## Dirk Weuster-Botz

## List of Publications by Year in descending order

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Version: 2024-02-01

195 papers 6,718 citations

71102 41 h-index 70 g-index

205 all docs 205 docs citations

205 times ranked 6100 citing authors

#	Article	IF	CITATIONS
1	Artificial microbial consortia for bioproduction processes. Engineering in Life Sciences, 2023, 23, .	3.6	15
2	Novel synthetic coâ€culture of <i>Acetobacterium woodii</i> and <i>Clostridium drakei</i> using CO <sub>2</sub> and in situ generated H <sub>2</sub> for the production of caproic acid via lactic acid. Engineering in Life Sciences, 2023, 23, .	3.6	7
3	Synthetic coâ€culture of autotrophic <i>Clostridium carboxidivorans</i> and chain elongating <i>Clostridium kluyveri</i> monitored by flow cytometry. Microbial Biotechnology, 2022, 15, 1471-1485.	4.2	16
4	Advances in automated realâ€time flow cytometry for monitoring of bioreactor processes. Engineering in Life Sciences, 2022, 22, 260-278.	3.6	11
5	The SiLAÂ2 Manager for rapid device integration and workflow automation. SoftwareX, 2022, 17, 100991.	2.6	10
6	Lab-scale photobioreactor systems: principles, applications, and scalability. Bioprocess and Biosystems Engineering, 2022, 45, 791-813.	3.4	33
7	Comparison of Syngas-Fermenting Clostridia in Stirred-Tank Bioreactors and the Effects of Varying Syngas Impurities. Microorganisms, 2022, 10, 681.	3.6	10
8	Continuous sulfide supply enhanced autotrophic production of alcohols with Clostridium ragsdalei. Bioresources and Bioprocessing, 2022, 9, .	4.2	8
9	Efficient Green Light Acclimation of the Green Algae Picochlorum sp. Triggering Geranylgeranylated Chlorophylls. Frontiers in Bioengineering and Biotechnology, 2022, 10, 885977.	4.1	4
10	Machine learning-based protein crystal detection for monitoring of crystallization processes enabled with large-scale synthetic data sets of photorealistic images. Analytical and Bioanalytical Chemistry, 2022, 414, 6379-6391.	3.7	6
11	Byproduct-free geraniol glycosylation by whole-cell biotransformation with recombinant Escherichia coli. Biotechnology Letters, 2021, 43, 247-259.	2.2	3
12	Continuous Production of Lipids with Microchloropsis salina in Open Thin-Layer Cascade Photobioreactors on a Pilot Scale. Energies, 2021, 14, 500.	3.1	10
13	Studies on Syngas Fermentation With Clostridium carboxidivorans in Stirred-Tank Reactors With Defined Gas Impurities. Frontiers in Microbiology, 2021, 12, 655390.	3.5	24
14	Automated multi-scale cascade of parallel stirred-tank bioreactors for fast protein expression studies. Journal of Biotechnology, 2021, 332, 103-113.	3.8	8
15	Controlling Protein Crystallization by Free Energy Guided Design of Interactions at Crystal Contacts. Crystals, 2021, 11, 588.	2.2	4
16	D-Galacturonic acid reduction by S. cerevisiae for L-galactonate production from extracted sugar beet press pulp hydrolysate. Applied Microbiology and Biotechnology, 2021, 105, 5795-5807.	3.6	3
17	A Newly Designed Automatically Controlled, Sterilizable Flat Panel Photobioreactor for Axenic Algae Culture. Frontiers in Bioengineering and Biotechnology, 2021, 9, 697354.	4.1	13
18	Transfer of a Rational Crystal Contact Engineering Strategy between Diverse Alcohol Dehydrogenases. Crystals, 2021, 11, 975.	2.2	4

