# Christoph Herwig

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 227 papers | 4,269 citations | 32 h-index | 51 g-index |
| 236 ext. papers | 5,064 ext. citations | 4.6 avg, IF | 6.16 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 227 | Event driven modeling for the accurate identification of metabolic switches in fed-batch culture of S. cerevisiae. *Biochemical Engineering Journal*, **2022**, 180, 108345 | 4.2 | 1 |
| 226 | Mixotrophic co-utilization of glucose and carbon monoxide boosts ethanol and butanol productivity of continuous Clostridium carboxidivorans cultures.. *Bioresource Technology*, **2022**, 127138 | 11 | 0 |
| 225 | At-line quantitative profiling of monoclonal antibody products during bioprocessing using HPLC-MS.. *Analytica Chimica Acta*, **2022**, 1207, 339813 | 6.6 | 0 |
| 224 | Strategies for Continuous Processing in Microbial Systems **2022**, 1-37 | | |
| 223 | Characterization of reactions and growth in automated continuous flow and bioreactor platforms□rom linear DoE to model-based approaches **2022**, 273-319 | | |
| 222 | Reducing Organic Load From Industrial Residual Process Brine With a Novel Halophilic Mixed Culture: Scale-Up and Long-Term Piloting of an Integrated Bioprocess.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 896576 | 5.8 | 1 |
| 221 | Trendbericht Analytische Chemie 2022. *Nachrichten Aus Der Chemie*, **2022**, 70, 52-65 | 0.1 | |
| 220 | Optimized Operating Conditions for a Biological Treatment Process of Industrial Residual Process Brine Using a Halophilic Mixed Culture. *Fermentation*, **2022**, 8, 246 | 4.7 | |
| 219 | Integrated Process Model Applications Linking Bioprocess Development to Quality by Design Milestones. *Bioengineering*, **2021**, 8, | 5.3 | 4 |
| 218 | Lymphocyte expansion in bioreactors: upgrading adoptive cell therapy. *Journal of Biological Engineering*, **2021**, 15, 13 | 6.3 | 2 |
| 217 | Cascaded processing enables continuous upstream processing with E. coli BL21(DE3). *Scientific Reports*, **2021**, 11, 11477 | 4.9 | 1 |
| 216 | Reducing phenotypic instabilities of a microbial population during continuous cultivation based on cell switching dynamics. *Biotechnology and Bioengineering*, **2021**, 118, 3847-3859 | 4.9 | 4 |
| 215 | Noninvasive online monitoring of Corynebacterium glutamicum fed-batch bioprocesses subject to spent sulfite liquor raw material uncertainty. *Bioresource Technology*, **2021**, 321, 124395 | 11 | 5 |
| 214 | Event driven analysis to enhance model calibration of experiments with high offline sampling rates. *Computer Aided Chemical Engineering*, **2021**, 463-468 | 0.6 | |
| 213 | Advances in monitoring and control of refolding kinetics combining PAT and modeling. *Applied Microbiology and Biotechnology*, **2021**, 105, 2243-2260 | 5.7 | 3 |
| 212 | Potential applications of halophilic microorganisms for biological treatment of industrial process brines contaminated with aromatics. *Journal of Industrial Microbiology and Biotechnology*, **2021**, 48, | 4.2 | 6 |
| 211 | Effect of changes in continuous carboxylate feeding on the specific production rate of butanol using Clostridium saccharoperbutylacetonicum. *Bioresource Technology*, **2021**, 332, 125057 | 11 | 2 |

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|---|---|---|---|
| 210 | Establishing recombinant production of pediocin PA-1 in Corynebacterium glutamicum. *Metabolic Engineering*, **2021**, 68, 34-45 | 9.7 | 4 |
| 209 | Impact of exoD gene knockout on the polyhydroxybutyrate overaccumulating mutant Mt_a24. *International Journal of Biobased Plastics*, **2021**, 3, 1-18 | 3.3 | 3 |
| 208 | Usage of Digital Twins Along a Typical Process Development Cycle. *Advances in Biochemical Engineering/Biotechnology*, **2021**, 176, 71-96 | 1.7 | 2 |
