Roberto Viola

List of Publications by Year in descending order

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97 papers 10,869 citations

41258 49 h-index 95 g-index

98 all docs 98 docs citations 98 times ranked 12443 citing authors

#	Article	IF	CITATIONS
1	Predictive CDN Selection for Video Delivery Based on LSTM Network Performance Forecasts and Cost-Effective Trade-Offs. IEEE Transactions on Broadcasting, 2021, 67, 145-158.	2.5	6
2	A MEMS-Enabled Deployable Trace Chemical Sensor Based on Fast Gas-Chromatography and Quartz Enhanced Photoacousic Spectoscopy. Sensors, 2020, 20, 120.	2.1	8
3	CRISPR–Cas9-mediated genome editing in apple and grapevine. Nature Protocols, 2018, 13, 2844-2863.	5.5	142
4	DNA-Free Genetically Edited Grapevine and Apple Protoplast Using CRISPR/Cas9 Ribonucleoproteins. Frontiers in Plant Science, 2016, 7, 1904.	1.7	550
5	Plant microRNAs as novel immunomodulatory agents. Scientific Reports, 2016, 6, 25761.	1.6	93
6	Social wasp intestines host the local phenotypic variability of <i>Saccharomyces cerevisiae</i> strains. Yeast, 2016, 33, 277-287.	0.8	22
7	Identification and characterization of wild lactobacilli and pediococci from spontaneously fermented Mountain Cheese. Food Microbiology, 2015, 48, 123-132.	2.1	59
8	Non-GMO genetically edited crop plants. Trends in Biotechnology, 2015, 33, 489-491.	4.9	66
9	Plastome organization and evolution of chloroplast genes in Cardamine species adapted to contrasting habitats. BMC Genomics, 2015, 16, 306.	1.2	83
10	Comparative Analysis of Gene Expression: Uncovering Expression Conservation and Divergence Between Salmonella enterica Serovar Typhimurium Strains LT2 and 14028S. Methods in Molecular Biology, 2015, 1231, 125-135.	0.4	0
11	Carbon Sequestration and Fertility after Centennial Time Scale Incorporation of Charcoal into Soil. PLoS ONE, 2014, 9, e91114.	1.1	55
12	Structural Properties of Prokaryotic Promoter Regions Correlate with Functional Features. PLoS ONE, 2014, 9, e88717.	1.1	22
13	Development and Validation of a 20K Single Nucleotide Polymorphism (SNP) Whole Genome Genotyping Array for Apple (Malus × domestica Borkh). PLoS ONE, 2014, 9, e110377.	1.1	200
14	Fuelling genetic and metabolic exploration of <scp>C</scp> ₃ bioenergy crops through the first reference transcriptome of <i><scp>A</scp>rundo donax </i> <scp>L</scp> Plant Biotechnology Journal, 2014, 12, 554-567.	4.1	37
15	â€The way to a man's heart is through his gut microbiota' – dietary pro- and prebiotics for the management of cardiovascular risk. Proceedings of the Nutrition Society, 2014, 73, 172-185.	0.4	108
16	One-step reconstruction of multi-generation pedigree networks in apple (MalusÂ×Âdomestica Borkh.) and the parentage of Golden Delicious. Molecular Breeding, 2014, 34, 511-524.	1.0	21
17	Molecular genetics and genomics of the Rosoideae: state of the art and future perspectives. Horticulture Research, $2014, 1, 1$.	2.9	88
18	The Draft Genome Sequence of European Pear (Pyrus communis L. †Bartlett'). PLoS ONE, 2014, 9, e92644.	1.1	241