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19	Metabolic control analysis of L-tryptophan producing Escherichia coli applying targeted perturbation with shikimate. Bioprocess and Biosystems Engineering, 2021, 44, 2591-2613.	3.4	5
20	Production of βâ€carotene with <i>Dunaliella salina</i> CCAP19/18 at physically simulated outdoor conditions. Engineering in Life Sciences, 2021, 21, 115-125.	3.6	21
21	Monitoring co-cultures of Clostridium carboxidivorans and Clostridium kluyveri by fluorescence in situ hybridization with specific 23S rRNA oligonucleotide probes. Systematic and Applied Microbiology, 2021, 44, 126271.	2.8	8
22	Process Engineering Aspects for the Microbial Conversion of C1 Gases. Advances in Biochemical Engineering/Biotechnology, 2021, , 33-56.	1.1	3
23	Metabolic control analysis of L-tryptophan production with Escherichia coli based on data from short-term perturbation experiments. Journal of Biotechnology, 2020, 307, 15-28.	3.8	23
24	Greener aromatic antioxidants for aviation and beyond. Sustainable Energy and Fuels, 2020, 4, 2153-2163.	4.9	4
25	Improved packing of preparative biochromatography columns by mechanical vibration. Biotechnology Progress, 2020, 36, e2950.	2.6	2
26	Engineering cofactor supply and NADH-dependent d-galacturonic acid reductases for redox-balanced production of l-galactonate in Saccharomyces cerevisiae. Scientific Reports, 2020, 10, 19021.	3.3	7
27	Contact-free infrared OD measurement for online monitoring of parallel stirred-tank bioreactors up to high cell densities. Biochemical Engineering Journal, 2020, 164, 107749.	3.6	4
28	High-Density Microalgae Cultivation in Open Thin-Layer Cascade Photobioreactors with Water Recycling. Applied Sciences (Switzerland), 2020, 10, 3883.	2.5	15
29	Development and characterization of Escherichia coli triple reporter strains for investigation of population heterogeneity in bioprocesses. Microbial Cell Factories, 2020, 19, 14.	4.0	15
30	Comparative evaluation of Aspergillus niger strains for endogenous pectin-depolymerization capacity and suitability for d-galacturonic acid production. Bioprocess and Biosystems Engineering, 2020, 43, 1549-1560.	3.4	9
31	Crystal Contact Engineering Enables Efficient Capture and Purification of an Oxidoreductase by Technical Crystallization. Biotechnology Journal, 2020, 15, e2000010.	3.5	8
32	Mikrobielle Verfahren zur Umsetzung von CO2 und CO., 2020,, 121-149.		0
33	Asymmetric Whole-Cell Bio-Reductions of (R)-Carvone Using Optimized Ene Reductases. Molecules, 2019, 24, 2550.	3.8	11
34	Continuous conversion of CO2/H2 with Clostridium aceticum in biofilm reactors. Bioresource Technology, 2019, 291, 121760.	9.6	22
35	L-Erythrulose production with a multideletion strain of Gluconobacter oxydans. Applied Microbiology and Biotechnology, 2019, 103, 4393-4404.	3.6	13
36	Light-dependent growth kinetics enable scale-up of well-mixed phototrophic bioprocesses in different types of photobioreactors. Journal of Biotechnology, 2019, 297, 41-48.	3.8	25