| 207 | Morphological and physiological characterization of filamentous Lentzea aerocolonigenes: Comparison of biopellets by microscopy and flow cytometry. *PLoS ONE*, **2020**, 15, e0234125 | 3.7 | 9 |
| 206 | Production of Active Recombinant Hyaluronidase Inclusion Bodies from in Bl21(DE3) and characterization by FT-IR Spectroscopy. *International Journal of Molecular Sciences*, **2020**, 21, | 6.3 | 7 |
| 205 | A Reliable Automated Sampling System for On-Line and Real-Time Monitoring of CHO Cultures. *Processes*, **2020**, 8, 637 | 2.9 | 4 |
| 204 | Development of a generic reversed-phase liquid chromatography method for protein quantification using analytical quality-by-design principles. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 188, 113412 | 3.5 | 11 |
| 203 | A robust flow cytometry-based biomass monitoring tool enables rapid at-line characterization of S. cerevisiae physiology during continuous bioprocessing of spent sulfite liquor. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 2137-2149 | 4.4 | 9 |
| 202 | Multivariate Monitoring Workflow for Formulation, Fill and Finish Processes. *Bioengineering*, **2020**, 7, | 5.3 | 2 |
| 201 | Development, characterization, and application of a 2-Compartment system to investigate the impact of pH inhomogeneities in large-scale CHO-based processes. *Engineering in Life Sciences*, **2020**, 20, 368-378 | 3.4 | 4 |
| 200 | Scale-down simulators for mammalian cell culture as tools to access the impact of inhomogeneities occurring in large-scale bioreactors. *Engineering in Life Sciences*, **2020**, 20, 197-204 | 3.4 | 9 |
| 199 | Optimal process design space to ensure maximum viability and productivity in Penicillium chrysogenum pellets during fed-batch cultivations through morphological and physiological control. *Microbial Cell Factories*, **2020**, 19, 33 | 6.4 | 3 |
| 198 | A Chemometric Tool to Monitor and Predict Cell Viability in Filamentous Fungi Bioprocesses Using UV Chromatogram Fingerprints. *Processes*, **2020**, 8, 461 | 2.9 | 1 |
| 197 | Risk assessment and integrated process modeling□n improved QbD approach for the development of the bioprocess control strategy. *AIMS Bioengineering*, **2020**, 7, 254-271 | 3.4 | 0 |
| 196 | Current and future requirements to industrial analytical infrastructure-part 1: process analytical laboratories. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 2027-2035 | 4.4 | 17 |
| 195 | Current and future requirements to industrial analytical infrastructure-part 2: smart sensors. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 2037-2045 | 4.4 | 32 |
| 194 | Probeless non-invasive near-infrared spectroscopic bioprocess monitoring using microspectrometer technology. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 2103-2109 | 4.4 | 7 |
| 193 | Experimental verification and comparison of model predictive, PID and model inversion control in a Penicillium chrysogenum fed-batch process. *Process Biochemistry*, **2020**, 90, 1-11 | 4.8 | 18 |

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| 192 | Time Scale Analysis and Optimization of a Continuous Microbial Bioprocess. *Computer Aided Chemical Engineering*, **2020**, 1603-1608 | 0.6 | 0 |
| 191 | Improving the Calibration of Kinetic Growth Models using Dynamic Time Warping. *Computer Aided Chemical Engineering*, **2020**, 1651-1656 | 0.6 | |
| 190 | The Lazarus Effect: Recovery of Productivity on Glycerol/Lactose Mixed Feed in Continuous Biomanufacturing. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 993 | 5.8 | 6 |
| 189 | Investigation of cell line specific responses to pH inhomogeneity and consequences for process design. *Engineering in Life Sciences*, **2020**, 20, 412-421 | 3.4 | 2 |
| 188 | Repetitive Fed-Batch: A Promising Process Mode for Biomanufacturing With. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 573607 | 5.8 | 4 |
