Karsten Niehaus

List of Publications by Year
in descending order

75 papers	1,987 citations	279701 23 h-index	276775 41 g-index
78 all docs	78 docs citations	78 times ranked	2875 citing authors

#	Article	IF	Citations
1	The genome of Xanthomonas campestris pv. campestris B100 and its use for the reconstruction of metabolic pathways involved in xanthan biosynthesis. Journal of Biotechnology, 2008, 134, 33-45.	1.9	238
2	Analysis of outer membrane vesicle associated proteins isolated from the plant pathogenic bacterium Xanthomonas campestris pv. campestris. BMC Microbiology, 2008, 8, 87.	1.3	118
3	The lipopolysaccharides of the phytopathogen Xanthomonas campestris pv. campestris induce an oxidative burst reaction in cell cultures of Nicotiana tabacum. Planta, 2001, 213, 214-222.	1.6	114
4	Comprehensive analysis of the extracellular proteins fromXanthomonas campestris pv.campestris B100. Proteomics, 2005, 5, 153-167.	1.3	89
5	Metabolic Adaptations of White Lupin Roots and Shoots under Phosphorus Deficiency. Frontiers in Plant Science, 2015, 6, 1014.	1.7	79
6	Suppression of an elicitorâ€induced oxidative burst reaction in Medicago sativa cell cultures by Sinorhizobium meliloti lipopolysaccharides. New Phytologist, 2001, 151, 597-606.	3.5	69
7	Spatio-Temporal Metabolite Profiling of the Barley Germination Process by MALDI MS Imaging. PLoS ONE, 2016, 11, e0150208.	1.1	62
8	Characterization of the Xanthomonas campestris pv. campestris Lipopolysaccharide Substructures Essential for Elicitation of an Oxidative Burst in Tobacco Cells. Molecular Plant-Microbe Interactions, 2005, 18, 674-681.	1.4	55
9	Rapid incorporation of glucosinolates as a strategy used by a herbivore to prevent activation by myrosinases. Insect Biochemistry and Molecular Biology, 2014, 52, 115-123.	1.2	52
10	Detection and localization of novel hordatine-like compounds and glycosylated derivates of hordatines by imaging mass spectrometry of barley seeds. Planta, 2014, 239, 1321-1335.	1.6	52
11	The noncanonical type <scp>III</scp> secretion system of <scp>X</scp>anthomonas translucens pv. graminis is essential for forage grass infection. Molecular Plant Pathology, 2013, 14, 576-588.	2.0	48
12	Establishment, in silico analysis, and experimental verification of a large-scale metabolic network of the xanthan producing Xanthomonas campestris pv. campestris strain B100. Journal of Biotechnology, 2013, 167, 123-134.	1.9	43
13	Conjugated Polymers as a New Class of Dual-Mode Matrices for MALDI Mass Spectrometry and Imaging. Journal of the American Chemical Society, 2018, 140, 11416-11423.	6.6	41
14	Proteomic and metabolomic analysis of the carotenogenic yeast Xanthophyllomyces dendrorhous using different carbon sources. BMC Genomics, 2015, 16, 289.	1.2	40
15	Genome wide transcription start sites analysis of Xanthomonas campestris pv. campestris B100 with insights into the gum gene cluster directing the biosynthesis of the exopolysaccharide xanthan. Journal of Biotechnology, 2016, 225, 18-28.	1.9	38
16	Identification of Xanthomonas campestris pv. campestris galactose utilization genes from transcriptome data. Journal of Biotechnology, 2008, 135, 309-317.	1.9	36
17	Mass Spectrometry Imaging of the Spatial and Temporal Localization of Alkaloids in Nightshades. Journal of Agricultural and Food Chemistry, 2019, 67, 13470-13477.	2.4	36
18	Involvement of bacterial TonB-dependent signaling in the generation of an oligogalacturonide damage-associated molecular pattern from plant cell walls exposed to Xanthomonas campestris pv. campestris pectate lyases. BMC Microbiology, 2012, 12, 239.	1.3	33

