Maria Carlota Vaz Patto

List of Publications by Year
in descending order

94 papers	2,720 citations	236833 25 h-index	206029 48 g-index
95 all docs	95 docs citations	95 times ranked	2770 citing authors

#	Article	IF	Citations
1	Abiotic Stress Responses in Legumes: Strategies Used toÂCope with Environmental Challenges. Critical Reviews in Plant Sciences, 2015, 34, 237-280.	2.7	212
2	Cereal landraces for sustainable agriculture. A review. Agronomy for Sustainable Development, 2010, 30, 237-269.	2.2	197
3	Achievements and Challenges in Improving the Nutritional Quality of Food Legumes. Critical Reviews in Plant Sciences, 2015, 34, 105-143.	2.7	187
4	Breeding Annual Grain Legumes for Sustainable Agriculture: New Methods to Approach Complex Traits and Target New Cultivar Ideotypes. Critical Reviews in Plant Sciences, 2015, 34, 381-411.	2.7	140
5	Lathyrus improvement for resistance against biotic and abiotic stresses: From classical breeding to marker assisted selection. Euphytica, 2006, 147, 133-147.	0.6	133
6	Cross-species amplification of Medicago truncatula microsatellites across three major pulse crops. Theoretical and Applied Genetics, 2005, 110, 1210-1217.	1.8	127
7	Screening techniques and sources of resistance to rusts and mildews in grain legumes. Euphytica, 2006, 147, 255-272.	0.6	90
8	Relevance, structure and analysis of ferulic acid in maize cell walls. Food Chemistry, 2018, 246, 360-378.	4.2	89
9	Assessing the genetic diversity of Portuguese maize germplasm using microsatellite markers. Euphytica, 2004, 137, 63-72.	0.6	84
10	Lathyrus diversity: available resources with relevance to crop improvement â€“ L. sativus and L. cicera as case studies. Annals of Botany, 2014, 113, 895-908.	1.4	74
11	The impact of CdSe/ZnS Quantum Dots in cells of Medicago sativa in suspension culture. Journal of Nanobiotechnology, 2010, 8, 24.	4.2	66
12	Development of a genetic composite map of Vicia faba using F2 populations derived from trisomic plants. Theoretical and Applied Genetics, 1999, 98, 736-743.	1.8	54
13	Identification of common genomic regions controlling resistance to Mycosphaerella pinodes, earliness and architectural traits in different pea genetic backgrounds. Euphytica, 2011, 182, 43-52.	0.6	50
14	Performance index: An expeditious tool to screen for improved drought resistance in the <i>Lathyrus</i> genus. Journal of Integrative Plant Biology, 2014, 56, 610-621.	4.1	46
15	Lathyrus sativus transcriptome resistance response to Ascochyta lathyri investigated by deepSuperSAGE analysis. Frontiers in Plant Science, 2015, 6, 178.	1.7	43
16	Collecting maize (Zea mays L. convar. mays) with potential technological ability for bread making in Portugal. Genetic Resources and Crop Evolution, 2007, 54, 1555-1563.	0.8	40
17	Allelic diversity in the transcriptomes of contrasting rust-infected genotypes of Lathyrus sativus, a lasting resource for smart breeding. BMC Plant Biology, 2014, 14, 376.	1.6	37
18	Characterization of resistance to powdery mildew (Erysiphe pisi) in a germplasm collection of Lathyrus sativus. Plant Breeding, 2006, 125, 308-310.	1.0	35

