

# Michael M Blanke

## List of Publications by Year in descending order

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118  
papers

3,590  
citations

136740

32  
h-index

182168

51  
g-index

167  
all docs

167  
docs citations

167  
times ranked

3005  
citing authors

#	ARTICLE	IF	CITATIONS
1	Potential impacts of climate change on vegetable production and product quality – A review. <i>Journal of Cleaner Production</i> , 2018, 170, 1602-1620.	4.6	248
2	Identification of chilling and heat requirements of cherry trees – a statistical approach. <i>International Journal of Biometeorology</i> , 2013, 57, 679-689.	1.3	141
3	Food (miles) for Thought - Energy Balance for Locally-grown versus Imported Apple Fruit (3 pp). <i>Environmental Science and Pollution Research</i> , 2005, 12, 125-127.	2.7	137
4	Differential responses of trees to temperature variation during the chilling and forcing phases. <i>Agricultural and Forest Meteorology</i> , 2013, 181, 33-42.	1.9	118
5	A comprehensive overview of the spatial and temporal variability of apple bud dormancy release and blooming phenology in Western Europe. <i>International Journal of Biometeorology</i> , 2013, 57, 317-331.	1.3	102
6	Using colour features of cv. ‘Gala’™ apple fruits in an orchard in image processing to predict yield. <i>Precision Agriculture</i> , 2012, 13, 568-580.	3.1	99
7	Early Yield Prediction Using Image Analysis of Apple Fruit and Tree Canopy Features with Neural Networks. <i>Journal of Imaging</i> , 2017, 3, 6.	1.7	82
8	Effects of flooding and drought on stomatal activity, transpiration, photosynthesis, water potential and water channel activity in strawberry stolons and leaves. <i>Plant Growth Regulation</i> , 2004, 42, 153-160.	1.8	66
9	Overcoming adverse effects of hailnets on fruit quality and microclimate in an apple orchard. <i>Journal of the Science of Food and Agriculture</i> , 2007, 87, 2625-2637.	1.7	61
10	Effects of fruit thinning agents on apple tree canopy photosynthesis and dark respiration. <i>Plant Growth Regulation</i> , 2001, 35, 1-9.	1.8	60
11	Phenological models for the beginning of apple blossom in Germany. <i>Meteorologische Zeitschrift</i> , 2011, 20, 487-496.	0.5	56
12	Mechanical flower thinning improves the fruit quality of apples. <i>Journal of the Science of Food and Agriculture</i> , 2010, 90, 735-741.	1.7	54
13	Stomata of apple leaves cultured in vitro. <i>Plant Cell, Tissue and Organ Culture</i> , 1989, 19, 85-89.	1.2	52
14	Effect of delayed fruit harvest on photosynthesis, transpiration and nutrient remobilization of apple leaves. <i>New Phytologist</i> , 2004, 164, 441-450.	3.5	52
15	Coloured hailnets alter light transmission, spectra and phytochrome, as well as vegetative growth, leaf chlorophyll and photosynthesis and reduce flower induction of apple. <i>Plant Growth Regulation</i> , 2008, 56, 211-218.	1.8	52
16	Smallholder farmers as a backbone for the implementation of the Sustainable Development Goals. <i>Sustainable Development</i> , 2019, 27, 523-529.	6.9	52
17	The microclimate under coloured hailnets affects leaf and fruit temperature, leaf anatomy, vegetative and reproductive growth as well as fruit colouration in apple. <i>Annals of Applied Biology</i> , 2010, 156, 121-136.	1.3	51
18	Soil respiration in an apple orchard. <i>Environmental and Experimental Botany</i> , 1996, 36, 339-348.	2.0	49

