Carolina Escobar

List of Publications by Year
in descending order

61 papers	3,381 citations	159358 30 h-index	149479 56 g-index
63 all docs	63 docs citations	63 times ranked	3301 citing authors

#	Article	IF	Citations
1	Glucosinolates as an effective tool in plant-parasitic nematodes control: Exploiting natural plant defenses. Applied Soil Ecology, 2022, 176, 104497.	2.1	9
2	Compatible interactions between plants and endoparasitic nematodesâ€"A follow-up of ABR volume 73: Plant nematode interactionsâ€"A view on compatible interrelationships. Advances in Botanical Research, 2021, , 237-248.	0.5	1
3	The Use of Biochar for Plant Pathogen Control. Phytopathology, 2021, 111, 1490-1499.	1.1	27
4	Non-coding RNAs in the interaction between rice and Meloidogyne graminicola. BMC Genomics, 2021, 22, 560.	1.2	12
5	Laser Microdissection of Cells and Isolation of High-Quality RNA After Cryosectioning. Methods in Molecular Biology, 2021, 2170, 35-43.	0.4	1
6	Biological Control of Plant-Parasitic Nematodes by Filamentous Fungi Inducers of Resistance: Trichoderma, Mycorrhizal and Endophytic Fungi. Frontiers in Microbiology, 2020, 11, 992.	1.5	229
7	Rootâ€knot nematodes induce gall formation by recruiting developmental pathways of postâ€embryonic organogenesis and regeneration to promote transient pluripotency. New Phytologist, 2020, 227, 200-215.	3.5	41
8	All in One High Quality Genomic DNA and Total RNA Extraction From Nematode Induced Galls for High Throughput Sequencing Purposes. Frontiers in Plant Science, 2019, 10, 657.	1.7	2
9	A role for <i>ALF4</i> during gall and giant cell development in the biotic interaction between Arabidopsis and <i>Meloidogyne</i> spp.. Physiologia Plantarum, 2019, 165, 17-28.	2.6	5
10	Arabidopsis <i>HIPP27</i> is a host susceptibility gene for the beet cyst nematode <i>Heterodera schachtii</i>. Molecular Plant Pathology, 2018, 19, 1917-1928.	2.0	38
11	sRNAs involved in the regulation of plant developmental processes are altered during the root-knot nematode interaction for feeding site formation. European Journal of Plant Pathology, 2018, 152, 945-955.	0.8	5
12	A role for the gene regulatory module <i>microRNA172/TARGET OF EARLY ACTIVATION TAGGED 1/FLOWERING LOCUS T</i> (<i>mi<scp>RNA</scp>172/<scp>TOE</scp>1/<scp>FT</scp></i>) in the feeding sites induced by <i>Meloidogyne javanica</i> in <i>Arabidopsis thaliana</i>. New Phytologist, 2018, 217, 813-827.	3.5	38
13	The Role of Programmed Cell Death Regulator LSD1 in Nematode-Induced Syncytium Formation. Frontiers in Plant Science, 2018, 9, 314.	1.7	14
14	Silenced retrotransposons are major rasiRNAs targets in Arabidopsis galls induced by <i>Meloidogyne javanica</i>. Molecular Plant Pathology, 2018, 19, 2431-2445.	2.0	25
15	A Phenotyping Method of Giant Cells from Root-Knot Nematode Feeding Sites by Confocal Microscopy Highlights a Role for CHITINASE-LIKE 1 in Arabidopsis. International Journal of Molecular Sciences, 2018, 19, 429.	1.8	33
16	A Standardized Method to Assess Infection Rates of Root-Knot and Cyst Nematodes in Arabidopsis thaliana Mutants with Alterations in Root Development Related to Auxin and Cytokinin Signaling. Methods in Molecular Biology, 2017, 1569, 73-81.	0.4	14
17	Characterization of microRNAs from <i>Arabidopsis</i> galls highlights a role for miR159 in the plant response to the rootâ€knot nematode <i>Meloidogyne incognita</i>. New Phytologist, 2017, 216, 882-896.	3.5	71
18	Molecular Transducers from Roots Are Triggered in Arabidopsis Leaves by Root-Knot Nematodes for Successful Feeding Site Formation: A Conserved Post-Embryogenic De novo Organogenesis Program?. Frontiers in Plant Science, 2017, 8, 875.	1.7	18