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19	Saturated linkage map construction in Rubus idaeus using genotyping by sequencing and genome-independent imputation. BMC Genomics, 2013, 14, 2.	1.2	171
20	PTR-ToF-MS, A Novel, Rapid, High Sensitivity and Non-Invasive Tool to Monitor Volatile Compound Release During Fruit Post-Harvest Storage: The Case Study of Apple Ripening. Food and Bioprocess Technology, 2013, 6, 2831-2843.	2.6	74
21	Overview of Dekkera bruxellensis behaviour in an ethanol-rich environment using untargeted and targeted metabolomic approaches. Food Research International, 2013, 51, 670-678.	2.9	15
22	An evaluation of the PacBio RS platform for sequencing and de novo assembly of a chloroplast genome. BMC Genomics, $2013,14,670.$	1.2	146
23	Genetic and physical characterisation of the locus controlling columnar habit in apple (MalusÂ×Âdomestica Borkh.). Molecular Breeding, 2013, 31, 429-440.	1.0	45
24	Spatiotemporal reconstruction of the <i>Aquilegia</i> rapid radiation through nextâ€generation sequencing of rapidly evolving cp <scp>DNA</scp> regions. New Phytologist, 2013, 198, 579-592.	3.5	86
25	Linking Genomics and Ecology to Investigate the Complex Evolution of an Invasive Drosophila Pest. Genome Biology and Evolution, 2013, 5, 745-757.	1.1	138
26	Evaluation of SNP Data from the Malus Infinium Array Identifies Challenges for Genetic Analysis of Complex Genomes of Polyploid Origin. PLoS ONE, 2013, 8, e67407.	1.1	17
27	Role of social wasps in <i>Saccharomyces cerevisiae</i> ecology and evolution. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13398-13403.	3.3	259
28	PTR-ToF-MS and data mining methods: a new tool for fruit metabolomics. Metabolomics, 2012, 8, 761-770.	1.4	58
29	Linking GC-MS and PTR-TOF-MS fingerprints of food samples. Chemometrics and Intelligent Laboratory Systems, 2012, 118, 301-307.	1.8	30
30	D-optimal design of an untargeted HS-SPME-GC-TOF metabolite profiling method. Analyst, The, 2012, 137, 3725.	1.7	12
31	Development of a dense SNP-based linkage map of an apple rootstock progeny using the Malus Infinium whole genome genotyping array. BMC Genomics, 2012, 13, 203.	1.2	77
32	Up-regulating the Human Intestinal Microbiome Using Whole Plant Foods, Polyphenols, and/or Fiber. Journal of Agricultural and Food Chemistry, 2012, 60, 8776-8782.	2.4	242
33	Comprehensive QTL mapping survey dissects the complex fruit texture physiology in apple (Malus x) Tj ETQq $1\ 1$	0.784314 2.4	rgBT Overlo
34	Deconstruction of the (Paleo)Polyploid Grapevine Genome Based on the Analysis of Transposition Events Involving NBS Resistance Genes. PLoS ONE, 2012, 7, e29762.	1.1	38
35	A Versatile Targeted Metabolomics Method for the Rapid Quantification of Multiple Classes of Phenolics in Fruits and Beverages. Journal of Agricultural and Food Chemistry, 2012, 60, 8831-8840.	2.4	267
36	Desorption kinetics with PTR-MS: Isothermal differential desorption kinetics from a heterogeneous inlet surface at ambient pressure and a new concept for compound identification. International Journal of Mass Spectrometry, 2012, 314, 33-41.	0.7	7

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37	The mitochondrial genome of <i>Malus domestica</i> and the importâ€driven hypothesis of mitochondrial genome expansion in seed plants. Plant Journal, 2012, 71, 615-626.	2.8	76
38	The genome of woodland strawberry (Fragaria vesca). Nature Genetics, 2011, 43, 109-116.	9.4	1,091
39	Obesity and the gut microbiota: does up-regulating colonic fermentation protect against obesity and metabolic disease?. Genes and Nutrition, 2011, 6, 241-260.	1.2	194
40	Stomatal numbers, leaf and canopy conductance, and the control of transpiration. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E275-E275.	3.3	12
41	On the evolutionary history of the domesticated apple. Nature Genetics, 2011, 43, 1044-1045.	9.4	11
42	The genome of the domesticated apple (Malus × domestica Borkh.). Nature Genetics, 2010, 42, 833-839.	9.4	1,891
43	Grapevine cell early activation of specific responses to DIMEB, a resveratrol elicitor. BMC Genomics, 2009, 10, 363.	1.2	54
44	Removal of Noisy Characters from Chloroplast Genome-Scale Data Suggests Revision of Phylogenetic Placements of Amborella and Ceratophyllum. Journal of Molecular Evolution, 2009, 68, 197-204.	0.8	28
45	White Wine Phenolics Are Absorbed and Extensively Metabolized in Humans. Journal of Agricultural and Food Chemistry, 2009, 57, 2711-2718.	2.4	51
46	A survey of ellagitannin content in raspberry and blackberry cultivars grown in Trentino (Italy). European Food Research and Technology, 2008, 226, 817-824.	1.6	42
47	A reference integrated map for cultivated grapevine (Vitis vinifera L.) from three crosses, based on 283 SSR and 501 SNP-based markers. Theoretical and Applied Genetics, 2008, 117, 499-511.	1.8	97
48	Sequencing and assembly of highly heterozygous genome of Vitis vinifera L. cv Pinot Noir: Problems and solutions. Journal of Biotechnology, 2008, 136, 38-43.	1.9	34
49	Ascorbic acid conjugates isolated from the phloem of Cucurbitaceae. Phytochemistry, 2008, 69, 1850-1858.	1.4	27
50	A SNP transferability survey within the genus Vitis. BMC Plant Biology, 2008, 8, 128.	1.6	40
51	Mitochondrial DNA of Vitis vinifera and the Issue of Rampant Horizontal Gene Transfer. Molecular Biology and Evolution, 2008, 26, 99-110.	3.5	238
52	A role for symplastic gating in the control of the potato tuber life cycle. Plant Signaling and Behavior, 2008, 3, 27-29.	1.2	9
53	Co-ordinated gene expression during phases of dormancy release in raspberry (Rubus idaeus L.) buds. Journal of Experimental Botany, 2007, 58, 1035-1045.	2.4	187
54	A High Quality Draft Consensus Sequence of the Genome of a Heterozygous Grapevine Variety. PLoS ONE, 2007, 2, e1326.	1.1	945