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19	Reducing ethylene levels along the food supply chain: a key to reducing food waste?. <i>Journal of the Science of Food and Agriculture</i> , 2014, 94, 2357-2361.	1.7	49
20	Can coloured hailnets improve taste (sugar, sugar: acid ratio), consumer appeal (colouration) and nutritional value (anthocyanin, vitamin C) of apple fruit?. <i>LWT - Food Science and Technology</i> , 2010, 43, 1277-1284.	2.5	48
21	Effects of defruiting on source-sink relationship, carbon budget, leaf carbohydrate content and water use efficiency of apple trees. <i>Physiologia Plantarum</i> , 1995, 94, 529-533.	2.6	46
22	Changes in carbohydrate levels and relative water content (RWC) to distinguish dormancy phases in sweet cherry. <i>Journal of Plant Physiology</i> , 2017, 218, 1-5.	1.6	46
23	Bioactive components in forced sweet cherry fruit ( <i>Prunus avium</i> L.), antioxidative capacity and allergenic potential as dependent on cultivation under cover. <i>LWT - Food Science and Technology</i> , 2012, 46, 388-392.	2.5	45
24	Pomological Characteristics of Some Autochthonous Genotypes of Cornelian Cherry ( <i>Cornus mas</i> L.) in Bosnia and Herzegovina. <i>Erwerbs-Obstbau</i> , 2014, 56, 59-66.	0.5	44
25	Anatomy and Transpiration of the Avocado Inflorescence. <i>Annals of Botany</i> , 1993, 71, 543-547.	1.4	43
26	Stomatal Activity of the Grape Berry cv. Riesling, Müller-Thurgau and Ehrenfelser. <i>Journal of Plant Physiology</i> , 1987, 127, 451-460.	1.6	42
27	Farming and marketing system affects carbon and water footprint – a case study using Hokaido pumpkin. <i>Journal of Cleaner Production</i> , 2012, 28, 113-119.	4.6	41
28	Non-invasive assessment of glossiness and polishing of the wax bloom of European plum. <i>Postharvest Biology and Technology</i> , 2014, 87, 144-151.	2.9	39
29	Regulation of source: sink relationship, fruit set, fruit growth and fruit quality in European plum ( <i>Prunus domestica</i> L.) using thinning for crop load management. <i>Plant Growth Regulation</i> , 2011, 65, 335-341.	1.8	37
30	Stomatal and Cuticular Transpiration of the Cap and Berry of Grape. <i>Journal of Plant Physiology</i> , 1988, 132, 250-253.	1.6	34
31	Effects of defruiting on source-sink relationship, carbon budget, leaf carbohydrate content and water use efficiency of apple trees. <i>Physiologia Plantarum</i> , 1995, 94, 529-533.	2.6	34
32	Effect of mechanical harvest and timing of 1-MCP application on respiration and fruit quality of European plums <i>Prunus domestica</i> L. <i>Postharvest Biology and Technology</i> , 2004, 34, 305-311.	2.9	33
33	Alternatives to reflective mulch cloth (Extenday <sup>®</sup> ) for apple under hail net?. <i>Scientia Horticulturae</i> , 2008, 116, 223-226.	1.7	33
34	Quantifying key parameters as elicitors for alternate fruit bearing in cv. "Elstar"™ apple trees. <i>Plant Science</i> , 2013, 212, 10-14.	1.7	33
35	The Effects of Extreme Weather on Apple Quality. <i>Scientific Reports</i> , 2020, 10, 7919.	1.6	33
36	Mechanical flower thinning improves fruit quality of apples and promotes consistent bearing. <i>Scientia Horticulturae</i> , 2012, 134, 241-244.	1.7	31

