2016.	4.8	76
30	Functional analysis of the anaphase promoting complex activator CCS52A highlights the crucial role of endo-reduplication for fruit growth in tomato. Plant Journal, 2010, 62, 727-741.	5.7	69
31	Genome-Wide Analysis of Intraspecific DNA Polymorphism in â€˜Micro-Tomâ€™, a Model Cultivar of Tomato (Solanum lycopersicum). Plant and Cell Physiology, 2014, 55, 445-454.	3.1	69
32	Role of phosphoenol pyruvate carboxylase in organic acid accumulation during peach fruit development. Physiologia Plantarum, 2000, 108, 1-10.	5.2	63
33	A fruit-specific phospho enol pyruvate carboxylase is related to rapid growth of tomato fruit. Planta, 2002, 214, 717-726.	3.2	63
34	Rapid identification of causal mutations in tomato EMS populations via mapping-by-sequencing. Nature Protocols, 2016, 11, 2401-2418.	12.0	62
35	Genome-Wide SNP Genotyping to Infer the Effects on Gene Functions in Tomato. DNA Research, 2013, 20, 221-233.	3.4	58
36	Breeding for cuticle-associated traits in crop species: traits, targets, and strategies. Journal of Experimental Botany, 2017, 68, 5369-5387.	4.8	58

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37	Silencing of the GDP-d-mannose 3,5-Epimerase Affects the Structure and Cross-linking of the Pectic Polysaccharide Rhamnogalacturonan II and Plant Growth in Tomato. Journal of Biological Chemistry, 2011, 286, 8014-8020.	3.4	57
38	Two tomato GDP-D-mannose epimerase isoforms involved in ascorbate biosynthesis play specific roles in cell wall biosynthesis and development. Journal of Experimental Botany, 2016, 67, 4767-4777.	4.8	57
39	Assembly of tomato fruit cuticles: a crossâ€talk between the cutin polyester and cell wall polysaccharides. New Phytologist, 2020, 226, 809-822.	7.3	56
40	Fruit-localized phytochromes regulate plastid biogenesis, starch synthesis, and carotenoid metabolism in tomato. Journal of Experimental Botany, 2018, 69, 3573-3586.	4.8	53
41	Ester Cross-Link Profiling of the Cutin Polymer of Wild-Type and Cutin Synthase Tomato Mutants Highlights Different Mechanisms of Polymerization. Plant Physiology, 2016, 170, 807-820.	4.8	51
42	Narrowing down the single homoeologous <i>Fa<scp>PFRU</scp></i> locus controlling flowering in cultivated octoploid strawberry using a selective mapping strategy. Plant Biotechnology Journal, 2016, 14, 2176-2189.	8.3	48
43	The tomato hexokinase LeHXK1 cloning, mapping, expression pattern and phylogenetic relationships. Plant Science, 2002, 163, 581-590.	3.6	46
44	Applying the Solanaceae Strategies to Strawberry Crop Improvement. Trends in Plant Science, 2020, 25, 130-140.	8.8	43
45	A novel class of PTEN protein in <i>Arabidopsis</i> displays unusual phosphoinositide phosphatase activity and efficiently binds phosphatidic acid. Biochemical Journal, 2012, 441, 161-171.	3.7	42
46	Micro-Tom mutants for functional analysis of target genes and discovery of new alleles in tomato. Plant Biotechnology, 2013, 30, 225-231.	1.0	40
47	Down-regulation of tomato<i>PHYTOL KINASE</i>strongly impairs tocopherol biosynthesis and affects prenyllipid metabolism in an organ-specific manner. Journal of Experimental Botany, 2016, 67, 919-934.	4.8	39
48	Genotype-dependent response to carbon availability in growing tomato fruit. Plant, Cell and Environment, 2010, 33, 1186-204.	5.7	35
49	High CO2 levels reduce ethylene production in kiwifruit. Physiologia Plantarum, 1994, 92, 1-8.	5.2	32
50	Investigating the role of vitamin C in tomato through TILLING identification of ascorbate-deficient tomato mutants. Plant Biotechnology, 2013, 30, 309-314.	1.0	32
51	Reducing the content of nornicotine in tobacco via targeted mutation breeding. Molecular Breeding, 2008, 21, 369-381.	2.1	31
52	An integrative genomics approach for deciphering the complex interactions between ascorbate metabolism and fruit growth and composition in tomato. Comptes Rendus - Biologies, 2009, 332, 1007-1021.	0.2	30
53	Overproduction of ascorbic acid impairs pollen fertility in tomato. Journal of Experimental Botany, 2021, 72, 3091-3107.	4.8	30
54	Cloning and characterization of a cDNA encoding hexokinase from tomato. Plant Science, 2001, 160, 209-218.	3.6	27