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55	Symplastic connection is required for bud outgrowth following dormancy in potato (Solanum) Tj ETQq1 1 0.7843	14 rgBT / 2.8	Overlock 10
56	Genome-wide transcriptional analysis of grapevine berry ripening reveals a set of genes similarly modulated during three seasons and the occurrence of an oxidative burst at và raison. BMC Genomics, 2007, 8, 428.	1.2	216
57	L-Ascorbic acid accumulation in fruit of Ribes nigrum occurs by in situ biosynthesis via the L-galactose pathway. Functional Plant Biology, 2007, 34, 1080.	1.1	81
58	Modulation of Fructokinase Activity of Potato (Solanum tuberosum) Results in Substantial Shifts in Tuber Metabolism. Plant and Cell Physiology, 2005, 46, 1103-1115.	1.5	54
59	Biosynthesis and Catabolism of L-Ascorbic Acid in Plants. Critical Reviews in Plant Sciences, 2005, 24, 167-188.	2.7	108
60	Improving the Nutritional Value of Crops through Enhancement ofl-Ascorbic Acid (Vitamin C) Content: A Rationale and Biotechnological Opportunities. Journal of Agricultural and Food Chemistry, 2005, 53, 5248-5257.	2.4	82
61	EFFECT OF NUTRIENT DEPRIVATION AND RESUPPLY ON METABOLITES AND ENZYMES RELATED TO CARBON ALLOCATION IN GRACILARIA TENUISTIPITATA (RHODOPHYTA)1. Journal of Phycology, 2004, 40, 305-314.	1.0	29
62	Starch metabolism in developing strawberry (Fragaria x ananassa) fruits. Physiologia Plantarum, 2004, 121, 369-376.	2.6	42
63	Long-distance transport of L-ascorbic acid in potato. BMC Plant Biology, 2004, 4, 16.	1.6	76
64	Regulated expression of a novel TCP domain transcription factor indicates an involvement in the control of meristem activation processes in Solanum tuberosum. Journal of Experimental Botany, 2004, 55, 951-953.	2.4	24
65	Changes in gene expression during meristem activation processes in Solanum tuberosum with a focus on the regulation of an auxin response factor gene*. Journal of Experimental Botany, 2004, 55, 613-622.	2.4	78
66	Synthesis of L-ascorbic acid in the phloem. BMC Plant Biology, 2003, 3, 7.	1.6	72
67	Biotechnological approaches for l-ascorbic acid production. Trends in Biotechnology, 2002, 20, 299-305.	4.9	111
68	Tuberization in Potato Involves a Switch from Apoplastic to Symplastic Phloem Unloading. Plant Cell, 2001, 13, 385-398.	3.1	233
69	The use of micro-organisms for L- ascorbic acid production: current status and future perspectives. Applied Microbiology and Biotechnology, 2001, 56, 567-576.	1.7	43
70	Tuberization in Potato Involves a Switch from Apoplastic to Symplastic Phloem Unloading. Plant Cell, 2001, 13, 385.	3.1	19
71	The unique features of starch metabolism in red algae. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 1417-1422.	1.2	128
72	L-ascorbic acid accumulation in berries of <i>Ribes nigrum</i> L Journal of Horticultural Science and Biotechnology, 2000, 75, 409-412.	0.9	27

