

Thomas Bley

List of Publications by Year in descending order

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100
papers

3,210
citations

172457

29
h-index

168389

53
g-index

105
all docs

105
docs citations

105
times ranked

3714
citing authors

#	ARTICLE	IF	CITATIONS
1	Monitoring the apical growth characteristics of hairy roots using non-invasive laser speckle contrast imaging. Engineering in Life Sciences, 2022, 22, 288-298.	3.6	2
2	Immobilization of xylanases on metallic hollow spheres for biochemical catalysis. Catalysis Today, 2021, 367, 189-198.	4.4	2
3	Biospeckle characterization of hairy root cultures using laser speckle photometry. Engineering in Life Sciences, 2020, 20, 287-295.	3.6	2
4	Monitoring bioactive and total antibody concentrations for continuous process control by surface plasmon resonance spectroscopy. Engineering in Life Sciences, 2019, 19, 681-690.	3.6	5
5	Combining Chemical and Biological Catalysis for the Conversion of Hemicelluloses: Hydrolytic Hydrogenation of Xylan to Xylitol. Catalysis Letters, 2019, 149, 69-76.	2.6	21
6	A new method for non-invasive biomass determination based on stereo photogrammetry. Bioprocess and Biosystems Engineering, 2018, 41, 369-380.	3.4	7
7	Monitoring of Plant Cells and Tissues in Bioprocesses. Reference Series in Phytochemistry, 2018, , 433-481.	0.4	3
8	Uptake of iron by <i>Kluyveromyces marxianus</i> DSM 5422 cultivated in a whey-based medium. Engineering in Life Sciences, 2018, 18, 459-474.	3.6	4
9	A novel protocol to prepare cell probes for the quantification of microbial adhesion and biofilm initiation on structured bioinspired surfaces using AFM for single-cell force spectroscopy. Engineering in Life Sciences, 2017, 17, 833-840.	3.6	6
10	Zone line formation on artificial media and in hardwoods by basidiomycetes for production of spalted wood. Holzforschung, 2017, 71, 833-841.	1.9	2
11	Green bioprinting: extrusion-based fabrication of plant cell-laden biopolymer hydrogel scaffolds. Biofabrication, 2017, 9, 045011.	7.1	63
12	Additive Biotechâ€”Chances, challenges, and recent applications of additive manufacturing technologies in biotechnology. New Biotechnology, 2017, 39, 222-231.	4.4	40
13	A Modular Flow Cell System for Studying Biomimetic and Bioinspired Anti-Adhesive and Antimicrobial Surfaces. Heat Transfer Engineering, 2017, 38, 805-817.	1.9	1
14	The challenge of scaling up photobioreactors: Modeling and approaches in small scale. Engineering in Life Sciences, 2016, 16, 598-609.	3.6	10
15	MicrOLED-photobioreactor: Design and characterization of a milliliter-scale Flat-Panel-Airlift-photobioreactor with optical process monitoring. Algal Research, 2016, 18, 225-234.	4.6	17
16	Two parametric cell cycle analyses of plant cell suspension cultures with fragile, isolated nuclei to investigate heterogeneity in growth of batch cultivations. Biotechnology and Bioengineering, 2016, 113, 1244-1250.	3.3	3
17	â€œFungal elicitors combined with a sucrose feed significantly enhance triterpene production of a <i>Salvia fruticosa</i> cell suspensionâ€• Applied Microbiology and Biotechnology, 2016, 100, 7071-7082.	3.6	21
18	Monitoring of Plant Cells and Tissues in Bioprocesses. Reference Series in Phytochemistry, 2016, , 1-49.	0.4	0

