Eugénio C Ferreira

List of Publications by Year in descending order

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181 papers 4,556 citations

36 h-index 57 g-index

190 all docs

190 docs citations

190 times ranked 5230 citing authors

#	Article	IF	CITATIONS
1	Monitoring morphological changes from activated sludge to aerobic granular sludge under distinct organic loading rates and increasing minimal imposed sludge settling velocities through quantitative image analysis. Chemosphere, 2022, 286, 131637.	8.2	2
2	FT-NIR spectroscopy analysis for monitoring the microbial production of 2-phenylethanol using crude glycerol as carbon source. LWT - Food Science and Technology, 2022, 155, 112951.	5.2	3
3	Treatment of saline wastewater amended with endocrine disruptors by aerobic granular sludge: Assessing performance and microbial community dynamics. Journal of Environmental Chemical Engineering, 2022, 10, 107272.	6.7	7
4	Prediction of sludge settleability, density and suspended solids of aerobic granular sludge in the presence of pharmaceutically active compounds by quantitative image analysis and chemometric tools. Journal of Environmental Chemical Engineering, 2022, 10, 107136.	6.7	3
5	The Role of Extracellular Polymeric Substances in Micropollutant Removal. Frontiers in Chemical Engineering, 2022, 4, .	2.7	17
6	<i>merlin</i> , an improved framework for the reconstruction of high-quality genome-scale metabolic models. Nucleic Acids Research, 2022, 50, 6052-6066.	14.5	18
7	Long-term stability of a non-adapted aerobic granular sludge process treating fish canning wastewater associated to EPS producers in the core microbiome. Science of the Total Environment, 2021, 756, 144007.	8.0	33
8	A kinetic model of the central carbon metabolism for acrylic acid production in Escherichia coli. PLoS Computational Biology, 2021, 17, e1008704.	3. 2	10
9	COVID-19, Chikungunya, Dengue and Zika Diseases: An Analytical Platform Based on MALDI-TOF MS, IR Spectroscopy and RT-qPCR for Accurate Diagnosis and Accelerate Epidemics Control. Microorganisms, 2021, 9, 708.	3.6	9
10	Increased extracellular polymeric substances production contributes for the robustness of aerobic granular sludge during long-term intermittent exposure to 2-fluorophenol in saline wastewater. Journal of Water Process Engineering, 2021, 40, 101977.	5 . 6	18
11	Assessment of an aerobic granular sludge system in the presence of pharmaceutically active compounds by quantitative image analysis and chemometric techniques. Journal of Environmental Management, 2021, 289, 112474.	7.8	9
12	Validation of a quantitative image analysis methodology for the assessment of the morphology and structure of aerobic granular sludge in the presence of pharmaceutically active compounds. Environmental Technology and Innovation, 2021, 23, 101639.	6.1	8
13	High Carbon Load in Food Processing Industrial Wastewater is a Driver for Metabolic Competition in Aerobic Granular Sludge. Frontiers in Environmental Science, 2021, 9, .	3.3	4
14	Effect of ibuprofen on extracellular polymeric substances (EPS) production and composition, and assessment of microbial structure by quantitative image analysis. Journal of Environmental Management, 2021, 293, 112852.	7.8	15
15	Quantitative image analysis as a robust tool to assess effluent quality from an aerobic granular sludge system treating industrial wastewater. Chemosphere, 2021, , 132773.	8.2	2
16	Environmental impact and biological removal processes of pharmaceutically active compounds: The particular case of sulfonamides, anticonvulsants and steroid estrogens. Critical Reviews in Environmental Science and Technology, 2020, 50, 698-742.	12.8	21
17	Sludge volume index and suspended solids estimation of mature aerobic granular sludge by quantitative image analysis and chemometric tools. Separation and Purification Technology, 2020, 234, 116049.	7.9	24
18	Degradation of widespread pharmaceuticals by activated sludge: Kinetic study, toxicity assessment, and comparison with adsorption processes. Journal of Water Process Engineering, 2020, 33, 101061.	5.6	20

