Barbara Sturm

List of Publications by Year
in descending order

71 papers	1,814 citations	279487 23 h-index	301761 39 g-index
73 all docs	73 docs citations	73 times ranked	1685 citing authors

#	Article	IF	Citations
1	Implementation of machine vision for detecting behaviour of cattle and pigs. Livestock Science, 2017, 202, 25-38.	0.6	131
2	Crops that feed the world: Production and improvement of cassava for food, feed, and industrial uses. Food Security, 2017, 9, 907-927.	2.4	96
3	Using machine vision for investigation of changes in pig group lying patterns. Computers and Electronics in Agriculture, 2015, 119, 184-190.	3.7	90
4	Deep Learning and Machine Vision Approaches for Posture Detection of Individual Pigs. Sensors, 2019, 19, 3738.	2.1	85
5	Automatic detection of mounting behaviours among pigs using image analysis. Computers and Electronics in Agriculture, 2016, 124, 295-302.	3.7	77
6	Automatic scoring of lateral and sternal lying posture in grouped pigs using image processing and Support Vector Machine. Computers and Electronics in Agriculture, 2019, 156, 475-481.	3.7	70
7	Influence of process control strategies on drying kinetics, colour and shrinkage of air dried apples. Applied Thermal Engineering, 2014, 62, 455-460.	3.0	63
8	Effects of hot-air and hybrid hot air-microwave drying on drying kinetics and textural quality of nectarine slices. Heat and Mass Transfer, 2018, 54, 915-927.	1.2	62
9	Energy efficiency, carbon emissions, and measures towards their improvement in the food and beverage sector for six European countries. Energy, 2016, 104, 266-283.	4.5	60
10	Recent Advances in Reducing Food Losses in the Supply Chain of Fresh Agricultural Produce. Processes, 2020, 8, 1431.	1.3	58
11	Hyperspectral imaging for the determination of potato slice moisture content and chromaticity during the convective hot air drying process. Biosystems Engineering, 2018, 166, 170-183.	1.9	52
12	Optimizing the Drying Parameters for Hot-Airâ€“Dried Apples. Drying Technology, 2012, 30, 1570-1582.	1.7	51
13	Integration of a solar thermal system in a medium-sized brewery using pinch analysis: Methodology and case study. Applied Thermal Engineering, 2017, 113, 1558-1568.	3.0	47
14	Optimisation of Physical and Chemical Treatments to Control Browning Development and Enzymatic Activity on Fresh-cut Apple Slices. Foods, 2020, 9, 76.	1.9	46
15	Opportunities and barriers for efficient energy use in a medium-sized brewery. Applied Thermal Engineering, 2013, 53, 397-404.	3.0	44
16	Parametric modelling of domestic air-source heat pumps. Energy and Buildings, 2017, 139, 578-589.	3.1	41
17	The feasibility of the sustainable energy supply from bio wastes for a small scale brewery â€“ A case study. Applied Thermal Engineering, 2012, 39, 45-52.	3.0	40
18	Thermodynamic analysis of drying process in a diagonal-batch dryer developed for batch uniformity using potato slices. Journal of Food Engineering, 2016, 169, 238-249.	2.7	34