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55	Metabolite Quantitative Trait Loci for Flavonoids Provide New Insights into the Genetic Architecture of Strawberry (<i>Fragaria Ã— ananassa</i>) Fruit Quality. Journal of Agricultural and Food Chemistry, 2020, 68, 6927-6939.	5.2	27
56	Identification of Two New Mechanisms That Regulate Fruit Growth by Cell Expansion in Tomato. Frontiers in Plant Science, 2017, 8, 988.	3.6	25
57	The <i>FveFT2</i> florigen/<i>FveTFL1</i> antiflorigen balance is critical for the control of seasonal flowering in strawberry while <i>FveFT3</i> modulates axillary meristem fate and yield. New Phytologist, 2021, 232, 372-387.	7.3	23
58	A Tomato Tocopherol Binding Protein Sheds Light on Intracellular Î±-tocopherol Metabolism in Plants. Plant and Cell Physiology, 2018, 59, 2188-2203.	3.1	19
59	Regulation of the Fruit-Specific PEP Carboxylase SlPPC2 Promoter at Early Stages of Tomato Fruit Development. PLoS ONE, 2012, 7, e36795.	2.5	19
60	The Complex Architecture of Plant Cuticles and Its Relation to Multiple Biological Functions. Frontiers in Plant Science, 2021, 12, 782773.	3.6	19
61	The Tomato Guanylate-Binding Protein SlGBP1 Enables Fruit Tissue Differentiation by Maintaining Endopolyploid Cells in a Non-Proliferative State. Plant Cell, 2020, 32, 3188-3205.	6.6	17
62	Deficiency of GDP-l-galactose phosphorylase, an enzyme required for ascorbic acid synthesis, reduces tomato fruit yield. Planta, 2020, 251, 54.	3.2	17
63	Culture of the Tomato Micro-Tom Cultivar in Greenhouse. Methods in Molecular Biology, 2016, 1363, 57-64.	0.9	15
64	The effect of low ascorbic acid content on tomato fruit ripening. Planta, 2020, 252, 36.	3.2	12
65	Validated MAGIC and GWAS population mapping reveals the link between vitamin E content and natural variation in chorismate metabolism in tomato. Plant Journal, 2021, 105, 907-923.	5.7	12
66	A Systems Biology Study in Tomato Fruit Reveals Correlations between the Ascorbate Pool and Genes Involved in Ribosome Biogenesis, Translation, and the Heat-Shock Response. Frontiers in Plant Science, 2018, 9, 137.	3.6	11
67	An Ionic Liquid Extraction That Preserves the Molecular Structure of Cutin Shown by Nuclear Magnetic Resonance. Plant Physiology, 2020, 184, 592-606.	4.8	11
68	A Chimeric TGA Repressor Slows Down Fruit Maturation and Ripening in Tomato. Plant and Cell Physiology, 2022, 63, 120-134.	3.1	9
69	Natural and artificially induced genetic variability in crop and model plant species for plant systems biology. , 2007, 97, 21-53.		9
70	Unraveling Cuticle Formation, Structure, and Properties by Using Tomato Genetic Diversity. Frontiers in Plant Science, 2021, 12, 778131.	3.6	9
71	High light stress induces H2O2 production and accelerates fruit ripening in tomato. Plant Science, 2022, 322, 111348.	3.6	9
72	The conserved brassinosteroid-related transcription factor BIM1a negatively regulates fruit growth in tomato. Journal of Experimental Botany, 2021, 72, 1181-1197.	4.8	8

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73	Quantification of Structureâ€“Property Relationships for Plant Polyesters Reveals Suberin and Cutin Idiosyncrasies. ACS Sustainable Chemistry and Engineering, 2021, 9, 15780-15792.	6.7	8
74	The SlSHN2 transcription factor contributes to cuticle formation and epidermal patterning in tomato fruit. Molecular Horticulture, 2022, 2, .	5.8	8
75	High-Throughput Biochemical Phenotyping for Plants. Advances in Botanical Research, 2013, , 407-439.	1.1	7
76	High Resolution Quantitative Trait Locus Mapping and Whole Genome Sequencing Enable the Design of an Anthocyanidin Reductase-Specific Homoeo-Allelic Marker for Fruit Colour Improvement in Octoploid Strawberry (Fragaria Ã— ananassa). Frontiers in Plant Science, 2022, 13, 869655.	3.6	7
77	Comparative analysis of common genes involved in early fruit development in tomato and grape. Plant Biotechnology, 2013, 30, 295-300.	1.0	4
78	Tomato Resources for Functional Genomics. Compendium of Plant Genomes, 2016, , 75-94.	0.5	4
79	Make it bloom! CONSTANS contributes to day neutrality in rose. Journal of Experimental Botany, 2020, 71, 3923-3926.	4.8	4
80	A quick protocol for the identification and characterization of early growth mutants in tomato. Plant Science, 2020, 301, 110673.	3.6	3
81	Vitamins in fleshy fruits.. , 2014, , 127-150.		3
82	1H-NMR metabolomics: Profiling method for a rapid and efficient screening of transgenic plants. African Journal of Biotechnology, 2012, 11, .	0.6	1