| 187 | Microbial technologies for biotherapeutics production: Key tools for advanced biopharmaceutical process development and control.. *Drug Discovery Today: Technologies*, **2020**, 38, 9-24 | 7.1 | 2 |
| 186 | Study of metabolism and identification of productive regions in filamentous fungi via spatially resolved time-of-flight secondary ion mass spectrometry. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 2081-2088 | 4.4 | 3 |
| 185 | Generic Workflow for the Setup of Mechanistic Process Models. *Methods in Molecular Biology*, **2020**, 2095, 189-211 | 1.4 | 3 |
| 184 | Morphological and physiological characterization of filamentous Lentzea aerocolonigenes: Comparison of biopellets by microscopy and flow cytometry **2020**, 15, e0234125 | | |
| 183 | Morphological and physiological characterization of filamentous Lentzea aerocolonigenes: Comparison of biopellets by microscopy and flow cytometry **2020**, 15, e0234125 | | |
| 182 | Morphological and physiological characterization of filamentous Lentzea aerocolonigenes: Comparison of biopellets by microscopy and flow cytometry **2020**, 15, e0234125 | | |
| 181 | Morphological and physiological characterization of filamentous Lentzea aerocolonigenes: Comparison of biopellets by microscopy and flow cytometry **2020**, 15, e0234125 | | |
| 180 | Data science tools and applications on the way to Pharma 4.0. *Drug Discovery Today*, **2019**, 24, 1795-1805 | 8.8 | 50 |
| 179 | The filamentous fungus Penicillium chrysogenum analysed via flow cytometry-a fast and statistically sound insight into morphology and viability. *Applied Microbiology and Biotechnology*, **2019**, 103, 6725-6735 | 5.7 | 14 |
| 178 | Monitoring and control strategies for inclusion body production in E. coli based on glycerol consumption. *Journal of Biotechnology*, **2019**, 296, 75-82 | 3.7 | 12 |
| 177 | Provable Data Integrity in the Pharmaceutical Industry Based on Version Control Systems and the Blockchain. *PDA Journal of Pharmaceutical Science and Technology*, **2019**, 73, 373-390 | 0.6 | 11 |
| 176 | Model-based optimization of temperature and pH shift to increase volumetric productivity of a Chinese hamster ovary fed-batch process. *Journal of Bioscience and Bioengineering*, **2019**, 128, 710-715 | 3.3 | 4 |
| 175 | Boosting Recombinant Inclusion Body Production-From Classical Fed-Batch Approach to Continuous Cultivation. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 297 | 5.8 | 12 |

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| 174 | Time Resolved Sensitivity & Identifiability Analysis for Directed Parametrization of Highly Dynamic Models. *Computer Aided Chemical Engineering*, **2019**, 46, 1111-1116 | 0.6 | 0 |
| 173 | Extension of a Particle Filter for Bioprocess State Estimation using Invasive and Non-Invasive IR Measurements. *Computer Aided Chemical Engineering*, **2019**, 1417-1422 | 0.6 | 2 |
| 172 | Model-based Analysis and Optimisation of a Continuous Corynebacterium glutamicum Bioprocess Utilizing Lignocellulosic Waste. *IFAC-PapersOnLine*, **2019**, 52, 181-186 | 0.7 | 5 |
| 171 | Characterization of photosynthetically synthesized poly(3-hydroxybutyrate) using a randomly mutated strain of Synechocystis sp. PCC 6714. *International Journal of Biobased Plastics*, **2019**, 1, 48-59 | 3.3 | 6 |
| 170 | The Rocky Road From Fed-Batch to Continuous Processing With. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 328 | 5.8 | 17 |
| 169 | Quantitative CPP Evaluation from Risk Assessment Using Integrated Process Modeling. *Bioengineering*, **2019**, 6, | 5.3 | 3 |
| 168 | Scale-up challenges and requirement of technology-transfer for cyanobacterial poly (3-hydroxybutyrate) production in industrial scale. *International Journal of Biobased Plastics*, **2019**, 1, 60-71 | 3.3 | 5 |
