

Jochen Buchs

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

182
papers

5,551
citations

41
h-index

67
g-index

190
ext. papers

6,366
ext. citations

5
avg, IF

5.92
L-index

#	Paper	IF	Citations
182	Introduction to advantages and problems of shaken cultures. <i>Biochemical Engineering Journal</i> , 2001 , 7, 91-98	4.2	277
181	Online respiration activity measurement (OTR, CTR, RQ) in shake flasks. <i>Biochemical Engineering Journal</i> , 2004 , 17, 187-194	4.2	232
180	Device for sterile online measurement of the oxygen transfer rate in shaking flasks. <i>Biochemical Engineering Journal</i> , 2001 , 7, 157-162	4.2	229
179	Characterisation of the gas-liquid mass transfer in shaking bioreactors. <i>Biochemical Engineering Journal</i> , 2001 , 7, 99-106	4.2	190
178	Itaconic acid--a biotechnological process in change. <i>Bioresource Technology</i> , 2013 , 135, 422-31	11	187
177	Validation of a high-throughput fermentation system based on online monitoring of biomass and fluorescence in continuously shaken microtiter plates. <i>Microbial Cell Factories</i> , 2009 , 8, 31	6.4	161
176	Power consumption in shaking flasks on rotary shaking machines: I. Power consumption measurement in unbaffled flasks at low liquid viscosity. <i>Biotechnology and Bioengineering</i> , 2000 , 68, 589-93	4.9	142
175	Power consumption in shaking flasks on rotary shaking machines: II. Nondimensional description of specific power consumption and flow regimes in unbaffled flasks at elevated liquid viscosity. <i>Biotechnology and Bioengineering</i> , 2000 , 68, 594-601	4.9	136
174	Advances in shaking technologies. <i>Trends in Biotechnology</i> , 2012 , 30, 307-14	15.1	133
173	Effect of oxygen limitation and medium composition on Escherichia coli fermentation in shake-flask cultures. <i>Biotechnology Progress</i> , 2004 , 20, 1062-8	2.8	131
172	Advances in understanding and modeling the gas-liquid mass transfer in shake flasks. <i>Biochemical Engineering Journal</i> , 2004 , 17, 155-167	4.2	106
171	The baffled microtiter plate: increased oxygen transfer and improved online monitoring in small scale fermentations. <i>Biotechnology and Bioengineering</i> , 2009 , 103, 1118-28	4.9	105
170	Robo-Lector - a novel platform for automated high-throughput cultivations in microtiter plates with high information content. <i>Microbial Cell Factories</i> , 2009 , 8, 42	6.4	100
169	Out-of-phase operating conditions, a hitherto unknown phenomenon in shaking bioreactors. <i>Biochemical Engineering Journal</i> , 2001 , 7, 135-141	4.2	91
168	Biomass pretreatment affects <i>Ustilago maydis</i> in producing itaconic acid. <i>Microbial Cell Factories</i> , 2012 , 11, 43	6.4	87
167	Flavin mononucleotide-based fluorescent reporter proteins outperform green fluorescent protein-like proteins as quantitative in vivo real-time reporters. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 5990-4	4.8	85
166	How recombinant swollenin from <i>Kluyveromyces lactis</i> affects cellulosic substrates and accelerates their hydrolysis. <i>Biotechnology for Biofuels</i> , 2011 , 4, 33	7.8	82