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19	Environmentally-friendly technology for rapid identification and quantification of emerging pollutants from wastewater using infrared spectroscopy. Environmental Toxicology and Pharmacology, 2020, 80, 103458.	4.0	12
20	Bio-Based Nanoparticles as a Carrier of \hat{l}^2 -Carotene: Production, Characterisation and In Vitro Gastrointestinal Digestion. Molecules, 2020, 25, 4497.	3.8	24
21	Variability in the composition of extracellular polymeric substances from a full-scale aerobic granular sludge reactor treating urban wastewater. Journal of Environmental Chemical Engineering, 2020, 8, 104156.	6.7	29
22	O papel da investigação e da inovação. , 2020, , 244-262.		0
23	Optimization of bacterial nanocellulose fermentation using recycled paper sludge and development of novel composites. Applied Microbiology and Biotechnology, 2019, 103, 9143-9154.	3.6	12
24	SamPler $\hat{a}\in$ a novel method for selecting parameters for gene functional annotation routines. BMC Bioinformatics, 2019, 20, 454.	2.6	5
25	Discrimination of Camellia japonica cultivars and chemometric models: An interlaboratory study. Computers and Electronics in Agriculture, 2019, 159, 28-33.	7.7	5
26	NIR spectroscopy applied to the determination of 2â€phenylethanol and <scp> </scp> â€phenylalanine concentrations in culture medium of <i>Yarrowia lipolytica</i> Biotechnology, 2019, 94, 812-818.	3.2	10
27	Quantification of pharmaceutical compounds in wastewater samples by near infrared spectroscopy (NIR). Talanta, 2019, 194, 507-513.	5.5	27
28	Mapping Salmonella typhimurium pathways using 13C metabolic flux analysis. Metabolic Engineering, 2019, 52, 303-314.	7.0	3
29	An Overview of the Evolution of Infrared Spectroscopy Applied to Bacterial Typing. Biotechnology Journal, 2018, 13, 1700449.	3.5	81
30	Quantitative physiology and elemental composition of Kluyveromyces lactis CBS 2359 during growth on glucose at different specific growth rates. Antonie Van Leeuwenhoek, 2018, 111, 183-195.	1.7	8
31	Reconstructing High-Quality Large-Scale Metabolic Models with merlin. Methods in Molecular Biology, 2018, 1716, 1-36.	0.9	13
32	New PLS analysis approach to wine volatile compounds characterization by near infrared spectroscopy (NIR). Food Chemistry, 2018, 246, 172-178.	8.2	80
33	Genome-Wide Semi-Automated Annotation of Transporter Systems. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2017, 14, 443-456.	3.0	14
34	Quantitative image analysis of polyhydroxyalkanoates inclusions from microbial mixed cultures under different SBR operation strategies. Environmental Science and Pollution Research, 2017, 24, 15148-15156.	5.3	3
35	Simultaneous partial nitrification and 2-fluorophenol biodegradation with aerobic granular biomass: Reactor performance and microbial communities. Bioresource Technology, 2017, 238, 232-240.	9.6	21
36	Monitoring biological wastewater treatment processes: recent advances in spectroscopy applications. Reviews in Environmental Science and Biotechnology, 2017, 16, 395-424.	8.1	50