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19	Root-Knot and Cyst Nematodes Activate Procambium-Associated Genes in Arabidopsis Roots. Frontiers in Plant Science, 2017, 8, 1195.	1.7	46
20	Anatomical Alterations in Plant Tissues Induced by Plant-Parasitic Nematodes. Frontiers in Plant Science, 2017, 8, 1987.	1.7	93
21	Long-Term In Vitro System for Maintenance and Amplification of Root-Knot Nematodes in Cucumis sativus Roots. Frontiers in Plant Science, 2016, 7, 124.	1.7	22
22	A Reliable Protocol for In situ microRNAs Detection in Feeding Sites Induced by Root-Knot Nematodes. Frontiers in Plant Science, 2016, 7, 966.	1.7	15
23	Belowground Defence Strategies Against Sedentary Nematodes. Signaling and Communication in Plants, 2016, , 221-251.	0.5	2
24	Differentially expressed small <scp>RNA</scp>s in Arabidopsis galls formed by <i>Meloidogyne javanica</i>: a functional role for miR390 and its <scp>TAS</scp>3â€derived tasi<scp>RNA</scp>s. New Phytologist, 2016, 209, 1625-1640.	3.5	86
25	The Power of Omics to Identify Plant Susceptibility Factors and to Study Resistance to Root-knot Nematodes. Current Issues in Molecular Biology, 2016, , .	1.0	4
26	The Power of Omics to Identify Plant Susceptibility Factors and to Study Resistance to Root-knot Nematodes. Current Issues in Molecular Biology, 2016, 19, 53-72.	1.0	6
27	Genes co-regulated withLBD16in nematode feeding sites inferred fromin silicoanalysis show similarities to regulatory circuits mediated by the auxin/cytokinin balance in Arabidopsis. Plant Signaling and Behavior, 2015, 10, e990825.	1.2	15
28	Phenotyping nematode feeding sites: threeâ€dimensional reconstruction and volumetric measurements of giant cells induced by rootâ€knot nematodes in Arabidopsis. New Phytologist, 2015, 206, 868-880.	3.5	32
29	Developmental Pathways Mediated by Hormones in Nematode Feeding Sites. Advances in Botanical Research, 2015, 73, 167-188.	0.5	16
30	Overview of Root-Knot Nematodes and Giant Cells. Advances in Botanical Research, 2015, 73, 1-32.	0.5	72
31	Contribution of glutathione to the control of cellular redox homeostasis under toxic metal and metalloid stress. Journal of Experimental Botany, 2015, 66, 2901-2911.	2.4	217
32	Transcriptomic signatures of transfer cells in early developing nematode feeding cells of Arabidopsis focused on auxin and ethylene signaling. Frontiers in Plant Science, 2014, 5, 107.	1.7	31
33	Are plant endogenous factors like ethylene modulators of the early oxidative stress induced by mercury?. Frontiers in Environmental Science, 2014, 2, .	1.5	25
34	Two closely related members of <i><scp>A</scp>rabidopsis</i> 13â€lipoxygenases (13â€<scp>LOXs</scp>), <scp>LOX3</scp> and <scp>LOX4</scp>, reveal distinct functions in response to plantâ€parasitic nematode infection. Molecular Plant Pathology, 2014, 15, 319-332.	2.0	64
35	A role for <i><scp>LATERAL ORGAN BOUNDARIES</scp>â€<scp>DOMAIN</scp> 16</i> during the interaction <scp>A</scp>rabidopsisâ€“<i><scp>M</scp>eloidogyne</i> spp. provides a molecular link between lateral root and rootâ€knot nematode feeding site development. New Phytologist, 2014, 203, 632-645.	3.5	61
36	Early transcriptional responses to mercury: a role for ethylene in mercuryâ€induced stress. New Phytologist, 2014, 201, 116-130.	3.5	87