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37	Loop Swapping as a Potent Approach to Increase Ene Reductase Activity with Nicotinamide Adenine Dinucleotide (NADH). Advanced Synthesis and Catalysis, 2019, 361, 2505-2513.	4.3	9
38	Rational Crystal Contact Engineering of <i>Lactobacillus brevis</i> Alcohol Dehydrogenase To Promote Technical Protein Crystallization. Crystal Growth and Design, 2019, 19, 2380-2387.	3.0	7
39	Validated numerical fluid simulation of a thinâ€layer cascade photobioreactor in OpenFOAM. Engineering in Life Sciences, 2019, 19, 97-103.	<b>3.</b> 6	7
40	Reversible retrofitting of a stirred-tank bioreactor for gas-lift operation to perform synthesis gas fermentation studies. Biochemical Engineering Journal, 2019, 141, 89-101.	3.6	24
41	A two-stage biological gas to liquid transfer process to convert carbon dioxide into bioplastic. Bioresource Technology Reports, 2018, 1, 61-68.	2.7	22
42	Investigation of vertical mixing in thin-layer cascade reactors using computational fluid dynamics. Chemical Engineering Research and Design, 2018, 132, 436-444.	5.6	15
43	Bacterial Anaerobic Synthesis Gas (Syngas) and CO 2 + H 2 Fermentation. Advances in Applied Microbiology, 2018, 103, 143-221.	2.4	118
44	Population heterogeneity in microbial bioprocesses: origin, analysis, mechanisms, and future perspectives. Bioprocess and Biosystems Engineering, 2018, 41, 889-916.	3.4	61
45	Identification and Experimental Characterization of an Extremophilic Brine Pool Alcohol Dehydrogenase from Single Amplified Genomes. ACS Chemical Biology, 2018, 13, 161-170.	3.4	19
46	Phosphoenolpyruvate Transporter Enables Targeted Perturbation During Metabolic Analysis of Lâ€Phenylalanine Production With ⟨i⟩Escherichia coli⟨/i⟩. Biotechnology Journal, 2018, 13, e1700611.	3.5	7
47	Studies on the scale-up of biomass production with Scenedesmus spp. in flat-plate gas-lift photobioreactors. Bioprocess and Biosystems Engineering, 2018, 41, 213-220.	3.4	16
48	Rational selection of biphasic reaction systems for geranyl glucoside production by Escherichia coli whole-cell biocatalysts. Enzyme and Microbial Technology, 2018, 112, 79-87.	3.2	12
49	Neutron and X-ray crystal structures of <i>Lactobacillus brevis</i> alcohol dehydrogenase reveal new insights into hydrogen-bonding pathways. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 754-764.	0.8	6
50	Fedâ€batch production of <scp>l</scp> â€tryptophan from glycerol using recombinant <i>Escherichia coli</i> li>. Biotechnology and Bioengineering, 2018, 115, 2881-2892.	3.3	26
51	Using gas mixtures of CO, CO <sub>2</sub> and H <sub>2</sub> as microbial substrates: the do's and don'ts of successful technology transfer from laboratory to production scale. Microbial Biotechnology, 2018, 11, 606-625.	4.2	126
52	Two stirred-tank bioreactors in series enable continuous production of alcohols from carbon monoxide with Clostridium carboxidivorans. Bioprocess and Biosystems Engineering, 2018, 41, 1403-1416.	3.4	36
53	Carbon monoxide conversion with <i>Clostridium aceticum</i> . Biotechnology and Bioengineering, 2018, 115, 2740-2750.	3.3	26
54	Bioreaktoren. , 2018, , 157-229.		3

