Rex Bernardo

List of Publications by Citations

72 papers	3,993 citations	29 h-index	63 g-index
74 ext. papers	4,726 ext. citations	3.1 avg, IF	6.47 L-index

#	Paper	IF	Citations
72	Prospects for Genomewide Selection for Quantitative Traits in Maize. *Crop Science*, **2007**, 47, 1082-1090	2.4	576
71	Molecular Markers and Selection for Complex Traits in Plants: Learning from the Last 20 Years. *Crop Science*, **2008**, 48, 1649-1664	2.4	570
70	Accuracy of genotypic value predictions for marker-based selection in biparental plant populations. *Theoretical and Applied Genetics*, **2009**, 120, 151-61	6	308
69	Prediction of Maize Single-Cross Performance Using RFLPs and Information from Related Hybrids. *Crop Science*, **1994**, 34, 20-25	2.4	212
68	Best Linear Unbiased Prediction of Maize Single-Cross Performance. *Crop Science*, **1996**, 36, 50-56	2.4	141
67	Genomewide Selection versus Marker-assisted Recurrent Selection to Improve Grain Yield and Stover-quality Traits for Cellulosic Ethanol in Maize. *Crop Science*, **2013**, 53, 58-66	2.4	139
66	Genomewide Selection when Major Genes Are Known. *Crop Science*, **2014**, 54, 68-75	2.4	137
65	Validating the Fhb1 QTL for Fusarium Head Blight Resistance in Near-Isogenic Wheat Lines Developed from Breeding Populations. *Crop Science*, **2007**, 47, 200-206	2.4	134
64	Usefulness of Gene Information in Marker-Assisted Recurrent Selection: A Simulation Appraisal. *Crop Science*, **2006**, 46, 614-621	2.4	127
63	Genomic prediction contributing to a promising global strategy to turbocharge gene banks. *Nature Plants*, **2016**, 2, 16150	11.5	125
62	Bandwagons I, too, have known. *Theoretical and Applied Genetics*, **2016**, 129, 2323-2332	6	120
61	Accuracy of Genomewide Selection for Different Traits with Constant Population Size, Heritability, and Number of Markers. *Plant Genome*, **2013**, 6, plantgenome2012.11.0030	4.4	107
60	Genomewide predictions from maize single-cross data. *Theoretical and Applied Genetics*, **2013**, 126, 13-22	6	105
59	What If We Knew All the Genes for a Quantitative Trait in Hybrid Crops?. *Crop Science*, **2001**, 41, 1-4	2.4	87
58	Genomewide Selection for Rapid Introgression of Exotic Germplasm in Maize. *Crop Science*, **2009**, 49, 419-425	2.4	80
57	Drought Tolerance in Maize: Indirect Selection through Secondary Traits versus Genomewide Selection. *Crop Science*, **2013**, 53, 1269-1275	2.4	72
56	General Combining Ability Model for Genomewide Selection in a Biparental Cross. *Crop Science*, **2014**, 54, 895-905	2.4	61

