Roberto Pilu

List of Publications by Year
in descending order

67 papers	2,250 citations	201575 27 h-index	233338 45 g-index
69 all docs	69 docs citations	69 times ranked	2640 citing authors

#	Article	IF	Citations
1	Chronic Dietary Intake of Plant-Derived Anthocyanins Protects the Rat Heart against Ischemia-Reperfusion Injury3. Journal of Nutrition, 2008, 138, 747-752.	1.3	210
2	Arundo donax L.: A non-food crop for bioenergy and bio-compound production. Biotechnology Advances, 2014, 32, 1535-1549.	6.0	151
3	Phenotypic, genetic and molecular characterization of a maize low phytic acid mutant (lpa241). Theoretical and Applied Genetics, 2003, 107, 980-987.	1.8	142
4	Anthocyanins in corn: a wealth of genes for human health. Planta, 2014, 240, 901-911.	1.6	123
5	Phytic acid prevents oxidative stress in seeds: evidence from a maize (Zea mays L.) low phytic acid mutant. Journal of Experimental Botany, 2009, 60, 967-978.	2.4	122
6	A defective ABC transporter of the MRP family, responsible for the bean <i>lpa1</i> mutation, affects the regulation of the phytic acid pathway, reduces seed <i>myo</i>â€inositol and alters ABA sensitivity. New Phytologist, 2011, 191, 70-83.	3.5	100
7	Bioaccumulation of heavy metals from wastewater through a Typha latifolia and Thelypteris palustris phytoremediation system. Chemosphere, 2020, 241, 125018.	4.2	65
8	The Maize lpa241 Mutation Causes a Remarkable Variability of Expression and Some Pleiotropic Effects. Crop Science, 2005, 45, 2096-2105.	0.8	63
9	Dietary cyanidin 3-glucoside from purple corn ameliorates doxorubicin-induced cardiotoxicity in mice. Nutrition, Metabolism and Cardiovascular Diseases, 2017, 27, 462-469.	1.1	58
10	New energy crop giant cane (Arundo donax L.) can substitute traditional energy crops increasing biogas yield and reducing costs. Bioresource Technology, 2015, 191, 197-204.	4.8	56
11	pl-bol3, a complex allele of the anthocyanin regulatorypl1locus that arose in a naturally occurring maize population. Plant Journal, 2003, 36, 510-521.	2.8	51
12	A paramutation phenomenon is involved in the genetics of maize low phytic acid1-241 (lpa1-241) trait. Heredity, 2009, 102, 236-245.	1.2	47
13	Genetic characterization of an Italian Giant Reed (Arundo donax L.) clones collection: exploiting clonal selection. Euphytica, 2014, 196, 169-181.	0.6	43
14	Exploitation of Common Bean Flours with Low Antinutrient Content for Making Nutritionally Enhanced Biscuits. Frontiers in Plant Science, 2016, 7, 928.	1.7	43
15	Characterization of the first dominant dwarf maize mutant carrying a single amino acid insertion in the VHYNP domain of the dwarf8 gene. Molecular Breeding, 2009, 24, 375-385.	1.0	41
16	Evaluation of concentration of heavy metals in animal rearing system. Italian Journal of Animal Science, 2019, 18, 1372-1384.	0.8	41
17	Development and study of a maize cultivar rich in anthocyanins: coloured polenta, a new functional food. Plant Breeding, 2014, 133, 210-217.	1.0	40
18	Effect of flavonoid pigments on the accumulation of fumonisin B1 in the maize kernel. Journal of Applied Genetics, 2011, 52, 145-152.	1.0	38