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55	Prozessmodelle., 2018,, 71-105.		1
56	Enzymatische Prozesse., 2018,, 403-447.		0
57	Wachstumskinetik., 2018,, 45-70.		3
58	Rapid salinity measurements for fluid flow characterisation using minimal invasive sensors. Chemical Engineering Science, 2017, 166, 161-167.	3.8	9
59	Experimental validation of in silico estimated biomass yields of <i>Pseudomonas putida</i> KT2440. Biotechnology Journal, 2017, 12, 1600720.	3.5	18
60	High-performance recombinant protein production with Escherichia coli in continuously operated cascades of stirred-tank reactors. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 1021-1029.	3.0	21
61	Studies on the enzymatic synthesis of N-acetylneuraminic acid with continuously operated enzyme membrane reactors on a milliliter scale. Biochemical Engineering Journal, 2017, 119, 9-19.	3.6	8
62	Reaction engineering analysis of the autotrophic energy metabolism of Clostridium aceticum. FEMS Microbiology Letters, 2017, 364, .	1.8	16
63	Metabolic control analysis of l-phenylalanine production from glycerol with engineered E. coli using data from short-term steady-state perturbation experiments. Biochemical Engineering Journal, 2017, 126, 86-100.	3.6	10
64	Continuous Crystallization of Proteins in a Stirred Classified Product Removal Tank with a Tubular Reactor in Bypass. Crystal Growth and Design, 2017, 17, 4162-4169.	3.0	35
65	Open thin-layer cascade reactors for saline microalgae production evaluated in a physically simulated Mediterranean summer climate. Algal Research, 2017, 25, 381-390.	4.6	66
66	Chemostat studies of bacteriophage M13 infected Escherichia coli JM109 for continuous ssDNA production. Journal of Biotechnology, 2017, 258, 92-100.	3.8	3
67	Asymmetric whole-cell bioreduction of ( R )-carvone by recombinant Escherichia coli with in situ substrate supply and product removal. Biochemical Engineering Journal, 2017, 117, 102-111.	3.6	33
68	Specific growth rate and multiplicity of infection affect highâ€cellâ€density fermentation with bacteriophage M13 for ssDNA production. Biotechnology and Bioengineering, 2017, 114, 777-784.	3.3	32
69	Lipid production with Trichosporon oleaginosus in a membrane bioreactor using microalgae hydrolysate. Journal of Biotechnology, 2017, 241, 1-10.	3.8	27
70	Modelâ€supported phototrophic growth studies with <i>Scenedesmus obtusiusculus</i> in a flatâ€plate photobioreactor. Biotechnology and Bioengineering, 2017, 114, 308-320.	3.3	28
71	Reaction engineering analysis of Scenedesmus ovalternus in a flat-plate gas-lift photobioreactor. Bioresource Technology, 2017, 225, 165-174.	9.6	16
72	Biotechnological mass production of DNA origami. Nature, 2017, 552, 84-87.	27.8	374

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73	Effects of hydrogen partial pressure on autotrophic growth and product formation of Acetobacterium woodii. Bioprocess and Biosystems Engineering, 2016, 39, 1325-1330.	3.4	35
74	Comparative reaction engineering analysis of different acetogenic bacteria for gas fermentation. Journal of Biotechnology, 2016, 228, 82-94.	3.8	69
75	Parallel steady state studies on a milliliter scale accelerate fedâ€batch bioprocess design for recombinant protein production with ⟨i⟩Escherichia coli⟨ i⟩. Biotechnology Progress, 2016, 32, 1426-1435.	2.6	16
76	Anodic respiration of Pseudomonas putida KT2440 in a stirred-tank bioreactor. Biochemical Engineering Journal, 2016, 115, 1-13.	3.6	34
77	Model-based optimization of microalgae areal productivity in flat-plate gas-lift photobioreactors. Algal Research, 2016, 20, 153-163.	4.6	38
78	Syngas Fermentation with Acetogenic Bacteria. Chemie-Ingenieur-Technik, 2016, 88, 1328-1328.	0.8	0
79	Non-water miscible ionic liquid improves biocatalytic production of geranyl glucoside with Escherichia coli overexpressing a glucosyltransferase. Bioprocess and Biosystems Engineering, 2016, 39, 1409-1414.	3.4	16
80	General medium for the autotrophic cultivation of acetogens. Bioprocess and Biosystems Engineering, 2016, 39, 1645-1650.	3.4	24
81	High-cell-density cultivation and recombinant protein production with Komagataella pastoris in stirred-tank bioreactors from milliliter to cubic meter scale. Process Biochemistry, 2016, 51, 177-184.	3.7	22
82	Production of halophilic proteins using Haloferax volcanii H1895 in a stirred-tank bioreactor. Applied Microbiology and Biotechnology, 2016, 100, 1183-1195.	3.6	21
83	IPTG can replace lactose in autoâ€induction media to enhance protein expression in batchâ€cultured <i>Escherichia coli</i> . Engineering in Life Sciences, 2015, 15, 824-829.	3.6	19
84	A novel one-step expression and immobilization method for the production of biocatalytic preparations. Microbial Cell Factories, 2015, 14, 180.	4.0	16
85	Efficient Production of Single-Stranded Phage DNA as Scaffolds for DNA Origami. Nano Letters, 2015, 15, 4672-4676.	9.1	100
86	Perturbation Experiments: Approaches for Metabolic Pathway Analysis in Bioreactors. Advances in Biochemical Engineering/Biotechnology, 2015, 152, 91-136.	1.1	6
87	Evaluation of fluorimetric pH sensors for bioprocess monitoring at low pH. Bioprocess and Biosystems Engineering, 2015, 38, 1685-1692.	3.4	25
88	Purification of proteins from solutions containing residual host cell proteins via preparative crystallization. Biotechnology Letters, 2015, 37, 1791-1801.	2.2	8
89	Engineering solutions for open microalgae mass cultivation and realistic indoor simulation of outdoor environments. Bioprocess and Biosystems Engineering, 2015, 38, 995-1008.	3.4	62
90	Dynamic mechanistic modeling of the multienzymatic oneâ€pot reduction of dehydrocholic acid to 12â€keto ursodeoxycholic acid with competing substrates and cofactors. Biotechnology Progress, 2015, 31, 375-386.	2.6	8