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19	Lightâ€fieldâ€characterization in a continuous hydrogenâ€producing photobioreactor by optical simulation and computational fluid dynamics. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2439-2449.	3.3	27
20	Kinetic Analyses of Data from a Human Serum Albumin Assay Using the liSPR System. <i>Biosensors</i> , 2015, 5, 27-36.	4.7	2
21	Ramified Challenges: Monitoring and Modeling of Hairy Root Growth in Bioprocessesâ€A Review. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2015, 149, 253-273.	1.1	1
22	Modeling of plant in vitro cultures: Overview and estimation of biotechnological processes. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1-12.	3.3	18
23	Green bioprinting: Fabrication of photosynthetic algaeâ€laden hydrogel scaffolds for biotechnological and medical applications. <i>Engineering in Life Sciences</i> , 2015, 15, 177-183.	3.6	104
24	Studies on the mechanism of synthesis of ethyl acetate in <i>Kluyveromyces marxianus</i> DSM 5422. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 1131-1144.	3.6	41
25	Biomass measurement by flow cytometry during solidâ€state fermentation of basidiomycetes. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2015, 87, 176-188.	1.5	16
26	Efficient growth of <i>Kluyveromyces marxianus</i> biomass used as a biocatalyst in the sustainable production of ethyl acetate. <i>Energy, Sustainability and Society</i> , 2015, 5, .	3.8	20
27	Green bioprinting: Viability and growth analysis of microalgae immobilized in 3Dâ€plotted hydrogels versus suspension cultures. <i>Engineering in Life Sciences</i> , 2015, 15, 678-688.	3.6	46
28	Biomass estimation during macro-scale solid-state fermentation of basidiomycetes using established and novel approaches. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 1313-1323.	3.4	18
29	PetriJet Platform Technology: An Automated Platform for Culture Dish Handling and Monitoring of the Contents. <i>Journal of the Association for Laboratory Automation</i> , 2015, 20, 447-456.	2.8	7
30	Wholeâ€cell biotransformation of oleanolic acid by free and immobilized cells of <i>Nocardia iowensis</i> : Characterization of new metabolites. <i>Engineering in Life Sciences</i> , 2015, 15, 108-115.	3.6	10
31	Hydrogen production by <i>Rhodobacter sphaeroides</i> DSM 158 under intense irradiation. <i>Bioresource Technology</i> , 2015, 175, 82-90.	9.6	27
32	Determination of Triterpenic Acids and Screening for Valuable Secondary Metabolites in <i>Salvia</i> sp. Suspension Cultures. <i>Natural Product Communications</i> , 2014, 9, 1934578X1400900.	0.5	3
33	Phototrophic growth of <i>Arthrospira platensis</i> in a respiration activity monitoring system for shake flasks (RAMOS®). <i>Engineering in Life Sciences</i> , 2014, 14, 658-666.	3.6	12
34	Initial phases of microbial biofilm formation on opaque, innovative antiâ€adhesive surfaces using a modular microfluidic system. <i>Engineering in Life Sciences</i> , 2014, 14, 76-84.	3.6	5
35	Biotechnological hydrogen production by photosynthesis. <i>Engineering in Life Sciences</i> , 2014, 14, 592-606.	3.6	25
36	Sage in vitro cultures: a promising tool for the production of bioactive terpenes and phenolic substances. <i>Biotechnology Letters</i> , 2014, 36, 211-221.	2.2	40

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37	Modeling hairy root tissue growth in in vitro environments using an agent-based, structured growth model. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 1173-1184.	3.4	8
38	Induction of a photomixotrophic plant cell culture of <i>Helianthus annuus</i> and optimization of culture conditions for improved Î±-tocopherol production. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 2029-2040.	3.6	29
39	Perspectives for the biotechnological production of ethyl acetate by yeasts. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 5397-5415.	3.6	73
40	Robust multi-parametric sensor system for the online detection of microbial biofilms in industrial applications — Preliminary examinations. , 2014, , .		1
41	Temporary immersion systems in plant biotechnology. <i>Engineering in Life Sciences</i> , 2014, 14, 607-621.	3.6	121
42	Surface plasmon resonance based detection of human serum albumin as a marker for hepatocytes activity. , 2014, , .		2
43	<i>Salvia</i> suspension cultures as production systems for oleanolic and ursolic acid. <i>Acta Physiologiae Plantarum</i> , 2014, 36, 2137-2147.	2.1	14
44	Mass propagation of <i>Helianthus annuus</i> suspension cells in orbitally shaken bioreactors: Improved growth rate in single-use bag bioreactors. <i>Engineering in Life Sciences</i> , 2014, 14, 676-684.	3.6	12
45	Determination of triterpenic acids and screening for valuable secondary metabolites in <i>Salvia</i> sp. suspension cultures. <i>Natural Product Communications</i> , 2014, 9, 17-20.	0.5	6
46	Growth kinetics of a <i>Helianthus annuus</i> and a <i>Salvia fruticosa</i> suspension cell line: Shake flask cultivations with online monitoring system. <i>Engineering in Life Sciences</i> , 2013, 13, 593-602.	3.6	27
47	Growth of <i>Kluyveromyces marxianus</i> and formation of ethyl acetate depending on temperature. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 10359-10371.	3.6	31
48	Formation of ethyl acetate from whey by <i>Kluyveromyces marxianus</i> on a pilot scale. <i>Journal of Biotechnology</i> , 2013, 163, 17-23.	3.8	49
49	Bioprocessing of differentiated plant in vitro systems. <i>Engineering in Life Sciences</i> , 2013, 13, 26-38.	3.6	112
50	A new generation of bioproduction systems. <i>Engineering in Life Sciences</i> , 2013, 13, 1-2.	3.6	1
51	Formation of ethyl acetate by <i>Kluyveromyces marxianus</i> on whey: Influence of aeration and inhibition of yeast growth by ethyl acetate. <i>Engineering in Life Sciences</i> , 2013, 13, 247-260.	3.6	25
52	Citric acid production from sucrose by recombinant <i>Yarrowia lipolytica</i> using semicontinuous fermentation. <i>Engineering in Life Sciences</i> , 2013, 13, 163-171.	3.6	11
53	Bioreactors for the Cultivation of Red Beet Hairy Roots. , 2013, , 251-281.		6
54	Correlation of Community Dynamics and Process Parameters As a Tool for the Prediction of the Stability of Wastewater Treatment. <i>Environmental Science & Technology</i> , 2012, 46, 84-92.	10.0	57

