# Carlos Guzman

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3256408/publications.pdf

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|---|---|---|---|
| 96 papers | 3,108 citations | 172207 29 h-index | 189595 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 (<scp>Triticum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf Agriculture, 2022, 102, 5974-5983. | 1.7 | 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. | 1.8 | 10 |
| 3 | Do ancient wheats contain less gluten than modern bread wheat, in favour of better health?. Nutrition Bulletin, 2022, 47, 157-167. | 0.8 | 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. | 2.3 | 19 |
| 6 | Genome-wide association analysis for arabinoxylan content in common wheat (T. Aestivum L.) flour. Journal of Cereal Science, 2021, 98, 103166. | 1.8 | 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. | 1.3 | 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. | 1.3 | 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. | 1.7 | 3 |
| 10 | Genome-wide identification of bZIP transcription factor genes related to starch synthesis in barley (Hordeum vulgare L.). Genome, 2021, 64, 1067-1080. | 0.9 | 8 |
| 11 | Solvent Retention Capacity and Gluten Protein Composition of Durum Wheat Flour as Influenced by Drought and Heat Stress. Plants, 2021, 10, 1000. | 1.6 | 8 |
| 12 | Suitability of the current breadmaking quality test to predict the breadmaking potential of healthy bread formulations. Cereal Chemistry, 2021, 98, 1091-1100. | 1.1 | 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. | 1.8 | 16 |
| 14 | Drought and Heat Stress Impacts on Phenolic Acids Accumulation in Durum Wheat Cultivars. Foods, 2021, 10, 2142. | 1.9 | 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, , . | 1.7 | 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. | 1.0 | 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. | 1.9 | 14 |

