Petr Hlavinka

List of Publications by Year in descending order

75 papers	3,914 citations	117453 34 h-index	128067 60 g-index
76 all docs	76 docs citations	76 times ranked	4403 citing authors

#	Article	IF	Citations
1	Simulation of winter wheat yield and its variability in different climates of Europe: A comparison of eight crop growth models. European Journal of Agronomy, 2011, 35, 103-114.	1.9	408
2	Agroclimatic conditions in Europe under climate change. Global Change Biology, 2011, 17, 2298-2318.	4.2	315
3	Simulation of spring barley yield in different climatic zones of Northern and Central Europe: A comparison of nine crop models. Field Crops Research, 2012, 133, 23-36.	2.3	269
4	Application of relative drought indices in assessing climate-change impacts on drought conditions in Czechia. Theoretical and Applied Climatology, 2009, 96, 155-171.	1.3	191
5	Effect of drought on yield variability of key crops in Czech Republic. Agricultural and Forest Meteorology, 2009, 149, 431-442.	1.9	179
6	Cereal yield gaps across Europe. European Journal of Agronomy, 2018, 101, 109-120.	1.9	135
7	Crop rotation modellingâ€"A European model intercomparison. European Journal of Agronomy, 2015, 70, 98-111.	1.9	125
8	Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. Climate Research, 2015, 65, 87-105.	0.4	122
9	Mitigation efforts will not fully alleviate the increase in water scarcity occurrence probability in wheat-producing areas. Science Advances, 2019, 5, eaau2406.	4.7	104
10	Interactive effects of high temperature and drought stress during stem elongation, anthesis and early grain filling on the yield formation and photosynthesis of winter wheat. Field Crops Research, 2018, 221, 182-195.	2.3	98
11	Variability of droughts in the Czech Republic, 1881â€"2006. Theoretical and Applied Climatology, 2009, 97, 297-315.	1.3	83
12	Use of a soil moisture network for drought monitoring in the Czech Republic. Theoretical and Applied Climatology, 2012, 107, 99-111.	1.3	73
13	Comparing the performance of 11 crop simulation models in predicting yield response to nitrogen fertilization. Journal of Agricultural Science, 2016, 154, 1218-1240.	0.6	70
14	Consequences of climate change for the soil climate in Central Europe and the central plains of the United States. Climatic Change, 2013, 120, 405-418.	1.7	69
15	Adaptation options for wheat in Europe will be limited by increased adverse weather events under climate change. Journal of the Royal Society Interface, 2015, 12, 20150721.	1.5	69
16	Drought trends over part of Central Europe between 1961 and 2014. Climate Research, 2016, 70, 143-160.	0.4	69
17	Regional climate change impacts on agricultural crop production in Central and Eastern Europe â€" hotspots, regional differences and common trends. Journal of Agricultural Science, 2013, 151, 787-812.	0.6	68
18	Adaptation response surfaces for managing wheat under perturbed climate and CO2 in a Mediterranean environment. Agricultural Systems, 2018, 159, 260-274.	3.2	68