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19	Metabolic survey of Botryococcus braunii: Impact of the physiological state on product formation. PLoS ONE, 2018, 13, e0198976.	1.1	31
20	ALLocator: An Interactive Web Platform for the Analysis of Metabolomic LC-ESI-MS Datasets, Enabling Semi-Automated, User-Revised Compound Annotation and Mass Isotopomer Ratio Analysis. PLoS ONE, 2014, 9, e113909.	1.1	28
21	Metabolic flux pattern of glucose utilization by Xanthomonas campestris pv. campestris: prevalent role of the Entnerâ€“Doudoroff pathway and minor fluxes through the pentose phosphate pathway and glycolysis. Molecular BioSystems, 2014, 10, 2663-2676.	2.9	28
22	The Rhizoctonia solani AG1-IB (isolate 7/3/14) transcriptome during interaction with the host plant lettuce (Lactuca sativa L.). PLoS ONE, 2017, 12, e0177278.	1.1	28
23	Assessment of mixture toxicity of (tri)azoles and their hepatotoxic effects in vitro by means of omics technologies. Archives of Toxicology, 2019, 93, 2321-2333.	1.9	28
24	Low molecular weight plant extract induces metabolic changes and the secretion of extracellular enzymes, but has a negative effect on the expression of the type-III secretion system in Xanthomonas campestris pv. campestris. Journal of Biotechnology, 2009, 140, 59-67.	1.9	26
25	Physiological roles of sigma factor SigD in Corynebacterium glutamicum. BMC Microbiology, 2017, 17, 158.	1.3	26
26	Glioblastoma multiforme: Metabolic differences to peritumoral tissue and <scp>IDH</scp>â€mutated gliomas revealed by mass spectrometry imaging. Neuropathology, 2020, 40, 546-558.	0.7	25
27	FlavinâEDependent Halogenases from Xanthomonas campestris pv. campestris B100 Prefer Bromination over Chlorination. Advanced Synthesis and Catalysis, 2019, 361, 2475-2486.	2.1	24
28	Learning to Classify Organic and Conventional Wheat Ã¢â‚¬â€œ A Machine Learning Driven Approach Using the MeltDB 2.0 Metabolomics Analysis Platform. Frontiers in Bioengineering and Biotechnology, 2015, 3, 35.	2.0	23
29	Carbon source dependent biosynthesis of acarviose metabolites in Actinoplanes sp. SE50/110. Journal of Biotechnology, 2014, 191, 113-120.	1.9	21
30	Comparative analysis of different xanthan samples by atomic force microscopy. Journal of Biotechnology, 2017, 257, 2-8.	1.9	21
31	Proteomic analysis of the carotenogenic yeast Xanthophyllomyces dendrorhous. BMC Microbiology, 2011, 11, 131.	1.3	20
32	IncP-1Î² plasmids of Comamonas sp. and Delftia sp. strains isolated from a wastewater treatment plant mediate resistance to and decolorization of the triphenylmethane dye crystal violet. Microbiology (United Kingdom), 2012, 158, 2060-2072.	0.7	20
33	Subtyping non-small cell lung cancer by histology-guided spatial metabolomics. Journal of Cancer Research and Clinical Oncology, 2022, 148, 351-360.	1.2	20
34	Protein arginine methylation modulates lightâ€harvesting antenna translation in Chlamydomonas reinhardtii. Plant Journal, 2011, 65, 119-130.	2.8	19
35	Genome-enabled determination of amino acid biosynthesis in Xanthomonas campestris pv. campestris and identification of biosynthetic pathways for alanine, glycine, and isoleucine by 13C-isotopologue profiling. Molecular Genetics and Genomics, 2011, 286, 247-59.	1.0	19
36	Fast responses of metabolites in Vicia faba L. to moderate NaCl stress. Plant Physiology and Biochemistry, 2015, 92, 19-29.	2.8	19

