

# Carlos Guzman

## List of Publications by Year in descending order

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96  
papers

3,108  
citations

172457

29  
h-index

189892

50  
g-index

99  
all docs

99  
docs citations

99  
times ranked

2713  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of starch structure and functional properties of tetraploid wheat (<sc><i>Triticum</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Agriculture, 2022, 102, 5974-5983.	3.5	4
2	Are the agronomic performance and grain quality characteristics of bread wheat Mediterranean landraces related to the climate prevalent in their area of origin?. Journal of Cereal Science, 2022, 105, 103478.	3.7	10
3	Do ancient wheats contain less gluten than modern bread wheat, in favour of better health?. Nutrition Bulletin, 2022, 47, 157-167.	1.8	3
4	Wheat Quality. , 2022, , 177-193.		4
5	Effects of glutenins (Glu-1 and Glu-3) allelic variation on dough properties and bread-making quality of CIMMYT bread wheat breeding lines. Field Crops Research, 2022, 284, 108585.	5.1	19
6	Genome-wide association analysis for arabinoxylan content in common wheat (T. Aestivum L.) flour. Journal of Cereal Science, 2021, 98, 103166.	3.7	14
7	Unlocking the Patterns of the Tunisian Durum Wheat Landraces Genetic Structure Based on Phenotypic Characterization in Relation to Farmerâ€™s Vernacular Name. Agronomy, 2021, 11, 634.	3.0	4
8	Potential Use of Wild Einkorn Wheat for Wheat Grain Quality Improvement: Evaluation and Characterization of Glu-1, Wx and Ha Loci. Agronomy, 2021, 11, 816.	3.0	3
9	Molecular characterization of five novel Wx-A1 alleles in common wheat including one silent allele by transposon insertion. Plant Science, 2021, 305, 110843.	3.6	3
10	Genome-wide identification of bZIP transcription factor genes related to starch synthesis in barley (<i>Hordeum vulgare</i> L.). Genome, 2021, 64, 1067-1080.	2.0	8
11	Solvent Retention Capacity and Gluten Protein Composition of Durum Wheat Flour as Influenced by Drought and Heat Stress. Plants, 2021, 10, 1000.	3.5	8
12	Suitability of the current breadmaking quality test to predict the breadmaking potential of healthy bread formulations. Cereal Chemistry, 2021, 98, 1091-1100.	2.2	1
13	Gluten protein response to heat and drought stress in durum wheat as measured by reverse phase - High performance liquid chromatography. Journal of Cereal Science, 2021, 100, 103267.	3.7	16
14	Drought and Heat Stress Impacts on Phenolic Acids Accumulation in Durum Wheat Cultivars. Foods, 2021, 10, 2142.	4.3	34
15	A single base change at exon of Wxâ€™A1 caused gene inactivation and starch properties modified in a wheat EMS mutant line. Journal of the Science of Food and Agriculture, 2021, , .	3.5	3
16	Ancient wheats role in sustainable wheat cultivation. , 2021, , 29-66.		1
17	Strategic use of Iranian bread wheat landrace accessions for genetic improvement: Core set formulation and validation. Plant Breeding, 2021, 140, 87-99.	1.9	8
18	Allelic Variation at Glutenin Loci (Glu-1, Glu-2 and Glu-3) in a Worldwide Durum Wheat Collection and Its Effect on Quality Attributes. Foods, 2021, 10, 2845.	4.3	14