#	Article	IF	Citations
19	Classification of organic beef freshness using VNIR hyperspectral imaging. Meat Science, 2017, 129, 20-27.	2.7	34
20	Using automated image analysis in pig behavioural research: Assessment of the influence of enrichment substrate provision on lying behaviour. Applied Animal Behaviour Science, 2017, 196, 30-35.	0.8	34
21	Nutritional Characteristics of Four Underutilized Edible Wild Fruits of Dietary Interest in Ghana. Foods, 2019, 8, 104.	1.9	33
22	Post-harvest handling practices and associated food losses and limitations in the sweetpotato value chain of southern Ethiopia. Njas - Wageningen Journal of Life Sciences, 2017, 80, 65-74.	7.9	29
23	Use of hyperspectral imaging for the prediction of moisture content and chromaticity of raw and pretreated apple slices during convection drying. Drying Technology, 2018, 36, 804-816.	1.7	24
24	Effect of orange-fleshed sweet potato flour particle size and degree of wheat flour substitution on physical, nutritional, textural and sensory properties of cookies. European Food Research and Technology, 2021, 247, 889-905.	1.6	23
25	Process intensification and integration of solar heat generation in the Chinese condiment sector â€“ A case study of a medium sized Beijing based factory. Energy Conversion and Management, 2015, 106, 1295-1308.	4.4	21
26	Simulation of the convective drying process with automatic control of surface temperature. Journal of Food Engineering, 2016, 170, 16-23.	2.7	20
27	Pecking activity detection in group-housed turkeys using acoustic data and a deep learning technique. Biosystems Engineering, 2020, 194, 40-48.	1.9	20
28	Influence of Inlet Drying Air Temperature and Milk Flow Rate on the Physical, Optical and Thermal Properties of Spray-Dried Camel Milk Powders. Food and Bioprocess Technology, 2019, 12, 751-768.	2.6	19
29	Investigation of dynamic quality changes and optimization of drying parameters of carrots (Daucus) Tj ETQq1 1 0.784314 rgBT /Over	1.5	19
30	Effect of Sieve Particle Size and Blend Proportion on the Quality Properties of Peeled and Unpeeled Orange Fleshed Sweet Potato Composite Flours. Foods, 2020, 9, 740.	1.9	19
31	Vis-NIR hyperspectral imaging along with Gaussian process regression to monitor quality attributes of apple slices during drying. LWT - Food Science and Technology, 2021, 152, 112297.	2.5	19
32	Hot air drying of purple-speckled Cocoyam (Colocasia esculenta (L.) Schott) slices: Optimisation of drying conditions for improved product quality and energy savings. Thermal Science and Engineering Progress, 2020, 18, 100557.	1.3	18
33	The Effect of Pre-Drying Treatment and Drying Conditions on Quality and Energy Consumption of Hot Air-Dried Celeriac Slices: Optimisation. Foods, 2021, 10, 1758.	1.9	17
34	Comparative analysis of methods and model prediction performance evaluation for continuous online non-invasive quality assessment during drying of apples from two cultivars. Thermal Science and Engineering Progress, 2020, 18, 100461.	1.3	16
35	Dependency of production planning on availability of thermal energy in commercial greenhouses â€“ A case study in Germany. Applied Thermal Engineering, 2014, 71, 239-247.	3.0	15
36	Drying behavior and quality parameters of dried beef (biltong) subjected to different pre-treatments and maturation stages. Drying Technology, 2018, 36, 21-32.	1.7	15

#	Article	IF	Citations
37	Nutritional and sensory quality of composite extruded complementary food. Food Science and Nutrition, 2019, 7, 882-889.	1.5	15
38	In-process investigation of the dynamics in drying behavior and quality development of hops using visual and environmental sensors combined with chemometrics. Computers and Electronics in Agriculture, 2020, 175, 105547.	3.7	15
39	High pH thresholding of beef with VNIR hyperspectral imaging. Meat Science, 2017, 134, 14-17.	2.7	14
40	Postharvest monitoring of organic potato (cv. Anuschka) during hotâ€air drying using visibleâ€“NIR hyperspectral imaging. Journal of the Science of Food and Agriculture, 2018, 98, 2507-2517.	1.7	14
41	Effect of maturation and freezing on quality and drying kinetics of beef. Drying Technology, 2017, 35, 2002-2014.	1.7	13
42	Rheological properties of dough and bread quality characteristics as influenced by the proportion of wheat flour substitution with orange-fleshed sweet potato flour and baking conditions. LWT - Food Science and Technology, 2021, 147, 111515.	2.5	13
43	Investigating the Effect of Different Drying Strategies on the Quality Parameters of Daucus carota L. Using Dynamic Process Control and Measurement Techniques. Food and Bioprocess Technology, 2021, 14, 1067-1088.	2.6	12
44	Post-harvest management and associated food losses and by-products of cassava in southern Ethiopia. Food Security, 2018, 10, 419-435.	2.4	11
45	Influence of preâ€drying storage time on essential oil components in dried hops (<scp><i>Humulus) Tj ETQq1 1 0.784314 rgBT /Over	1.7	11
46	Method comparison between real-time spectral and laboratory based measurements of moisture content and CIELAB color pattern during dehydration of beef slices. Journal of Food Engineering, 2021, 294, 110419.	2.7	11
47	Solar energy policy implementation in Ghana: A LEAP model analysis. Scientific African, 2022, 16, e01162.	0.7	11
48	Mathematical modelling of adsorption isotherms of Malaysian variety of purple flesh sweet potato at different temperatures. Thermal Science and Engineering Progress, 2018, 7, 326-330.	1.3	10
49	Impact of drying temperature and salt pre-treatments on drying behavior and instrumental color and investigations on spectral product monitoring during drying of beef slices. Meat Science, 2021, 178, 108525.	2.7	10
50	Vis-NIR Hyperspectral Imaging for Online Quality Evaluation during Food Processing: A Case Study of Hot Air Drying of Purple-Speckled Cocoyam (Colocasia esculenta (L.) Schott). Processes, 2021, 9, 1804.	1.3	10
51	Application of dynamic thermal engineering principles to improve the efficiency of resource use in UK pork production chains. Energy and Buildings, 2017, 139, 53-62.	3.1	9
52	Simulation of transient heat transfer during cooling and heating of whole sweet potato (Ipomoea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.0	9
53	An innovative concept building design incorporating passive technology to improve resource efficiency and welfare of finishing pigs. Biosystems Engineering, 2018, 174, 190-203.	1.9	9
54	Impact of critical control-point based intermittent drying on drying kinetics and quality of carrot (Daucus carota var. laguna). Thermal Science and Engineering Progress, 2020, 20, 100682.	1.3	9