165	Hydromechanical stress in shake flasks: correlation for the maximum local energy dissipation rate. <i>Biotechnology and Bioengineering</i> , 2006 , 93, 1164-76	4.9	81
164	Microfluidic biolector-microfluidic bioprocess control in microtiter plates. <i>Biotechnology and Bioengineering</i> , 2010 , 107, 497-505	4.9	75
163	Optical method for the determination of the oxygen-transfer capacity of small bioreactors based on sulfite oxidation. <i>Biotechnology and Bioengineering</i> , 2001 , 74, 355-63	4.9	72
162	Scale-up from microtiter plate to laboratory fermenter: evaluation by online monitoring techniques of growth and protein expression in <i>Escherichia coli</i> and <i>Hansenula polymorpha</i> fermentations. <i>Microbial Cell Factories</i> , 2009 , 8, 68	6.4	71
161	Mass transfer resistance of sterile plugs in shaking bioreactors. <i>Biochemical Engineering Journal</i> , 2001 , 7, 107-112	4.2	61
160	Scale-up from shake flasks to fermenters in batch and continuous mode with <i>Corynebacterium glutamicum</i> on lactic acid based on oxygen transfer and pH. <i>Biotechnology and Bioengineering</i> , 2007 , 98, 800-11	4.9	59
159	High cell density cultivation of recombinant yeasts and bacteria under non-pressurized and pressurized conditions in stirred tank bioreactors. <i>Journal of Biotechnology</i> , 2007 , 132, 167-79	3.7	59
158	Oxygen limitation is a pitfall during screening for industrial strains. <i>Applied Microbiology and Biotechnology</i> , 2006 , 72, 1157-60	5.7	54
157	Microscale and miniscale fermentation and screening. <i>Current Opinion in Biotechnology</i> , 2015 , 35, 1-6	11.4	53
156	Biocatalytic conversion of lignocellulose to platform chemicals. <i>Biotechnology Journal</i> , 2012 , 7, 1122-36	5.6	52
155	High-throughput screening of <i>Hansenula polymorpha</i> clones in the batch compared with the controlled-release fed-batch mode on a small scale. <i>FEMS Yeast Research</i> , 2010 , 10, 83-92	3.1	52
154	Bioprocess control in microscale: scalable fermentations in disposable and user-friendly microfluidic systems. <i>Microbial Cell Factories</i> , 2010 , 9, 86	6.4	50
153	Evaluation of Maximum to Specific Power Consumption Ratio in Shaking Bioreactors.. <i>Journal of Chemical Engineering of Japan</i> , 2001 , 34, 647-653	0.8	49
152	Process development in <i>Hansenula polymorpha</i> and <i>Arxula adenivorans</i> , a re-assessment. <i>Microbial Cell Factories</i> , 2009 , 8, 22	6.4	48
151	Controlling pH in shake flasks using polymer-based controlled-release discs with pre-determined release kinetics. <i>BMC Biotechnology</i> , 2011 , 11, 25	3.5	46
150	Measurement and characterization of mixing time in shake flasks. <i>Chemical Engineering Science</i> , 2011 , 66, 440-447	4.4	46
149	Necessity of a two-stage process for the production of azadirachtin-related limonoids in suspension cultures of <i>Azadirachta indica</i> . <i>Journal of Bioscience and Bioengineering</i> , 2003 , 96, 16-22	3.3	46
148	Impact of two ionic liquids, 1-ethyl-3-methylimidazolium acetate and 1-ethyl-3-methylimidazolium methylphosphonate, on <i>Saccharomyces cerevisiae</i> : metabolic, physiologic, and morphological investigations. <i>Biotechnology for Biofuels</i> , 2015 , 8, 17	7.8	43