#	Article	IF	Citations
19	Genetic studies regarding the control of seed pigmentation of an ancient European pointed maize (Zea) Tj ETQq1 1 0.784314 rgBT /Ove Crop Evolution, 2017, 64, 761-773.	0.8	37
20	Study of Low Phytic Acid1-7 (lpa1-7), a New ZmMRP4 Mutation in Maize. Journal of Heredity, 2012, 103, 598-605.	1.0	35
21	Study and characterization of a novel functional food: purple popcorn. Molecular Breeding, 2013, 31, 575-585.	1.0	35
22	Arundo donax L. can substitute traditional energy crops for more efficient, environmentally-friendly production of biogas: A Life Cycle Assessment approach. Bioresource Technology, 2018, 267, 249-256.	4.8	35
23	Phlobaphenes modify pericarp thickness in maize and accumulation of the fumonisin mycotoxins. Scientific Reports, 2020, 10, 1417.	1.6	34
24	The low phytic acid1-241 (lpa1-241) maize mutation alters the accumulation of anthocyanin pigment in the kernel. Planta, 2010, 231, 1189-1199.	1.6	30
25	Phytic Acid and Transporters: What Can We Learn from low phytic acid Mutants?. Plants, 2020, 9, 69.	1.6	30
26	<i>Low Phytic Acid 1</i> Mutation in Maize Modifies Density, Starch Properties, Cations, and Fiber Contents in the Seed. Journal of Agricultural and Food Chemistry, 2013, 61, 4622-4630.	2.4	29
27	Bioconversion of Giant Cane for Integrated Production of Biohydrogen, Carboxylic Acids, and Polyhydroxyalkanoates (PHAs) in a Multistage Biorefinery Approach. ACS Sustainable Chemistry and Engineering, 2018, 6, 15361-15373.	3.2	29
28	Isolation and characterization of a new mutant allele of brachytic 2 maize gene. Molecular Breeding, 2007, 20, 83-91.	1.0	28
29	A mutation in the FZL gene of Arabidopsis causing alteration in chloroplast morphology results in a lesion mimic phenotype. Journal of Experimental Botany, 2013, 64, 4313-4328.	2.4	27
30	Recovery of phenolic compounds from agro-industrial by-products: Evaluating antiradical activities and immunomodulatory properties. Food and Bioproducts Processing, 2021, 127, 338-348.	1.8	25
31	Paramutation: Just a Curiosity or Fine Tuning of Gene Expression in the Next Generation?. Current Genomics, 2011, 12, 298-306.	0.7	24
32	Giant cane (Arundo donax L.) for biogas production: The effect of two ensilage methods on biomass characteristics and biogas potential. Biomass and Bioenergy, 2016, 93, 131-136.	2.9	24
33	Analysis of chromosome number and speculations on the origin of Arundo donax L. (Giant Reed). Cytology and Genetics, 2013, 47, 237-241.	0.2	23
34	Paramutation phenomena in plants. Seminars in Cell and Developmental Biology, 2015, 44, 2-10.	2.3	23
35	MRP Transporters and Low Phytic Acid Mutants in Major Crops: Main Pleiotropic Effects and Future Perspectives. Frontiers in Plant Science, 2020, 11, 1301.	1.7	23
36	Arundo donax L. Biomass Production in a Polluted Area: Effects of Two Harvest Timings on Heavy Metals Uptake. Applied Sciences (Switzerland), 2021, 11, 1147.	1.3	23