| 167 | Soft Sensor-Based Monitoring and Efficient Control Strategies of Biomass Concentration for Continuous Cultures of and Their Application to an Industrial Production Chain. *Microorganisms*, **2019**, 7, | 4.9 | 7 |
| 166 | Perspectives of inclusion bodies for bio-based products: curse or blessing?. *Applied Microbiology and Biotechnology*, **2019**, 103, 1143-1153 | 5.7 | 31 |
| 165 | Increased carbohydrate production from carbon dioxide in randomly mutated cells of cyanobacterial strain Synechocystis sp. PCC 6714: Bioprocess understanding and evaluation of productivities. *Bioresource Technology*, **2019**, 273, 277-287 | 11 | 23 |
| 164 | Comparison of data science workflows for root cause analysis of bioprocesses. *Bioprocess and Biosystems Engineering*, **2019**, 42, 245-256 | 3.7 | 8 |
| 163 | Optimization of sample preparation for intact cell mass spectrometry (matrix-assisted laser desorption/ionization linear time-of-flight mass spectrometry) of endophytic Xylaria. *Rapid Communications in Mass Spectrometry*, **2018**, 32, 815-823 | 2.2 | 1 |
| 162 | In-depth characterization of the raw material corn steep liquor and its bioavailability in bioprocesses of Penicillium chrysogenum. *Process Biochemistry*, **2018**, 70, 20-28 | 4.8 | 18 |
| 161 | The filamentous fungal pellet-relationship between morphology and productivity. *Applied Microbiology and Biotechnology*, **2018**, 102, 2997-3006 | 5.7 | 98 |
| 160 | Media photo-degradation in pharmaceutical biotechnology - impact of ambient light on media quality, cell physiology, and IgG production in CHO cultures. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 2141-2151 | 3.5 | 11 |
| 159 | State estimation for a penicillin fed-batch process combining particle filtering methods with online and time delayed offline measurements. *Chemical Engineering Science*, **2018**, 177, 234-244 | 4.4 | 26 |
| 158 | Characterizing the effect of expression of an acetyl-CoA synthetase insensitive to acetylation on co-utilization of glucose and acetate in batch and continuous cultures of E. coli W. *Microbial Cell Factories*, **2018**, 17, 109 | 6.4 | 11 |
| 157 | Automatic controller failure detection with application in model based control of an E. coli fed-batch. *Computer Aided Chemical Engineering*, **2018**, 43, 1673-1678 | 0.6 | |

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| 156 | Multivariate analytics of chromatographic data: Visual computing based on moving window factor models. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2018**, 1092, 179-190 | 3.2 | 3 |
| 155 | Prediction of filamentous process performance attributes by CSL quality assessment using mid-infrared spectroscopy and chemometrics. *Journal of Biotechnology*, **2018**, 265, 93-100 | 3.7 | 9 |
| 154 | Teaching an old pET new tricks: tuning of inclusion body formation and properties by a mixed feed system in E. coli. *Applied Microbiology and Biotechnology*, **2018**, 102, 667-676 | 5.7 | 30 |
| 153 | Elevated pCO affects the lactate metabolic shift in CHO cell culture processes. *Engineering in Life Sciences*, **2018**, 18, 204-214 | 3.4 | 26 |
| 152 | Workflow for Target-Oriented Parametrization of an Enhanced Mechanistic Cell Culture Model. *Biotechnology Journal*, **2018**, 13, e1700395 | 5.6 | 23 |
| 151 | Optimized bioreactor setup for scale-up studies of extreme halophilic cultures. *Biochemical Engineering Journal*, **2018**, 130, 39-46 | 4.2 | 17 |
| 150 | Inclusion Body Bead Size in Controlled by Physiological Feeding. *Microorganisms*, **2018**, 6, | 4.9 | 13 |
| 149 | Bioprocess Engineering Aspects of Sustainable Polyhydroxyalkanoate Production in Cyanobacteria. *Bioengineering*, **2018**, 5, | 5.3 | 26 |
| 148 | Production of a recombinant peroxidase in different glyco-engineered Pichia pastoris strains: a morphological and physiological comparison. *Microbial Cell Factories*, **2018**, 17, 183 | 6.4 | 13 |