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91	A novel milliliter-scale chemostat system for parallel cultivation of microorganisms in stirred-tank bioreactors. Journal of Biotechnology, 2015, 210, 19-24.	3.8	32
92	Parallelized small-scale production of uniformly 13C-labeled cell extract for quantitative metabolome analysis. Analytical Biochemistry, 2015, 478, 134-140.	2.4	17
93	Continuous gas fermentation by Acetobacterium woodii in a submerged membrane reactor with full cell retention. Journal of Biotechnology, 2015, 212, 11-18.	3.8	103
94	Non-chromatographic preparative purification of enhanced green fluorescent protein. Journal of Biotechnology, 2015, 194, 84-90.	3.8	7
95	Utilization of organophosphate:phosphate antiporter for isotope-labeling experiments inE.Âcoli. FEMS Microbiology Letters, 2014, 361, 52-61.	1.8	6
96	CFD analysis of interphase mass transfer and energy dissipation in a milliliter-scale stirred-tank reactor for filamentous microorganisms. Chemical Engineering Research and Design, 2014, 92, 240-248.	5.6	15
97	Selective enhancement of autotrophic acetate production with genetically modified Acetobacterium woodii. Journal of Biotechnology, 2014, 178, 67-72.	3.8	119
98	Improvement of constraintâ€based flux estimation during Lâ€phenylalanine production with <i>Escherichia coli</i> using targeted knockâ€out mutants. Biotechnology and Bioengineering, 2014, 111, 1406-1416.	3.3	17
99	Fed-batch production of l-phenylalanine from glycerol and ammonia with recombinant Escherichia coli. Biochemical Engineering Journal, 2014, 83, 62-69.	3.6	47
100	Feeding strategies enhance high cell density cultivation and protein expression in milliliter scale bioreactors. Biotechnology Journal, 2014, 9, 1293-1303.	3.5	34
101	Carbon storage in recombinant <i>Escherichia coli</i> during growth on glycerol and lactic acid. Biotechnology and Bioengineering, 2014, 111, 2508-2519.	3.3	11
102	Characterization of stirrers for screening studies of enzymatic biomass hydrolyses on a milliliter scale. Bioprocess and Biosystems Engineering, 2013, 36, 927-935.	3.4	18
103	Reaction engineering analysis of cellulase production with Trichoderma reesei RUT-C30 with intermittent substrate supply. Bioprocess and Biosystems Engineering, 2013, 36, 893-900.	3.4	15
104	Engineering of formate dehydrogenase: synergistic effect of mutations affecting cofactor specificity and chemical stability. Applied Microbiology and Biotechnology, 2013, 97, 2473-2481.	3.6	79
105	Catalytic hydrogenation of levulinic acid in aqueous phase. Journal of Organometallic Chemistry, 2013, 724, 297-299.	1.8	71
106	One-step synthesis of 12-ketoursodeoxycholic acid from dehydrocholic acid using a multienzymatic system. Applied Microbiology and Biotechnology, 2013, 97, 633-639.	3.6	20
107	Protein crystallization in stirred systems—scaleâ€up via the maximum local energy dissipation. Biotechnology and Bioengineering, 2013, 110, 1956-1963.	3.3	43
108	Development and Scale up of High-Yield Crystallization Processes of Lysozyme and Lipase Using Additives. Crystal Growth and Design, 2013, 13, 2499-2506.	3.0	41