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73	Biosynthesis of L-ascorbic acid (vitamin C) by Saccharomyces cerevisiae. FEMS Microbiology Letters, 2000, 186, 245-250.	0.7	65
74	Biosynthesis of ?-ascorbic acid (vitamin C) by Saccharomyces cerevisiae. FEMS Microbiology Letters, 2000, 186, 245-250.	0.7	47
75	Tuber filling and starch synthesis in potato. Developments in Crop Science, 2000, 26, 169-194.	0.1	4
76	An HPLC method for the assay of starch synthase. Phytochemistry, 1999, 50, 947-951.	1.4	1
77	Purification and characterisation of a novel starch synthase selective for uridine 5′-diphosphate glucose from the red alga Gracilaria tenuistipitata. Planta, 1999, 209, 143-152.	1.6	40
78	Structure of Aspartate- \hat{l}^2 -semialdehyde Dehydrogenase from Escherichia coli, a Key Enzyme in the Aspartate Family of Amino Acid Biosynthesis. Journal of Molecular Biology, 1999, 289, 991-1002.	2.0	69
79	Stable isotope distribution in the major metabolites of source and sink organs of Solanum tuberosum L.: a powerful tool in the study of metabolic partitioning in intact plants. Planta, 1998, 207, 241-245.	1.6	115
80	Potential for artefacts in the measurement of fructose and sucrose in extracts of potato tubers using the microplate reader assay. Potato Research, 1998, 41, 383-386.	1.2	3
81	Identification of an enzyme in protein extracts of potato (Solanum tuberosum L.) tubers which interferes with the assay of fructokinase and other enzymes requiring phosphorylated nucleosides. Plant Science, 1998, 132, 127-137.	1.7	1
82	Accumulation of L-ascorbic acid in tuberising stolon tips of potato (Solanum tuberosum L). Journal of Plant Physiology, 1998, 152, 58-63.	1.6	17
83	A Theoretical Analysis of the Role of Pyrophosphate,Fructose 6-P,1-Phosphotransferase in Energy Dissipation During the Conversion of Fructose 6-Phosphate to Fructose 1,6-Bisphosphate in Plant Cells. Journal of Biological Systems, 1997, 05, 389-401.	0.5	1
84	Prospects for advancing the understanding of complex biochemical systems. Plant Molecular Biology, 1997, 33, 573-581.	2.0	9
85	Hexose metabolism in discs excised from developing potato (Solanum tuberosum L.) tubers. Planta, 1996, 198, 179-185.	1.6	7
86	Hexose metabolism in discs excised from developing potato (Solanum tuberosum L.) tubers. Planta, 1996, 198, 186-196.	1.6	27
87	The consequences of interactive noise for understanding the dynamics of complex biochemical systems. Dynamical Systems, 1996, 11, 135-148.	0.7	6
88	Chaos, coexistence of attractors and fractal basin boundaries of attraction in a model system coupling activation and inhibition in parallel. Dynamical Systems, 1995, 10, 111-124.	0.7	8
89	A high performance liquid chromatographic method for the separation of hexose monophosphates and UDP glucose from plant extracts and its use to determine specific activities in radiotracer experiments. Phytochemical Analysis, 1994, 5, 10-14.	1.2	11
90	Developmental changes in carbohydrate content and sucrose degrading enzymes in tuberising stolons of potato (Solanum tuberosum). Physiologia Plantarum, 1994, 90, 748-756.	2.6	82

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91	Effect of temperature on pathways of carbohydrate metabolism in tubers of potato (Solanum) Tj ETQq1 1 0.7843	14.rgBT /0	Dyerlock 10
92	Developmental changes in carbohydrate content and sucrose degrading enzymes in tuberising stolons of potato (Solanum tuberosum). Physiologia Plantarum, 1994, 90, 748-756.	2.6	18
93	Transgenic potato plants with strongly decreased expression of pyrophosphate:fructose-6-phosphate phosphotransferase show no visible phenotype and only minor changes in metabolic fluxes in their tubers. Planta, 1993, 192, 16.	1.6	47
94	A microplate reader assay for rapid enzymatic quantification of sugars in potato tubers. Potato Research, 1992, 35, 55-58.	1.2	45
95	Fluoride-Induced Inhibition of Starch Biosynthesis in Developing Potato, <i>Solanum tuberosum</i> L., Tubers Is Associated with Pyrophosphate Accumulation. Plant Physiology, 1991, 97, 638-643.	2.3	19
96	Pathways of starch and sucrose biosynthesis in developing tubers of potato (Solanum tuberosum L.) and seeds of faba bean (Vicia faba L.). Planta, 1991, 183, 202-8.	1.6	89
97	Effect of sink isolation on sugar uptake and starch synthesis by potato-tuber storage parenchyma. Planta, 1990, 182, 113-7.	1.6	18