Sonia Osorio

List of Publications by Year
in descending order

98 papers	12,126 citations	38742 50 h-index	34986 98 g-index
110 all docs	110 docs citations	110 times ranked	14044 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	Sucrose Efflux Mediated by SWEET Proteins as a Key Step for Phloem Transport. Science, 2012, 335, 207-211.	12.6	1,085
3	Metabolic priming by a secreted fungal effector. Nature, 2011, 478, 395-398.	27.8	509
4	The genome of the stress-tolerant wild tomato species Solanum pennellii. Nature Genetics, 2014, 46, 1034-1038.	21.4	391
5	Molecular regulation of seed and fruit set. Trends in Plant Science, 2012, 17, 656-665.	8.8	331
6	Systems Biology of Tomato Fruit Development: Combined Transcript, Protein, and Metabolite Analysis of Tomato Transcription Factor (<i>nor, rin</i>) and Ethylene Receptor (<i>Nr</i>) Mutants Reveals Novel Regulatory Interactions Â Â. Plant Physiology, 2011, 157, 405-425.	4.8	303
7	Rice endosperm iron biofortification by targeted and synergistic action of nicotianamine synthase and ferritin. Plant Biotechnology Journal, 2009, 7, 631-644.	8.3	298
8	AtABCG29 Is a Monolignol Transporter Involved in Lignin Biosynthesis. Current Biology, 2012, 22, 1207-1212.	3.9	265
9	Metabolic Profiling during Peach Fruit Development and Ripening Reveals the Metabolic Networks That Underpin Each Developmental Stage Â Â. Plant Physiology, 2011, 157, 1696-1710.	4.8	254
10	Malate Plays a Crucial Role in Starch Metabolism, Ripening, and Soluble Solid Content of Tomato Fruit and Affects Postharvest Softening Â. Plant Cell, 2011, 23, 162-184.	6.6	227
11	RNA Interference of LIN5 in Tomato Confirms Its Role in Controlling Brix Content, Uncovers the Influence of Sugars on the Levels of Fruit Hormones, and Demonstrates the Importance of Sucrose Cleavage for Normal Fruit Development and Fertility Â Â. Plant Physiology, 2009, 150, 1204-1218.	4.8	226
12	Antisense Inhibition of the Iron-Sulphur Subunit of Succinate Dehydrogenase Enhances Photosynthesis and Growth in Tomato via an Organic Acidâ€"Mediated Effect on Stomatal Aperture Â. Plant Cell, 2011, 23, 600-627.	6.6	221
13	Vitamin Deficiencies in Humans: Can Plant Science Help?. Plant Cell, 2012, 24, 395-414.	6.6	212
14	From Central to Specialized Metabolism: An Overview of Some Secondary Compounds Derived From the Primary Metabolism for Their Role in Conferring Nutritional and Organoleptic Characteristics to Fruit. Frontiers in Plant Science, 2019, 10, 835.	3.6	204
15	Molecular regulation of fruit ripening. Frontiers in Plant Science, 2013, 4, 198.	3.6	200
16	Overexpression of the vascular brassinosteroid receptor BRL3 confers drought resistance without penalizing plant growth. Nature Communications, 2018, 9, 4680.	12.8	189
17	An update on source-to-sink carbon partitioning in tomato. Frontiers in Plant Science, 2014, 5, 516.	3.6	181
18	Integrative Comparative Analyses of Transcript and Metabolite Profiles from Pepper and Tomato Ripening and Development Stages Uncovers Species-Specific Patterns of Network Regulatory Behavior Â. Plant Physiology, 2012, 159, 1713-1729.	4.8	174