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37	Glutathione is a key antioxidant metabolite to cope with mercury and cadmium stress. Plant and Soil, 2014, 377, 369-381.	1.8	84
38	The role of glutathione in mercury tolerance resembles its function under cadmium stress in Arabidopsis. Metallomics, 2014, 6, 356.	1.0	31
39	<scp>NEMATIC</scp>: a simple and versatile tool for the <i>inâ€‰silico</i> analysis of plantâ€“nematode interactions. Molecular Plant Pathology, 2014, 15, 627-636.	2.0	38
40	Altered sucrose synthase and invertase expression affects the local and systemic sugar metabolism of nematode-infected Arabidopsis thaliana plants. Journal of Experimental Botany, 2014, 65, 201-212.	2.4	52
41	Distinct and conserved transcriptomic changes during nematodeâ€‘induced giant cell development in tomato compared with Arabidopsis: a functional role for gene repression. New Phytologist, 2013, 197, 1276-1290.	3.5	98
42	Specific stress responses to cadmium, arsenic and mercury appear in the metallophyte Silene vulgaris when grown hydroponically. RSC Advances, 2013, 3, 4736.	1.7	37
43	<i>CCS52</i> and <i>DEL1</i> genes are key components of the endocycle in nematodeâ€‘induced feeding sites. Plant Journal, 2012, 72, 185-198.	2.8	75
44	Laser Microdissection of Cells and Isolation of High-Quality RNA After Cryosectioning. Methods in Molecular Biology, 2012, 883, 87-95.	0.4	15
45	Heavy Metal Perception in a Microscale Environment: A Model System Using High Doses of Pollutants. , 2012, , 23-39.		9
46	Transcriptomic and Proteomic Analysis of the Plant Response to Nematode Infection. , 2011, , 157-173.		23
47	Activation of geminivirus Vâ€‘sense promoters in roots is restricted to nematode feeding sites. Molecular Plant Pathology, 2010, 11, 409-417.	2.0	4
48	Early transcriptomic events in microdissected Arabidopsis nematode-induced giant cells. Plant Journal, 2010, 61, 698-712.	2.8	216
49	Isolation of RNA from laserâ€‘captureâ€‘microdissected giant cells at early differentiation stages suitable for differential transcriptome analysis. Molecular Plant Pathology, 2009, 10, 523-535.	2.0	39
50	Differential alterations of antioxidant defenses as bioindicators of mercury and cadmium toxicity in alfalfa. Chemosphere, 2009, 77, 946-954.	4.2	110
51	Distinct heat-shock element arrangements that mediate the heat shock, but not the late-embryogenesis induction of small heat-shock proteins, correlate with promoter activation in root-knot nematode feeding cells. Plant Molecular Biology, 2008, 66, 151-164.	2.0	30
52	Evaluation of different RNA extraction methods for small quantities of plant tissue: Combined effects of reagent type and homogenization procedure on RNA quality-integrity and yield. Physiologia Plantarum, 2006, 128, 1-7.	2.6	43
53	Antioxidant enzyme induction in pea plants under high irradiance. Biologia Plantarum, 2006, 50, 395-399.	1.9	20
54	Novel expression patterns of phosphatidylinositol 3-hydroxy kinase in nodulated Medicago spp. plants. Journal of Experimental Botany, 2004, 55, 957-959.	2.4	6

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55	Role of hydrogen peroxide and the redox state of ascorbate in the induction of antioxidant enzymes in pea leaves under excess light stress. Functional Plant Biology, 2004, 31, 359.	1.1	48
56	Transient expression of Arabidopsis thaliana ascorbate peroxidaseÂ3 in Nicotiana benthamiana plants infected with recombinant potato virus X. Plant Cell Reports, 2003, 21, 699-704.	2.8	12
57	Induction of the Hahsp17.7G4 Promoter by Root-Knot Nematodes: Involvement of Heat-Shock Elements in Promoter Activity in Giant Cells. Molecular Plant-Microbe Interactions, 2003, 16, 1062-1068.	1.4	37
58	Are diverse signalling pathways integrated in the regulation of Arabidopsis antioxidant defence gene expression in response to excess excitation energy?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1531-1540.	1.8	132
59	Isolation of the LEMMI9 Gene and Promoter Analysis During a Compatible Plant-Nematode Interaction. Molecular Plant-Microbe Interactions, 1999, 12, 440-449.	1.4	35
60	Over-expression of the oat arginine decarboxylase cDNA in transgenic rice (Oryza sativa L.) affects normal development patterns in vitro and results in putrescine accumulation in transgenic plants. Theoretical and Applied Genetics, 1998, 97, 246-254.	1.8	129
61	Photosynthetic electron transport regulates the expression of cytosolic ascorbate peroxidase genes in Arabidopsis during excess light stress.. Plant Cell, 1997, 9, 627-640.	3.1	579