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37	Challenges of Reducing Fresh Produce Waste in Europeâ€™From Farm to Fork. Agriculture (Switzerland), 2015, 5, 389-399.	1.4	30
38	Securing Horticulture in a Changing Climateâ€™A Mini Review. Horticulturae, 2019, 5, 56.	1.2	30
39	Effect of fruiting on carbon budgets of apple tree canopies. Trees - Structure and Function, 1993, 8, 56.	0.9	29
40	Structure and Elemental Compositon of Grape Berry Stomata. Journal of Plant Physiology, 1999, 154, 477-481.	1.6	29
41	Substitution of winter chilling by spring forcing for flowering using sweet cherry as model crop. Scientia Horticulturae, 2019, 244, 75-81.	1.7	28
42	Bioenergetics, maintenance respiration and transpiration of pepper fruits. Journal of Plant Physiology, 1997, 150, 247-250.	1.6	27
43	Deficiency of potassium but not phosphorus enhances root respiration. Plant Growth Regulation, 2000, 32, 77-81.	1.8	27
44	Reflective materials under hailnet improve orchard light utilisation, fruit quality and particularly fruit colouration. Scientia Horticulturae, 2011, 127, 447-451.	1.7	26
45	Opportunities and Challenges of Carbon Footprint, Climate or CO2 Labelling for Horticultural Products. Erwerbs-Obstbau, 2014, 56, 73-80.	0.5	26
46	Effects of fungicide and insecticide mixtures on apple tree canopy photosynthesis, dark respiration and carbon economy. Crop Protection, 2004, 23, 1001-1006.	1.0	25
47	Reflective mulch enhances ripening and health compounds in apple fruit. Journal of the Science of Food and Agriculture, 2013, 93, 2575-2579.	1.7	25
48	Non-invasive determination of the quality of pomegranate fruit. Postharvest Biology and Technology, 2018, 136, 74-79.	2.9	25
49	Physical and kinetic properties of photosynthetic phosphoenolpyruvate carboxylase in developing apple fruit. Phytochemistry, 1986, 25, 601-606.	1.4	24
50	Bioenergetics, Respiration Cost and Water Relations of Developing Avocado Fruit. Journal of Plant Physiology, 1995, 145, 87-92.	1.6	22
51	Non-Invasive Examination of Plant Surfaces by Opto-Electronic Meansâ€™Using Russet as a Prime Example. Sensors, 2016, 16, 452.	2.1	22
52	Identification of light availability in different sweet cherry orchards under cover by using non-destructive measurements with a Dualexâ„¢. European Journal of Agronomy, 2018, 93, 50-56.	1.9	22
53	Non-invasive Assessment of Firmness and NIR Sugar (TSS) Measurement in Apple, Pear and Kiwi Fruit. Erwerbs-Obstbau, 2013, 55, 19-24.	0.5	20
54	Performance of three numerical models to assess winter chill for fruit treesâ€™a case study using cherry as model crop in Germany. Regional Environmental Change, 2017, 17, 715-723.	1.4	20

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55	Effect of non-chemical crop load regulation on apple fruit quality, assessed by the DA-meter. <i>Scientia Horticulturae</i> , 2018, 233, 526-531.	1.7	19
56	Phosphoenolpyruvate carboxylase in avocado fruit: Purification and properties. <i>Phytochemistry</i> , 1993, 33, 1333-1337.	1.4	18
57	Ammonium Nutrition Enhances Chlorophyll and Glauconsness in Kohlrabi. <i>Annals of Botany</i> , 1996, 78, 599-604.	1.4	18
58	Effect of mechanically-simulated hail on photosynthesis, dark respiration and transpiration of apple leaves. <i>Environmental and Experimental Botany</i> , 2002, 48, 169-175.	2.0	18
59	Does the microclimate under hail nets influence micromorphological characteristics of apple leaves and cuticles?. <i>Journal of Plant Physiology</i> , 2010, 167, 974-980.	1.6	17
60	Carbon reduction strategies for regionally produced and consumed wine: From farm to fork. <i>Journal of Environmental Management</i> , 2021, 278, 111453.	3.8	17
61	Distribution and Physiological Significance of Photosynthetic Phosphoenolpyruvate Carboxylase in Developing Apple Fruit. <i>Journal of Plant Physiology</i> , 1987, 129, 319-325.	1.6	16
62	Light transmission into apple fruit and leaves. <i>Scientia Horticulturae</i> , 1992, 51, 43-53.	1.7	16
63	Stomata and Structure of Tetraploid Apple Leaves cultured in Vitro. <i>Annals of Botany</i> , 1994, 73, 651-654.	1.4	16
64	Alleviation of frost damage to pear flowers by application of gibberellin. <i>Plant Growth Regulation</i> , 2005, 45, 21-27.	1.8	16
65	Fruchtqualität und Ertrag teil-entblätterter Erdbeeren in tropischen Höhenlagen. <i>Gesunde Pflanzen</i> , 2013, 65, 107-112.	1.7	16
66	Non-destructive detection of the wax bloom on European plum during post-harvest handling. <i>Journal of Food Engineering</i> , 2014, 140, 46-51.	2.7	16
67	A main effects meta principal components analysis of netting effects on fruit: using apple as a model crop. <i>Plant Growth Regulation</i> , 2018, 86, 455-464.	1.8	15
68	Anthocyanin synthesis and light utilisation can be enhanced by reflective mulch – Visualisation of light penetration into a tree canopy. <i>Journal of Plant Physiology</i> , 2019, 233, 52-57.	1.6	15
69	Non-invasive, real time in-situ techniques to determine the ripening stage of banana. <i>Journal of Food Measurement and Characterization</i> , 2021, 15, 4426-4437.	1.6	15
70	Kinetics and Physiological Significance of Photosynthetic Phosphoenolpyruvate Carboxylase in Avocado Fruit. <i>Journal of Plant Physiology</i> , 1991, 137, 553-558.	1.6	14
71	Photosynthesis and transpiration of tomato and CO <sub>2</sub> fluxes in a greenhouse under changing environmental conditions in winter. <i>Annals of Applied Biology</i> , 2007, 150, 149-156.	1.3	14
72	A collection of European sweet cherry phenology data for assessing climate change. <i>Scientific Data</i> , 2016, 3, 160108.	2.4	14