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109	Multiâ€enzymatic oneâ€pot reduction of dehydrocholic acid to 12â€ketoâ€ursodeoxycholic acid with wholeâ€cell biocatalysts. Biotechnology and Bioengineering, 2013, 110, 68-77.	3.3	23
110	Modeling of transient flow through a viscoelastic preparative chromatography packing. Biotechnology Progress, 2013, 29, 958-967.	2.6	9
111	Comparative characterization of novel eneâ€reductases from cyanobacteria. Biotechnology and Bioengineering, 2013, 110, 1293-1301.	3.3	38
112	Statistical vs. Stochastic experimental design: An experimental comparison on the example of protein refolding. Biotechnology Progress, 2012, 28, 1499-1506.	2.6	7
113	Evaluation of parallel milliliter-scale stirred-tank bioreactors for the study of biphasic whole-cell biocatalysis with ionic liquids. Journal of Biotechnology, 2012, 157, 253-257.	3.8	22
114	A novel ene-reductase from Synechococcus sp. PCC 7942 for the asymmetric reduction of alkenes. Process Biochemistry, 2012, 47, 1988-1997.	3.7	26
115	Novel whole-cell biocatalysts with recombinant hydroxysteroid dehydrogenases for the asymmetric reduction of dehydrocholic acid. Applied Microbiology and Biotechnology, 2012, 95, 1457-1468.	3.6	19
116	Reaction engineering studies of acetoneâ€butanolâ€ethanol fermentation with <i>Clostridium acetobutylicum</i> . Biotechnology Journal, 2012, 7, 656-661.	3.5	16
117	Comparative reaction engineering studies for succinic acid production from sucrose by metabolically engineered <i>E</i> s <i>cherichia coli</i> in fedâ€batchâ€operated stirred tank bioreactors.  Biotechnology Journal, 2012, 7, 1277-1287.	3.5	17
118	Modifying the product pattern of Clostridium acetobutylicum. Applied Microbiology and Biotechnology, 2012, 94, 743-754.	3.6	75
119	New miniature stirred-tank bioreactors for parallel study of enzymatic biomass hydrolysis. Bioresource Technology, 2012, 106, 138-146.	9.6	38
120	Esterification of bio-based succinic acid in biphasic systems: Comparison of chemical and biological catalysts. Journal of Molecular Catalysis B: Enzymatic, 2012, 80, 39-47.	1.8	26
121	Kinetic mechanism of 3-ketoacyl-(acyl-carrier-protein) reductase from Synechococcus sp. strain PCC 7942: A useful enzyme for the production of chiral alcohols. Journal of Molecular Catalysis B: Enzymatic, 2011, 69, 89-94.	1.8	2
122	Combination of hydrodynamic cavitation and chlorine dioxide for disinfection of water. Engineering in Life Sciences, 2011, 11, 350-358.	3.6	8
123	Process performance of parallel bioreactors for batch cultivation of Streptomyces tendae. Bioprocess and Biosystems Engineering, 2011, 34, 297-304.	3.4	12
124	New reactive extraction systems for separation of bio-succinic acid. Bioprocess and Biosystems Engineering, 2011, 34, 779-787.	3.4	73
125	Growth and recombinant protein expression with Escherichia coli in different batch cultivation media. Applied Microbiology and Biotechnology, 2011, 90, 69-76.	3.6	31
126	A new microfluidic concept for parallel operated milliliterâ€scale stirred tank bioreactors. Biotechnology Progress, 2011, 27, 684-690.	2.6	38