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37	Exploiting intrinsic fluorescence spectroscopy to discriminate between Acinetobacter calcoaceticus–Acinetobacter baumannii complex species. RSC Advances, 2017, 7, 8581-8588.	3.6	3
38	Online Analysis for Industrial Bioprocesses. , 2017, , 679-704.		6
39	A Comparative Proteome Analysis of Escherichia coli ΔrelA Mutant Cells. Frontiers in Bioengineering and Biotechnology, 2016, 4, 78.	4.1	3
40	Discrimination of clinically relevant Candida species by Fourier-transform infrared spectroscopy with attenuated total reflectance (FTIR-ATR). RSC Advances, 2016, 6, 92065-92072.	3.6	7
41	Estimation of effluent quality parameters from an activated sludge system using quantitative image analysis. Chemical Engineering Journal, 2016, 285, 349-357.	12.7	31
42	Quantitative image analysis as a tool for Yarrowia lipolytica dimorphic growth evaluation in different culture media. Journal of Biotechnology, 2016, 217, 22-30.	3.8	20
43	Salmonella typhimuriumandEscherichia colidissimilarity: Closely related bacteria with distinct metabolic profiles. Biotechnology Progress, 2015, 31, 1217-1225.	2.6	19
44	Polyhydroxyalkanoate granules quantification in mixed microbial cultures using image analysis: Sudan Black B versus Nile Blue A staining. Analytica Chimica Acta, 2015, 865, 8-15.	5.4	16
45	Near-infrared spectroscopy for the detection and quantification of bacterial contaminations in pharmaceutical products. International Journal of Pharmaceutics, 2015, 492, 199-206.	5.2	18
46	Economic analysis and environmental impact assessment of three different fermentation processes for fructooligosaccharides production. Bioresource Technology, 2015, 198, 673-681.	9.6	23
47	Reconstructing genome-scale metabolic models with merlin. Nucleic Acids Research, 2015, 43, 3899-3910.	14.5	121
48	Aroma production by Yarrowia lipolytica in airlift and stirred tank bioreactors: Differences in yeast metabolism and morphology. Biochemical Engineering Journal, 2015, 93, 55-62.	3.6	42
49	Genome-wide metabolic re-annotation of Ashbya gossypii: new insights into its metabolism through a comparative analysis with Saccharomyces cerevisiae and Kluyveromyces lactis. BMC Genomics, 2014, 15, 810.	2.8	13
50	Image Analysis Technique as a Tool to Identify Morphological Changes in Trametes versicolor Pellets According to Exopolysaccharide or Laccase Production. Applied Biochemistry and Biotechnology, 2014, 172, 2132-2142.	2.9	3
51	Optimization of fed-batch fermentation processes with bio-inspired algorithms. Expert Systems With Applications, 2014, 41, 2186-2195.	7.6	48
52	What is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ where $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites? The theory of $\hat{a} \in \mathbb{C}$ is the relationship between intracellular and extracellular metabolites?	4.4	1
53	Monitoring intracellular polyphosphate accumulation in enhanced biological phosphorus removal systems by quantitative image analysis. Water Science and Technology, 2014, 69, 2315-2323.	2.5	1
54	iOD907, the first genomeâ€scale metabolic model for the milk yeast <i>Kluyveromyces lactis</i> Biotechnology Journal, 2014, 9, 776-790.	3.5	52

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55	Population Dynamics of a Salmonella Lytic Phage and Its Host: Implications of the Host Bacterial Growth Rate in Modelling. PLoS ONE, 2014, 9, e102507.	2.5	56
56	Prediction of intracellular storage polymers using quantitative image analysis in enhanced biological phosphorus removal systems. Analytica Chimica Acta, 2013, 770, 36-44.	5.4	15
57	Quantitative image analysis for the characterization of microbial aggregates in biological wastewater treatment: a review. Environmental Science and Pollution Research, 2013, 20, 5887-5912.	5.3	31
58	Activated sludge characterization through microscopy: A review on quantitative image analysis and chemometric techniques. Analytica Chimica Acta, 2013, 802, 14-28.	5.4	59
59	Molecular Aspects and Comparative Genomics of Bacteriophage Endolysins. Journal of Virology, 2013, 87, 4558-4570.	3.4	222
60	Automatic identification of activated sludge disturbances and assessment of operational parameters. Chemosphere, 2013, 91, 705-710.	8.2	34
61	Metabolic responses to recombinant bioprocesses in Escherichia coli. Journal of Biotechnology, 2013, 164, 396-408.	3.8	76
62	Energy recovery and impact on land use of Maltese municipal solid waste incineration. Energy, 2013, 49, 1-11.	8.8	42
63	Genome scale metabolic network reconstruction of the pathogen Enterococcus faecalis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 131-136.	0.4	1
64	Identification of Metabolic Engineering Targets through Analysis of Optimal and Sub-Optimal Routes. PLoS ONE, 2013, 8, e61648.	2.5	16
65	Image Analysis for Automatic Characterization of Polyhydroxyalcanoates Granules. Lecture Notes in Computer Science, 2013, , 790-797.	1.3	3
66	Random sampling of elementary flux modes in large-scale metabolic networks. Bioinformatics, 2012, 28, i515-i521.	4.1	66
67	Genome-wide metabolic (re-) annotation of Kluyveromyces lactis. BMC Genomics, 2012, 13, 517.	2.8	20
68	Kinetic and stoichiometric characterization of a fixed biofilm reactor by pulse respirometry. Journal of Biotechnology, 2012, 157, 173-179.	3.8	15
69	Influence of the RelA Activity on E. coli Metabolism by Metabolite Profiling of Glucose-Limited Chemostat Cultures. Metabolites, 2012, 2, 717-732.	2.9	9
70	State and specific growth estimation in heterologous protein production by <i>Pichia pastoris</i> AICHE Journal, 2012, 58, 2966-2979.	3.6	14
71	Exploring the gap between dynamic and constraint-based models of metabolism. Metabolic Engineering, 2012, 14, 112-119.	7.0	33
72	Genomic and Proteomic Characterization of the Broad-Host-Range Salmonella Phage PVP-SE1: Creation of a New Phage Genus. Journal of Virology, 2011, 85, 11265-11273.	3.4	80