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19	Perspective: Whole and Refined Grains and Health—Evidence Supporting “Make Half Your Grains Whole”. <i>Advances in Nutrition</i> , 2020, 11, 492-506.	6.4	43
20	Variability for Glutenins, Gluten Quality, Iron, Zinc and Phytic Acid in a Set of One Hundred and Fifty-Eight Common Wheat Landraces from Iran. <i>Agronomy</i> , 2020, 10, 1797.	3.0	19
21	Endogenous arabinoxylans variability in refined wheat flour and its relationship with quality traits. <i>Journal of Cereal Science</i> , 2020, 95, 103062.	3.7	9
22	Assessment of the Glutenin Subunits Diversity in a Durum Wheat ( <i>T. turgidum</i> ssp. <i>durum</i> ) Collection from Morocco. <i>Agronomy</i> , 2020, 10, 957.	3.0	10
23	Puroindoline ( <i>Pina-D1</i> and <i>Pinb-D1</i> ) and waxy ( <i>Wx-1</i> ) genes in Iranian bread wheat ( <i>Triticum aestivum</i> L.) landraces. <i>Biotechnology and Biotechnological Equipment</i> , 2020, 34, 1019-1027.	1.3	5
24	Genome-based prediction of multiple wheat quality traits in multiple years. <i>Plant Genome</i> , 2020, 13, e20034.	2.8	25
25	Diversity analysis of 80,000 wheat accessions reveals consequences and opportunities of selection footprints. <i>Nature Communications</i> , 2020, 11, 4572.	12.8	129
26	SNP markers for low molecular glutenin subunits (LMW-GSs) at the Glu-A3 and Glu-B3 loci in bread wheat. <i>PLoS ONE</i> , 2020, 15, e0233056.	2.5	9
27	Nutritional quality characterization of a set of durum wheat landraces from Iran and Mexico. <i>LWT - Food Science and Technology</i> , 2020, 124, 109198.	5.2	20
28	Yield and Quality in Purple-Grained Wheat Isogenic Lines. <i>Agronomy</i> , 2020, 10, 86.	3.0	16
29	Identification of CIMMYT spring bread wheat germplasm maintaining superior grain yield and quality under heat-stress. <i>Journal of Cereal Science</i> , 2020, 93, 102981.	3.7	28
30	Cultivar, Trait and Management System Selection to Improve Soft-Red Winter Wheat Productivity in the Eastern United States. <i>Frontiers in Plant Science</i> , 2020, 11, 335.	3.6	6
31	New Findings in the Amino Acid Profile and Gene Expression in Contrasting Durum Wheat Gluten Strength Genotypes during Grain Filling. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 5521-5528.	5.2	5
32	Phenolic Compounds in Wheat Kernels: Genetic and Genomic Studies of Biosynthesis and Regulations. , 2020, , 225-253.		2
33	Starch and Starch-Associated Proteins: Impacts on Wheat Grain Quality. , 2020, , 21-38.		2
34	Genotype x environment interaction and genetic gain for grain yield and grain quality traits in Turkish spring wheat released between 1964 and 2010. <i>PLoS ONE</i> , 2019, 14, e0219432.	2.5	54
35	Genomic Prediction and Genome-Wide Association Studies of Flour Yield and Alveograph Quality Traits Using Advanced Winter Wheat Breeding Material. <i>Genes</i> , 2019, 10, 669.	2.4	12
36	Validation of Candidate Gene-Based Markers and Identification of Novel Loci for Thousand-Grain Weight in Spring Bread Wheat. <i>Frontiers in Plant Science</i> , 2019, 10, 1189.	3.6	54

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37	Preliminary characterization for grain quality traits and high and low molecular weight glutenins subunits composition of durum wheat landraces from Iran and Mexico. <i>Journal of Cereal Science</i> , 2019, 88, 47-56.	3.7	14
38	Deep Kernel for Genomic and Near Infrared Predictions in Multi-environment Breeding Trials. G3: Genes, Genomes, Genetics, 2019, 9, 2913-2924.	1.8	61
39	Improving grain yield, stress resilience and quality of bread wheat using large-scale genomics. <i>Nature Genetics</i> , 2019, 51, 1530-1539.	21.4	216
40	Recovery of Wheat Heritage for Traditional Food: Genetic Variation for High Molecular Weight Glutenin Subunits in Neglected/Underutilized Wheat. <i>Agronomy</i> , 2019, 9, 755.	3.0	11
41	Genetic improvement of wheat grain quality at CIMMYT. <i>Frontiers of Agricultural Science and Engineering</i> , 2019, 6, 265.	1.4	19
42	Interspecific and intergeneric hybridization as a source of variation for wheat grain quality improvement. <i>Theoretical and Applied Genetics</i> , 2018, 131, 225-251.	3.6	40
43	Almond by-products: Extraction and characterization of phenolic compounds and evaluation of their potential use in composite dough with wheat flour. <i>LWT - Food Science and Technology</i> , 2018, 89, 299-306.	5.2	35
44	Milling, processing and end-use quality traits of CIMMYT spring bread wheat germplasm under drought and heat stress. <i>Field Crops Research</i> , 2018, 215, 104-112.	5.1	62
45	Breeding-assisted genomics: Applying meta-GWAS for milling and baking quality in CIMMYT wheat breeding program. <i>PLoS ONE</i> , 2018, 13, e0204757.	2.5	50
46	Assessing Genetic Diversity to Breed Competitive Biofortified Wheat With Enhanced Grain Zn and Fe Concentrations. <i>Frontiers in Plant Science</i> , 2018, 9, 1971.	3.6	79
47	Identification and molecular characterization of novel LMW-m and -s glutenin genes, and a chimeric -m/i glutenin gene in 1A chromosome of three diploid <i>Triticum</i> species. <i>Journal of Cereal Science</i> , 2017, 74, 46-55.	3.7	7
48	Genetic improvement of grain quality traits for CIMMYT semi-dwarf spring bread wheat varieties developed during 1965–2015: 50 years of breeding. <i>Field Crops Research</i> , 2017, 210, 192-196.	5.1	48
49	Variability in iron, zinc and phytic acid content in a worldwide collection of commercial durum wheat cultivars and the effect of reduced irrigation on these traits. <i>Food Chemistry</i> , 2017, 237, 499-505.	8.2	100
50	Definition of the low molecular weight glutenin subunit gene family members in a set of standard bread wheat ( <i>Triticum aestivum</i> L.) varieties. <i>Journal of Cereal Science</i> , 2017, 74, 263-271.	3.7	27
51	Grain quality traits of commercial durum wheat varieties and their relationships with drought stress and glutenins composition. <i>Journal of Cereal Science</i> , 2017, 75, 1-9.	3.7	62
52	Genetic impact of Rht dwarfing genes on grain micronutrients concentration in wheat. <i>Field Crops Research</i> , 2017, 214, 373-377.	5.1	61
53	Characterization of grain protein content gene (GPC-B1) introgression lines and its potential use in breeding for enhanced grain zinc and iron concentration in spring wheat. <i>Acta Physiologiae Plantarum</i> , 2017, 39, 1.	2.1	15
54	Strategies for Selecting Crosses Using Genomic Prediction in Two Wheat Breeding Programs. <i>Plant Genome</i> , 2017, 10, plantgenome2016.12.0128.	2.8	37