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37	Draft genome of the xanthan producer Xanthomonas campestris NRRL B-1459 (ATCC 13951). Journal of Biotechnology, 2015, 204, 45-46.	1.9	19
38	An integrated approach to study novel properties of a MALDI matrix (4-maleicanhydridoproton) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	1.9	18
39	Genetic engineering in Actinoplanes sp. SE50/110 â˜ development of an intergeneric conjugation system for the introduction of actinophage-based integrative vectors. Journal of Biotechnology, 2016, 232, 79-88.	1.9	17
40	Dynamic protein phosphorylation during the growth of Xanthomonas campestris pv. campestris B100 revealed by a gel-based proteomics approach. Journal of Biotechnology, 2013, 167, 111-122.	1.9	16
41	Co-encapsulation of amyloglucosidase with starch and Saccharomyces cerevisiae as basis for a long-lasting CO2 release. World Journal of Microbiology and Biotechnology, 2017, 33, 71.	1.7	16
42	Mass spectrometry imaging reveals lipid upregulation and bile acid changes indicating amitriptyline induced steatosis in a rat model. Toxicology Letters, 2020, 325, 43-50.	0.4	16
43	Investigation of the chemical structure and biological activity of oligosaccharides isolated from rough-type Xanthomonas campestris pv. campestris B100 lipopolysaccharide. Journal of Endotoxin Research, 2007, 13, 101-108.	2.5	15
44	Antiviral effect of Bosentan and Valsartan during coxsackievirus B3 infection of human endothelial cells. Journal of General Virology, 2010, 91, 1959-1970.	1.3	15
45	Metabolite profiling of wheat flag leaf and grains during grain filling phase as affected by sulfur fertilisation. Functional Plant Biology, 2012, 39, 156.	1.1	14
46	Characterization of the pyrophosphate-dependent 6-phosphofructokinase from Xanthomonas campestris pv. campestris. Archives of Biochemistry and Biophysics, 2014, 546, 53-63.	1.4	14
47	The influence of a modified lipopolysaccharide O-antigen on the biosynthesis of xanthan in Xanthomonas campestris pv. campestris B100. BMC Microbiology, 2016, 16, 93.	1.3	13
48	Metabolite profiling of somatic embryos of Cyclamen persicum in comparison to zygotic embryos, endosperm, and testa. Frontiers in Plant Science, 2015, 6, 597.	1.7	12
49	A comprehensive analysis of the Lactuca sativa, L. transcriptome during different stages of the compatible interaction with Rhizoctonia solani. Scientific Reports, 2019, 9, 7221.	1.6	11
50	Overexpression of alfalfa SIMK promotes root hair growth, nodule clustering and shoot biomass production. Plant Biotechnology Journal, 2021, 19, 767-784.	4.1	11
51	A new technological approach in diagnostic pathology: mass spectrometry imaging-based metabolomics for biomarker detection in urachal cancer. Laboratory Investigation, 2021, 101, 1281-1288.	1.7	10
52	Metabolomic responses in grain, ear, and straw of winter wheat under increasing sulfur treatment. Journal of Plant Nutrition and Soil Science, 2013, 176, 964-970.	1.1	8
53	The lipopolysaccharide of the crop pathogenXanthomonas translucenspv. translucens: chemical characterization and determination of signaling events in plant cells. Glycobiology, 2017, 27, 264-274.	1.3	8
54	Comparative transcription profiling of two fermentation cultures of Xanthomonas campestris pv. campestris B100 sampled in the growth and in the stationary phase. Applied Microbiology and Biotechnology, 2018, 102, 6613-6625.	1.7	8