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73	Characterization of activated sludge abnormalities by image analysis and chemometric techniques. Analytica Chimica Acta, 2011, 705, 235-242.	5.4	29
74	Metabolic footprint analysis of recombinant Escherichia coli strains during fed-batch fermentations. Molecular BioSystems, 2011, 7, 899-910.	2.9	34
75	A Study of the Short and Long-term Regulation of E. coli Metabolic Pathways. Journal of Integrative Bioinformatics, 2011, 8, 195-209.	1.5	7
76	Identification of minimal metabolic pathway models consistent with phenotypic data. Journal of Process Control, 2011, 21, 1483-1492.	3.3	9
77	Critical perspective on the consequences of the limited availability of kinetic data in metabolic dynamic modelling. IET Systems Biology, 2011, 5, 157-163.	1.5	18
78	Stringent response of Escherichia coli: revisiting the bibliome using literature mining. Microbial Informatics and Experimentation, 2011, 1, 14.	7.6	9
79	Modeling formalisms in Systems Biology. AMB Express, 2011, 1, 45.	3.0	139
80	In situ pulse respirometric methods for the estimation of kinetic and stoichiometric parameters in aerobic microbial communities. Biochemical Engineering Journal, 2011, 58-59, 12-19.	3.6	14
81	Identifying different types of bulking in an activated sludge system through quantitative image analysis. Chemosphere, 2011, 85, 643-652.	8.2	71
82	A Systematic Modeling Approach to Elucidate the Triggering of the Stringent Response in Recombinant E. coli Systems. Advances in Intelligent and Soft Computing, 2011, , 313-320.	0.2	1
83	Image analysis application for the study of activated sludge floc size during the treatment of synthetic and real fishery wastewaters. Environmental Science and Pollution Research, 2011, 18, 1390-1397.	5.3	6
84	Semantic annotation of biological concepts interplaying microbial cellular responses. BMC Bioinformatics, 2011, 12, 460.	2.6	5
85	Challenges in integrating Escherichia coli molecular biology data. Briefings in Bioinformatics, 2011, 12, 91-103.	6.5	4
86	Interpreting the Regulatory Interplay in E. coli Metabolic Pathways. Advances in Intelligent and Soft Computing, 2011, , 303-312.	0.2	0
87	A study of the short and long-term regulation of E. coli metabolic pathways. Journal of Integrative Bioinformatics, 2011, 8, 183.	1.5	2
88	Selection of Elementary Modes for Bioprocess Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 156-161.	0.4	17
89	Evaluating the integration of proteomic data for the prediction of intracellular fluxes after knockout experiments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 114-119.	0.4	1
90	Dilution and Magnification Effects on Image Analysis Applications in Activated Sludge Characterization. Microscopy and Microanalysis, 2010, 16, 561-568.	0.4	14

