Hartmut R StÃ¼tzel

List of Publications by Year
in descending order

#	Article	IF	Citations
1	First Form, Then Function: 3D Reconstruction of Cucumber Plants (Cucumis sativus L.) Allows Early Detection of Stress Effects through Leaf Dimensions. Remote Sensing, 2022, 14, 1094.	4.0	0
2	Interspecific variation in leaf traits, photosynthetic light response, and whole-plant productivity in amaranths (Amaranthus spp. L.). PLoS ONE, 2022, 17, e0270674.	2.5	1
3	Performance of Cassava under Lime, Fertilizer, and Legume Intercropping on Exhausted Land in Northern Zambia. International Journal of Agronomy, 2022, 2022, 1-17.	1.2	2
4	Changes in plant growth, leaf relative water content and physiological traits in response to salt stress in peanut (Arachis hypogaea L.) varieties. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2021, 49, 12049.	1.1	8
5	Seasonal Efficiency of Supplemental LED Lighting on Growth and Photomorphogenesis of Sweet Basil. Frontiers in Plant Science, 2021, 12, 609975.	3.6	7
6	Physiological and Morphological Responses of Cassava Genotypes to Fertilization Regimes in Chromi-Haplic Acrisols Soils. Agronomy, 2021, 11, 1757.	3.0	8
7	Biodiversity in European agricultural landscapes: transformative societal changes needed. Trends in Ecology and Evolution, 2021, 36, 1067-1070.	8.7	29
8	How does structure matter? Comparison of canopy photosynthesis using one- and three-dimensional light models: a case study using greenhouse cucumber canopies. In Silico Plants, 2021, 3, .	1.9	6
9	Physiological and morphological responses of different spring barley genotypes to water deficit and associated QTLs. PLoS ONE, 2020, 15, e0237834.	2.5	8
10	Determining Ion Toxicity in Cucumber under Salinity Stress. Agronomy, 2020, 10, 677.	3.0	21
11	Decoupling of impact factors reveals the response of German winter wheat yields to climatic changes. Global Change Biology, 2020, 26, 3601-3626.	9.5	35
12	Experiments for in silico evaluation of Optimality of Photosynthetic Nitrogen Distribution and Partitioning in the Canopy: an Example Using Greenhouse Cucumber Plants. Bio-protocol, 2020, 10, e3556.	0.4	3
13	A mechanistic view of the reduction in photosynthetic protein abundance under diurnal light fluctuation. Journal of Experimental Botany, 2019, 70, 3705-3708.	4.8	10
14	Unraveling the genetic complexity underlying sorghum response to water availability. PLoS ONE, 2019, 14, e0215515.	2.5	7
15	Breeding improves wheat productivity under contrasting agrochemical input levels. Nature Plants, 2019, 5, 706-714.	9.3	194
16	Environmental triggers for photosynthetic protein turnover determine the optimal nitrogen distribution and partitioning in the canopy. Journal of Experimental Botany, 2019, 70, 2419-2434.	4.8	18
17	Co-Evolution of Sink and Source in the Recent Breeding History of Winter Wheat in Germany. Frontiers in Plant Science, 2019, 10, 1771.	3.6	23
18	High light aggravates functional limitations of cucumber canopy photosynthesis under salinity. Annals of Botany, 2018, 121, 797-807.	2.9	23