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55	Formation of ethyl acetate by <i>Kluyveromyces marxianus</i> on whey during aerobic batch cultivation at specific trace element limitation. <i>Applied Microbiology and Biotechnology</i> , 2012, 96, 1313-1323.	3.6	30
56	Formation of ethyl acetate by <i>Kluyveromyces marxianus</i> on whey during aerobic batch and chemostat cultivation at iron limitation. <i>Applied Microbiology and Biotechnology</i> , 2012, 96, 685-696.	3.6	26
57	Constitutive expression of hydrophobin HFB1 from <i>Trichoderma reesei</i> in <i>Pichia pastoris</i> and its pre-purification by foam separation during cultivation. <i>Engineering in Life Sciences</i> , 2012, 12, 162-170.	3.6	16
58	Automatic image recognition to determine morphological development and secondary metabolite accumulation in hairy root networks. <i>Engineering in Life Sciences</i> , 2012, 12, 588-594.	3.6	10
59	Substrate utilization by recombinant <i>Yarrowia lipolytica</i> growing on sucrose. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 1695-1702.	3.6	16
60	Production of Oleanolic and Ursolic Acids by Callus Cultures of <i>Salvia tomentosa</i> Mill.. <i>Biotechnology and Biotechnological Equipment</i> , 2011, 25, 34-38.	1.3	17
61	Solid-state fermentation of lignocellulotic materials for the production of enzymes by the white rot fungus <i>Trametes hirsuta</i> in a modular bioreactor. <i>Engineering in Life Sciences</i> , 2011, 11, 395-401.	3.6	19
62	Screening of <i>Kluyveromyces</i> strains for the production of ethyl acetate: Design and evaluation of a cultivation system. <i>Engineering in Life Sciences</i> , 2011, 11, 369-381.	3.6	24
63	A compact and rapid aptasensor platform based on surface plasmon resonance. <i>Engineering in Life Sciences</i> , 2011, 11, 573-579.	3.6	20
64	Editorial: Bioprocess-oriented plant design – turning basic research into practical applications. <i>Engineering in Life Sciences</i> , 2011, 11, 333-334.	3.6	2
65	Phytochemical and flow cytometric analyses of <i>Devil's claw</i> cell cultures. <i>Plant Cell, Tissue and Organ Culture</i> , 2011, 105, 79-84.	2.3	20
66	Formation of ethyl acetate by <i>Kluyveromyces marxianus</i> on whey: studies of the ester stripping. <i>Bioprocess and Biosystems Engineering</i> , 2011, 34, 547-559.	3.4	36
67	Bioactive metabolite production and stress-related hormones in <i>Devil's claw</i> cell suspension cultures grown in bioreactors. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 1683-1691.	3.6	29
68	Hydrophobin signal sequence mediates efficient secretion of recombinant proteins in <i>Pichia pastoris</i> . <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 133-141.	3.6	36
69	Biotransformation of triterpenes. <i>Process Biochemistry</i> , 2011, 46, 1-15.	3.7	141
70	Anti-inflammatory activity of <i>Devil's claw</i> in vitro systems and their active constituents. <i>Food Chemistry</i> , 2011, 125, 171-178.	8.2	86
71	Repeated fed-batch fermentation using biosensor online control for citric acid production by <i>Yarrowia lipolytica</i> . <i>Journal of Biotechnology</i> , 2011, 153, 133-137.	3.8	33
72	Ploidy levels in <i>Beta vulgaris</i> (red beet) plant organs and in vitro systems. <i>Engineering in Life Sciences</i> , 2010, 10, 139-147.	3.6	13