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127	Integrated separation process for isolation and purification of biosuccinic acid. Biotechnology Progress, 2011, 27, 1623-1628.	2.6	16
128	Reaction engineering analysis of hydrogenotrophic production of acetic acid by <i>Acetobacterium woodii</i> . Biotechnology and Bioengineering, 2011, 108, 470-474.	3.3	102
129	Biocatalytic process optimization based on mechanistic modeling of cholic acid oxidation with cofactor regeneration. Biotechnology and Bioengineering, 2011, 108, 1307-1317.	3.3	21
130	Microbial production of homogeneously layered cellulose pellicles in a membrane bioreactor. Biotechnology and Bioengineering, 2011, 108, 2237-2240.	3.3	15
131	Macroscopic investigation of the transient hydrodynamic memory behavior of preparative packed chromatography beds. Journal of Chromatography A, 2011, 1218, 944-950.	3.7	8
132	Recycling of the ionic liquid phase in process integrated biphasic whole-cell biocatalysis. Process Biochemistry, 2011, 46, 1132-1137.	3.7	53
133	Rapid media transition: An experimental approach for steady state analysis of metabolic pathways. Biotechnology Progress, 2010, 26, 1-10.	2.6	27
134	Power consumption and maximum energy dissipation in a milliliterâ€scale bioreactor. Biotechnology Progress, 2010, 26, 595-599.	2.6	29
135	Enantioselective reduction of prochiral ketones by engineered bifunctional fusion proteins. Biotechnology and Applied Biochemistry, 2010, 56, 131-140.	3.1	29
136	Reaction engineering studies for the production of 2-hydroxyisobutyric acid with recombinant Cupriavidus necator H 16. Applied Microbiology and Biotechnology, 2010, 88, 477-484.	3.6	36
137	Recovery of succinic acid from fermentation broth. Biotechnology Letters, 2010, 32, 331-339.	2.2	148
138	New milliliterâ€scale stirred tank bioreactors for the cultivation of mycelium forming microorganisms. Biotechnology and Bioengineering, 2010, 106, 443-451.	3.3	47
139	Metabolic engineering of Saccharomyces cerevisiae for the biotechnological production of succinic acid. Metabolic Engineering, 2010, 12, 518-525.	7.0	191
140	New oxidoreductases from cyanobacteria: Exploring nature's diversity. Enzyme and Microbial Technology, 2010, 47, 228-235.	3.2	26
141	Experimental optimization of protein refolding with a genetic algorithm. Protein Science, 2010, 19, 2085-2095.	7.6	9
142	Milliliter-Scale Stirred Tank Reactors for the Cultivation of Microorganisms. Advances in Applied Microbiology, 2010, 73, 61-82.	2.4	33
143	Discrimination of riboflavin producing Bacillus subtilis strains based on their fed-batch process performances on a millilitre scale. Applied Microbiology and Biotechnology, 2009, 84, 71-76.	3.6	31
144	Whole-cell biocatalysis: Evaluation of new hydrophobic ionic liquids for efficient asymmetric reduction of prochiral ketones. Enzyme and Microbial Technology, 2009, 45, 310-316.	3.2	104