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55	CIMMYT Series on Carbohydrates, Wheat, Grains, and Health: Wheat-Based Foods: Their Global and Regional Importance in the Food Supply, Nutrition, and Health. Cereal Foods World, 2017, 62, 231-249.	0.2	48
56	Evaluation of Grain Yield and Quality Traits of Bread Wheat Genotypes Cultivated in Northwest Turkey. Crop Science, 2016, 56, 73-84.	1.8	27
57	Harnessing Diversity in Wheat to Enhance Grain Yield, Climate Resilience, Disease and Insect Pest Resistance and Nutrition Through Conventional and Modern Breeding Approaches. Frontiers in Plant Science, 2016, 7, 991.	3.6	143
58	Genomic Selection for Processing and End-Use Quality Traits in the CIMMYT Spring Bread Wheat Breeding Program. Plant Genome, 2016, 9, plantgenome2016.01.0005.	2.8	161
59	Genetic diversity and molecular characterization of puroindoline genes ( Pina-D1 and Pinb-D1 ) in bread wheat landraces from Andalusia (Southern Spain). Journal of Cereal Science, 2016, 71, 61-65.	3.7	8
60	Wheat quality improvement at CIMMYT and the use of genomic selection on it. Applied & Translational Genomics, 2016, 11, 3-8.	2.1	79
61	Nitrogen fertilizer placement and timing affects bread wheat (Triticum aestivum) quality and yield in an irrigated bed planting system. Nutrient Cycling in Agroecosystems, 2016, 106, 185-199.	2.2	28
62	Molecular characterisation of novel LMW-m and LMW-s genes from four Aegilops species (Sitopsis). Journal of Cereal Science, 2016, 67, 938.	1.5	2
63	Genomic Prediction of Gene Bank Wheat Landraces. G3: Genes, Genomes, Genetics, 2016, 6, 1819-1834.	1.8	159
64	Unlocking the genetic diversity of Creole wheats. Scientific Reports, 2016, 6, 23092.	3.3	75
65	Diversity of phenotypic (plant and grain morphological) and genotypic (glutenin alleles in Glu-1 and) wheat landraces. Genetic Resources and Crop Evolution, 2016, 63, 465-475.	1.6	11
66	Sources of the highly expressed wheat bread making (wbm) gene in CIMMYT spring wheat germplasm and its effect on processing and bread-making quality. Euphytica, 2016, 209, 689-692.	1.2	24
67	Molecular Marker-Based Selection Tools in Spring Bread Wheat Improvement: CIMMYT Experience and Prospects. Sustainable Development and Biodiversity, 2016, , 421-474.	1.7	24
68	Use of rapid tests to predict quality traits of CIMMYT bread wheat genotypes grown under different environments. LWT - Food Science and Technology, 2016, 69, 327-333.	5.2	36
69	Effect of drought and elevated temperature on grain zinc and iron concentrations in CIMMYT spring wheat. Journal of Cereal Science, 2016, 69, 182-186.	3.7	54
70	Response to drought and heat stress on wheat quality, with special emphasis on bread-making quality, in durum wheat. Field Crops Research, 2016, 186, 157-165.	5.1	108
71	Wheat waxy proteins: polymorphism, molecular characterization and effects on starch properties. Theoretical and Applied Genetics, 2016, 129, 1-16.	3.6	87
72	Molecular characterization of two novel null waxy alleles in Mexican bread wheat landraces. Journal of Cereal Science, 2015, 62, 8-14.	3.7	20

