Maria Elena Otegui

List of Publications by Year
in descending order

87 papers	5,647 citations	71061 41 h-index	79644 73 g-index
88 all docs	88 docs citations	88 times ranked	3177 citing authors

#	Article	IF	Citations
1	Seed dry weight response to sourceâ€"sink manipulations in wheat, maize and soybean: a quantitative reappraisal. Field Crops Research, 2004, 86, 131-146.	2.3	667
2	Plant population density, row spacing and hybrid effects on maize canopy architecture and light attenuation. Field Crops Research, 2001, 71, 183-193.	2.3	234
3	Growth, water use, and kernel abortion of maize subjected to drought at silking. Field Crops Research, 1995, 40, 87-94.	2.3	202
4	Leaf senescence in maize hybrids: plant population, row spacing and kernel set effects. Field Crops Research, 2003, 82, 13-26.	2.3	175
5	Maize Kernel Weight Response to Postflowering Sourceâ€"Sink Ratio. Crop Science, 2001, 41, 1816-1822.	0.8	159
6	Grain yield components in maize. Field Crops Research, 1998, 56, 247-256.	2.3	147
7	Genetic gains in grain yield and related physiological attributes in Argentine maize hybrids. Field Crops Research, 2006, 95, 383-397.	2.3	146
8	Response of maize kernel number to plant density in Argentinean hybrids released between 1965 and 1993. Field Crops Research, 2000, 68, 1-8.	2.3	143
9	Control of Kernel Weight and Kernel Water Relations by Post-flowering Source-sink Ratio in Maize. Annals of Botany, 2003, 91, 857-867.	1.4	143
10	Maize Leaves Turn Away from Neighbors. Plant Physiology, 2002, 130, 1181-1189.	2.3	142
11	Intra-specific competition in maize: early establishment of hierarchies among plants affects final kernel set. Field Crops Research, 2004, 85, 1-13.	2.3	140
12	Sourceâ€"sink relations and kernel weight differences in maize temperate hybrids. Field Crops Research, 2006, 95, 316-326.	2.3	138
13	Leaf area, light interception, and crop development in maize. Field Crops Research, 1996, 48, 81-87.	2.3	134
14	Heat stress effects around flowering on kernel set of temperate and tropical maize hybrids. Field Crops Research, 2011, 123, 62-73.	2.3	134
15	Kernel number determination differs among maize hybrids in response to nitrogen. Field Crops Research, 2008, 105, 228-239.	2.3	123
16	Heat Stress in Fieldâ€Grown Maize: Response of Physiological Determinants of Grain Yield. Crop Science, 2010, 50, 1438-1448.	0.8	123
17	Inter-plant competition for resources in maize crops grown under contrasting nitrogen supply and density: Variability in plant and ear growth. Field Crops Research, 2011, 121, 373-380.	2.3	122
18	Heat stress in temperate and tropical maize hybrids: Differences in crop growth, biomass partitioning and reserves use. Field Crops Research, 2012, 130, 87-98.	2.3	109

#	ARTICLE	IF	CITATIONS
19	Kernel water relations and duration of grain filling in maize temperate hybrids. Field Crops Research, 2007, 101, 1-9.	2.3	103
20	Pollen Production, Pollination Dynamics, and Kernel Set in Maize. Crop Science, 2002, 42, 1910-1918.	0.8	102
21	Sowing Date Effects on Grain Yield Components for Different Maize Genotypes. Agronomy Journal, 1995, 87, 29-33.	0.9	100
22	Synchronous Pollination within and between Ears Improves Kernel Set in Maize. Crop Science, 2000, 40, 1056-1061.	0.8	98
23	Intra-specific competition in maize: Contribution of extreme plant hierarchies to grain yield, grain yield components and kernel composition. Field Crops Research, 2006, 97, 155-166.	2.3	81
24	Field-grown transgenic wheat expressing the sunflower gene<i>HaHB4</i>significantly outyields the wild type. Journal of Experimental Botany, 2019, 70, 1669-1681.	2.4	78
25	Ear Temperature and Pollination Timing Effects on Maize Kernel Set. Crop Science, 2001, 41, 1809-1815.	0.8	77
26	Row Width and Maize Grain Yield. Agronomy Journal, 2006, 98, 1532-1543.	0.9	77
27	Kernel Set and Flower Synchrony within the Ear of Maize : II. Plant Population Effects. Crop Science, 1997, 37, 448-455.	0.8	76
28	Intercepted Radiation at Flowering and Kernel Number in Maize. Agronomy Journal, 2000, 92, 92-97.	0.9	73
29	Modelling the impact of heat stress on maize yield formation. Field Crops Research, 2016, 198, 226-237.	2.3	72
30	Grain yield components in maize. Field Crops Research, 1998, 56, 257-264.	2.3	69
31	Kernel weight dependence upon plant growth at different grain-filling stages in maize and sorghum. Australian Journal of Agricultural Research, 2008, 59, 280.	1.5	63
32	Genotypic Variability in Morphological and Physiological Traits among Maize Inbred Lines-Nitrogen Responses. Crop Science, 2006, 46, 1266-1276.	0.8	61
33	Heat stress in temperate and tropical maize hybrids: Kernel growth, water relations and assimilate availability for grain filling. Field Crops Research, 2014, 166, 162-172.	2.3	61
34	Modeling hybrid and sowing date effects on potential grain yield of maize in a humid temperate region. Field Crops Research, 1996, 47, 167-174.	2.3	59
35	Maize Kernel Composition and Postâ€Flowering Sourceâ€Sink Ratio. Crop Science, 2002, 42, 781-790.	0.8	59
36	Heat Stress during Late Vegetative Growth of Maize: Effects on Phenology and Assessment of Optimum Temperature. Crop Science, 2010, 50, 1431-1437.	0.8	55