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|---|---|---|---|
| 19 | Perspective: Whole and Refined Grains and Healthâ€"Evidence Supporting â€œMake Half Your Grains Wholeâ€• Advances in Nutrition, 2020, 11, 492-506. | 2.9 | 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. Agronomy, 2020, 10, 1797. | 1.3 | 19 |
| 21 | Endogenous arabinoxylans variability in refined wheat flour and its relationship with quality traits. Journal of Cereal Science, 2020, 95, 103062. | 1.8 | 9 |
| 22 | Assessment of the Glutenin Subunits Diversity in a Durum Wheat (T. turgidum ssp. durum) Collection from Morocco. Agronomy, 2020, 10, 957. | 1.3 | 10 |
| 23 | Puroindoline (Pina-D1 and Pinb-D1) and waxy (Wx-1) genes in Iranian bread wheat (Triticum aestivum L.) landraces. Biotechnology and Biotechnological Equipment, 2020, 34, 1019-1027. | 0.5 | 5 |
| 24 | Genomeâ€based prediction of multiple wheat quality traits in multiple years. Plant Genome, 2020, 13, e20034. | 1.6 | 25 |
| 25 | Diversity analysis of 80,000 wheat accessions reveals consequences and opportunities of selection footprints. Nature Communications, 2020, 11, 4572. | 5.8 | 129 |
| 26 | SNP markers for low molecular glutenin subunits (LMW-GSs) at the Glu-A3 and Glu-B3 loci in bread wheat. PLoS ONE, 2020, 15, e0233056. | 1.1 | 9 |
| 27 | Nutritional quality characterization of a set of durum wheat landraces from Iran and Mexico. LWT - Food Science and Technology, 2020, 124, 109198. | 2.5 | 20 |
| 28 | Yield and Quality in Purple-Grained Wheat Isogenic Lines. Agronomy, 2020, 10, 86. | 1.3 | 16 |
| 29 | Identification of CIMMYT spring bread wheat germplasm maintaining superior grain yield and quality under heat-stress. Journal of Cereal Science, 2020, 93, 102981. | 1.8 | 28 |
| 30 | Cultivar, Trait and Management System Selection to Improve Soft-Red Winter Wheat Productivity in the Eastern United States. Frontiers in Plant Science, 2020, 11, 335. | 1.7 | 6 |
| 31 | New Findings in the Amino Acid Profile and Gene Expression in Contrasting Durum Wheat Gluten Strength Genotypes during Grain Filling. Journal of Agricultural and Food Chemistry, 2020, 68, 5521-5528. | 2.4 | 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. PLoS ONE, 2019, 14, e0219432. | 1.1 | 54 |
| 35 | Genomic Prediction and Genome-Wide Association Studies of Flour Yield and Alveograph Quality Traits Using Advanced Winter Wheat Breeding Material. Genes, 2019, 10, 669. | 1.0 | 12 |
| 36 | Validation of Candidate Gene-Based Markers and Identification of Novel Loci for Thousand-Grain Weight in Spring Bread Wheat. Frontiers in Plant Science, 2019, 10, 1189. | 1.7 | 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. Journal of Cereal Science, 2019, 88, 47-56. | 1.8 | 14 |
| 38 | Deep Kernel for Genomic and Near Infrared Predictions in Multi-environment Breeding Trials. G3: Genes, Genomes, Genetics, 2019, 9, 2913-2924. | 0.8 | 61 |
| 39 | Improving grain yield, stress resilience and quality of bread wheat using large-scale genomics. Nature Genetics, 2019, 51, 1530-1539. | 9.4 | 216 |
| 40 | Recovery of Wheat Heritage for Traditional Food: Genetic Variation for High Molecular Weight Glutenin Subunits in Neglected/Underutilized Wheat. Agronomy, 2019, 9, 755. | 1.3 | 11 |
| 41 | Genetic improvement of wheat grain quality at CIMMYT. Frontiers of Agricultural Science and Engineering, 2019, 6, 265. | 0.9 | 19 |
| 42 | Interspecific and intergeneric hybridization as a source of variation for wheat grain quality improvement. Theoretical and Applied Genetics, 2018, 131, 225-251. | 1.8 | 40 |
| 43 | Almond by-products: Extraction and characterization of phenolic compounds and evaluation of their potential use in composite dough with wheat flour. LWT - Food Science and Technology, 2018, 89, 299-306. | 2.5 | 35 |
| 44 | Milling, processing and end-use quality traits of CIMMYT spring bread wheat germplasm under drought and heat stress. Field Crops Research, 2018, 215, 104-112. | 2.3 | 62 |
| 45 | Breeding-assisted genomics: Applying meta-GWAS for milling and baking quality in CIMMYT wheat breeding program. PLoS ONE, 2018, 13, e0204757. | 1.1 | 50 |
| 46 | Assessing Genetic Diversity to Breed Competitive Biofortified Wheat With Enhanced Grain Zn and Fe Concentrations. Frontiers in Plant Science, 2018, 9, 1971. | 1.7 | 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 Triticum species. Journal of Cereal Science, 2017, 74, 46-55. | 1.8 | 7 |
| 48 | Genetic improvement of grain quality traits for CIMMYT semi-dwarf spring bread wheat varieties developed during 1965â€“2015: 50 years of breeding. Field Crops Research, 2017, 210, 192-196. | 2.3 | 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. Food Chemistry, 2017, 237, 499-505. | 4.2 | 100 |
| 50 | Definition of the low molecular weight glutenin subunit gene family members in a set of standard bread wheat (Triticum aestivum L.) varieties. Journal of Cereal Science, 2017, 74, 263-271. | 1.8 | 27 |
| 51 | Grain quality traits of commercial durum wheat varieties and their relationships with drought stress and glutenins composition. Journal of Cereal Science, 2017, 75, 1-9. | 1.8 | 62 |
| 52 | Genetic impact of Rht dwarfing genes on grain micronutrients concentration in wheat. Field Crops Research, 2017, 214, 373-377. | 2.3 | 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. Acta Physiologiae Plantarum, 2017, 39, 1. | 1.0 | 15 |
| 54 | Strategies for Selecting Crosses Using Genomic Prediction in Two Wheat Breeding Programs. Plant Genome, 2017, 10, plantgenome2016.12.0128. | 1.6 | 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<sup>,</sup>. Cereal Foods World, 2017, 62, 231-249. | 0.7 | 48 |
| 56 | Evaluation of Grain Yield and Quality Traits of Bread Wheat Genotypes Cultivated in Northwest Turkey. Crop Science, 2016, 56, 73-84. | 0.8 | 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. | 1.7 | 143 |
| 58 | Genomic Selection for Processing and Endâ€Use Quality Traits in the CIMMYT Spring Bread Wheat Breeding Program. Plant Genome, 2016, 9, plantgenome2016.01.0005. | 1.6 | 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. | 1.8 | 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. | 1.1 | 28 |
| 62 | Molecular characterisation of novel LMW-m and LMW-s genes from four Aegilops species (Sitopsis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Science, 2016, 67, 938. | 0.7 | 2 |
| 63 | Genomic Prediction of Gene Bank Wheat Landraces. G3: Genes, Genomes, Genetics, 2016, 6, 1819-1834. | 0.8 | 159 |
| 64 | Unlocking the genetic diversity of Creole wheats. Scientific Reports, 2016, 6, 23092. | 1.6 | 75 |
| 65 | Diversity of phenotypic (plant and grain morphological) and genotypic (glutenin alleles in Glu-1 and) Tj ETQq1 1 0.784314 rgBT /Over Resources and Crop Evolution, 2016, 63, 465-475. | 0.8 | 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. | 0.6 | 24 |
| 67 | Molecular Marker-Based Selection Tools in Spring Bread Wheat Improvement: CIMMYT Experience and Prospects. Sustainable Development and Biodiversity, 2016, , 421-474. | 1.4 | 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. | 2.5 | 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. | 1.8 | 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. | 2.3 | 108 |
| 71 | Wheat waxy proteins: polymorphism, molecular characterization and effects on starch properties. Theoretical and Applied Genetics, 2016, 129, 1-16. | 1.8 | 87 |
| 72 | Molecular characterization of two novel null waxy alleles in Mexican bread wheat landraces. Journal of Cereal Science, 2015, 62, 8-14. | 1.8 | 20 |