55	Genomewide Prediction Accuracy within 969 Maize Biparental Populations. *Crop Science*, **2014**, 54, 1514-1522	2.4	59
54	Genomewide Selection with Minimal Crossing in Self-Pollinated Crops. *Crop Science*, **2010**, 50, 624-627	2.4	59
53	Genomewide Selection and Marker-Assisted Recurrent Selection in Doubled Haploid versus F2 Populations. *Crop Science*, **2009**, 49, 1719-1725	2.4	50
52	Quantitative Trait Loci and Trait Correlations for Maize Stover Cell Wall Composition and Glucose Release for Cellulosic Ethanol. *Crop Science*, **2010**, 50, 541-555	2.4	44
51	Reinventing quantitative genetics for plant breeding: something old, something new, something borrowed, something BLUE. *Heredity*, **2020**, 125, 375-385	3.6	42
50	Genomewide Selection to Introgress Semidwarf Maize Germplasm into U.S. Corn Belt Inbreds. *Crop Science*, **2013**, 53, 1427-1436	2.4	40
49	Genomewide Selection of Parental Inbreds: Classes of Loci and Virtual Biparental Populations. *Crop Science*, **2014**, 54, 2586-2595	2.4	33
48	Should maize doubled haploids be induced among F(1) or F (2) plants?. *Theoretical and Applied Genetics*, **2009**, 119, 255-62	6	33
47	Potential for Simultaneous Improvement of Corn Grain Yield and Stover Quality for Cellulosic Ethanol. *Crop Science*, **2010**, 50, 516-523	2.4	32
46	On the effectiveness of early generation selection in self-pollinated crops. *Crop Science*, **2003**, 43, 1558-1560	2.4	31
45	Best Linear Unbiased Prediction of the Performance of Crosses between Untested Maize Inbreds. *Crop Science*, **1996**, 36, 872-876	2.4	31
44	Genetic Correlation between Corn Performance in Organic and Conventional Production Systems. *Crop Science*, **2008**, 48, 903	2.4	30
43	Prospective Targeted Recombination and Genetic Gains for Quantitative Traits in Maize. *Plant Genome*, **2017**, 10, plantgenome2016.11.0118	4.4	28
42	Number and Fitness of Selected Individuals in Marker-Assisted and Phenotypic Recurrent Selection. *Crop Science*, **2006**, 46, 1972-1980	2.4	28
41	Genomewide Markers for Controlling Background Variation in Association Mapping. *Plant Genome*, **2013**, 6, plantgenome2012.11.0028	4.4	22
40	Corn Performance under Managed Drought Stress and in a Kura Clover Living Mulch Intercropping System. *Agronomy Journal*, **2013**, 105, 579-586	2.2	22
39	Marker Imputation Before Genomewide Selection in Biparental Maize Populations. *Plant Genome*, **2015**, 8, eplantgenome2014.10.0078	4.4	20
38	Changes in Genetic Variance during Advanced Cycle Breeding in Maize. *Crop Science*, **2004**, 44, 405-410	2.4	20

37	Relative Efficiency of Genomewide Selection for Testcross Performance of Doubled Haploid Lines in a Maize Breeding Program. *Crop Science*, **2015**, 55, 2091-2099	2.4	18
36	Genomewide Association Mapping of Flowering Time, Kernel Composition, and Disease Resistance in Historical Minnesota Maize Inbreds. *Crop Science*, **2013**, 53, 2518-2529	2.4	18
35	Diverse Adapted Populations for Improving Northern Maize Inbreds. *Crop Science*, **2004**, 44, 1444-1449	2.4	17
34	Retrospective Index Weights Used in Multiple Trait Selection in a Maize Breeding Program. *Crop Science*, **1991**, 31, 1174-1179	2.4	17
33	Multienvironment Validation of the Effectiveness of Phenotypic and Genomewide Selection within Biparental Maize Populations. *Crop Science*, **2015**, 55, 1068-1075	2.4	16
32	Small ad hoc versus large general training populations for genomewide selection in maize biparental crosses. *Theoretical and Applied Genetics*, **2019**, 132, 347-353	6	15
31	Prediction of Genetic Variance in Biparental Maize Populations: Genomewide Marker Effects versus Mean Genetic Variance in Prior Populations. *Crop Science*, **2015**, 55, 1181-1188	2.4	13
30	Targeted recombination to increase genetic gain in self-pollinated species. *Theoretical and Applied Genetics*, **2019**, 132, 289-300	6	13
29	Recombination and genetic variance among maize doubled haploids induced from F and F plants. *Theoretical and Applied Genetics*, **2016**, 129, 2429-2436	6	12
28	Population Structure and Single Nucleotide Polymorphism Diversity of Historical Minnesota Maize Inbreds. *Crop Science*, **2013**, 53, 1529-1536	2.4	11
27	Comparison of Cell Wall Polysaccharide Hydrolysis by a Dilute Acid/Enzymatic Saccharification Process and Rumen Microorganisms. *Bioenergy Research*, **2012**, 5, 319-329	3.1	11
26	Genetic Variation in Maize Breeding Populations with Different Numbers of Parents. *Crop Science*, **2005**, 45, 2301-2306	2.4	11
25	Maintaining the Accuracy of Genomewide Predictions when Selection Has Occurred in the Training Population. *Crop Science*, **2018**, 58, 1226-1231	2.4	10
24	Germplasm Architecture Revealed through Chromosomal Effects for Quantitative Traits in Maize. *Plant Genome*, **2016**, 9, plantgenome2016.03.0028	4.4	9
23	Predicted Genetic Gains from Targeted Recombination in Elite Biparental Maize Populations. *Plant Genome*, **2019**, 12, 180062	4.4	9
22	Minimal Loss of Genetic Diversity after Genomewide Selection within Biparental Maize Populations. *Crop Science*, **2015**, 55, 783-789	2.4	8
21	Breeding Potential of Intra- and Interheterotic Group Crosses in Maize. *Crop Science*, **2001**, 41, 68-71	2.4	8
20	Genomewide Predictions for Backcrossing a Quantitative Trait from an Exotic to an Adapted Line. *Crop Science*, **2016**, 56, 1067-1075	2.4	7