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37	Kernel Set and Flower Synchrony within the Ear of Maize : I. Sowing Date Effects. Crop Science, 1997, 37, 441-447.	0.8	53
38	Co-ordination between Leaf Initiation and Leaf Appearance in Field-grown Maize (Zea mays): Genotypic Differences in Response of Rates to Temperature. Annals of Botany, 2005, 96, 997-1007.	1.4	50
39	Heat stress in temperate and tropical maize hybrids: A novel approach for assessing sources of kernel loss in field conditions. Field Crops Research, 2013, 142, 58-67.	2.3	50
40	Water deficit stress tolerance in maize conferred by expression of an isopentenyltransferase (IPT) gene driven by a stress- and maturation-induced promoter. Journal of Biotechnology, 2016, 220, 66-77.	1.9	46
41	Ecophysiological traits in maize hybrids and their parental inbred lines: Phenotyping of responses to contrasting nitrogen supply levels. Field Crops Research, 2009, 114, 147-158.	2.3	43
42	Source-sink relations and kernel weight in maize inbred lines and hybrids: Responses to contrasting nitrogen supply levels. Field Crops Research, 2019, 230, 151-159.	2.3	43
43	Intra-specific competition in maize: Ear development, flowering dynamics and kernel set of early-established plant hierarchies. Field Crops Research, 2007, 102, 198-209.	2.3	42
44	Water and radiation use efficiencies in maize: Breeding effects on single-cross Argentine hybrids released between 1980 and 2012. Field Crops Research, 2020, 246, 107683.	2.3	41
45	Successful field performance in warm and dry environments of soybean expressing the sunflower transcription factor HB4. Journal of Experimental Botany, 2020, 71, 3142-3156.	2.4	41
46	Inter-plant variability in maize crops grown under contrasting NÃ—stand density combinations: Links between development, growth and kernel set. Field Crops Research, 2012, 133, 90-100.	2.3	40
47	Reduced expression of selected <scp><i>FASCICLINâ€LIKE ARABINOGALACTAN PROTEIN</i></scp> genes associates with the abortion of kernels in field crops of <scp><i>Zea mays</i></scp> (maize) and of <scp>A</scp>rabidopsis seeds. Plant, Cell and Environment, 2018, 41, 661-674.	2.8	38
48	Seed yield determination of peanut crops under water deficit: Soil strength effects on pod set, the sourceâ€“sink ratio and radiation use efficiency. Field Crops Research, 2008, 109, 24-33.	2.3	35
49	Ovary Growth and Maize Kernel Set. Crop Science, 2007, 47, 1104-1110.	0.8	33
50	A role for LAX2 in regulating xylem development and lateral-vein symmetry in the leaf. Annals of Botany, 2017, 120, 577-590.	1.4	33
51	Environmental effects on seed yield determination of irrigated peanut crops: Links with radiation use efficiency and crop growth rate. Field Crops Research, 2007, 103, 217-228.	2.3	29
52	Enhanced kernel set promoted by synchronous pollination determines a tradeoff between kernel number and kernel weight in temperate maize hybrids. Field Crops Research, 2008, 105, 172-181.	2.3	28
53	Multiple abiotic stresses on maize grain yield determination: Additive vs multiplicative effects. Field Crops Research, 2016, 198, 280-289.	2.3	28
54	An Interdisciplinary Approach to Study the Performance of Second-generation Genetically Modified Crops in Field Trials: A Case Study With Soybean and Wheat Carrying the Sunflower HaHB4 Transcription Factor. Frontiers in Plant Science, 2020, 11, 178.	1.7	26