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19	Tomato Fruit Photosynthesis Is Seemingly Unimportant in Primary Metabolism and Ripening But Plays a Considerable Role in Seed Development Â Â. Plant Physiology, 2011, 157, 1650-1663.	4.8	150
20	Partial demethylation of oligogalacturonides by pectin methyl esteraseâ€ƒ1 is required for eliciting defence responses in wild strawberry (<i>Fragaria vesca</i>). Plant Journal, 2008, 54, 43-55.	5.7	134
21	Metabolic analysis of kiwifruit (Actinidia deliciosa) berries from extreme genotypes reveals hallmarks for fruit starch metabolism. Journal of Experimental Botany, 2013, 64, 5049-5063.	4.8	124
22	Combined transcription factor profiling, microarray analysis and metabolite profiling reveals the transcriptional control of metabolic shifts occurring during tomato fruit development. Plant Journal, 2011, 68, 999-1013.	5.7	118
23	Ethylene is involved in strawberry fruit ripening in an organ-specific manner. Journal of Experimental Botany, 2013, 64, 4421-4439.	4.8	111
24	Allelic Variation of <i>MYB10</i> Is the Major Force Controlling Natural Variation in Skin and Flesh Color in Strawberry (<i>Fragaria</i> spp.) Fruit. Plant Cell, 2020, 32, 3723-3749.	6.6	111
25	Gibberellin biosynthesis and signalling during development of the strawberry receptacle. New Phytologist, 2011, 191, 376-390.	7.3	110
26	Sugar Signaling During Fruit Ripening. Frontiers in Plant Science, 2020, 11, 564917.	3.6	98
27	Identification of Genes in the Phenylalanine Metabolic Pathway by Ectopic Expression of a MYB Transcription Factor in Tomato Fruit. Plant Cell, 2011, 23, 2738-2753.	6.6	97
28	Robin: An Intuitive Wizard Application for R-Based Expression Microarray Quality Assessment and Analysis Â Â. Plant Physiology, 2010, 153, 642-651.	4.8	96
29	Gene expression atlas of fruit ripening and transcriptome assembly from RNA-seq data in octoploid strawberry (Fragariaâ€‰Ã—â€‰ananassa). Scientific Reports, 2017, 7, 13737.	3.3	95
30	The NAC transcription factor FaRIF controls fruit ripening in strawberry. Plant Cell, 2021, 33, 1574-1593.	6.6	95
31	Antisense Inhibition of the 2-Oxoglutarate Dehydrogenase Complex in Tomato Demonstrates Its Importance for Plant Respiration and during Leaf Senescence and Fruit Maturation. Plant Cell, 2012, 24, 2328-2351.	6.6	88
32	Decreased Mitochondrial Activities of Malate Dehydrogenase and Fumarase in Tomato Lead to Altered Root Growth and Architecture via Diverse Mechanisms Â Â. Plant Physiology, 2009, 149, 653-669.	4.8	85
33	The Phosphorylated Pathway of Serine Biosynthesis Is Essential Both for Male Gametophyte and Embryo Development and for Root Growth in Arabidopsis. Plant Cell, 2013, 25, 2084-2101.	6.6	80
34	Alteration of the Interconversion of Pyruvate and Malate in the Plastid or Cytosol of Ripening Tomato Fruit Invokes Diverse Consequences on Sugar But Similar Effects on Cellular Organic Acid, Metabolism, and Transitory Starch Accumulation Â Â. Plant Physiology, 2013, 161, 628-643.	4.8	78
35	A Snapshot of the Emerging Tomato Genome Sequence. Plant Genome, 2009, 2, .	2.8	73
36	Herbivore-Induced Changes in Tomato (Solanum lycopersicum) Primary Metabolism: A Whole Plant Perspective. Journal of Chemical Ecology, 2011, 37, 1294-1303.	1.8	73

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37	The transcription factor AREB1 regulates primary metabolic pathways in tomato fruits. Journal of Experimental Botany, 2014, 65, 2351-2363.	4.8	71
38	Metabolic profiling of a range of peach fruit varieties reveals high metabolic diversity and commonalities and differences during ripening. Food Chemistry, 2016, 190, 879-888.	8.2	70
39	Mild Reductions in Mitochondrial NAD-Dependent Isocitrate Dehydrogenase Activity Result in Altered Nitrate Assimilation and Pigmentation But Do Not Impact Growth. Molecular Plant, 2010, 3, 156-173.	8.3	68
40	Metabolite Changes during Postharvest Storage: Effects on Fruit Quality Traits. Metabolites, 2020, 10, 187.	2.9	68
41	Deciphering the metabolic pathways influencing heat and cold responses during postâ€harvest physiology of peach fruit. Plant, Cell and Environment, 2014, 37, 601-616.	5.7	67
42	The interplay between sulfur and iron nutrition in tomato. Plant Physiology, 2015, 169, pp.00995.2015.	4.8	66
43	Adjustments of embryonic photosynthetic activity modulate seed fitness in <i><scp>A</scp>rabidopsis thaliana</i>. New Phytologist, 2015, 205, 707-719.	7.3	65
44	Central role of <i>Fa<scp>GAMYB</scp></i> in the transition of the strawberry receptacle from development to ripening. New Phytologist, 2015, 208, 482-496.	7.3	62
45	Metabolomic profiling in tomato reveals diel compositional changes in fruit affected by sourceâ€“sink relationships. Journal of Experimental Botany, 2015, 66, 3391-3404.	4.8	62
46	An <i>Orange Ripening</i> Mutant Links Plastid NAD(P)H Dehydrogenase Complex Activity to Central and Specialized Metabolism during Tomato Fruit Maturation Â. Plant Cell, 2010, 22, 1977-1997.	6.6	61
47	Water Balance, Hormone Homeostasis, and Sugar Signaling Are All Involved in Tomato Resistance to<i>Tomato Yellow Leaf Curl Virus</i>Â Â Â Â. Plant Physiology, 2014, 165, 1684-1697.	4.8	60
48	Demethylation of oligogalacturonides by FaPE1 in the fruits of the wild strawberry Fragaria vesca triggers metabolic and transcriptional changes associated with defence and development of the fruit. Journal of Experimental Botany, 2011, 62, 2855-2873.	4.8	55
49	Transcriptomic Analysis in Strawberry Fruits Reveals Active Auxin Biosynthesis and Signaling in the Ripe Receptacle. Frontiers in Plant Science, 2017, 8, 889.	3.6	55
50	Tricarboxylic Acid Cycle Activity Regulates Tomato Root Growth via Effects on Secondary Cell Wall Production Â Â. Plant Physiology, 2010, 153, 611-621.	4.8	54
51	Yield quantitative trait loci from wild tomato are predominately expressed by the shoot. Theoretical and Applied Genetics, 2011, 122, 405-420.	3.6	54
52	From shoots to roots: transport and metabolic changes in tomato after simulated feeding by a specialist lepidopteran. Entomologia Experimentalis Et Applicata, 2012, 144, 101-111.	1.4	53
53	Virus-Induced Alterations in Primary Metabolism Modulate Susceptibility to<i>Tobacco rattle virus</i>in Arabidopsis Â Â. Plant Physiology, 2014, 166, 1821-1838.	4.8	52
54	Conserved Changes in the Dynamics of Metabolic Processes during Fruit Development and Ripening across Species Â Â Â. Plant Physiology, 2014, 164, 55-68.	4.8	50