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91	Merlin: Metabolic Models Reconstruction using Genome-Scale Information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 120-125.	0.4	6
92	Applying a Metabolic Footprinting Approach to Characterize the Impact of the Recombinant Protein Production in Escherichia coli. Advances in Intelligent and Soft Computing, 2010, , 193-200.	0.2	1
93	OptFlux: an open-source software platform for in silico metabolic engineering. BMC Systems Biology, 2010, 4, 45.	3.0	321
94	A chemometric tool to monitor high-rate anaerobic granular sludge reactors during load and toxic disturbances. Biochemical Engineering Journal, 2010, 53, 38-43.	3.6	9
95	BioDR: Semantic indexing networks for biomedical document retrieval. Expert Systems With Applications, 2010, 37, 3444-3453.	7.6	14
96	Hybrid dynamic modeling of Escherichia coli central metabolic network combining Michaelis–Menten and approximate kinetic equations. BioSystems, 2010, 100, 150-157.	2.0	49
97	Virtual laboratories in (bio)chemical engineering education. Education for Chemical Engineers, 2010, 5, e22-e27.	4.8	59
98	A Comparison between Bright Field and Phase-Contrast Image Analysis Techniques in Activated Sludge Morphological Characterization. Microscopy and Microanalysis, 2010, 16, 166-174.	0.4	20
99	Selection and Characterization of a Multivalent <i>Salmonella</i> Phage and Its Production in a Nonpathogenic <i>Escherichia coli</i> Strain. Applied and Environmental Microbiology, 2010, 76, 7338-7342.	3.1	42
100	A Dynamical Model for the Fermentative Production of Fructooligosaccharides. Computer Aided Chemical Engineering, 2009, , 1827-1832.	0.5	9
101	Editorial: Special Issue Contributed by the 10th International Chemical and Biological Engineering Conference - CHEMPOR 2008. Chemical Product and Process Modeling, 2009, 4, .	0.9	0
102	Determination of Kinetic and Stoichiometric Parameters of Pseudomonas putida F1 by Chemostat and In Situ Pulse Respirometry. Chemical Product and Process Modeling, 2009, 4, .	0.9	4
103	A Critical Review on Modelling Formalisms and Simulation Tools in Computational Biosystems. Lecture Notes in Computer Science, 2009, , 1063-1070.	1.3	2
104	The 10th International Chemical and Biological Engineering Conference (CHEMPOR 2008). International Journal of Chemical Engineering, 2009, 2009, 1-2.	2.4	2
105	The use of antibiotics to improve phage detection and enumeration by the double-layer agar technique. BMC Microbiology, 2009, 9, 148.	3.3	87
106	Application of image analysis to the prediction of EBC barley kernel weight distribution. Industrial Crops and Products, 2009, 30, 366-371.	5.2	10
107	@Note: A workbench for Biomedical Text Mining. Journal of Biomedical Informatics, 2009, 42, 710-720.	4.3	34
108	Study of saline wastewater influence on activated sludge flocs through automated image analysis. Journal of Chemical Technology and Biotechnology, 2009, 84, 554-560.	3.2	12