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55	HeterosisÃ—environment interaction in maize: What drives heterosis for grain yield?. Field Crops Research, 2011, 124, 441-449.	2.3	25
56	Heterotic Response for Grain Yield and Ecophysiological Related Traits to Nitrogen Availability in Maize. Crop Science, 2011, 51, 1172-1187.	0.8	25
57	Parentâ€“Progeny Relationships between Maize Inbreds and Hybrids: Analysis of Grain Yield and Its Determinants for Contrasting Soil Nitrogen Conditions. Crop Science, 2013, 53, 2147-2161.	0.8	25
58	Modeling the response of maize phenology, kernel set, and yield components to heat stress and heat shock with CSM-IXIM. Field Crops Research, 2017, 214, 239-254.	2.3	21
59	Maize Physiological Responses to Heat Stress and Hormonal Plant Growth Regulators Related to Ethylene Metabolism. Crop Science, 2013, 53, 2135-2146.	0.8	20
60	Genetically modified maize hybrids and delayed sowing reduced drought effects across a rainfall gradient in temperate Argentina. Journal of Experimental Botany, 2021, 72, 5180-5188.	2.4	19
61	Multi-attribute responses of maize inbred lines across managed environments. Euphytica, 2008, 162, 381-394.	0.6	18
62	Contribution of Reserves to Kernel Weight and Grain Yield Determination in Maize: Phenotypic and Genotypic Variation. Crop Science, 2016, 56, 697-706.	0.8	18
63	Correlations Between Parental Inbred Lines and Derived Hybrid Performance for Grain Filling Traits in Maize. Crop Science, 2013, 53, 1636-1645.	0.8	17
64	Artificial selection for grain yield has increased net CO2 exchange of the ear leaf in maize crops. Journal of Experimental Botany, 2021, 72, 3902-3913.	2.4	17
65	Genetic improvement of peanut in Argentina between 1948 and 2004: Seed yield and its components. Field Crops Research, 2013, 149, 76-83.	2.3	15
66	New Relationships Between Light Interception, Ear Growth, and Kernel Set in Maize. CSSA Special Publication - Crop Science Society of America, 0, , 89-102.	0.1	15
67	Phenotypic plasticity of maize grain yield and related secondary traits: Differences between inbreds and hybrids in response to contrasting water and nitrogen regimes. Field Crops Research, 2019, 239, 19-29.	2.3	13
68	Why are second-generation transgenic crops not yet available in the market?. Journal of Experimental Botany, 2020, 71, 6876-6880.	2.4	13
69	Genetic improvement of peanut in Argentina between 1948 and 2004: Light interception, biomass production and radiation use efficiency. Field Crops Research, 2017, 204, 222-228.	2.3	12
70	A practical guide to estimating the light extinction coefficient with nonlinear modelsâ€"a case study on maize. Plant Methods, 2021, 17, 60.	1.9	12
71	Water deficit and impaired pegging effects on peanut seed yield: links with water and photosynthetically active radiation use efficiencies. Crop and Pasture Science, 2010, 61, 343.	0.7	11
72	Peg viability and pod set in peanut: Response to impaired pegging and water deficit. Flora: Morphology, Distribution, Functional Ecology of Plants, 2011, 206, 865-871.	0.6	10

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73	Genetic improvement of peanut in Argentina between 1948 and 2004: Links between phenology and grain yield determinants. Field Crops Research, 2015, 174, 12-19.	2.3	10
74	Heterosis and parentâ€"progeny relationships for silk extrusion dynamics and kernel number determination in maize: Nitrogen effects. Crop Science, 2020, 60, 961-976.	0.8	10
75	Contribution of the early-established plant hierarchies to maize crop responses to N fertilization. Field Crops Research, 2018, 216, 141-149.	2.3	9
76	Maize expressing the sunflower transcription factor HaHB11 has improved productivity in controlled and field conditions. Plant Science, 2019, 287, 110185.	1.7	9
77	Kernel filling and desiccation in temperate maize: Breeding and environmental effects. Field Crops Research, 2021, 271, 108243.	2.3	8
78	Expressing the sunflower transcription factor HaHB11 in maize improves waterlogging and defoliation tolerance. Plant Physiology, 2022, 189, 230-247.	2.3	7
79	Maize genetic progress in the central Pampas of Argentina: effects of contrasting sowing dates. Field Crops Research, 2022, 281, 108492.	2.3	7
80	Phenotypic plasticity for biomass partitioning in maize: genotype effects across a range of environments. Field Crops Research, 2020, 256, 107914.	2.3	6
81	Kernel weight responses to the photothermal environment in maize dent Ã— flint and flint Ã— flint hybrids. Crop Science, 2021, 61, 1996-2011.	0.8	6
82	Breeding effects on canopy light attenuation in maize: a retrospective and prospective analysis. Journal of Experimental Botany, 2022, 73, 1301-1311.	2.4	6
83	Row spacing and growth habit in peanut crops: Effects on seed yield determination across environments. Field Crops Research, 2022, 275, 108363.	2.3	5
84	Maize. , 2021, , 2-43.		4
85	Crop phenotyping for physiological breeding in grain crops: A case study for maize. , 2015, , 375-396.		3
86	Physiological Bases of Acrossâ€Environment and Environmentâ€Specific Responses for Grain Yield in Maize Hybrids Obtained from a Full Diallel Mating Design. Crop Science, 2018, 58, 180-191.	0.8	3
87	Ability of in situ canopy spectroscopy to differentiate genotype by environment interaction in wheat. International Journal of Remote Sensing, 2021, 42, 3660-3680.	1.3	3