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19	Genetic diversity of Moroccan populations of <i>Orobanche foetida</i>: evolving from parasitising wild hosts to crop plants. Weed Research, 2008, 48, 179-186.	0.8	34
20	Transferability of molecular markers from major legumes to Lathyrus spp. for their application in mapping and diversity studies. Molecular Biology Reports, 2014, 41, 269-283.	1.0	34
21	Identification and characterization of partial resistance to rust in a germplasm collection of <i>Lathyrus sativus</i> L.. Plant Breeding, 2009, 128, 495-500.	1.0	33
22	Fusarium Wilt Management in Legume Crops. Agronomy, 2020, 10, 1073.	1.3	32
23	Morphology and AFLP markers suggest three <i>Hordeum chilense</i> ecotypes that differ in avoidance to rust fungi. Canadian Journal of Botany, 2001, 79, 204-213.	1.2	32
24	Comparison of selection methods on â€˜Pigarroâ€™, a Portuguese improved maize population with fasciation expression. Euphytica, 2008, 163, 481-499.	0.6	31
25	Establishing the Bases for Introducing the Unexplored Portuguese Common Bean Germplasm into the Breeding World. Frontiers in Plant Science, 2017, 8, 1296.	1.7	30
26	Characterisation of nutritional quality traits of a chickpea (Cicer arietinum) germplasm collection exploited in chickpea breeding in Europe. Crop and Pasture Science, 2017, 68, 1031.	0.7	28
27	Natural Variation in Portuguese Common Bean Germplasm Reveals New Sources of Resistance Against <i>Fusarium oxysporum</i> f. sp. <i>phaseoli</i> and Resistance-Associated Candidate Genes. Phytopathology, 2020, 110, 633-647.	1.1	28
28	Traditional Foods From Maize (Zea mays L.) in Europe. Frontiers in Nutrition, 2021, 8, 683399.	1.6	28
29	Title is missing!. European Journal of Plant Pathology, 2001, 107, 795-803.	0.8	27
30	Genetic Architecture of Ear Fasciation in Maize (Zea mays) under QTL Scrutiny. PLoS ONE, 2015, 10, e0124543.	1.1	27
31	Genetic diversity evolution through participatory maize breeding in Portugal. Euphytica, 2008, 161, 283-291.	0.6	25
32	Longâ€term onâ€farm participatory maize breeding by stratified mass selection retains molecular diversity while improving agronomic performance. Evolutionary Applications, 2018, 11, 254-270.	1.5	25
33	Legume Breeding for the Agroecological Transition of Global Agri-Food Systems: A European Perspective. Frontiers in Plant Science, 2021, 12, 782574.	1.7	25
34	Pre and posthaustorial resistance to rusts in Lathyrus cicera L.. Euphytica, 2009, 165, 27-34.	0.6	24
35	Maize flour parameters that are related to the consumer perceived quality of â€˜broaâ€™ specialty bread. Food Science and Technology, 2016, 36, 259-267.	0.8	23
36	Resistance reaction to powdery mildew (Erysiphe pisi) in a germplasm collection of Lathyrus cicera from Iberian origin. Genetic Resources and Crop Evolution, 2007, 54, 1517-1521.	0.8	21

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37	Characterization of Soaking Processâ€™ Impact in Common Beans Phenolic Composition: Contribute from the Unexplored Portuguese Germplasm. Foods, 2019, 8, 296.	1.9	21
38	First genetic linkage map of Lathyrus cicera based on RNA sequencing-derived markers: Key tool for genetic mapping of disease resistance. Horticulture Research, 2018, 5, 45.	2.9	19
39	Genome-wide association study for kernel composition and flour pasting behavior in wholemeal maize flour. BMC Plant Biology, 2019, 19, 123.	1.6	19
40	Cereal Landraces for Sustainable Agriculture. , 2011, , 147-186.		19
41	Brief communication. New isozyme loci in faba bean (Vicia faba L.): genetic analysis and mapping using trisomics. Journal of Heredity, 1998, 89, 271-275.	1.0	18
42	QTL mapping provides evidence for lack of association of the avoidance of leaf rust in Hordeum chilense with stomata density. Theoretical and Applied Genetics, 2003, 106, 1283-1292.	1.8	17
43	Consumer-Driven Improvement of Maize Bread Formulations with Legume Fortification. Foods, 2019, 8, 235.	1.9	16
44	Variation in Pea (Pisum sativum L.) Seed Quality Traits Defined by Physicochemical Functional Properties. Foods, 2019, 8, 570.	1.9	15
45	Hydroxycinnamic Acids and Their Derivatives in Broa, a Traditional Ethnic Maize Bread. Foods, 2020, 9, 1471.	1.9	15
46	Legume Crops and Biotrophic Pathogen Interactions: A Continuous Cross-Talk of a Multilayered Array of Defense Mechanisms. Plants, 2020, 9, 1460.	1.6	15
47	Human bioavailability of phenolic compounds found in common beans: the use of high-resolution MS to evaluate inter-individual variability. British Journal of Nutrition, 2020, 123, 273-292.	1.2	13
48	Common bean SNP alleles and candidate genes affecting photosynthesis under contrasting water regimes. Horticulture Research, 2021, 8, 4.	2.9	13
49	Extent and pattern of genetic differentiation within and between European populations of <i>Phelipanche ramosa</i> revealed by amplified fragment length polymorphism analysis. Weed Research, 2009, 49, 48-55.	0.8	12
50	Relationship between seed traits and pasting and cooking behaviour in a pulse germplasm collection. Crop and Pasture Science, 2018, 69, 892.	0.7	12
51	A diversity of resistance sources to Fusarium oxysporum f. sp. pisi found within grass pea germplasm. Plant and Soil, 2021, 463, 19-38.	1.8	12
52	Disclosing the Nutritional Quality Diversity of Portuguese Common Beansâ€"The Missing Link for Their Effective Use in Protein Quality Breeding Programs. Agronomy, 2021, 11, 221.	1.3	11
53	Identification of resistance to rust (<i><scp>U</scp>romyces appendiculatus</i>) and powdery mildew (<i><scp>E</scp>rysiphe diffusa</i>) in <scp>P</scp>ortuguese common bean germplasm. Plant Breeding, 2013, 132, 654-657.	1.0	10
54	Partial Resistance Against <i>Erysiphe pisi</i> and <i>E. trifolii</i> Under Different Genetic Control in <i>Lathyrus cicera</i>: Outcomes from a Linkage Mapping Approach. Plant Disease, 2020, 104, 2875-2884.	0.7	10