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73	Targeted forcing improves quality, nutritional and health value of sweet cherry fruit. <i>Journal of the Science of Food and Agriculture</i> , 2017, 97, 3649-3655.	1.7	14
74	Non-Destructive Sensor-Based Prediction of Maturity and Optimum Harvest Date of Sweet Cherry Fruit. <i>Sensors</i> , 2017, 17, 277.	2.1	14
75	Effect of fruiting and drought or flooding on carbon balance of apple trees. <i>Photosynthetica</i> , 1997, 33, 269.	0.9	13
76	Alternate bearing in fruit tree crops: past, present and future. <i>Acta Horticulturae</i> , 2017, , 241-248.	0.1	13
77	Small fruit problem in Citrus trees. <i>Trees - Structure and Function</i> , 1991, 5, 239-243.	0.9	12
78	Iron Tolerance in Calla Lilies ( <i>Zantedeschia aethiopica</i> ). <i>Gesunde Pflanzen</i> , 2014, 66, 63-68.	1.7	12
79	Effects of climate change on cherry production in Naoussa, Greece and Bonn, Germany: adaptation strategies. <i>Euro-Mediterranean Journal for Environmental Integration</i> , 2020, 5, 1.	0.6	12
80	“60 Years on” Effects of Climatic Change on Tree Phenology” A Case Study Using Pome Fruit. <i>Horticulturae</i> , 2022, 8, 110.	1.2	11
81	Respiration of apple trees between leaf fall and leaf emergence. <i>Environmental and Experimental Botany</i> , 1994, 34, 25-30.	2.0	10
82	Respiration and plasma membrane ATPase in strawberry stolons. <i>Plant Growth Regulation</i> , 2000, 30, 163-170.	1.8	10
83	Alternatives to phosphonates for fruit colouration. <i>Scientia Horticulturae</i> , 2016, 198, 434-437.	1.7	10
84	Mechanical Crop Load Management (CLM) Improves Fruit Quality and Reduces Fruit Drop and Alternate Bearing in European Plum ( <i>Prunus domestica</i> L.). <i>Horticulturae</i> , 2020, 6, 52.	1.2	10
85	Diurnal CO <sub>2</sub> fluctuations in an apple orchard. <i>Environmental and Experimental Botany</i> , 1994, 34, 385-391.	2.0	9
86	Non-Destructive, Opto-Electronic Determination of the Freshness and Shriveling of Bell Pepper Fruits. <i>Journal of Imaging</i> , 2020, 6, 122.	1.7	9
87	Spatial and Temporal Enhancement of Colour Development in Apples Subjected to Reflective Material in the Southern Hemisphere. <i>Horticulturae</i> , 2021, 7, 2.	1.2	9
88	Aliphatic hydrocarbons in an oil-contaminated soil. <i>Environmental Science and Pollution Research</i> , 1999, 6, 2-6.	2.7	8
89	Temperature, evapotranspiration and primary photochemical responses of apple leaves to hail. <i>Journal of Plant Physiology</i> , 2008, 165, 1847-1852.	1.6	8
90	Preanthesis changes in freeze resistance, relative water content, and ovary growth preempt bud phenology and signify dormancy release of sour cherry floral buds. <i>Planta</i> , 2021, 254, 74.	1.6	8