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|---|---|---|---|
| 73 | Molecular characterization of novel LMW-i glutenin subunit genes from Triticum urartu Thum. ex Gandil.. Theoretical and Applied Genetics, 2015, 128, 2155-2165. | 1.8 | 19 |
| 74 | Molecular characterization of several Wx alleles in durum wheat. Biologia Plantarum, 2015, 59, 220-226. | 1.9 | 4 |
| 75 | Characterization and sequence diversity of the Gsp-1 gene in diploid species of the Aegilops genus. Journal of Cereal Science, 2015, 63, 1-7. | 1.8 | 2 |
| 76 | Molecular characterization of waxy alleles in three subspecies of hexaploid wheat and identification of two novel Wx-B1 alleles. Theoretical and Applied Genetics, 2015, 128, 2427-2435. | 1.8 | 17 |
| 77 | A new standard water absorption criteria based on solvent retention capacity (SRC) to determine dough mixing properties, viscoelasticity, and bread-making quality. Journal of Cereal Science, 2015, 66, 59-65. | 1.8 | 60 |
| 78 | Molecular characterization of two novel alleles of Hordoindoline genes in Hordeum chilense Roem. et Schult.. Genetic Resources and Crop Evolution, 2014, 61, 307-312. | 0.8 | 6 |
| 79 | Characterization of the Wx gene in diploid Aegilops species and its potential use in wheat breeding. Genetic Resources and Crop Evolution, 2014, 61, 369-382. | 0.8 | 19 |
| 80 | Use of wheat genetic resources to develop biofortified wheat with enhanced grain zinc and iron concentrations and desirable processing quality. Journal of Cereal Science, 2014, 60, 617-622. | 1.8 | 73 |
| 81 | Wx gene in diploid wheat: molecular characterization of five novel alleles from einkorn (Triticum) Tj ETQq1 1 0.784314 rgBT /Overlock | 1.0 | 9 |
| 82 | Molecular characterisation of the amino- and carboxyl-domains in different Glu-A1x alleles of Triticum urartu Thum. ex Gandil.. Theoretical and Applied Genetics, 2013, 126, 1703-1711. | 1.8 | 8 |
| 83 | Allelic diversity and molecular characterization of puroindoline genes in five diploid species of the Aegilops genus. Journal of Experimental Botany, 2013, 64, 5133-5143. | 2.4 | 14 |
| 84 | SNPs and an insertion sequence in five Wx-A1 alleles as factors for variant Wx-A1 protein in wheat. Euphytica, 2013, 192, 325-338. | 0.6 | 16 |
| 85 | Characterization of genetic diversity of puroindoline genes in Mexican wheat landraces. Euphytica, 2013, 190, 53-63. | 0.6 | 25 |
| 86 | Waxy genes from spelt wheat: new alleles for modern wheat breeding and new phylogenetic inferences about the origin of this species. Annals of Botany, 2012, 110, 1161-1171. | 1.4 | 36 |
| 87 | Molecular characterization of a novel waxy allele (Wx-A u 1a) from Triticum urartu Thum. ex Gandil.. Genetic Resources and Crop Evolution, 2012, 59, 971-979. | 0.8 | 24 |
| 88 | Molecular characterization and diversity of the Pina and Pinb genes in cultivated and wild diploid wheat. Molecular Breeding, 2012, 30, 69-78. | 1.0 | 22 |
| 89 | Molecular characterization of a new waxy allele with partial expression in spelt wheat. Planta, 2012, 235, 1331-1339. | 1.6 | 20 |
| 90 | Molecular characterisation of the Wx-B1 allelic variants identified in cultivated emmer wheat and comparison with those of durum wheat. Molecular Breeding, 2011, 28, 403-411. | 1.0 | 26 |

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|---|---|---|---|
| 91 | Amylose content and starch properties in emmer and durum wheat lines with different waxy proteins composition. Journal of the Science of Food and Agriculture, 2011, 91, 1625-1629. | 1.7 | 10 |
| 92 | Molecular characterization of the Glu-Ay gene from Triticum urartu for its potential use in quality wheat breeding. Plant Genetic Resources: Characterisation and Utilisation, 2011, 9, 334-337. | 0.4 | 9 |
| 93 | Polymorphism of waxy proteins in Spanish hulled wheats. Plant Genetic Resources: Characterisation and Utilisation, 2011, 9, 330-333. | 0.4 | 2 |
| 94 | Genetic variation for waxy proteins and amylose content in Spanish spelt wheat (Triticum spelta L.). Genetic Resources and Crop Evolution, 2010, 57, 721-725. | 0.8 | 16 |
| 95 | Variation in Spanish cultivated einkorn wheat (Triticum monococcum L. ssp. monococcum) as determined by morphological traits and waxy proteins. Genetic Resources and Crop Evolution, 2009, 56, 601-604. | 0.8 | 21 |
| 96 | Analysis of the starch properties in tetraploid wheatâ€“Aegilops sharonensis amphidiploid. Cereal Research Communications, 0, , 1. | 0.8 | 1 |