147	Correlation for the maximum oxygen transfer capacity in shake flasks for a wide range of operating conditions and for different culture media. <i>Biochemical Engineering Journal</i> , 2016 , 109, 228-235	4.2	43
146	Evidence for a key role of cytochrome bo ₃ oxidase in respiratory energy metabolism of <i>Gluconobacter oxydans</i> . <i>Journal of Bacteriology</i> , 2013 , 195, 4210-20	3.5	43
145	Combination of On-line pH and Oxygen Transfer Rate Measurement in Shake Flasks by Fiber Optical Technique and Respiration Activity MONitoring System (RAMOS). <i>Sensors</i> , 2007 , 7, 3472-3480	3.8	43
144	Online monitoring of fermentation processes via non-invasive low-field NMR. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 1810-21	4.9	42
143	Evolution of the specific power consumption and oxygen transfer rate in alginate-producing cultures of <i>Azotobacter vinelandii</i> conducted in shake flasks. <i>Biochemical Engineering Journal</i> , 2007 , 36, 73-80	4.2	42
142	Continuous production and recovery of itaconic acid in a membrane bioreactor. <i>Bioresource Technology</i> , 2013 , 137, 179-87	11	41
141	Calculating liquid distribution in shake flasks on rotary shakers at waterlike viscosities. <i>Biochemical Engineering Journal</i> , 2007 , 34, 200-208	4.2	41
140	Cellulolytic RoboLector - towards an automated high-throughput screening platform for recombinant cellulase expression. <i>Journal of Biological Engineering</i> , 2017 , 11, 1	6.3	40
139	An integrated catalytic approach to fermentable sugars from cellulose. <i>ChemSusChem</i> , 2010 , 3, 1151-3	8.3	40
138	From beech wood to itaconic acid: case study on biorefinery process integration. <i>Biotechnology for Biofuels</i> , 2018 , 11, 279	7.8	38
137	Correlation between mass transfer coefficient k _{La} and relevant operating parameters in cylindrical disposable shaken bioreactors on a bench-to-pilot scale. <i>Journal of Biological Engineering</i> , 2013 , 7, 28	6.3	37
136	High cell-density processes in batch mode of a genetically engineered <i>Escherichia coli</i> strain with minimized overflow metabolism using a pressurized bioreactor. <i>Journal of Biotechnology</i> , 2010 , 150, 73-9	3.7	37
135	Volumetric power consumption in baffled shake flasks. <i>Chemical Engineering Science</i> , 2006 , 61, 3771-3779	4.4	37
134	Exchange of single amino acids at different positions of a recombinant protein affects metabolic burden in <i>Escherichia coli</i> . <i>Microbial Cell Factories</i> , 2015 , 14, 10	6.4	35
133	The oxygen transfer rate as key parameter for the characterization of <i>Hansenula polymorpha</i> screening cultures. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2003 , 30, 613-22	4.2	35
132	Pitfalls in optical on-line monitoring for high-throughput screening of microbial systems. <i>Microbial Cell Factories</i> , 2014 , 13, 53	6.4	30
131	Equalizing growth in high-throughput small scale cultivations via precultures operated in fed-batch mode. <i>Biotechnology and Bioengineering</i> , 2009 , 103, 1095-102	4.9	30
130	In situ reactive extraction of itaconic acid during fermentation of <i>Aspergillus terreus</i> . <i>Biochemical Engineering Journal</i> , 2018 , 135, 133-141	4.2	29

129	Electrocatalytic upgrading of itaconic acid to methylsuccinic acid using fermentation broth as a substrate solution. <i>Green Chemistry</i> , 2017 , 19, 2390-2397	10	28
128	A Synthetic Reaction Cascade Implemented by Colocalization of Two Proteins within Catalytically Active Inclusion Bodies. <i>ACS Synthetic Biology</i> , 2018 , 7, 2282-2295	5.7	28
127	Dialysis shake flask for effective screening in fed-batch mode. <i>Biochemical Engineering Journal</i> , 2012 , 69, 182-195	4.2	28
126	Comprehensive characterization of two different <i>Nicotiana tabacum</i> cell lines leads to doubled GFP and HA protein production by media optimization. <i>Journal of Bioscience and Bioengineering</i> , 2012 , 113, 242-8	3.3	27
125	Catalytically-active inclusion bodies for biotechnology-general concepts, optimization, and application. <i>Applied Microbiology and Biotechnology</i> , 2020 , 104, 7313-7329	5.7	26
124	Fed-batch operation in special microtiter plates: a new method for screening under production conditions. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2014 , 41, 513-25	4.2	26
123	Optimizing recombinant protein expression via automated induction profiling in microtiter plates at different temperatures. <i>Microbial Cell Factories</i> , 2017 , 16, 220	6.4	24
122	Phenotyping the quality of complex medium components by simple online-monitored shake flask experiments. <i>Microbial Cell Factories</i> , 2014 , 13, 149	6.4	24
121	Liquid films on shake flask walls explain increasing maximum oxygen transfer capacities with elevating viscosity. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 295-308	4.9	24
120	Light-induced gene expression with photocaged IPTG for induction profiling in a high-throughput screening system. <i>Microbial Cell Factories</i> , 2016 , 15, 63	6.4	24
119	Photocaged Arabinose: A Novel Optogenetic Switch for Rapid and Gradual Control of Microbial Gene Expression. <i>ChemBioChem</i> , 2016 , 17, 296-9	3.8	23
118	Integration of Genetic and Process Engineering for Optimized Rhamnolipid Production Using. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 976	5.8	23
117	Metabolome analysis reveals the effect of carbon catabolite control on the poly(γ -glutamic acid) biosynthesis of <i>Bacillus licheniformis</i> ATCC 9945. <i>Journal of Bioscience and Bioengineering</i> , 2016 , 121, 413-9	3.3	22
116	Asymmetric division of <i>Hansenula polymorpha</i> reflected by a drop of light scatter intensity measured in batch microtiter plate cultivations at phosphate limitation. <i>Biotechnology and Bioengineering</i> , 2009 , 104, 554-61	4.9	22
115	A new approach for the spatially resolved qualitative analysis of the protein distribution in hydrogel beads based on confocal laser scanning microscopy. <i>Biotechnology Letters</i> , 2002 , 24, 845-850	3	22
114	Development of a modified Respiration Activity Monitoring System for accurate and highly resolved measurement of respiration activity in shake flask fermentations. <i>Journal of Biological Engineering</i> , 2012 , 6, 11	6.3	21
113	Increased product formation induced by a directed secondary substrate limitation in a batch <i>Hansenula polymorpha</i> culture. <i>Applied Microbiology and Biotechnology</i> , 2010 , 86, 93-101	5.7	21
112	Effective shear rates in shake flasks. <i>Chemical Engineering Science</i> , 2014 , 118, 102-113	4.4	20