| 147 | Model-based tools for optimal experiments in bioprocess engineering. *Current Opinion in Chemical Engineering*, **2018**, 22, 244-252 | 5.4 | 40 |
| 146 | Custom made inclusion bodies: impact of classical process parameters and physiological parameters on inclusion body quality attributes. *Microbial Cell Factories*, **2018**, 17, 148 | 6.4 | 28 |
| 145 | Lecithin is the key material attribute in soy bean oil affecting filamentous bioprocesses. *AMB Express*, **2018**, 8, 90 | 4.1 | 0 |
| 144 | Increased poly-Ehydroxybutyrate production from carbon dioxide in randomly mutated cells of cyanobacterial strain Synechocystis sp. PCC 6714: Mutant generation and characterization. *Bioresource Technology*, **2018**, 266, 34-44 | 11 | 63 |
| 143 | Model predictive control in comparison to elemental balance control in an E. coli fed-batch. *Chemical Engineering Science*, **2018**, 191, 459-467 | 4.4 | 13 |
| 142 | Metabolic flux analysis linked to complex raw materials as tool for bioprocess improvement. *Chemical Engineering Science*, **2018**, 191, 245-252 | 4.4 | 2 |
| 141 | Simple monitoring of cell leakiness and viability in bioprocesses-A case study. *Engineering in Life Sciences*, **2017**, 17, 598-604 | 3.4 | 10 |
| 140 | The impact of pH inhomogeneities on CHO cell physiology and fed-batch process performance - two-compartment scale-down modelling and intracellular pH excursion. *Biotechnology Journal*, **2017**, 12, 1600633 | 5.6 | 27 |
| 139 | Physiological capacities decline during induced bioprocesses leading to substrate accumulation. *Biotechnology Journal*, **2017**, 12, 1600547 | 5.6 | 8 |

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| 138 | A robust feeding strategy to maintain set-point glucose in mammalian fed-batch cultures when input parameters have a large error. *Biotechnology Progress*, **2017**, 33, 317-336 | 2.8 | 5 |
| 137 | Propagation of measurement accuracy to biomass soft-sensor estimation and control quality. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 693-706 | 4.4 | 7 |
| 136 | A novel method to recover inclusion body protein from recombinant E. coli fed-batch processes based on phage X174-derived lysis protein E. *Applied Microbiology and Biotechnology*, **2017**, 101, 5603-5614 | 5.7 | 20 |
| 135 | How to Determine Interdependencies of Glucose and Lactose Uptake Rates for Heterologous Protein Production with E. coli. *Methods in Molecular Biology*, **2017**, 1586, 397-408 | 1.4 | 7 |
| 134 | Controlling the specific growth rate via biomass trend regulation in filamentous fungi bioprocesses. *Chemical Engineering Science*, **2017**, 172, 32-41 | 4.4 | 19 |
| 133 | Mechanistic platform knowledge of concomitant sugar uptake in Escherichia coli BL21(DE3) strains. *Scientific Reports*, **2017**, 7, 45072 | 4.9 | 23 |
| 132 | High throughput inclusion body sizing: Nano particle tracking analysis. *Biotechnology Journal*, **2017**, 12, 1600471 | 5.6 | 4 |
| 131 | Quantitative determination of nine water-soluble vitamins in the complex matrix of corn steep liquor for raw material quality assessment. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 2106-2113 | 3.5 | 13 |
| 130 | Tunable recombinant protein expression in E. coli: promoter systems and genetic constraints. *Applied Microbiology and Biotechnology*, **2017**, 101, 501-512 | 5.7 | 28 |
| 129 | Integrated Process Modeling-A Process Validation Life Cycle Companion. *Bioengineering*, **2017**, 4, | 5.3 | 15 |
| 128 | A combination of HPLC and automated data analysis for monitoring the efficiency of high-pressure homogenization. *Microbial Cell Factories*, **2017**, 16, 134 | 6.4 | 15 |
| 127 | Photosynthetic poly-hydroxybutyrate accumulation in unicellular cyanobacterium Synechocystis sp. PCC 6714. *AMB Express*, **2017**, 7, 143 | 4.1 | 46 |