#	Article	IF	Citations
19	Differences in the enzymatic hydrolysis of glucosinolates increase the defense metabolite diversity in 19 Arabidopsis thaliana accessions. Plant Physiology and Biochemistry, 2018, 124, 126-135.	5.8	35
20	Narrow-leaved lupine as an N source alternative to grass-clover swards in organic vegetable rotations. Biological Agriculture and Horticulture, 2017, 33, 125-142.	1.0	3
21	Impact of the source of organic manure on persistence of E.Âcoli O157:H7 gfp + in rocket (Diplotaxis) Tj ETQq1 1 0.784314 rgBT /Over	5.5	3
22	A new method to estimate photosynthetic parameters through net assimilation rateâˆ'intercellular space <scp>CO</scp>₂ concentration (<i>A</i>âˆ'<i>C</i>_i) curve and chlorophyll fluorescence measurements. New Phytologist, 2017, 213, 1543-1554.	7.3	44
23	A Modeling Approach to Quantify the Effects of Stomatal Behavior and Mesophyll Conductance on Leaf Water Use Efficiency. Frontiers in Plant Science, 2016, 7, 875.	3.6	11
24	Editorial: Virtual Plants: Modeling Plant Architecture in Changing Environments. Frontiers in Plant Science, 2016, 7, 1734.	3.6	6
25	Prediction of time to harvest and its variability in broccoli (Brassica oleracea var. italica) Part I. Plant developmental variation and forecast of time to head induction. Scientia Horticulturae, 2016, 198, 424-433.	3.6	13
26	Quantitative trait loci controlling leaf appearance and curd initiation of cauliflower in relation to temperature. Theoretical and Applied Genetics, 2016, 129, 1273-1288.	3.6	21
27	The Future of Field Trials in Europe: Establishing a Network Beyond Boundaries. Trends in Plant Science, 2016, 21, 92-95.	8.8	14
28	Prediction of time to harvest and its variability of broccoli (Brassica oleracea var. italica) part II. Growth model description, parameterisation and field evaluation. Scientia Horticulturae, 2016, 200, 151-160.	3.6	9
29	High temperature and vapor pressure deficit aggravate architectural effects but ameliorate non-architectural effects of salinity on dry mass production of tomato. Frontiers in Plant Science, 2015, 6, 887.	3.6	17
30	Disentangling the contributions of osmotic and ionic effects of salinity on stomatal, mesophyll, biochemical and light limitations to photosynthesis. Plant, Cell and Environment, 2015, 38, 1528-1542.	5.7	51
31	What is the most prominent factor limiting photosynthesis in different layers of a greenhouse cucumber canopy?. Annals of Botany, 2014, 114, 677-688.	2.9	45
32	Quantification of the effects of architectural traits on dry mass production and light interception of tomato canopy under different temperature regimes using a dynamic functionalâ€"structural plant model. Journal of Experimental Botany, 2014, 65, 6399-6410.	4.8	42
33	Genetic dissection of temperature-dependent sorghum growth during juvenile development. Theoretical and Applied Genetics, 2014, 127, 1935-1948.	3.6	32
34	Nitrogen use efficiency of organically fertilized white cabbage and residual effects on subsequent beetroot. Plant and Soil, 2014, 382, 237-251.	3.7	12
35	Prediction of winter wheat cultivar performance in Germany: At national, regional and location scale. European Journal of Agronomy, 2014, 52, 210-217.	4.1	8
36	Prediction of flowering time in <i>Brassica oleracea</i> using a quantitative trait lociâ€based phenology model. Plant Biology, 2012, 14, 179-189.	3.8	31