111	Screening of cellulases for biofuel production: online monitoring of the enzymatic hydrolysis of insoluble cellulose using high-throughput scattered light detection. <i>Biotechnology Journal</i> , 2011 , 6, 74-85	5.6	20
110	Respiration activity monitoring system for any individual well of a 48-well microtiter plate. <i>Journal of Biological Engineering</i> , 2016 , 10, 14	6.3	20
109	Integrated in-situ product removal process concept for itaconic acid by reactive extraction, pH-shift back extraction and purification by pH-shift crystallization. <i>Separation and Purification Technology</i> , 2019 , 215, 463-472	8.3	20
108	Metabolic studies of ϵ -polyglutamic acid production in <i>Bacillus licheniformis</i> by small-scale continuous cultivations. <i>Biochemical Engineering Journal</i> , 2013 , 73, 29-37	4.2	19
107	Influence of nitrogen source and pH value on undesired poly(ϵ -glutamic acid) formation of a protease producing <i>Bacillus licheniformis</i> strain. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2015 , 42, 1203-15	4.2	18
106	Modelling and advanced understanding of unsteady-state gas transfer in shaking bioreactors. <i>Biotechnology and Applied Biochemistry</i> , 2007 , 46, 57-67	2.8	18
105	New method to determine the mass transfer resistance of sterile closures for shaken bioreactors. <i>Biotechnology and Bioengineering</i> , 2007 , 98, 999-1007	4.9	18
104	pH-optima in lipase-catalysed esterification. <i>Biocatalysis and Biotransformation</i> , 2005 , 23, 307-314	2.5	18
103	Easy to use and reliable technique for online dissolved oxygen tension measurement in shake flasks using infrared fluorescent oxygen-sensitive nanoparticles. <i>Microbial Cell Factories</i> , 2016 , 15, 45	6.4	17
102	<i>Kluyveromyces marxianus</i> , an Attractive Yeast for Ethanolic Fermentation in the Presence of Imidazolium Ionic Liquids. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	17
101	Cross-section perimeter is a suitable parameter to describe the effects of different baffle geometries in shaken microtiter plates. <i>Journal of Biological Engineering</i> , 2014 , 8, 18	6.3	17
100	Minireactor-based high-throughput temperature profiling for the optimization of microbial and enzymatic processes. <i>Journal of Biological Engineering</i> , 2014 , 8, 22	6.3	17
99	Anionic Extraction for Efficient Recovery of Biobased 2,3-Butanediol-A Platform for Bulk and Fine Chemicals. <i>ChemSusChem</i> , 2017 , 10, 3252-3259	8.3	17
98	An experimental comparison of respiration measuring techniques in fermenters and shake flasks: exhaust gas analyzer vs. RAMOS device vs. respirometer. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2007 , 34, 123-30	4.2	17
97	Promoters from the itaconate cluster of are induced by nitrogen depletion. <i>Fungal Biology and Biotechnology</i> , 2017 , 4, 11	7.5	16
96	Quantifying the release of polymer additives from single-use materials by respiration activity monitoring. <i>Polymer Testing</i> , 2013 , 32, 1064-1071	4.5	16
95	Efficient evaluation of cellulose digestibility by <i>Trichoderma reesei</i> Rut-C30 cultures in online monitored shake flasks. <i>Microbial Cell Factories</i> , 2016 , 15, 164	6.4	15
94	Characterization of Endogenous and Reduced Promoters for Oxygen-Limited Processes Using <i>Escherichia coli</i> . <i>ACS Synthetic Biology</i> , 2017 , 6, 344-356	5.7	15