| 126 | Comparison of Particle Filter and Extended Kalman Filter Algorithms for Monitoring of Bioprocesses. *Computer Aided Chemical Engineering*, **2017**, 1483-1488 | 0.6 | 10 |
| 125 | Impact of Glycerol as Carbon Source onto Specific Sugar and Inducer Uptake Rates and Inclusion Body Productivity in E. coli BL21(DE3). *Bioengineering*, **2017**, 5, | 5.3 | 65 |
| 124 | Morphological analysis of the filamentous fungus Penicillium chrysogenum using flow cytometry-the fast alternative to microscopic image analysis. *Applied Microbiology and Biotechnology*, **2017**, 101, 7675-7688 | 5.7 | 15 |
| 123 | Workflow to set up substantial target-oriented mechanistic process models in bioprocess engineering. *Process Biochemistry*, **2017**, 62, 24-36 | 4.8 | 27 |
| 122 | Between the Poles of Data-Driven and Mechanistic Modeling for Process Operation. *Chemie-Ingenieur-Technik*, **2017**, 89, 542-561 | 0.8 | 37 |
| 121 | An automated data-driven DSP development approach for glycoproteins from yeast. *Electrophoresis*, **2017**, 38, 2886-2891 | 3.6 | 3 |

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| 120 | Soft sensor for monitoring biomass subpopulations in mammalian cell culture processes. *Biotechnology Letters*, **2017**, 39, 1667-1673 | 3 | 19 |
| 119 | Toward a Noninvasive, Label-Free Screening Method for Determining Spore Inoculum Quality of Penicillium chrysogenum Using Raman Spectroscopy. *Applied Spectroscopy*, **2017**, 71, 2661-2669 | 3.1 | 3 |
| 118 | Model-Based Methods in the Biopharmaceutical Process Lifecycle. *Pharmaceutical Research*, **2017**, 34, 2596-2613 | 4.5 | 45 |
| 117 | Automatic feed phase identification in multivariate bioprocess profiles by sequential binary classification. *Analytica Chimica Acta*, **2017**, 982, 48-61 | 6.6 | 4 |
| 116 | A novel toolbox for E. coli lysis monitoring. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 667-671 | 4.4 | 10 |
| 115 | Role of Knowledge Management in Development and Lifecycle Management of Biopharmaceuticals. *Pharmaceutical Research*, **2017**, 34, 243-256 | 4.5 | 10 |
| 114 | Investigation of the interactions of critical scale-up parameters (pH, pO and pCO) on CHO batch performance and critical quality attributes. *Bioprocess and Biosystems Engineering*, **2017**, 40, 251-263 | 3.7 | 42 |
| 113 | How to trigger periplasmic release in recombinant : A comparative analysis. *Engineering in Life Sciences*, **2017**, 17, 215-222 | 3.4 | 12 |
| 112 | Bioprocess development workflow: Transferable physiological knowledge instead of technological correlations. *Biotechnology Progress*, **2017**, 33, 261-270 | 2.8 | 3 |
| 111 | Impact of cell lysis on the description of cell growth and death in cell culture. *Engineering in Life Sciences*, **2017**, 17, 440-447 | 3.4 | 3 |
| 110 | Workflow for multi-analyte bioprocess monitoring demonstrated on inline NIR spectroscopy of P. chrysogenum fermentation. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 797-805 | 4.4 | 8 |
| 109 | Workflow for Criticality Assessment Applied in Biopharmaceutical Process Validation Stage 1. *Bioengineering*, **2017**, 4, | 5.3 | 5 |
| 108 | Low-Frequency Electrochemical Impedance Spectroscopy as a Monitoring Tool for Yeast Growth in Industrial Brewing Processes. *Chemosensors*, **2017**, 5, 24 | 4 | 12 |
| 107 | Comparison of Fiber Optic and Conduit Attenuated Total Reflection (ATR) Fourier Transform Infrared (FT-IR) Setup for In-Line Fermentation Monitoring. *Applied Spectroscopy*, **2016**, 70, 1965-1973 | 3.1 | 10 |
| 106 | Combining Mechanistic Modeling and Raman Spectroscopy for Real-Time Monitoring of Fed-Batch Penicillin Production. *Chemie-Ingenieur-Technik*, **2016**, 88, 764-776 | 0.8 | 27 |
| 105 | The E. coli pET expression system revisited-mechanistic correlation between glucose and lactose uptake. *Applied Microbiology and Biotechnology*, **2016**, 100, 8721-9 | 5.7 | 39 |