#	Article	IF	Citations
37	Modeling temperature-modulated stem growth of cucumber plants (Cucumis sativus L.). , 2012, , .		1
38	Genetic dissection of the temperature dependent emergence processes in sorghum using a cumulative emergence model and stability parameters. Theoretical and Applied Genetics, 2012, 125, 1647-1661.	3.6	25
39	Determining photosynthetic limitations under saturated and non-saturated light conditions. , 2012, , .		1
40	Nitrogen efficiency of Brussels sprouts under different organic N fertilization rates. Scientia Horticulturae, 2012, 134, 7-12.	3.6	6
41	Decomposition of lupine seeds and seedlings as N fertilizer in organic vegetable production. Plant and Soil, 2012, 357, 59-71.	3.7	3
42	Evaluation of a radiosity based light model for greenhouse cucumber canopies. Agricultural and Forest Meteorology, 2011, 151, 906-915.	4.8	30
43	Modelling photoâ€modulated internode elongation in growing glasshouse cucumber canopies. New Phytologist, 2011, 190, 697-708.	7.3	49
44	Simplification of a light-based model for estimating final internode length in greenhouse cucumber canopies. Annals of Botany, 2011, 108, 1055-1063.	2.9	14
45	Dry matter partitioning models for the simulation of individual fruit growth in greenhouse cucumber canopies. Annals of Botany, 2011, 108, 1075-1084.	2.9	20
46	Determining the stable Fe isotope signature of plant-available iron in soils. Chemical Geology, 2010, 277, 269-280.	3.3	60
47	A new method for assessing the sustainability of land-use systems (I): Identifying the relevant issues. Ecological Economics, 2009, 68, 1275-1287.	5.7	33
48	A new method for assessing the sustainability of land-use systems (II): Evaluating impact indicators. Ecological Economics, 2009, 68, 1288-1300.	5.7	41
49	Ontogenetic Changes of 2-Propenyl and 3-Indolylmethyl Glucosinolates in <i>Brassica carinata</i> Leaves as Affected by Water Supply. Journal of Agricultural and Food Chemistry, 2009, 57, 7259-7263.	5.2	85
50	Modeling the Effects of Drought Stress on Leaf Development in a Brassica oleracea Doubled Haploid Population Using Two-phase Linear Functions. Journal of the American Society for Horticultural Science, 2009, 134, 543-552.	1.0	9
51	Crop model based QTL analysis across environments and QTL based estimation of time to floral induction and flowering in Brassica oleracea. Molecular Breeding, 2008, 21, 205-216.	2.1	45
52	Water supply and growing season influence glucosinolate concentration and composition in turnip root (<i>Brassica rapa</i> ssp. <i>rapifera</i> L.). Journal of Plant Nutrition and Soil Science, 2008, 171, 255-265.	1.9	66
53	Modelling leaf phototropism in a cucumber canopy. Functional Plant Biology, 2008, 35, 876.	2.1	39
54	Glucosinolate Concentration in Turnip (<i>Brassica rapa</i> ssp. <i>rapifera</i> L.) Roots as Affected by Nitrogen and Sulfur Supply. Journal of Agricultural and Food Chemistry, 2007, 55, 8452-8457.	5.2	81

#	Article	IF	Citations
55	Modelling the effects of soil water limitations on transpiration and stomatal regulation of cauliflower. European Journal of Agronomy, 2007, 26, 375-383.	4.1	16
56	Estimation of Geometric Attributes and Masses of Individual Cucumber Organs Using Three-dimensional Digitizing and Allometric Relationships. Journal of the American Society for Horticultural Science, 2007, 132, 439-446.	1.0	16
57	Plant growth, water relations and transpiration of two species of African nightshade (Solanum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 water-limited conditions. Scientia Horticulturae, 2006, 110, 7-15.	3.6	18
58	Plant Growth, Water Relations, and Transpiration of Spiderplant [Gynandropsis gynandra (L.) Briq.] under Water-limited Conditions. Journal of the American Society for Horticultural Science, 2005, 130, 469-477.	1.0	16
59	Root growth and dry matter partitioning of cauliflower under drought stress conditions: measurement and simulation. European Journal of Agronomy, 2004, 20, 379-394.	4.1	121
60	Biomass partitioning, specific leaf area, and water use efficiency of vegetable amaranth (Amaranthus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.6	225
61	Irrigation Scheduling of Kohlrabi (Brassica oleracea var. gongylodes) Using Crop Water Stress Index. Hortscience: A Publication of the American Society for Hortcultural Science, 2004, 39, 276-279.	1.0	12
62	Predicting dry-matter partitioning between individual cauliflower leaves using a source limitation/sink hierarchy model. Journal of Horticultural Science and Biotechnology, 2003, 78, 537-548.	1.9	1
63	Aspects of nitrogen use efficiency of cauliflower II. Productivity and nitrogen partitioning as influenced by N supply. Journal of Agricultural Science, 2003, 141, 17-29.	1.3	12
64	Leaf water relations of vegetable amaranth (Amaranthus spp.) in response to soil drying. European Journal of Agronomy, 2002, 16, 137-150.	4.1	66
65	Title is missing!. Plant and Soil, 2002, 246, 201-209.	3.7	30
66	Leaf Expansion, Stomatal Conductance, and Transpiration of Vegetable Amaranth (Amaranthus sp.) in Response to Soil Drying. Journal of the American Society for Horticultural Science, 2002, 127, 878-883.	1.0	63
67	Predicting dry matter production of cauliflower (Brassica oleracea L. botrytis) under unstressed conditions. Scientia Horticulturae, 2001, 87, 171-190.	3.6	18
68	Canopy development of Chenopodium album in pure and mixed stands. Weed Research, 2001, 41, 111-128.	1.7	6
69	Dry matter production and partitioning of Chenopodium album in contrasting competitive environments. Weed Research, 2001, 41, 129-142.	1.7	12
70	Quantitative aspects of Orobanche crenata infestation in faba beans as affected by abiotic factors and parasite soil seedbank. Weed Research, 2001, 41, 311-324.	1.7	24
71	A model for light competition between vegetable crops and weeds. European Journal of Agronomy, 2001, 14, 13-29.	4.1	19
72	Nitrogen Status and Light Environment Influence Dry Matter Partitioning in Cauliflower. Journal of the American Society for Horticultural Science, 2001, 126, 750-756.	1.0	2