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55	Computational aspects underlying genome to phenome analysis in plants. Plant Journal, 2019, 97, 182-198.	5.7	50
56	Virulence determines beneficial tradeâ€offs in the response of virusâ€infected plants to drought via induction of salicylic acid. Plant, Cell and Environment, 2017, 40, 2909-2930.	5.7	49
57	Eugenol Production in Achenes and Receptacles of Strawberry Fruits Is Catalyzed by Synthases Exhibiting Distinct Kinetics. Plant Physiology, 2013, 163, 946-958.	4.8	46
58	Genetic diversity of strawberry germplasm using metabolomic biomarkers. Scientific Reports, 2018, 8, 14386.	3.3	46
59	Transcriptomic and metabolomics responses to elevated cell wall invertase activity during tomato fruit set. Journal of Experimental Botany, 2017, 68, 4263-4279.	4.8	45
60	Impacts of high ATP supply from chloroplasts and mitochondria on the leaf metabolism of Arabidopsis thaliana. Frontiers in Plant Science, 2015, 6, 922.	3.6	43
61	Applying the Solanaceae Strategies to Strawberry Crop Improvement. Trends in Plant Science, 2020, 25, 130-140.	8.8	43
62	Metabolic Engineering of Tomato Fruit Organic Acid Content Guided by Biochemical Analysis of an Introgression Line Â Â. Plant Physiology, 2012, 161, 397-407.	4.8	42
63	hi2-1, A QTL which improves harvest index, earliness and alters metabolite accumulation of processing tomatoes. Theoretical and Applied Genetics, 2010, 121, 1587-1599.	3.6	41
64	Profiling Primary Metabolites of Tomato Fruit with Gas Chromatography/Mass Spectrometry. Methods in Molecular Biology, 2011, 860, 101-109.	0.9	40
65	Genetic and metabolic effects of ripening mutations and vine detachment on tomato fruit quality. Plant Biotechnology Journal, 2020, 18, 106-118.	8.3	39
66	Mild reductions in cytosolic NADP-dependent isocitrate dehydrogenase activity result in lower amino acid contents and pigmentation without impacting growth. Amino Acids, 2010, 39, 1055-1066.	2.7	34
67	Metabolic reconfiguration of strawberry physiology in response to postharvest practices. Food Chemistry, 2020, 321, 126747.	8.2	34
68	Quantitative trait loci analysis of seedâ€specialized metabolites reveals seedâ€specific flavonols and differential regulation of glycoalkaloid content in tomato. Plant Journal, 2020, 103, 2007-2024.	5.7	32
69	Monitoring and visualising plant cuticles by confocal laser scanning microscopy. Plant Physiology and Biochemistry, 1999, 37, 789-794.	5.8	31
70	Complex Assembly and Metabolic Profiling of Arabidopsis thaliana Plants Overexpressing Vitamin B6 Biosynthesis Proteins. Molecular Plant, 2010, 3, 890-903.	8.3	30
71	Silencing of the tomato Sugar Partitioning Affecting protein (<scp>SPA</scp>) modifies sink strength through a shift in leaf sugar metabolism. Plant Journal, 2014, 77, 676-687.	5.7	28
72	Signaling role of oligogalacturonides derived during cell wall degradation. Plant Signaling and Behavior, 2012, 7, 1447-1449.	2.4	26