19	Weighted vs. Unweighted Mean Performance of Varieties across Environments. *Crop Science*, **1992**, 32, 490-492	2.4	6
18	Random Mating before Selfing in Maize BC1 Populations. *Crop Science*, **2004**, 44, 401-404	2.4	5
17	Predicted genetic gains from introgressing chromosome segments from exotic germplasm into an elite soybean cultivar. *Theoretical and Applied Genetics*, **2020**, 133, 605-614	6	5
16	Predicting Genetic Variance from Genomewide Marker Effects Estimated from a Diverse Panel of Maize Inbreds. *Crop Science*, **2019**, 59, 583-590	2.4	4
15	Upgrading a maize breeding program via two-cycle genomewide selection: Same cost, same or less time, and larger gains. *Crop Science*, **2021**, 61, 2444	2.4	4
14	Genomewide Selection for Unfavorably Correlated Traits in Maize. *Crop Science*, **2018**, 58, 1587-1593	2.4	4
13	BreedingGames Software. *Crop Science*, **2017**, 57, 2313-2313	2.4	3
12	Random Mating before Selfing in Maize BC1 Populations **2004**, 44, 401		3
11	Breeding Potential of Semidwarf Corn for Grain and Forage in the Northern U.S. Corn Belt. *Crop Science*, **2011**, 51, 1637-1645	2.4	2
10	Assessing by Modeling the Consequences of Increased Recombination in Recurrent Selection of and. *G3: Genes, Genomes, Genetics*, **2019**, 9, 4169-4181	3.2	2
9	Multiparental populations in line development: Genetic gain, diversity, and practical limitations. *Crop Science*, **2021**, 61, 4139	2.4	2
8	Simple software for genomewide prediction, linkage and association mapping, and quality control of marker data. *Crop Science*, **2020**, 60, 515-515	2.4	1
7	Genomewide Selection with Biallelic versus Triallelic Models in Three-Way Maize Populations. *Crop Science*, **2017**, 57, 2471-2477	2.4	1
6	Plant Breeding in Times of Change. *Crop Science*, **2007**, 47, S-2-S-3	2.4	1
5	Predicted genetic gains from introgressing chromosome segments from exotic germplasm into an elite soybean cultivar		1
4	Predictive breeding in maize during the last 90 years. *Crop Science*, **2021**, 61, 2872-2881	2.4	1
3	Genomewide predictions as a substitute for a portion of phenotyping in maize. *Crop Science*, **2020**, 60, 181-189	2.4	0
2	Linear, funnel, and multiple funnel schemes for stacking chromosomes that carry targeted recombinations in plants. *Theoretical and Applied Genetics*, **2020**, 133, 3177-3186	6	0

1	Subgenome contributions to quantitative genetic variation in bread wheat and durum wheat populations. *Crop Science*, **2021**, 61, 1002-1012	2.4