#	Article	IF	Citations
73	Title is missing!. Plant and Soil, 2000, 223, 133-147.	3.7	40
74	Optimal Nitrogen Content and Photosynthesis in Cauliflower (Brassica oleracea L. botrytis). Scaling up from a Leaf to the Whole Plant. Annals of Botany, 2000, 85, 779-787.	2.9	16
75	Modelling Nitrogen Content and Distribution in Cauliflower (Brassica oleracea L.botrytis). Annals of Botany, 2000, 86, 963-973.	2.9	18
76	A simple empirical model for predicting development and dry matter partitioning in cauliflower (Brassica oleracea L. botrytis). Scientia Horticulturae, 1999, 80, 19-38.	3.6	28
77	A Threeâ€Dimensional Approach to Modeling Light Interception in Heterogeneous Canopies. Agronomy Journal, 1999, 91, 1024-1032.	1.8	28
78	Simulation of faba bean (Vicia faba L.) root system development under Mediterranean conditions. European Journal of Agronomy, 1998, 9, 259-272.	4.1	44
79	Simulation of faba bean (Vicia faba L.) growth and development under Mediterranean conditions: Model adaptation and evaluation. European Journal of Agronomy, 1998, 9, 273-293.	4.1	35
80	Lichtaufnahme und Stoffproduktion eines konventionellen und eines epigonalen Genotyps der WeiÃŸen Lupine (Lupinus albus). Journal of Agronomy and Crop Science, 1993, 171, 1-12.	3.5	1
81	Die Ertragsbildung und Ertragsstruktur eines konventionellen und eines epigonalen Genotyps der WeiÃŸen Lupine (Lupinus albus). Journal of Agronomy and Crop Science, 1993, 170, 177-186.	3.5	0
82	Dry Matter Partitioning in a Determinate and an Indeterminate Cultivar of Vicia faba L. Under Contrasting Plant Distributions and Densities. Annals of Botany, 1991, 67, 487-495.	2.9	12
83	Canopy development of a determinate and an indeterminate cultivar of Vicia faba L. under contrasting plant distributions and densities. Annals of Applied Biology, 1991, 118, 185-199.	2.5	11
84	The physiological causes of mixing effects in cultivar mixtures: A general hypothesis. Agricultural Systems, 1990, 32, 41-53.	6.1	13
85	Sorten-Mischungseffekte in Wintergerstenbestanden in AbhÃngigkeit von Standort und ProduktionsintensitÃt. Journal of Agronomy and Crop Science, 1989, 162, 180-191.	3.5	4
86	Effekte der Sorten- (Weizen)und der Arten- (Weizen, Roggen) Mischung auf die Ertragsleistung krankheitsfreier BestÃnde. Journal of Agronomy and Crop Science, 1989, 163, 319-329.	3.5	2
87	Yield determinants of guar (Cyamopsis tetragonoloba): 2. Nitrogen accumulation and growth at high plant density. Field Crops Research, 1989, 21, 39-47.	5.1	1
88	Yield determinants of Guar (Cyamopsis tetragonoloba): 1. Grain yield and pod number. Field Crops Research, 1989, 21, 29-37.	5.1	9
89	Effects of winter barley cultivar mixtures on lodging. Journal of Agricultural Science, 1989, 112, 47-55.	1.3	6
90	Grain Yield of Intercropped Sorghum and Pearl Millet as Influenced by Sorghum Genotype and Cropping Pattern. Journal of Agronomy and Crop Science, 1988, 160, 191-197.	3.5	1

#	Article	IF	Citations
91	A Model of the Partitioning of New Above-ground Dry Matter. Annals of Botany, 1988, 61, 481-487.	2.9	18