| 104 | Bioprocess monitoring: minimizing sample matrix effects for total protein quantification with bicinchoninic acid assay. *Journal of Industrial Microbiology and Biotechnology*, **2016**, 43, 1271-80 | 4.2 | 19 |
| 103 | A control strategy to investigate the relationship between specific productivity and high-mannose glycoforms in CHO cells. *Applied Microbiology and Biotechnology*, **2016**, 100, 7011-24 | 5.7 | 11 |

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| 102 | At-line determination of spore inoculum quality in Penicillium chrysogenum bioprocesses. *Applied Microbiology and Biotechnology*, **2016**, 100, 5363-73 | 5.7 | 18 |
| 101 | Quantitative feature extraction from the Chinese hamster ovary bioprocess bibliome using a novel meta-analysis workflow. *Biotechnology Advances*, **2016**, 34, 621-633 | 17.8 | 30 |
| 100 | Multi-parameter flow cytometry as a process analytical technology (PAT) approach for the assessment of bacterial ghost production. *Applied Microbiology and Biotechnology*, **2016**, 100, 409-18 | 5.7 | 23 |
| 99 | Experimental workflow for developing a feed forward strategy to control biomass growth and exploit maximum specific methane productivity of Methanothermobacter marburgensis in a biological methane production process (BMPP). *AIMS Microbiology*, **2016**, 2, 262-277 | 4.5 | 5 |
| 98 | Metabolic Control in Mammalian Fed-Batch Cell Cultures for Reduced Lactic Acid Accumulation and Improved Process Robustness. *Bioengineering*, **2016**, 3, | 5.3 | 26 |
| 97 | Fed-Batch Production of Bacterial Ghosts Using Dielectric Spectroscopy for Dynamic Process Control. *Microorganisms*, **2016**, 4, | 4.9 | 10 |
| 96 | A Novel Application for Low Frequency Electrochemical Impedance Spectroscopy as an Online Process Monitoring Tool for Viable Cell Concentrations. *Sensors*, **2016**, 16, | 3.8 | 16 |
| 95 | Accurate Information from Fermentation Processes Optimal Rate Calculation by Dynamic Window Adaptation. *Chemie-Ingenieur-Technik*, **2016**, 88, 798-808 | 0.8 | 1 |
| 94 | Generic biomass estimation methods targeting physiologic process control in induced bacterial cultures. *Engineering in Life Sciences*, **2016**, 16, 720-730 | 3.4 | 10 |
| 93 | Production strategies for active heme-containing peroxidases from inclusion bodies - a review. *Biotechnology Reports (Amsterdam, Netherlands)*, **2016**, 10, 75-83 | 5.3 | 22 |
| 92 | Tunable recombinant protein expression in E. coli: enabler for continuous processing?. *Applied Microbiology and Biotechnology*, **2016**, 100, 5719-28 | 5.7 | 25 |
| 91 | At-line determining spore germination of Penicillium chrysogenum bioprocesses in complex media. *Applied Microbiology and Biotechnology*, **2016**, 100, 8923-30 | 5.7 | 9 |
| 90 | Optimizing cofactor availability for the production of recombinant heme peroxidase in Pichia pastoris. *Microbial Cell Factories*, **2015**, 14, 4 | 6.4 | 20 |
| 89 | Development of a fed-batch process for a recombinant Pichia pastoris och1 strain expressing a plant peroxidase. *Microbial Cell Factories*, **2015**, 14, 1 | 6.4 | 130 |
| 88 | Knowledge management in the QbD paradigm: manufacturing of biotech therapeutics. *Trends in Biotechnology*, **2015**, 33, 381-7 | 15.1 | 24 |
| 87 | Mikroben zur Herstellung monoklonaler Antikper und Antikperfragmente. *BioSpektrum*, **2015**, 21, 281-283 | 0.1 | |
| 86 | Development of a mixed feed strategy for a recombinant Pichia pastoris strain producing with a de-repression promoter. *Microbial Cell Factories*, **2015**, 14, 101 | 6.4 | 15 |
| 85 | A novel real-time method to estimate volumetric mass biodensity based on the combination of dielectric spectroscopy and soft-sensors. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 262-272 | 3.5 | 26 |