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91	Innovative Strategies for the Use of Reflective Foils for Fruit Colouration to Reduce Plastic Use in Orchards. Sustainability, 2021, 13, 73.	1.6	8
92	Harmonisation of phenology stages and selected cherry cultivars as bioindicators for climate change. Acta Horticulturae, 2017, , 9-12.	0.1	7
93	Comparison of Climate Change Effects on Pome And Stone Fruit Phenology Between Balkan Countries and Bonn/Germany. Erwerbs-Obstbau, 2018, 60, 295-304.	0.5	7
94	Non-invasive determination of surface features of banana during ripening. Journal of Food Science and Technology, 2018, 55, 4197-4203.	1.4	7
95	Utilization of bicarbonate by apple fruit Phosphoenolpyruvate carboxylase. Phytochemistry, 1987, 26, 2475-2476.	1.4	5
96	Cherry phenology as bioindicator for climate change. Acta Horticulturae, 2017, , 1-8.	0.1	5
97	Does colouration affect non-invasive russet detection on pome fruit?. Postharvest Biology and Technology, 2019, 152, 54-59.	2.9	5
98	Development of a Freshness Index for Fruit Quality Assessmentâ€”Using Bell Pepper as a Case Study. Horticulturae, 2021, 7, 405.	1.2	5
99	Chilling in cherry â€œ principles and projection â€œ a brief introduction. Acta Horticulturae, 2017, , 39-44.	0.1	4
100	Colour development of apple with reflective mulches and biostimulants. Acta Horticulturae, 2018, , 433-438.	0.1	4
101	Chilling requirements of Mediterranean fruit crops in a changing climate. Acta Horticulturae, 2019, , 275-280.	0.1	4
102	Feldmethode zur Bestimmung der substrat-induzierten Bodenatmung. Journal of Plant Nutrition and Soil Science, 2000, 163, 165-171.	1.1	3
103	Climate change effects on cherry flowering in northern Greece. Acta Horticulturae, 2017, , 45-50.	0.1	3
104	Can hail nets reduce alternate bearing in â€œElstarâ€™™ apple?. Acta Horticulturae, 2018, , 151-156.	0.1	3
105	Lower carbon footprint from grapevine cultivation on steep slopes compared with flat terrain? A case study. Acta Horticulturae, 2021, , 703-706.	0.1	3
106	Measurement of Metabolic Activity of the Honeybee by Assessing Respiration. Journal of Apicultural Research, 1989, 28, 131-135.	0.7	2
107	Modern training systems for forcing sweet cherries â€œ slender spindle or hedgerow for protected growing?. Acta Horticulturae, 2019, , 657-662.	0.1	2
108	Innovative Strategy to Reduce Single-Use Plastics in Sustainable Horticulture by a Refund Strategy for Flowerpots. Sustainability, 2021, 13, 8532.	1.6	2

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109	Fruit Photosynthesis. , 1998, , 3813-3816.		2
110	Atmung eines Bodens im GemÃ¼sebau zu Beginn der Vegetationsperiode. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1997, 160, 485-489.	0.4	1
111	Mechanical selective removal of flowers in a fruit tree canopy. Acta Horticulturae, 2018, , 339-346.	0.1	1
112	PA and DA meter â€“ providers of the new ripeness index?. Acta Horticulturae, 2018, , 363-368.	0.1	1
113	Orchard management strategies to reduce bruises on apples in India: a review. Vegetos, 2022, 35, 1-8.	0.8	1
114	Morphologie und Physiologie von RebblÃ¤ttern mit lokalen AufwÃ¼lbungen. Journal of Phytopathology, 1988, 121, 318-324.	0.5	0
115	Improving fruit coloration of horticultural crops. Acta Horticulturae, 2019, , 639-644.	0.1	0
116	Non-invasive detection of russet on pome fruit by a luster sensor. Acta Horticulturae, 2019, , 687-690.	0.1	0
117	Non-invasive detection of surface features of three plum types. Acta Horticulturae, 2019, , 627-632.	0.1	0
118	Non-invasive russet detection on apple and pear fruit. Acta Horticulturae, 2021, , 677-684.	0.1	0