

Dirk E Maier

List of Publications by Year in descending order

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Version: 2024-02-01

46
papers

1,368
citations

361413

20
h-index

345221

36
g-index

48
all docs

48
docs citations

48
times ranked

1150
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficacy and fumigation characteristics of ozone in stored maize. <i>Journal of Stored Products Research</i> , 2001, 37, 371-382.	2.6	203
2	Applications of Discrete Element Method in Modeling of Grain Postharvest Operations. <i>Food Engineering Reviews</i> , 2014, 6, 128-149.	5.9	91
3	The effect of process variables during drying on the physical and chemical characteristics of corn dried distillers grains with solubles (DDGS) – Plant scale experiments. <i>Bioresource Technology</i> , 2010, 101, 193-199.	9.6	85
4	CFD simulation of corn drying in a natural convection solar dryer. <i>Drying Technology</i> , 2018, 36, 859-870.	3.1	70
5	Ozone application in a modified screw conveyor to treat grain for insect pests, fungal contaminants, and mycotoxins. <i>Journal of Stored Products Research</i> , 2011, 47, 249-254.	2.6	69
6	Half-life time of ozone as a function of air movement and conditions in a sealed container. <i>Journal of Stored Products Research</i> , 2013, 55, 41-47.	2.6	68
7	Multiscale fluid transport theory for swelling biopolymers. <i>Chemical Engineering Science</i> , 2003, 58, 2409-2419.	3.8	61
8	DON Occurrence in Grains: A North American Perspective. <i>Cereal Foods World</i> , 2015, 60, 32-56.	0.2	56
9	Temperature management of the maize weevil, <i>Sitophilus zeamais</i> Motsch. (Coleoptera: Curculionidae), in three locations in the United States. <i>Journal of Stored Products Research</i> , 1996, 32, 255-273.	2.6	49
10	Evaluation of spinosad as a grain protectant on three Kansas farms. <i>Crop Protection</i> , 2007, 26, 1021-1030.	2.1	48
11	Hybrid mixture theory based moisture transport and stress development in corn kernels during drying: Validation and simulation results. <i>Journal of Food Engineering</i> , 2011, 106, 275-282.	5.2	46
12	Effect of viscoelastic relaxation on moisture transport in foods. Part II: Sorption and drying of soybeans. <i>Journal of Mathematical Biology</i> , 2004, 49, 20-34.	1.9	35
13	Feasibility of Aeration for Management of Maize Weevil Populations in Corn Stored in the Southern United States: Model Simulations Based on Recorded Weather Data. <i>American Entomologist</i> , 1998, 44, 118-123.	0.2	34
14	Three scale thermomechanical theory for swelling biopolymeric systems. <i>Chemical Engineering Science</i> , 2003, 58, 4017-4035.	3.8	34
15	Evaluation of different temperature management strategies for suppression of <i>Sitophilus zeamais</i> (Motschulsky) in stored maize. <i>Journal of Stored Products Research</i> , 2007, 43, 480-488.	2.6	31
16	Three-dimensional airflow distribution in a maize silo with peaked, levelled and cored grain mass configurations. <i>Biosystems Engineering</i> , 2011, 110, 321-329.	4.3	30
17	Effect of viscoelastic relaxation on moisture transport in foods. Part I: Solution of general transport equation. <i>Journal of Mathematical Biology</i> , 2004, 49, 1-19.	1.9	27
18	Modeling of moisture diffusivities for components of yellow-dent corn kernels. <i>Journal of Cereal Science</i> , 2009, 50, 82-90.	3.7	27