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145	Enantiocomplementary inverting sec-alkylsulfatase activity in cyano- and thio-bacteria Synechococcus and Paracoccus spp.: selectivity enhancement by medium engineering. Tetrahedron: Asymmetry, 2009, 20, 115-118.	1.8	8
146	Succinic acid from renewable resources as a C <sub>4</sub> building-block chemical—a review of the catalytic possibilities in aqueous media. Green Chemistry, 2009, 11, 13-26.	9.0	303
147	Leakage of adenylates during cold methanol/glycerol quenching of Escherichia coli. Metabolomics, 2008, 4, 240-247.	3.0	61
148	A parallel bubble column system for the cultivation of phototrophic microorganisms. Biotechnology Letters, 2008, 30, 1197-1200.	2.2	9
149	Fully automated single-use stirred-tank bioreactors for parallel microbial cultivations. Bioprocess and Biosystems Engineering, 2008, 31, 207-215.	3.4	68
150	Biochemical engineering science. Bioprocess and Biosystems Engineering, 2008, 31, 153-154.	3.4	0
151	Multi-objective steady state optimization of biochemical reaction networks using a constrained genetic algorithm. Computers and Chemical Engineering, 2008, 32, 1707-1713.	3.8	21
152	Enhancement of the NAD(P)(H) Pool in <i>Saccharomyces cerevisiae</i> . Engineering in Life Sciences, 2008, 8, 381-389.	3.6	13
153	Identification, Cloning, and Characterization of a Novel Ketoreductase from the Cyanobacterium <i>Synechococcus</i> sp. Strain PCC 7942. Applied and Environmental Microbiology, 2008, 74, 6697-6702.	3.1	35
154	Enabling Technologies: Fermentation and Downstream Processing. , 2007, 105, 205-247.		17
155	Steady-state analysis of metabolic pathways: Comparing the double modulation method and the lin–log approach. Metabolic Engineering, 2007, 9, 433-441.	7.0	8
156	Asymmetric whole cell biotransformations in biphasic ionic liquid/water-systems by use of recombinant Escherichia coli with intracellular cofactor regeneration. Tetrahedron: Asymmetry, 2007, 18, 1883-1887.	1.8	87
157	Scale-down and parallel operation of the riboflavin production process with Bacillus subtilis. Biochemical Engineering Journal, 2007, 33, 263-274.	3.6	59
158	Application of fuzzy-logic models for metabolic control analysis. Journal of Theoretical Biology, 2007, 245, 391-399.	1.7	7
159	Process intensification of wholeâ€cell biocatalysis with ionic liquids. Chemical Record, 2007, 7, 334-340.	5.8	74
160	Cofactor regeneration in phototrophic cyanobacteria applied for asymmetric reduction of ketones. Applied Microbiology and Biotechnology, 2007, 75, 1031-1037.	3.6	17
161	Kinetic studies on autohydrogenotrophic growth of Ralstonia eutropha with nitrate as terminal electron acceptor. Applied Microbiology and Biotechnology, 2007, 76, 75-81.	3.6	26
162	Fast sampling and quenching procedures for microbial metabolic profiling. Biotechnology Letters, 2007, 29, 1161-1167.	2.2	36

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163	Metabolic profiling of Escherichia coli cultivations: evaluation of extraction and metabolite analysis procedures. Biotechnology Letters, 2007, 29, 1169-1178.	2.2	36
164	Advanced protein crystallization using water-soluble ionic liquids as crystallization additives. Biotechnology Letters, 2007, 29, 1703-1711.	2.2	72
165	Water immiscible ionic liquids as solvents for whole cell biocatalysis. Journal of Biotechnology, 2006, 124, 182-190.	3.8	162
166	Evaluation of artificial neural networks for modelling and optimization of medium composition with a genetic algorithm. Process Biochemistry, 2006, 41, 2200-2206.	3.7	65
167	Comparison of genetic algorithms for experimental multi-objective optimization on the example of medium design for cyanobacteria. Biotechnology Journal, 2006, 1, 549-555.	3.5	25
168	Comparative Study of Cyanobacteria as Biocatalysts for the Asymmetric Synthesis of Chiral Building Blocks. Engineering in Life Sciences, 2006, 6, 175-179.	3.6	24
169	Genetic algorithm for multi-objective experimental optimization. Bioprocess and Biosystems Engineering, 2006, 29, 385-390.	3.4	33
170	Model-supported optimization of phototrophic growth in a stirred-tank photobioreactor. Biotechnology and Bioengineering, 2006, 95, 1177-1187.	3.3	34
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