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19	Simple snow cover model for agrometeorological applications. Agricultural and Forest Meteorology, 2010, 150, 1115-1127.	1.9	66
20	Development and evaluation of the SoilClim model for water balance and soil climate estimates. Agricultural Water Management, 2011, 98, 1249-1261.	2.4	63
21	Soil moisture trends in the Czech Republic between 1961 and 2012. International Journal of Climatology, 2015, 35, 3733-3747.	1.5	61
22	Combined effects of drought and high temperature on photosynthetic characteristics in four winter wheat genotypes. Field Crops Research, 2018, 223, 137-149.	2.3	57
23	Expected changes in agroclimatic conditions in Central Europe. Climatic Change, 2011, 108, 261-289.	1.7	55
24	Could the changes in regional crop yields be a pointer of climatic change?. Agricultural and Forest Meteorology, 2012, 166-167, 62-71.	1.9	55
25	Czech Drought Monitor System for monitoring and forecasting agricultural drought and drought impacts. International Journal of Climatology, 2020, 40, 5941-5958.	1.5	55
26	Variability in the Water Footprint of Arable Crop Production across European Regions. Water (Switzerland), 2017, 9, 93.	1.2	54
27	The extreme drought episode of August 2011â€“May 2012 in the Czech Republic. International Journal of Climatology, 2015, 35, 3335-3352.	1.5	53
28	Characteristic â€˜fingerprintsâ€™ of crop model responses to weather input data at different spatial resolutions. European Journal of Agronomy, 2013, 49, 104-114.	1.9	51
29	Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. Agricultural Systems, 2018, 159, 209-224.	3.2	47
30	Changing regional weather-crop yield relationships across Europe between 1901 and 2012. Climate Research, 2016, 70, 195-214.	0.4	44
31	Performance of process-based models for simulation of grain N in crop rotations across Europe. Agricultural Systems, 2017, 154, 63-77.	3.2	43
32	Relationships between the evaporative stress index and winter wheat and spring barley yield anomalies in the Czech Republic. Climate Research, 2016, 70, 215-230.	0.4	41
33	Assessing the combined hazards of drought, soil erosion and local flooding on agricultural land: a Czech case study. Climate Research, 2016, 70, 231-249.	0.4	40
34	Is rainfed crop production in central Europe at risk? Using a regional climate model to produce high resolution agroclimatic information for decision makers. Journal of Agricultural Science, 2010, 148, 639-656.	0.6	39
35	Drivers of soil drying in the Czech Republic between 1961 and 2012. International Journal of Climatology, 2015, 35, 2664-2675.	1.5	37
36	Multi-model uncertainty analysis in predicting grain N for crop rotations in Europe. European Journal of Agronomy, 2017, 84, 152-165.	1.9	35

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37	Implications of crop model ensemble size and composition for estimates of adaptation effects and agreement of recommendations. Agricultural and Forest Meteorology, 2019, 264, 351-362.	1.9	35
38	Influence of climatic factors on the low yields of spring barley and winter wheat in Southern Moravia (Czech Republic) during the 1961â€“2007 period. Theoretical and Applied Climatology, 2014, 117, 707-721.	1.3	33
39	Impacts of water availability and drought on maize yield â€“ A comparison of 16 indicators. Agricultural Water Management, 2017, 188, 126-135.	2.4	32
40	Agricultural drought and spring barley yields in the Czech Republic. Plant, Soil and Environment, 2007, 53, 306-316.	1.0	30
41	â€˜Fingerprintsâ€™ of four crop models as affected by soil input data aggregation. European Journal of Agronomy, 2014, 61, 35-48.	1.9	28
42	Modelling of yields and soil nitrogen dynamics for crop rotations by HERMES under different climate and soil conditions in the Czech Republic. Journal of Agricultural Science, 2014, 152, 188-204.	0.6	27
43	Drought reconstruction based on grape harvest dates for the Czech Lands, 1499-2012. Climate Research, 2016, 70, 119-132.	0.4	26
44	Climate-driven changes of production regions in Central Europe. Plant, Soil and Environment, 2009, 55, 257-266.	1.0	24
45	Assessing Uncertainties of Water Footprints Using an Ensemble of Crop Growth Models on Winter Wheat. Water (Switzerland), 2016, 8, 571.	1.2	23
46	Quantifying turbulent energy fluxes and evapotranspiration in agricultural field conditions: A comparison of micrometeorological methods. Agricultural Water Management, 2018, 209, 249-263.	2.4	21
47	Observed changes in the agroclimatic zones in the Czech Republic between 1961 and 2019. Plant, Soil and Environment, 2021, 67, 154-163.	1.0	20
48	Effect of heat stress at anthesis on yield formation in winter wheat. Plant, Soil and Environment, 2017, 63, 139-144.	1.0	17
49	Water requirements of short rotation poplar coppice: Experimental and modelling analyses across Europe. Agricultural and Forest Meteorology, 2018, 250-251, 343-360.	1.9	17
50	Estimating the water use efficiency of spring barley using crop models. Journal of Agricultural Science, 2018, 156, 628-644.	0.6	13
51	Water balance, drought stress and yields for rainfed field crop rotations under present and future conditions in the Czech Republic. Climate Research, 2015, 65, 175-192.	0.4	13
52	Performance of 13 crop simulation models and their ensemble for simulating four field crops in Central Europe. Journal of Agricultural Science, 2021, 159, 69-89.	0.6	11
53	Climate change impacts on selected aspects of the Czech agricultural production. Plant Protection Science, 2009, 45, S11-S19.	0.7	10
54	Drought Prediction System for Central Europe and Its Validation. Geosciences (Switzerland), 2018, 8, 104.	1.0	10