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55	Refined annotation of the complete genome of the phytopathogenic and xanthan producing Xanthomonas campestris pv. campestris strain B100 based on RNA sequence data. Journal of Biotechnology, 2017, 253, 55-61.	1.9	7
56	Microâ€organisms growing on rapeseed during storage affect the profile of volatile compounds of virgin rapeseed oil. Journal of the Science of Food and Agriculture, 2018, 98, 2147-2155.	1.7	7
57	Systems and synthetic biology perspective of the versatile plant-pathogenic and polysaccharide-producing bacterium Xanthomonas campestris. Microbiology (United Kingdom), 2017, 163, 1117-1144.	0.7	7
58	A robust protocol for the isolation of cellular proteins from Xanthomonas campestris to analyze the methionine effect in 2Dâ€gel experiments. Electrophoresis, 2017, 38, 2603-2609.	1.3	6
59	Tissue culture, genetic transformation, interaction with beneficial microbes, and modern bio-imaging techniques in alfalfa research. Critical Reviews in Biotechnology, 2020, 40, 1265-1280.	5.1	6
60	Metabolic responses of sugar beet to the combined effect of root hypoxia and NaCl-salinity. Journal of Plant Physiology, 2021, 267, 153545.	1.6	5
61	Experimental Measurements and Mathematical Modeling of Cytosolic Ca2+ Signatures upon Elicitation by Penta-N-acetylchitopentaose Oligosaccharides in Nicotiana tabacum Cell Cultures. Plants, 2013, 2, 750-768.	1.6	4
62	Regulatory associations between the metabolism of sulfur-containing amino acids and xanthan biosynthesis inXanthomonas campestrispv. campestris B100. FEMS Microbiology Letters, 2019, 366, .	0.7	4
63	Spatial evaluation of long-term metabolic changes induced by cisplatin nephrotoxicity. Toxicology Letters, 2020, 334, 36-43.	0.4	4
64	Human Coxsackie- and adenovirus receptor is a putative target of neutrophil elastase-mediated shedding. Molecular Biology Reports, 2022, 49, 3213-3223.	1.0	4
65	MetHoS: a platform for large-scale processing, storage and analysis of metabolomics data. BMC Bioinformatics, 2022, 23, .	1.2	4
66	Applying DNA affinity chromatography to specifically screen for sucrose-related DNA-binding transcriptional regulators of Xanthomonas campestris. Journal of Biotechnology, 2016, 232, 89-98.	1.9	3
67	Evaluation of virulence potential of methicillin-sensitive and methicillin-resistant Staphylococcus aureus isolates from a German refugee cohort. Travel Medicine and Infectious Disease, 2022, 45, 102204.	1.5	3
68	Two Flagellar mutants of Xanthomonas campestris are characterized by enhanced xanthan production and higher xanthan viscosity. Journal of Biotechnology, 2022, 347, 9-17.	1.9	3
69	Analysis of Gum proteins involved in xanthan biosynthesis throughout multiple cell fractions in a â€œsingle-tubeâ€• Journal of Proteomics, 2022, 257, 104513.	1.2	3
70	Naturally occurring variants in the transmembrane and cytoplasmic domains of the human Coxsackie- and adenovirus receptor have no impact on virus internalisation. Biochemical and Biophysical Research Communications, 2020, 527, 401-405.	1.0	2
71	Fast visual exploration of mass spectrometry images with interactive dynamic spectral similarity pseudocoloring. Scientific Reports, 2021, 11, 4606.	1.6	2
72	Using transposition to introduce eGFP fusions in Sinorhizobium meliloti : A tool to analyze protein localization patterns in bacteria. Journal of Biotechnology, 2017, 257, 139-149.	1.9	1

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73	Perfect merohedral twinning combined with noncrystallographic symmetry potentially causes the failure of molecular replacement with low-homology search models for the flavin-dependent halogenase HalX from Xanthomonas campestris. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 345-350.	0.4	1
74	Immersion by rotationâ€based application of the matrix for fast and reproducible sample preparations and robust results in mass spectrometry imaging. Journal of Mass Spectrometry, 2020, 55, e4488.	0.7	1
75	Abstract 111: Head and neck cancer cells can differentiate and resemble their tissue of origin. Cancer Research, 2022, 82, 111-111.	0.4	0