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37	Identification of anthocyanins in plant sources and textiles by surface-enhanced Raman spectroscopy (SERS). Journal of Raman Spectroscopy, 2016, 47, 269-276.	1.2	21
38	Food Containing Bioactive Flavonoids and Other Phenolic or Sulfur Phytochemicals With Antiviral Effect: Can We Design a Promising Diet Against COVID-19?. Frontiers in Nutrition, 2021, 8, 661331.	1.6	20
39	The brachytic 2 and 3 maize double mutant shows alterations in plant growth and embryo development. Plant Growth Regulation, 2011, 64, 185-192.	1.8	19
40	Study and Characterization of an Ancient European Flint White Maize Rich in Anthocyanins: Millo Corvo from Galicia. PLoS ONE, 2015, 10, e0126521.	1.1	19
41	Assessing pigmented pericarp of maize kernels as possible source of resistance to fusarium ear rot, Fusarium spp. infection and fumonisin accumulation. International Journal of Food Microbiology, 2016, 227, 56-62.	2.1	17
42	Giant cane (Arundo donax L.) can substitute traditional energy crops in producing energy by anaerobic digestion, reducing surface area and costs: A full-scale approach. Bioresource Technology, 2016, 218, 826-832.	4.8	17
43	Plant agro-biodiversity needs protection, study and promotion: results of research conducted in Lombardy region (Northern Italy). Biodiversity and Conservation, 2020, 29, 409-430.	1.2	16
44	Mutations in Two Independent Genes Lead to Suppression of the Shoot Apical Meristem in Maize. Plant Physiology, 2002, 128, 502-511.	2.3	14
45	A mutational approach to the study of seed development in maize. Journal of Experimental Botany, 2007, 58, 1197-1205.	2.4	14
46	Pigmented Corn Varieties as Functional Ingredients for Gluten-Free Products. Foods, 2021, 10, 1770.	1.9	13
47	Characterization of â€œMais delle Fiorineâ€•(Zea mays L.) and nutritional, morphometric and genetic comparison with other maize landraces of Lombardy region (Northern Italy). Genetic Resources and Crop Evolution, 2021, 68, 2075-2091.	0.8	13
48	Evaluation of leonardite as a feed additive on lipid metabolism and growth of weaned piglets. Animal Feed Science and Technology, 2020, 266, 114519.	1.1	12
49	Biorefinery Approach Applied to the Valorization of Purple Corn Cobs. ACS Sustainable Chemistry and Engineering, 2021, 9, 3781-3791.	3.2	10
50	Nanometer-scale structure of alkali-soluble bio-macromolecules of maize plant residues explains their recalcitrance in soil. Chemosphere, 2009, 76, 523-528.	4.2	9
51	lpa1-5525: A New lpa1 Mutant Isolated in a Mutagenized Population by a Novel Non-Disrupting Screening Method. Plants, 2019, 8, 209.	1.6	9
52	Skin toxicity following radiotherapy in patients with breast carcinoma: is anthocyanin supplementation beneficial?. Clinical Nutrition, 2021, 40, 2068-2077.	2.3	9
53	Micropore surface area of alkali-soluble plant macromolecules (humic acids) drives their decomposition rates in soil. Chemosphere, 2010, 78, 1036-1041.	4.2	8
54	Genetic Improvement of Arundo donax L.: Opportunities and Challenges. Plants, 2020, 9, 1584.	1.6	8

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55	Characterization of the Ra1 maize gene involved in inflorescence architecture. Sexual Plant Reproduction, 2006, 19, 145-150.	2.2	7
56	Bacterial Communities in the Embryo of Maize Landraces: Relation with Susceptibility to Fusarium Ear Rot. Microorganisms, 2021, 9, 2388.	1.6	7
57	Study on the inflorescences of Arundo donax L. clones sampled in Italy. Revista Brasileira De Botanica, 2016, 39, 275-285.	0.5	6
58	Influence of Clonal Variation on the Efficiency of Arundo donax Propagation Methods. Journal of Plant Growth Regulation, 2019, 38, 1449-1457.	2.8	5
59	Arabidopsis thaliana plants overexpressing Ramosa1 maize gene show an increase in organ size due to cell expansion. Sexual Plant Reproduction, 2007, 20, 191-198.	2.2	4
60	A quantitative trait locus involved in maize yield is tightly associated to the r1 gene on the long arm of chromosome 10. Molecular Breeding, 2012, 30, 799-807.	1.0	4
61	Sugars Production for Green Chemistry from 2ndÂGeneration Crop (<b>Arundo donax) Tj ETQq1 1 0.784314 rgBT /Overlo	0.7	4
62	The Ancient Varieties of Mountain Maize: The Inheritance of the Pointed Character and Its Effect on the Natural Drying Process. Agronomy, 2021, 11, 2295.	1.3	3
63	Low-Phytate Grains to Enhance Phosphorus Sustainability in Agriculture: Chasing Drought Stress in lpa1-1 Mutant. Agronomy, 2022, 12, 721.	1.3	3
64	Agriculture in Marginal Areas: Reintroduction of Rye and Wheat Varieties for Breadmaking in the Antrona Valley. Agronomy, 2022, 12, 1695.	1.3	3
65	Brachytic2 mutation is able to counteract the main pleiotropic effects of brown midrib3 mutant in maize. Scientific Reports, 2022, 12, 2446.	1.6	2
66	Letter to the editor. Food and Chemical Toxicology, 2013, 53, 454.	1.8	1
67	Expression of<i>Arabidopsis thaliana</i>S-ACP-DES3 in<i>Escherichia coli</i>for high-performance biodiesel production. RSC Advances, 2014, 4, 63387-63392.	1.7	1