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55	Improvement of wheat cookiesâ€™ nutritional quality, by partial substitution with common bean and maize flours, sustained human glycemia and enhanced satiety perception. Cereal Chemistry, 2021, 98, 1123-1134.	1.1	10
56	Shared and tailored common bean transcriptomic responses to combined fusarium wilt and water deficit. Horticulture Research, 2021, 8, 149.	2.9	10
57	Advances in pea breeding. Burleigh Dodds Series in Agricultural Science, 2019, , 575-606.	0.1	10
58	Grass Pea (Lathyrus sativus L.)â€"A Sustainable and Resilient Answer to Climate Challenges. Agronomy, 2022, 12, 1324.	1.3	10
59	Grain legume protein quality: a hot subject. Arbor, 2016, 192, a314.	0.1	9
60	Setting Up Decision-Making Tools toward a Quality-Oriented Participatory Maize Breeding Program. Frontiers in Plant Science, 2017, 8, 2203.	1.7	9
61	Warm Season Grain Legume Landraces From the South of Europe for Germplasm Conservation and Genetic Improvement. Frontiers in Plant Science, 2018, 9, 1524.	1.7	9
62	Metabolomics profile responses to changing environments in a common bean (Phaseolus vulgaris L.) germplasm collection. Food Chemistry, 2022, 370, 131003.	4.2	9
63	Participatory Plant Quality Breeding: An Ancient Art Revisited by Knowledge Sharing. The Portuguese Experience. , 0, , .		8
64	Editorial: Advances in Legume Research. Frontiers in Plant Science, 2018, 9, 501.	1.7	8
65	Application of the CATA methodology with children: Qualitative approach on ballot development and product characterization of innovative products. Food Quality and Preference, 2021, 88, 104083.	2.3	8
66	Broa, an Ethnic Maize Bread, as a Source of Phenolic Compounds. Antioxidants, 2021, 10, 672.	2.2	8
67	The <i>MLO1</i> powdery mildew susceptibility gene in <i>Lathyrus</i> species: The power of highâ€density linkage maps in comparative mapping and synteny analysis. Plant Genome, 2021, 14, e20090.	1.6	8
68	Unveiling common responses of Medicago truncatula to appropriate and inappropriate rust species. Frontiers in Plant Science, 2014, 5, 618.	1.7	7
69	Is ear value an effective indicator for maize yield evaluation?. Field Crops Research, 2014, 161, 75-86.	2.3	7
70	Maize participatory breeding in Portugal: Comparison of farmer's and breeder's onâ€farm selection. Plant Breeding, 2017, 136, 861-871.	1.0	7
71	An Improved HILIC HPLC-MS/MS Method for the Determination of Î²-ODAP and Its Î± Isomer in Lathyrus sativus. Molecules, 2019, 24, 3043.	1.7	7
72	Alleles to Enhance Antioxidant Content in Maizeâ€"A Genome-Wide Association Approach. Journal of Agricultural and Food Chemistry, 2020, 68, 4051-4061.	2.4	7