93	A particular silent codon exchange in a recombinant gene greatly influences host cell metabolic activity. <i>Microbial Cell Factories</i> , 2015 , 14, 156	6.4	15
92	Replication methods and tools in high-throughput cultivation processes - recognizing potential variations of growth and product formation by on-line monitoring. <i>BMC Biotechnology</i> , 2010 , 10, 22	3.5	15
91	Consolidated bioprocessing of cellulose to itaconic acid by a co-culture of <i>Trichoderma reesei</i> and <i>Ustilago maydis</i> . <i>Biotechnology for Biofuels</i> , 2020 , 13, 207	7.8	15
90	Molecular weight and viscosifying power of alginates produced in <i>Azotobacter vinelandii</i> cultures in shake flasks under low power input. <i>Journal of Chemical Technology and Biotechnology</i> , 2016 , 91, 1485-1492	3.5	15
89	Process relevant screening of cellulolytic organisms for consolidated bioprocessing. <i>Biotechnology for Biofuels</i> , 2017 , 10, 106	7.8	14
88	Production of the potential sweetener 5-ketofructose from fructose in fed-batch cultivation with <i>Gluconobacter oxydans</i> . <i>Bioresource Technology</i> , 2018 , 259, 164-172	11	14
87	Improvement and scale-down of a <i>Trichoderma reesei</i> shake flask protocol to microtiter plates enables high-throughput screening. <i>Journal of Bioscience and Bioengineering</i> , 2014 , 118, 702-9	3.3	14
86	Online monitoring of dissolved oxygen tension in microtiter plates based on infrared fluorescent oxygen-sensitive nanoparticles. <i>Microbial Cell Factories</i> , 2015 , 14, 161	6.4	14
85	Probing unnatural amino acid integration into enhanced green fluorescent protein by genetic code expansion with a high-throughput screening platform. <i>Journal of Biological Engineering</i> , 2016 , 10, 11	6.3	13
84	Scale-down of vinegar production into microtiter plates using a custom-made lid. <i>Journal of Bioscience and Bioengineering</i> , 2014 , 117, 485-96	3.3	13
83	Potential errors in conventional DOT measurement techniques in shake flasks and verification using a rotating flexitube optical sensor. <i>BMC Biotechnology</i> , 2011 , 11, 49	3.5	13
82	Complementing the intrinsic repertoire of <i>Ustilago maydis</i> for degradation of the pectin backbone polygalacturonic acid. <i>Journal of Biotechnology</i> , 2020 , 307, 148-163	3.7	13
81	Prediction of recombinant protein production by <i>Escherichia coli</i> derived online from indicators of metabolic burden. <i>Biotechnology Progress</i> , 2018 , 34, 1543-1552	2.8	13
80	Comparison of Isomerase and Weimberg Pathway for EPA Production From Xylose by Engineered. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019 , 7, 476	5.8	12
79	Tackling destructive proteolysis of unconventionally secreted heterologous proteins in <i>Ustilago maydis</i> . <i>Journal of Biotechnology</i> , 2018 , 284, 37-51	3.7	12
78	The liquid fraction from hydrothermal pretreatment of wheat straw provides lytic polysaccharide monoxygenases with both electrons and HO co-substrate. <i>Biotechnology for Biofuels</i> , 2019 , 12, 235	7.8	12
77	Oxygen transfer rate identifies priming compounds in parsley cells. <i>BMC Plant Biology</i> , 2015 , 15, 282	5.3	12
76	Testing plasmid stability of <i>Escherichia coli</i> using the Continuously Operated Shaken BIOreactor System. <i>Biotechnology Progress</i> , 2016 , 32, 1418-1425	2.8	12