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73	Increased antioxidant capacity in tomato by ectopic expression of the strawberry <scp>D</scp>â€‹<i>galacturonate reductase</i> gene. Biotechnology Journal, 2015, 10, 490-500.	3.5	26
74	Characterizing the involvement of <i>FaMADS9</i> in the regulation of strawberry fruit receptacle development. Plant Biotechnology Journal, 2020, 18, 929-943.	8.3	25
75	Identification of quantitative trait loci and candidate genes for primary metabolite content in strawberry fruit. Horticulture Research, 2019, 6, 4.	6.3	24
76	Postharvest changes in LIN5-down-regulated plants suggest a role for sugar deficiency in cuticle metabolism during ripening. Phytochemistry, 2017, 142, 11-20.	2.9	23
77	Establishment of a Photoautotrophic Cell Suspension Culture of Arabidopsis thaliana for Photosynthetic, Metabolic, and Signaling Studies. Molecular Plant, 2012, 5, 524-527.	8.3	20
78	Pyrophosphate levels strongly influence ascorbate and starch content in tomato fruit. Frontiers in Plant Science, 2013, 4, 308.	3.6	20
79	Acquisition of Volatile Compounds by Gas Chromatographyâ€“Mass Spectrometry (GC-MS). Methods in Molecular Biology, 2018, 1778, 225-239.	0.9	20
80	Organic Acids. , 2019, , 207-224.		20
81	Combining metabolomic and transcriptomic approaches to assess and improve crop quality traits. CABI Agriculture and Bioscience, 2021, 2, .	2.4	19
82	A <i>Solanum neorickii</i> introgression population providing a powerful complement to the extensively characterized <i>Solanum pennellii</i> population. Plant Journal, 2019, 97, 391-403.	5.7	18
83	Analysis of the Interface between Primary and Secondary Metabolism in Catharanthus roseus Cell Cultures Using 13C-Stable Isotope Feeding and Coupled Mass Spectrometry. Molecular Plant, 2013, 6, 581-584.	8.3	16
84	Genetic analysis of phenylpropanoids and antioxidant capacity in strawberry fruit reveals mQTL hotspots and candidate genes. Scientific Reports, 2020, 10, 20197.	3.3	16
85	The cytosolic invertase NI6 affects vegetative growth, flowering, fruit set, and yield in tomato. Journal of Experimental Botany, 2021, 72, 2525-2543.	4.8	16
86	Primary Metabolite Profile Changes in Coffea spp. Promoted by Single and Combined Exposure to Drought and Elevated CO2 Concentration. Metabolites, 2021, 11, 427.	2.9	15
87	Decreasing the Mitochondrial Synthesis of Malate in Potato Tubers Does Not Affect Plastidial Starch Synthesis, Suggesting That the Physiological Regulation of ADPglucose Pyrophosphorylase Is Context Dependent Â Â. Plant Physiology, 2012, 160, 2227-2238.	4.8	14
88	Exploring Genotype-by-Environment Interactions of Chemical Composition of Raspberry by Using a Metabolomics Approach. Metabolites, 2021, 11, 490.	2.9	13
89	Regulation of Plant Tannin Synthesis in Crop Species. Frontiers in Genetics, 2022, 13, 870976.	2.3	13
90	Simultaneous Determination of Plant Hormones by GC-TOF-MS. Methods in Molecular Biology, 2016, 1363, 229-237.	0.9	9

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91	Metabolomics-Based Evaluation of Crop Quality Changes as a Consequence of Climate Change. Metabolites, 2021, 11, 461.	2.9	8
92	Developmental metabolomics to decipher and improve fleshy fruit quality. Advances in Botanical Research, 2021, 98, 3-34.	1.1	6
93	Fruit Ripening and QTL for Fruit Quality in the Octoploid Strawberry. Compendium of Plant Genomes, 2018, , 95-113.	0.5	2
94	Special Issue on â€œFruit Metabolism and Metabolomicsâ€• Metabolites, 2020, 10, 230.	2.9	2
95	Profiling Volatile Compounds in Blackcurrant Fruit using Headspace Solid-Phase Microextraction Coupled to Gas Chromatography-Mass Spectrometry. Journal of Visualized Experiments, 2021, , .	0.3	2
96	Extraction and Measurement the Activities of Cytosolic Phosphoenolpyruvate Carboxykinase (PEPCK) and Plastidic NADP-dependent Malic Enzyme (ME) on Tomato (Solanum lycopersicum). Bio-protocol, 2014, 4, .	0.4	2
97	Genomics tools available for unravelling mechanisms underlying agronomical traits in strawberry with more to come. Acta Horticulturae, 2017, , 13-24.	0.2	1
98	ComparaciÃ³n de la calidad del humus de material vegetal (de humedales artificiales) con el de residuos orgÃ¡nicos domÃ©sticos. Logos Ciencia & TecnologÃa, 2017, 8, .	0.1	0