#	Article	IF	Citations
55	Prediction of total carotenoids, color, and moisture content of carrot slices during hot air drying using nonâ€invasive hyperspectral imaging technique. Journal of Food Processing and Preservation, 2022, 46, .	0.9	9
56	Impact of Process Parameters and Bulk Properties on Quality of Dried Hops. Processes, 2020, 8, 1507.	1.3	7
57	Using CFD Modelling to Relate Pig Lying Locations to Environmental Variability in Finishing Pens. Sustainability, 2020, 12, 1928.	1.6	6
58	Comparison between Hyperspectral Imaging and Chemical Analysis of Polyphenol Oxidase Activity on Fresh-Cut Apple Slices. Journal of Spectroscopy, 2020, 2020, 1-10.	0.6	6
59	Determinants of appropriate complementary feeding practices among women with children aged 6-23 months in Iseyin, Nigeria. Scientific African, 2021, 13, e00848.	0.7	6
60	Increase of nutritional security in Sub-Saharan Africa through the production of dried products from underutilized crops. Drying Technology, 2023, 41, 322-334.	1.7	5
61	Pre-harvest Curing: Effects on Skin Adhesion, Chemical Composition and Shelf-life of Sweetpotato Roots under Tropical Conditions. East African Agricultural and Forestry Journal, 2017, 82, 130-143.	0.4	4
62	Organic apples (cv. Elstar) quality evaluation during hot-air drying using Vis/NIR hyperspectral imaging. , 0, , .		4
63	Strategies and Technologies for Camel Milk Preservation and Utilization of Non-Marketed Milk in Arid and Semi-Arid Areas. East African Agricultural and Forestry Journal, 2017, 82, 144-167.	0.4	3
64	Feeding practices of preâ€school children and associated factors in Kathmandu, Nepal. Journal of Human Nutrition and Dietetics, 2020, 33, 241-251.	1.3	3
65	Comparative evaluation of instant 'poundo' cocoyam (Colocasia esculenta) and yam (Dioscorea rotundata) flours produced by flash and cabinet drying. International Journal of Food Science and Technology, 2021, 56, 1482-1490.	1.3	3
66	Intelligent potato frying: Time to say goodbye to the â€œgood oldâ€•processing strategies. Thermal Science and Engineering Progress, 2022, 34, 101389.	1.3	3
67	Analysis of the influence of different factors on the quality of aÂcurd-whey mixture during pumping. LWT - Food Science and Technology, 2016, 65, 88-97.	2.5	2
68	Feasibility of Vis/NIR spectroscopy and image analysis as basis of the development of smart-drying technologies. , 0, , .		2
69	Waste Utilization in a Spirit Plant as Alternative to Fossil Fuels. Energy Procedia, 2014, 61, 1208-1212.	1.8	1
70	Drying and Chilling/Freezing of Perishable Foods in the Organic Sector. , 2018, , 245-273.		0
71	Development of an Optical System Based on Spectral Imaging Used for a Slug Control Robot. Horticulturae, 2022, 8, 77.	1.2	0