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19	Impact of Aeration on Maize Weevil (Coleoptera: Curculionidae) Populations in Corn Stored in the Northern United States: Simulation Studies. <i>American Entomologist</i> , 2001, 47, 104-111.	0.2	25
20	Assessment of Aflatoxin and Fumonisin Contamination and Associated Risk Factors in Feed and Feed Ingredients in Rwanda. <i>Toxins</i> , 2019, 11, 270.	3.4	25
21	A post-harvest economic model to evaluate grain chilling as an IPM technology. <i>Journal of Stored Products Research</i> , 1999, 35, 369-383.	2.6	20
22	Thermomechanics of Swelling Biopolymeric Systems. <i>Transport in Porous Media</i> , 2003, 53, 1-24.	2.6	20
23	The counterflow cooling of feed pellets. <i>Biosystems Engineering</i> , 1992, 53, 305-319.	0.4	18
24	Impact of various storage conditions on enzymatic activity, biomass components and conversion to ethanol yields from sorghum biomass used as a bioenergy crop. <i>Bioresource Technology</i> , 2013, 132, 269-275.	9.6	15
25	Testing the performance and compatibility of degummed soybean heating oil blends for use in residential furnaces. <i>Fuel</i> , 2010, 89, 105-113.	6.4	14
26	Cytotoxicity assessment of Aflatoxin B1 after high voltage atmospheric cold plasma treatment. <i>Toxicon</i> , 2021, 194, 17-22.	1.6	14
27	Effects of weather conditions on sulfuryl fluoride and methyl bromide leakage during structural fumigation in a flour mill. <i>Journal of Stored Products Research</i> , 2009, 45, 1-9.	2.6	13
28	Experimental and theoretical analysis of a novel deep-bed solid-state bioreactor for cellulolytic enzymes production. <i>Biochemical Engineering Journal</i> , 2011, 58-59, 110-123.	3.6	13
29	Siloâ€“dryerâ€“aerator in fixed and thick layer conceptualized for high quality of grains applied in different social scales post-harvest: modeling and validation. <i>Drying Technology</i> , 2022, 40, 1369-1394.	3.1	13
30	Development and validation of Computational Fluid Dynamics models for precision structural fumigation. <i>Journal of Stored Products Research</i> , 2008, 44, 11-20.	2.6	12
31	Gas leakage and distribution characteristics of methyl bromide and sulfuryl fluoride during fumigations in a pilot flour mill. <i>Journal of Stored Products Research</i> , 2012, 50, 1-7.	2.6	12
32	Toxigenic mycoflora, aflatoxin and fumonisin contamination of poultry feeds in Ghana. <i>Toxicon</i> , 2021, 198, 164-170.	1.6	12
33	Developing and verifying a fumigant loss model for bulk stored grain to predict phosphine concentrations by taking into account fumigant leakage and sorption. <i>Journal of Stored Products Research</i> , 2018, 77, 197-204.	2.6	11
34	Investigation of fumigant efficacy in flour mills under real-world fumigation conditions. <i>Journal of Stored Products Research</i> , 2011, 47, 179-184.	2.6	8
35	Chilled Aeration to Control Pests and Maintain Grain Quality during Summer Storage of Wheat in the North Central Region of Kansas. <i>Applied Engineering in Agriculture</i> , 2019, 35, 657-688.	0.7	7
36	Effect of Temperature Sensor Numbers and Placement on Aeration Cooling of a Stored Grain Mass Using a 3D Finite Element Model. <i>Agriculture (Switzerland)</i> , 2021, 11, 231.	3.1	6

#	ARTICLE	IF	CITATIONS
37	Drying Temperature Effect on Kernel Damage and Viability of Maize Dried in a Solar Biomass Hybrid Dryer. Open Journal of Applied Sciences, 2018, 08, 506-517.	0.4	5
38	Use of a Stakeholder-Driven DACUM Process to Define Knowledge Areas for Food Protection and Defense. Journal of Homeland Security and Emergency Management, 2011, 8, .	0.5	4
39	Development and validation of a headspace model for a stored grain silo filled to its eave. Journal of Stored Products Research, 2012, 49, 176-183.	2.6	4
40	Techno-Economic Analysis of a Crossflow Column Dryer for Maize Drying in Ghana. Agriculture (Switzerland), 2021, 11, 568.	3.1	4
41	Mango Postharvest Technologies: An Observational Study of the Yieldwise Initiative in Kenya. Agriculture (Switzerland), 2021, 11, 623.	3.1	3
42	Recent Innovations in Post-Harvest Preservation and Protection of Agricultural Products. Agriculture (Switzerland), 2021, 11, 1275.	3.1	2
43	Does On-Farm Quality Assurance Pay? A Cost-Benefit Analysis of the <i>Grainsafe</i> Program. Journal of Agricultural & Applied Economics, 2007, 39, 541-556.	1.4	1
44	Chilling of Grain by Refrigerated Air. , 2001, , .		1
45	Evaluation of stirring to suppress weevils in stored maize. Journal of Stored Products Research, 2021, 93, 101849.	2.6	0
46	Preliminary sampling of aflatoxin M1 contamination in raw milk from dairy farms using feed ingredients from Rwanda. Mycotoxin Research, 2022, , 1.	2.3	0