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73	Thermal imaging to phenotype traditional maize landraces for drought tolerance. Comunicata Scientiae, 2015, 6, 334.	0.4	7
74	Positioning Portugal into the context of world production and research in grain legumes. Revista De CiÃªncias AgrÃ¡rias, 2016, 39, 471-489.	0.2	7
75	Association Mapping of Lathyrus sativus Disease Response to Uromyces pisi Reveals Novel Loci Underlying Partial Resistance. Frontiers in Plant Science, 2022, 13, 842545.	1.7	7
76	Achievements and Challenges towards a Sustainable Conservation and Use of â€˜Galega vulgarâ€™ Olea europaea Variety. Agronomy, 2020, 10, 1467.	1.3	6
77	Volatilomeâ€“Genome-Wide Association Study on Wholemeal Maize Flour. Journal of Agricultural and Food Chemistry, 2020, 68, 7809-7818.	2.4	6
78	Grass Pea. Handbook of Plant Breeding, 2015, , 251-265.	0.1	5
79	Elucidating potential utilization of Portuguese common bean varieties in rice based processed foods. Journal of Food Science and Technology, 2018, 55, 1056-1064.	1.4	5
80	Grass pea and pea phylogenetic relatedness reflected at Fusarium oxysporum host range. Crop Protection, 2021, 141, 105495.	1.0	5
81	Accessing Ancestral Origin and Diversity Evolution by Net Divergence of an Ongoing Domestication Mediterranean Olive Tree Variety. Frontiers in Plant Science, 2021, 12, 688214.	1.7	5
82	Grass pea natural variation reveals oligogenic resistance to <i>Fusarium oxysporum</i> f. sp. <i>pisi</i>. Plant Genome, 2021, 14, e20154.	1.6	5
83	Portuguese Common Bean Natural Variation Helps to Clarify the Genetic Architecture of the Legumeâ€™s Nutritional Composition and Protein Quality. Plants, 2022, 11, 26.	1.6	5
84	Comprehensive Two-Dimensional Gas Chromatography as a Powerful Strategy for the Exploration of Broas Volatile Composition. Molecules, 2022, 27, 2728.	1.7	5
85	Two Sides of the Same Coin: The Impact of Grain Legumes on Human Health: Common Bean (Phaseolus) Tj ETQq1 1 0.784314 rgBT /Ov		4
86	Projection to latent correlative structures, a dimension reduction strategy for spectral-based classification. RSC Advances, 2021, 11, 29124-29129.	1.7	4
87	Maize Open-Pollinated Populations Physiological Improvement: Validating Tools for Drought Response Participatory Selection. Sustainability, 2019, 11, 6081.	1.6	3
88	Integrating Phenotypic and Gene Expression Linkage Mapping to Dissect Rust Resistance in Chickling Pea. Frontiers in Plant Science, 2022, 13, 837613.	1.7	3
89	Shedding Light on the Volatile Composition of Broa, a Traditional Portuguese Maize Bread. Biomolecules, 2021, 11, 1396.	1.8	2
90	Abiotic and Biotic Stresses Interaction in Fabaceae Plants. Contributions from the Grain Legumes/Soilborne Vascular Diseases/Drought Stress Triangle. , 2020, , 237-260.		2

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91	Towards a Trait-Based Approach to Potentiate Yield under Drought in Legume-Rich Annual Forage Mixtures. Plants, 2021, 10, 1763.	1.6	2
92	Assessing the environmental sustainability of Portuguese olive growing practices from a life cycle assessment perspective. Journal of Cleaner Production, 2022, 355, 131692.	4.6	2
93	Towards a Trait-Based Approach to Potentiate Yield under Drought in Legume-Rich Annual Forage Mixtures. Plants, 2021, 10, .	1.6	1
94	Aleksandar MikiÄ‡, the legume (re)searcher. , 0, , .		0