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73	Molecular characterization of novel LMW-i glutenin subunit genes from <i>Triticum urartu</i> Thum. ex Gandil.. <i>Theoretical and Applied Genetics</i> , 2015, 128, 2155-2165.	3.6	19
74	Molecular characterization of several Wx alleles in durum wheat. <i>Biologia Plantarum</i> , 2015, 59, 220-226.	1.9	4
75	Characterization and sequence diversity of the Gsp-1 gene in diploid species of the <i>Aegilops</i> genus. <i>Journal of Cereal Science</i> , 2015, 63, 1-7.	3.7	2
76	Molecular characterization of waxy alleles in three subspecies of hexaploid wheat and identification of two novel Wx-B1 alleles. <i>Theoretical and Applied Genetics</i> , 2015, 128, 2427-2435.	3.6	17
77	A new standard water absorption criteria based on solvent retention capacity (SRC) to determine dough mixing properties, viscoelasticity, and bread-making quality. <i>Journal of Cereal Science</i> , 2015, 66, 59-65.	3.7	60
78	Molecular characterization of two novel alleles of Hordoindoline genes in <i>Hordeum chilense</i> Roem. et Schult.. <i>Genetic Resources and Crop Evolution</i> , 2014, 61, 307-312.	1.6	6
79	Characterization of the Wx gene in diploid <i>Aegilops</i> species and its potential use in wheat breeding. <i>Genetic Resources and Crop Evolution</i> , 2014, 61, 369-382.	1.6	19
80	Use of wheat genetic resources to develop biofortified wheat with enhanced grain zinc and iron concentrations and desirable processing quality. <i>Journal of Cereal Science</i> , 2014, 60, 617-622.	3.7	73
81	Wx gene in diploid wheat: molecular characterization of five novel alleles from einkorn ( <i>Triticum</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock	2.1	9
82	Molecular characterisation of the amino- and carboxyl-domains in different Glu-A1x alleles of <i>Triticum urartu</i> Thum. ex Gandil.. <i>Theoretical and Applied Genetics</i> , 2013, 126, 1703-1711.	3.6	8
83	Allelic diversity and molecular characterization of puroindoline genes in five diploid species of the <i>Aegilops</i> genus. <i>Journal of Experimental Botany</i> , 2013, 64, 5133-5143.	4.8	14
84	SNPs and an insertion sequence in five Wx-A1 alleles as factors for variant Wx-A1 protein in wheat. <i>Euphytica</i> , 2013, 192, 325-338.	1.2	16
85	Characterization of genetic diversity of puroindoline genes in Mexican wheat landraces. <i>Euphytica</i> , 2013, 190, 53-63.	1.2	25
86	Waxy genes from spelt wheat: new alleles for modern wheat breeding and new phylogenetic inferences about the origin of this species. <i>Annals of Botany</i> , 2012, 110, 1161-1171.	2.9	36
87	Molecular characterization of a novel waxy allele (Wx-A u 1a) from <i>Triticum urartu</i> Thum. ex Gandil.. <i>Genetic Resources and Crop Evolution</i> , 2012, 59, 971-979.	1.6	24
88	Molecular characterization and diversity of the Pina and Pinb genes in cultivated and wild diploid wheat. <i>Molecular Breeding</i> , 2012, 30, 69-78.	2.1	22
89	Molecular characterization of a new waxy allele with partial expression in spelt wheat. <i>Planta</i> , 2012, 235, 1331-1339.	3.2	20
90	Molecular characterisation of the Wx-B1 allelic variants identified in cultivated emmer wheat and comparison with those of durum wheat. <i>Molecular Breeding</i> , 2011, 28, 403-411.	2.1	26

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91	Amylose content and starch properties in emmer and durum wheat lines with different waxy proteins composition. <i>Journal of the Science of Food and Agriculture</i> , 2011, 91, 1625-1629.	3.5	10
92	Molecular characterization of the <i>Glu-Ay</i> gene from <i>Triticum urartu</i> for its potential use in quality wheat breeding. <i>Plant Genetic Resources: Characterisation and Utilisation</i> , 2011, 9, 334-337.	0.8	9
93	Polymorphism of waxy proteins in Spanish hulled wheats. <i>Plant Genetic Resources: Characterisation and Utilisation</i> , 2011, 9, 330-333.	0.8	2
94	Genetic variation for waxy proteins and amylose content in Spanish spelt wheat ( <i>Triticum spelta</i> L.). <i>Genetic Resources and Crop Evolution</i> , 2010, 57, 721-725.	1.6	16
95	Variation in Spanish cultivated einkorn wheat ( <i>Triticum monococcum</i> L. ssp. <i>monococcum</i> ) as determined by morphological traits and waxy proteins. <i>Genetic Resources and Crop Evolution</i> , 2009, 56, 601-604.	1.6	21
96	Analysis of the starch properties in tetraploid wheat "Aegilops sharonensis amphidiploid. <i>Cereal Research Communications</i> , 0, , 1.	1.6	1