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55	Carbon pool in soil under organic and conventional farming systems. Soil and Water Research, 2019, 14, 145-152.	0.7	10
56	Observed and estimated consequences of climate change for the fire weather regime in the moist-temperate climate of the Czech Republic. Agricultural and Forest Meteorology, 2021, 310, 108583.	1.9	10
57	Increasing available water capacity as a factor for increasing drought resilience or potential conflict over water resources under present and future climate conditions. Agricultural Water Management, 2022, 264, 107460.	2.4	10
58	Potential of water balance and remote sensing-based evapotranspiration models to predict yields of spring barley and winter wheat in the Czech Republic. Agricultural Water Management, 2021, 256, 107064.	2.4	9
59	Validity and reliability of drought reporters in estimating soil water content and drought impacts in central Europe. Agricultural and Forest Meteorology, 2022, 315, 108808.	1.9	9
60	Observed and expected changes in wildfire-conducive weather and fire events in peri-urban zones and key nature reserves of the Czech Republic. Climate Research, 2020, 82, 33-54.	0.4	8
61	Estimating Crop Yields at the Field Level Using Landsat and MODIS Products. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 1141-1150.	0.2	7
62	Calibration and Validation of the Crop Growth Model DAISY for Spring Barley in the Czech Republic. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2015, 63, 1177-1186.	0.2	6
63	Expected effects of climate change on the production and water use of crop rotation management reproduced by crop model ensemble for Czech Republic sites. European Journal of Agronomy, 2022, 134, 126446.	1.9	6
64	The Challenges of Measuring Environmental Sustainability. Political Research Quarterly, 2009, 62, 205-208.	1.1	5
65	Future agroclimatic conditions and implications for European grasslands. Biologia Plantarum, 0, 64, 865-880.	1.9	5
66	Evaluating drought risk for permanent grasslands under present and future climate conditions. Procedia Environmental Sciences, 2011, 3, 50-57.	1.3	4
67	The performance of Metop Advanced SCATterometer soil moisture data as a complementary source for the estimation of crop-soil water balance in Central Europe. Journal of Agricultural Science, 2018, 156, 577-598.	0.6	4
68	Trends in temperature and precipitation in the period of 1961-2010 in Å½abÄice locality. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2013, 61, 1521-1531.	0.2	4
69	Is Crop Growth Model Able to Reproduce Drought Stress Caused by Rain-Out Shelters Above Winter Wheat?. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 225-233.	0.2	4
70	Droughts and Drought Management in the Czech Republic in a Changing Climate. Drought and Water Crises, 2017, , 461-480.	0.1	4
71	ANNUAL AND INTRA-ANNUAL WATER BALANCE COMPONENTS OF A SHORT ROTATION POPLAR COPPICE BASED ON SAP FLOW AND MICROMETEOROLOGICAL AND HYDROLOGICAL APPROACHES. Acta Horticulturae, 2013, , 401-408.	0.1	3
72	The Possibility of Consensus Regarding Climate Change Adaptation Policies in Agriculture and Forestry among Stakeholder Groups in the Czech Republic. Environmental Management, 2021, , 1.	1.2	2

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73	Empirical model for estimating daily erythemal UV radiation in the Central European region. Meteorologische Zeitschrift, 2007, 16, 183-190.	0.5	1
74	Climate Change Impacts on Czech Agriculture. , 0, , .		1
75	Yield Formation Parameters of Selected Winter Wheat Genotypes in Response to Water Shortage. Agronomy, 2022, 12, 831.	1.3	1