75	Parallel online multi-wavelength (2D) fluorescence spectroscopy in each well of a continuously shaken microtiter plate. <i>Biotechnology Journal</i> , 2016 , 11, 1605-1616	5.6	12
74	Fast automated online xylanase activity assay using HPAEC-PAD. <i>Analytical and Bioanalytical Chemistry</i> , 2018 , 410, 57-69	4.4	12
73	Prediction of expression performance in microtiter plates by analyzing only the temporal development of scattered light during culture. <i>Journal of Biological Engineering</i> , 2017 , 11, 20	6.3	11
72	The oxygen mass transfer, carbon dioxide inhibition, heat removal, and the energy and cost efficiencies of high pressure fermentation. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2005 , 92, 77-99	1.7	11
71	Computational minimization of the specific energy demand of large-scale aerobic fermentation processes based on small-scale data. <i>Chemical Engineering Science</i> , 2016 , 153, 270-283	4.4	11
70	Detailed small-scale characterization and scale-up of active YFP inclusion body production with <i>Escherichia coli</i> induced by a tetrameric coiled coil domain. <i>Journal of Bioscience and Bioengineering</i> , 2020 , 129, 730-740	3.3	10
69	Permeability of currently available microtiter plate sealing tapes fail to fulfil the requirements for aerobic microbial cultivation. <i>Biotechnology Journal</i> , 2016 , 11, 1525-1538	5.6	10
68	Online monitoring of the respiratory quotient reveals metabolic phases during microaerobic 2,3-butanediol production with. <i>Engineering in Life Sciences</i> , 2020 , 20, 133-144	3.4	10
67	Optogenetic Regulation of Tunable Gene Expression in Yeast Using Photo-Labile Caged Methionine. <i>ACS Chemical Biology</i> , 2016 , 11, 2915-2922	4.9	10
66	Online in vivo monitoring of cytosolic NAD redox dynamics in <i>Ustilago maydis</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018 , 1859, 1015-1024	4.6	10
65	Introducing substrate limitations to overcome catabolite repression in a protease producing <i>Bacillus licheniformis</i> strain using membrane-based fed-batch shake flasks. <i>Biotechnology and Bioengineering</i> , 2019 , 116, 1326-1340	4.9	9
64	Shake flask methodology for assessing the influence of the maximum oxygen transfer capacity on 2,3-butanediol production. <i>Microbial Cell Factories</i> , 2019 , 18, 78	6.4	9
63	Time efficient way to calculate oxygen transfer areas and power input in cylindrical disposable shaken bioreactors. <i>Biotechnology Progress</i> , 2014 , 30, 1441-56	2.8	9
62	Branched chain amino acids maintain the molecular weight of poly(γ -glutamic acid) of <i>Bacillus licheniformis</i> ATCC 9945 during the fermentation. <i>Journal of Bioscience and Bioengineering</i> , 2016 , 122, 400-5	3.3	9
61	Investigation of poly(γ -glutamic acid) production via online determination of viscosity and oxygen transfer rate in shake flasks. <i>Journal of Biological Engineering</i> , 2017 , 11, 23	6.3	8
60	Quasi-continuous parallel online scattered light, fluorescence and dissolved oxygen tension measurement combined with monitoring of the oxygen transfer rate in each well of a shaken microtiter plate. <i>Microbial Cell Factories</i> , 2016 , 15, 206	6.4	8
59	Online measurement of viscosity for biological systems in stirred tank bioreactors. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 990-997	4.9	8
58	Mixing Performance of a Reciprocally Shaking Vessel. <i>Journal of Chemical Engineering of Japan</i> , 2003 , 36, 663-667	0.8	8

