Jochem B Evers

List of Publications by Year
in descending order

77 papers	3,529 citations	136950 32 h-index	155660 55 g-index
77 all docs	77 docs citations	77 times ranked	3177 citing authors

#	Article	IF	Citations
1	Root plasticity and interspecific complementarity improve yields and water use efficiency of maize/soybean intercropping in a water-limited condition. Field Crops Research, 2022, 282, 108523.	5.1	12
2	The effect of pruning on yield of cocoa trees is mediated by tree size and tree competition. Scientia Horticulturae, 2022, 304, 111275.	3.6	8
3	Light from below matters: Quantifying the consequences of responses to farâ€red light reflected upwards for plant performance in heterogeneous canopies. Plant, Cell and Environment, 2021, 44, 102-113.	5.7	8
4	Turning plant interactions upside down: Light signals from below matter. Plant, Cell and Environment, 2021, 44, 1111-1118.	5.7	5
5	Estimating the contribution of plant traits to light partitioning in simultaneous maize/soybean intercropping. Journal of Experimental Botany, 2021, 72, 3630-3646.	4.8	36
6	Mycorrhizal associations change root functionality: a 3D modelling study on competitive interactions between plants for light and nutrients. New Phytologist, 2021, 231, 1171-1182.	7.3	17
7	Improving C4 photosynthesis to increase productivity under optimal and suboptimal conditions. Journal of Experimental Botany, 2021, 72, 5942-5960.	4.8	25
8	Does reduced intraspecific competition of the dominant species in intercrops allow for a higher population density?. Food and Energy Security, 2021, 10, 285-298.	4.3	12
9	Breeding Beyond Monoculture: Putting the â€œIntercropâ€•Into Crops. Frontiers in Plant Science, 2021, 12, 734167.	3.6	32
10	Quantifying the contribution of bent shoots to plant photosynthesis and biomass production of flower shoots in rose (Rosa hybrida) using a functionalâ€"structural plant model. Annals of Botany, 2020, 126, 587-599.	2.9	13
11	Disentangling the effects of photosynthetically active radiation and red to far-red ratio on plant photosynthesis under canopy shading: a simulation study using a functionalâ€"structural plant model. Annals of Botany, 2020, 126, 635-646.	2.9	13
12	Leaf Nitrogen Traits in Response to Plant Density and Nitrogen Supply in Oilseed Rape. Agronomy, 2020, 10, 1780.	3.0	6
13	Substantial differences occur between canopy and ambient climate: Quantification of interactions in a greenhouse-canopy system. PLoS ONE, 2020, 15, e0233210.	2.5	12
14	Plant architectural responses in simultaneous maize/soybean strip intercropping do not lead to a yield advantage. Annals of Applied Biology, 2020, 177, 195-210.	2.5	13
15	Border-row proportion determines strength of interspecific interactions and crop yields in maize/peanut strip intercropping. Field Crops Research, 2020, 253, 107819.	5.1	51
16	Simulating the effects of water limitation on plant biomass using a 3D functionalâ€"structural plant model of shoot and root driven by soil hydraulics. Annals of Botany, 2020, 126, 713-728.	2.9	13
17	Quantifying the Feedback Between Rice Architecture, Physiology, and Microclimate Under Current and Future CO 2 Conditions. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005452.	3.0	5
18	Optimal plant defence under competition for light and nutrients: an evolutionary modelling approach. In Silico Plants, 2020, 2, .	1.9	4