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| 84 | Intact cell mass spectrometry as a progress tracking tool for batch and fed-batch fermentation processes. *Analytical Biochemistry*, **2015**, 470, 25-33 | 3.1 | 4 |
| 83 | Essential prerequisites for successful bioprocess development of biological CH4 production from CO2 and H2. *Critical Reviews in Biotechnology*, **2015**, 35, 141-51 | 9.4 | 89 |
| 82 | Observability analysis of biochemical process models as a valuable tool for the development of mechanistic soft sensors. *Biotechnology Progress*, **2015**, 31, 1703-15 | 2.8 | 18 |
| 81 | Combining mechanistic and data-driven approaches to gain process knowledge on the control of the metabolic shift to lactate uptake in a fed-batch CHO process. *Biotechnology Progress*, **2015**, 31, 1657-68 | 2.8 | 25 |
| 80 | Monoliths in Bioprocess Technology. *Chromatography (Basel)*, **2015**, 2, 195-212 | | 19 |
| 79 | Combining Protein and Strain Engineering for the Production of Glyco-Engineered Horseradish Peroxidase C1A in Pichia pastoris. *International Journal of Molecular Sciences*, **2015**, 16, 23127-42 | 6.3 | 8 |
| 78 | Generation of PHB from Spent Sulfite Liquor Using Halophilic Microorganisms. *Microorganisms*, **2015**, 3, 268-89 | 4.9 | 16 |
| 77 | Universal Capacitance Model for Real-Time Biomass in Cell Culture. *Sensors*, **2015**, 15, 22128-50 | 3.8 | 19 |
| 76 | Quantification of cell lysis during CHO bioprocesses: Impact on cell count, growth kinetics and productivity. *Journal of Biotechnology*, **2015**, 207, 67-76 | 3.7 | 17 |
| 75 | Examining the freezing process of an intermediate bulk containing an industrially relevant protein. *Enzyme and Microbial Technology*, **2015**, 71, 13-9 | 3.8 | 11 |
| 74 | Ultrasound-enhanced attenuated total reflection mid-infrared spectroscopy in-line probe: acquisition of cell spectra in a bioreactor. *Analytical Chemistry*, **2015**, 87, 2314-20 | 7.8 | 24 |
| 73 | Advanced Development Strategies for Biopharmaceutical Cell Culture Processes. *Current Pharmaceutical Biotechnology*, **2015**, 16, 983-1001 | 2.6 | 12 |
| 72 | Investigating the potential of thermophilic species for ethanol production from industrial spent sulfite liquor. *AIMS Energy*, **2015**, 3, 592-611 | 1.8 | 3 |
| 71 | Imaging Flow Cytometry and High-Throughput Microscopy for Automated Macroscopic Morphological Analysis of Filamentous Fungi. *Fungal Biology*, **2015**, 201-210 | 2.3 | 4 |
| 70 | Christian Doppler-Labor F□ Mechanistische Und Physiologische Methoden F□ Leistungsf□higere Bioprozesse **2015**, 75-78 | | |
| 69 | Identification of lipophilic bioproduct portfolio from bioreactor samples of extreme halophilic archaea with HPLC-MS/MS. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 2421-32 | 4.4 | 9 |
| 68 | Microbials for the production of monoclonal antibodies and antibody fragments. *Trends in Biotechnology*, **2014**, 32, 54-60 | 15.1 | 151 |
| 67 | Multi-analyte quantification in bioprocesses by Fourier-transform-infrared spectroscopy by partial least squares regression and multivariate curve resolution. *Analytica Chimica Acta*, **2014**, 807, 103-10 | 6.6 | 37 |

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| 66 | Stoichiometric and kinetic analysis of extreme halophilic Archaea on various substrates in a corrosion resistant bioreactor. *New Biotechnology*, **2014**, 31, 80-9 | 6.4 | 17 |
| 65 | Physiological description of multivariate interdependencies between process parameters, morphology and physiology during fed-batch penicillin production. *Biotechnology Progress*, **2014**, 30, 689-99 | 2.8 | 19 |
| 64 | Radial line-scans as representative sampling strategy in dried-droplet laser ablation of liquid samples deposited on pre-cut filter paper disks. *Spectrochimica Acta, Part B: Atomic Spectroscopy*, **2014**, 101, 123-129 | 3.1 | 29 |
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