57	Online evaluation of the metabolic activity of on (poly)galacturonic acid. <i>Journal of Biological Engineering</i> , 2018 , 12, 34	6.3	8
56	The metabolic switch can be activated in a recombinant strain of <i>Streptomyces lividans</i> by a low oxygen transfer rate in shake flasks. <i>Microbial Cell Factories</i> , 2018 , 17, 189	6.4	8
55	Online measurement of the respiratory activity in shake flasks enables the identification of cultivation phases and patterns indicating recombinant protein production in various <i>Escherichia coli</i> host strains. <i>Biotechnology Progress</i> , 2018 , 34, 315-327	2.8	7
54	The role of volumetric power input in the growth, morphology, and production of a recombinant glycoprotein by <i>Streptomyces lividans</i> in shake flasks. <i>Biochemical Engineering Journal</i> , 2014 , 90, 224-233	4.2	7
53	Newly designed and validated impedance spectroscopy setup in microtiter plates successfully monitors viable biomass online. <i>Biotechnology Journal</i> , 2015 , 10, 1259-68	5.6	7
52	Novel dynamic model for aerated shaking bioreactors. <i>Biotechnology and Applied Biochemistry</i> , 2011 , 58, 128-137	2.8	7
51	Comparative Fermentation 2005 , 287-317		7
50	Contact-free determination of viscosity in multiple parallel samples. <i>Scientific Reports</i> , 2019 , 9, 8335	4.9	6
49	Optimization of the Ames RAMOS test allows for a reproducible high-throughput mutagenicity test. <i>Science of the Total Environment</i> , 2020 , 717, 137168	10.2	6
48	Design and Operation of Microbioreactor Systems for Screening and Process Development 2016 , 35-76		6
47	Online in situ viscosity determination in stirred tank reactors by measurement of the heat transfer capacity. <i>Chemical Engineering Science</i> , 2016 , 152, 116-126	4.4	6
46	Parallel online determination of ethylene release rate by Shaken Parsley cell cultures using a modified RAMOS device. <i>BMC Plant Biology</i> , 2018 , 18, 101	5.3	6
45	Precultures Grown under Fed-Batch Conditions Increase the Reliability and Reproducibility of High-Throughput Screening Results. <i>Biotechnology Journal</i> , 2019 , 14, e1800727	5.6	6
44	Effect of the oxygen transfer rate on oxygen-limited production of plasmid DNA by <i>Escherichia coli</i> . <i>Biochemical Engineering Journal</i> , 2019 , 150, 107303	4.2	6
43	Characterization of hydromechanical stress in aerated stirred tanks up to 40 m(3) scale by measurement of maximum stable drop size. <i>Journal of Biological Engineering</i> , 2014 , 8, 17	6.3	6
42	Extended Method to Evaluate Power Consumption in Large Disposable Shaking Bioreactors. <i>Journal of Chemical Engineering of Japan</i> , 2008 , 41, 1075-1082	0.8	6
41	Online measurement of CO ₂ and total gas production in parallel anaerobic shake flask cultivations. <i>Biochemical Engineering Journal</i> , 2020 , 153, 107418	4.2	6
40	Glucose-containing polymer rings enable fed-batch operation in microtiter plates with parallel online measurement of scattered light, fluorescence, dissolved oxygen tension, and pH. <i>Biotechnology and Bioengineering</i> , 2019 , 116, 2250-2262	4.9	5

39	Gas Fermentation Expands the Scope of a Process Network for Material Conversion. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 1665-1679	0.8	5
38	Novel plasmid-free <i>Gluconobacter oxydans</i> strains for production of the natural sweetener 5-ketofructose. <i>Microbial Cell Factories</i> , 2020 , 19, 54	6.4	5
37	Molecular weight and viscosifying power of alginates produced by mutant strains of under microaerophilic conditions. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2020 , 26, e00436	5.3	5
36	Elucidation of auxotrophic deficiencies of <i>Bacillus pumilus</i> DSM 18097 to develop a defined minimal medium. <i>Microbial Cell Factories</i> , 2018 , 17, 106	6.4	5
35	Salt-enhanced cultivation as a morphology engineering tool for filamentous actinomycetes: Increased production of labyrinthopeptin A1 in. <i>Engineering in Life Sciences</i> , 2019 , 19, 781-794	3.4	5
34	Establishing a Fed-Batch Process for Protease Expression with <i>Bacillus licheniformis</i> in Polymer-Based Controlled-Release Microtiter Plates. <i>Biotechnology Journal</i> , 2020 , 15, e1900088	5.6	5
33	Light-controlled gene expression in yeast using photocaged Cu. <i>Journal of Biotechnology</i> , 2017 , 258, 117-125	3.7	4
32	Three-dimensional (3D) evaluation of liquid distribution in shake flask using an optical fluorescence technique. <i>Journal of Biological Engineering</i> , 2017 , 11, 28	6.3	4
31	Evaluation of microbial globin promoters for oxygen-limited processes using. <i>Journal of Biological Engineering</i> , 2017 , 11, 39	6.3	4
30	Online measurement of dissolved carbon monoxide concentrations reveals critical operating conditions in gas fermentation experiments. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 253-264	4.9	4
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