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19	A new empirical equation to describe the vertical leaf distribution profile of maize. Journal of Agricultural Science, 2020, 158, 676-686.	1.3	8
20	Impact of Future Warming and Enhanced [CO 2] on the Vegetationâ€Cloud Interaction. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12444-12454.	3.3	8
21	Variation in plastic responses to light results from selection in different competitive environmentsâ€"A game theoretical approach using virtual plants. PLoS Computational Biology, 2019, 15, e1007253.	3.2	14
22	A lack of complementarity for water acquisition limits yield advantage of oats/vetch intercropping in a semi-arid condition. Agricultural Water Management, 2019, 225, 105778.	5.6	13
23	Ecological significance of light quality in optimizing plant defence. Plant, Cell and Environment, 2019, 42, 1065-1077.	5.7	12
24	Use of EDAH Improves Maize Morphological and Mechanical Traits Related to Lodging. Agronomy Journal, 2019, 111, 581-591.	1.8	13
25	Current knowledge and future research opportunities for modeling annual crop mixtures. A review. Agronomy for Sustainable Development, 2019, 39, 1.	5.3	87
26	Understanding and optimizing species mixtures using functionalâ€"structural plant modelling. Journal of Experimental Botany, 2019, 70, 2381-2388.	4.8	54
27	Intercropping potato (Solanum tuberosum L.) with hairy vetch (Vicia villosa) increases water use efficiency in dry conditions. Field Crops Research, 2019, 240, 168-176.	5.1	43
28	Optimized sowing time windows mitigate climate risks for oats production under cool semi-arid growing conditions. Agricultural and Forest Meteorology, 2019, 266-267, 184-197.	4.8	24
29	Ecological interactions shape the adaptive value of plant defence: Herbivore attack versus competition for light. Functional Ecology, 2019, 33, 129-138.	3.6	28
30	Agroforestry enables high efficiency of light capture, photosynthesis and dry matter production in a semi-arid climate. European Journal of Agronomy, 2018, 94, 1-11.	4.1	37
31	Quantifying within-plant spatial heterogeneity in carbohydrate availability in cotton using a local-pool model. Annals of Botany, 2018, 121, 1005-1017.	2.9	11
32	Elucidating the interaction between light competition and herbivore feeding patterns using functionalâ€"structural plant modelling. Annals of Botany, 2018, 121, 1019-1031.	2.9	27
33	Subtle variation in shade avoidance responses may have profound consequences for plant competitiveness. Annals of Botany, 2018, 121, 863-873.	2.9	39
34	Modelling the combined effect of moisture and temperature on secondary infection in a coupled host-pathogen FSPM. , 2018, , .		0
35	Computational botany: advancing plant science through functionalâ€"structural plant modelling. Annals of Botany, 2018, 121, 767-772.	2.9	38
36	Use of the beta growth function to quantitatively characterize the effects of plant density and a growth regulator on growth and biomass partitioning in cotton. Field Crops Research, 2018, 224, 28-36.	5.1	25

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37	Dynamic Plantâ€"Plantâ€"Herbivore Interactions Govern Plant Growthâ€"Defence Integration. Trends in Plant Science, 2017, 22, 329-337.	8.8	40
38	Ridge and furrow systems with film cover increase maize yields and mitigate climate risks of cold and drought stress in continental climates. Field Crops Research, 2017, 207, 71-78.	5.1	26
39	Plasticity of seed weight compensates reductions in seed number of oilseed rape in response to shading at flowering. European Journal of Agronomy, 2017, 84, 113-124.	4.1	52
40	Spatial configuration drives complementary capture of light of the understory cotton in young jujube plantations. Field Crops Research, 2017, 213, 21-28.	5.1	18
41	Neighbor detection at the leaf tip adaptively regulates upward leaf movement through spatial auxin dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7450-7455.	7.1	118
42	Morphological plasticity of root growth under mild water stress increases water use efficiency without reducing yield in maize. Biogeosciences, 2017, 14, 3851-3858.	3.3	26
43	Density responses and spatial distribution of cotton yield and yield components in jujube (Zizyphus) Tj ETQq1 1 0.784314 rgBT /Overlo	4.1	30
44	Mixing trees and crops increases land and water use efficiencies in a semi-arid area. Agricultural Water Management, 2016, 178, 281-290.	5.6	62
45	Quantifying the effect of crop spatial arrangement on weed suppression using functional-structural plant modelling. Journal of Plant Research, 2016, 129, 339-351.	2.4	44
46	High productivity of wheat intercropped with maize is associated with plant architectural responses. Annals of Applied Biology, 2016, 168, 357-372.	2.5	36
47	Identification of plant configurations maximizing radiation capture in relay strip cotton using a functionalâ€"structural plant model. Field Crops Research, 2016, 187, 1-11.	5.1	22
48	Simulating Crop Growth and Development Using Functional-Structural Plant Modeling. Advances in Photosynthesis and Respiration, 2016, , 219-236.	1.0	20
49	Yield components and quality of intercropped cotton in response to mepiquat chloride and plant density. Field Crops Research, 2015, 179, 63-71.	5.1	56
50	The contribution of phenotypic plasticity to complementary light capture in plant mixtures. New Phytologist, 2015, 207, 1213-1222.	7.3	143
51	Sugar as a key component of the shoot branching regulation network. Plant, Cell and Environment, 2015, 38, 1455-1456.	5.7	17
52	Resource use efficiency, ecological intensification and sustainability of intercropping systems. Journal of Integrative Agriculture, 2015, 14, 1542-1550.	3.5	42
53	Early competition shapes maize whole-plant development in mixed stands. Journal of Experimental Botany, 2014, 65, 641-653.	4.8	50
54	Canopy architectural and physiological characterization of near-isogenic wheat lines differing in the tiller inhibition gene tin. Frontiers in Plant Science, 2014, 5, 617.	3.6	37