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73	Whiteâ€rot fungi combined with lignite granules and lignitic xylite to decolorize textile industry wastewater. Engineering in Life Sciences, 2010, 10, 26-34.	3.6	16
74	Biosensor online control of citric acid production from glucose by <i>Yarrowia lipolytica</i> using semicontinuous fermentation. Engineering in Life Sciences, 2010, 10, 311-320.	3.6	26
75	From Single Cells to Microbial Population Dynamics: Modelling in Biotechnology Based on Measurements of Individual Cells. Advances in Biochemical Engineering/Biotechnology, 2010, 124, 211-227.	1.1	4
76	Antioxidant Activity and Phenolic Content of Betalain Extracts from Intact Plants and Hairy Root Cultures of the Red Beetroot <i>Beta vulgaris</i> cv. Detroit Dark Red. Plant Foods for Human Nutrition, 2010, 65, 105-111.	3.2	292
77	Antioxidant activity of devilâ€™s claw cell biomass and its active constituents. Food Chemistry, 2010, 121, 967-972.	8.2	29
78	Origin and analysis of microbial population heterogeneity in bioprocesses. Current Opinion in Biotechnology, 2010, 21, 100-113.	6.6	123
79	Devilâ€™s Claw Hairy Root Culture in Flasks and in a 3-L Bioreactor: Bioactive Metabolite Accumulation and Flow Cytometry. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2010, 65, 472-478.	1.4	18
80	Improved procedure for nucleus extraction for DNA measurements by flow cytometry of red beet (<i>Beta vulgaris</i> L.) hairy roots. Journal of Bioscience and Bioengineering, 2009, 107, 439-441.	2.2	6
81	Asymmetric division of <i>Hansenula polymorpha</i> reflected by a drop of light scatter intensity measured in batch microtiter plate cultivations at phosphate limitation. Biotechnology and Bioengineering, 2009, 104, 554-561.	3.3	25
82	In situ hybridization of microcolonies using catalyzed reporter deposition with tetramethylbenzidine: a method for detecting low numbers of bacterial cells in drinking water. European Food Research and Technology, 2008, 227, 995-999.	3.3	1
83	Betalain production in plant in vitro systems. Acta Physiologiae Plantarum, 2008, 30, 581-593.	2.1	73
84	Modeling synchronous growth of bacterial populations in phased cultivation. Bioprocess and Biosystems Engineering, 2008, 31, 435-443.	3.4	8
85	Flow cytometric investigations of diploid and tetraploid plants and in vitro cultures of <i>Datura stramonium</i> and <i>Hyoscyamus niger</i> . Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2008, 73A, 931-939.	1.5	28
86	Metabolite and hormonal status of hairy root cultures of Devil's claw (<i>Harpagophytum procumbens</i>) in flasks and in a bubble column bioreactor. Process Biochemistry, 2008, 43, 15-23.	3.7	51
87	Flow Cytometry and Phytochemical Analysis of a Sunflower Cell Suspension Culture in a 5-L Bioreactor. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2008, 63, 699-705.	1.4	21
88	Batch and Fed-Batch Production of Betalains by Red Beet (<i>Beta vulgaris</i>) Hairy Roots in a Bubble Column Reactor. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2007, 62, 439-446.	1.4	22
89	The use of respirometric measurements to determine the toxicity of textile dyes in aqueous solution and after oxidative decolourisation processes. Chemosphere, 2007, 67, 2163-2168.	8.2	9
90	Effects of caffeine on stereoselectivities of high cell density biotransformations of cyclic β^2 -keto esters with <i>Saccharomyces cerevisiae</i> . Organic and Biomolecular Chemistry, 2007, 5, 3456.	2.8	11

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91	Hairy root type plant in vitro systems as sources of bioactive substances. <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 1175-1185.	3.6	316
92	Betalains biosynthesis by <i>Beta vulgaris</i> L. hairy root culture in a temporary immersion cultivation system. <i>Process Biochemistry</i> , 2006, 41, 848-852.	3.7	65
93	Radical Scavenging Activity and Stability of Betalains from <i>Beta vulgaris</i> Hairy Root Culture in Simulated Conditions of Human Gastrointestinal Tract. <i>Plant Foods for Human Nutrition</i> , 2005, 60, 43-47.	3.2	43
94	Flavour compounds in backslop fermented uji (an East African sour porridge). <i>European Food Research and Technology</i> , 2004, 218, 579-583.	3.3	23
95	Rapid monitoring of the biodegradation of phenol-like compounds by the yeast <i>Candida maltosa</i> using BOD measurements. <i>International Biodeterioration and Biodegradation</i> , 2004, 54, 69-76.	3.9	73
96	Adaptive responses of <i>Ralstonia eutropha</i> to feast and famine conditions analysed by flow cytometry. <i>Journal of Biotechnology</i> , 1999, 75, 81-97.	3.8	52
97	Membrane-potential-related fluorescence intensity indicates bacterial injury. <i>Microbiological Research</i> , 1996, 151, 127-131.	5.3	17
98	Flow Cytometric Monitoring of Bacterial Cell States Under Growth Limiting Conditions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 213-216.	0.4	1
99	<i>Methylobacterium rhodesianum</i> cells tend to double the DNA content under growth limitations and accumulate PHB. <i>Journal of Biotechnology</i> , 1995, 39, 9-20.	3.8	61
100	FLOW CYTOMETRIC MONITORING OF BACTERIAL CELL STATES UNDER GROWTH LIMITING CONDITIONS. , 1995, , 213-216.		2