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55	Towards modelling the flexible timing of shoot development: simulation of maize organogenesis based on coordination within and between phytomers. Annals of Botany, 2014, 114, 753-762.	2.9	18
56	Predicting the effects of environment and management on cotton fibre growth and quality: a functional-structural plant modelling approach. AoB PLANTS, 2014, 6, plu040-plu040.	2.3	16
57	Modelling the structural response of cotton plants to mepiquat chloride and population density. Annals of Botany, 2014, 114, 877-887.	2.9	41
58	From shade avoidance responses to plant performance at vegetation level: using virtual plant modelling as a tool. New Phytologist, 2014, 204, 268-272.	7.3	31
59	Plant density affects light interception and yield in cotton grown as companion crop in young jujube plantations. Field Crops Research, 2014, 169, 132-139.	5.1	53
60	Optimizing soaking and germination conditions to improve gamma-aminobutyric acid content in japonica and indica germinated brown rice. Journal of Functional Foods, 2014, 10, 283-291.	3.4	108
61	Maize yield and quality in response to plant density and application of a novel plant growth regulator. Field Crops Research, 2014, 164, 82-89.	5.1	94
62	Extension of the GroIMP modelling platform to allow easy specification of differential equations describing biological processes within plant models. Computers and Electronics in Agriculture, 2013, 92, 1-8.	7.7	13
63	Managing mepiquat chloride and plant density for optimal yield and quality of cotton. Field Crops Research, 2013, 149, 1-10.	5.1	85
64	Modeling branching in cereals. Frontiers in Plant Science, 2013, 4, 399.	3.6	21
65	Simulation of optimal rooting strategies: What's the best way to find a wet crack?. , 2012, , .		2
66	Plant neighbor detection through touching leaf tips precedes phytochrome signals. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14705-14710.	7.1	89
67	Understanding shoot branching by modelling form and function. Trends in Plant Science, 2011, 16, 464-467.	8.8	96
68	Simulation of wheat growth and development based on organ-level photosynthesis and assimilate allocation. Journal of Experimental Botany, 2010, 61, 2203-2216.	4.8	111
69	Functionalâ€“structural plant modelling: a new versatile tool in crop science. Journal of Experimental Botany, 2010, 61, 2101-2115.	4.8	434
70	Using combined measurements of gas exchange and chlorophyll fluorescence to estimate parameters of a biochemical C₃ photosynthesis model: a critical appraisal and a new integrated approach applied to leaves in a wheat (<i>Triticum aestivum</i>) canopy. Plant, Cell and Environment, 2009, 32, 448-464.	5.7	201
71	Light Extinction in Spring Wheat Canopies in Relation to Crop Configuration and Solar Angle. , 2009, , .		4
72	The Derivation of Sink Functions of Wheat Organs using the GREENLAB Model. Annals of Botany, 2007, 101, 1099-1108.	2.9	38

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73	Simulation of the threeâ€dimensional distribution of the red:farâ€red ratio within crop canopies. New Phytologist, 2007, 176, 223-234.	7.3	54
74	Simulating the effects of localized red:farâ€red ratio on tillering in spring wheat (<i>Triticum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	7.3	84
75	An architectural model of spring wheat: Evaluation of the effects of population density and shading on model parameterization and performance. Ecological Modelling, 2007, 200, 308-320.	2.5	65
76	Cessation of Tillering in Spring Wheat in Relation to Light Interception and Red : Far-red Ratio. Annals of Botany, 2006, 97, 649-658.	2.9	168
77	Towards a generic architectural model of tillering in Gramineae, as exemplified by spring wheat () Tj ETQq1 1 0.784314 rgBT /Overlock 1	7.3	98