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109	Advanced monitoring of highâ€rate anaerobic reactors through quantitative image analysis of granular sludge and multivariate statistical analysis. Biotechnology and Bioengineering, 2009, 102, 445-456.	3.3	12
110	Assessment of physiological conditions in $\langle i \rangle$ E. coli $\langle i \rangle$ fermentations by epifluorescent microscopy and image analysis. Biotechnology Progress, 2009, 25, 882-891.	2.6	10
111	Monitoring of activated sludge settling ability through image analysis: validation on full-scale wastewater treatment plants. Bioprocess and Biosystems Engineering, 2009, 32, 361-367.	3.4	28
112	Monitoring of fed-batch E. coli fermentations with software sensors. Bioprocess and Biosystems Engineering, 2009, 32, 381-388.	3.4	47
113	Correlation between sludge settling ability and image analysis information using partial least squares. Analytica Chimica Acta, 2009, 642, 94-101.	5.4	41
114	Comparison of adsorption equilibrium of fructose, glucose and sucrose on potassium gel-type and macroporous sodium ion-exchange resins. Analytica Chimica Acta, 2009, 654, 71-76.	5.4	55
115	Quantitative monitoring of an activated sludge reactor using on-line UV-visible and near-infrared spectroscopy. Analytical and Bioanalytical Chemistry, 2009, 395, 1159-1166.	3.7	56
116	Galacto-oligosaccharides production during lactose hydrolysis by free Aspergillus oryzae \hat{l}^2 -galactosidase and immobilized on magnetic polysiloxane-polyvinyl alcohol. Food Chemistry, 2009, 115, 92-99.	8.2	170
117	Inoculum type response to different pHs on biohydrogen production from l-arabinose, a component of hemicellulosic biopolymers. International Journal of Hydrogen Energy, 2009, 34, 1744-1751.	7.1	40
118	Morphology and physiology of anaerobic granular sludge exposed to an organic solvent. Journal of Hazardous Materials, 2009, 167, 393-398.	12.4	10
119	Air pollution control with semi-infinite programming. Applied Mathematical Modelling, 2009, 33, 1957-1969.	4.2	36
120	Principal component analysis and quantitative image analysis to predict effects of toxics in anaerobic granular sludge. Bioresource Technology, 2009, 100, 1180-1185.	9.6	31
121	Large Scale Dynamic Model Reconstruction for the Central Carbon Metabolism of Escherichia coli. Lecture Notes in Computer Science, 2009, , 1079-1083.	1.3	2
122	Data Integration Issues in the Reconstruction of the Genome-Scale Metabolic Model of Zymomonas Mobillis. Advances in Soft Computing, 2009, , 92-101.	0.4	2
123	Computational Intelligence Techniques for Supervision and Diagnosis of Biological Wastewater Treatment Systems. Studies in Computational Intelligence, 2009, , 127-162.	0.9	1
124	Evolutionary Approaches for Strain Optimization Using Dynamic Models under a Metabolic Engineering Perspective. Lecture Notes in Computer Science, 2009, , 140-151.	1.3	2
125	A Software Tool for the Simulation and Optimization of Dynamic Metabolic Models. Lecture Notes in Computer Science, 2009, , 1071-1078.	1.3	0
126	Modelling of Biotechnological Processes – An Approach Based on Artificial Neural Networks. Studies in Computational Intelligence, 2009, , 311-332.	0.9	0

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127	Biomedical Text Mining Applied to Document Retrieval and Semantic Indexing. Lecture Notes in Computer Science, 2009, , 954-963.	1.3	1
128	Stalked protozoa identification by image analysis and multivariable statistical techniques. Analytical and Bioanalytical Chemistry, 2008, 391, 1321-1325.	3.7	16
129	Quantification of the CBD-FITC conjugates surface coating on cellulose fibres. BMC Biotechnology, 2008, 8, 1.	3.3	90
130	Kinetic and stoichiometric parameters estimation in a nitrifying bubble column through "in-situ― pulse respirometry. Biotechnology and Bioengineering, 2008, 100, 94-102.	3.3	16
131	Natural computation meta-heuristics for the in silico optimization of microbial strains. BMC Bioinformatics, 2008, 9, 499.	2.6	90
132	A framework for the integrated analysis of metabolic and regulatory networks. , 2008, , .		0
133	Evaluating evolutionary multiobjective algorithms for the in silico optimization of mutant strains. , 2008, , .		10
134	A framework for the development of Biomedical Text Mining software tools. , 2008, , .		1
135	Activated sludge process monitoring through in situ near-infrared spectral analysis. Water Science and Technology, 2008, 57, 1643-1650.	2.5	22
136	IMPLEMENTATION OF A SPECIFIC RATE CONTROLLER IN A FED-BATCH E. COLI FERMENTATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15565-15570.	0.4	14
137	Differential Evolution for the Offline and Online Optimization of Fed-Batch Fermentation Processes. Studies in Computational Intelligence, 2008, , 299-317.	0.9	5
138	Exact Fuzzy Observer for a Baker's Yeast Fed-Batch Fermentation Process. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	4
139	ESTIMATION OF BIOMASS CONCENTRATION USING INTERVAL OBSERVERS IN AN E. COLI FED-BATCH FERMENTATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 103-108.	0.4	1
140	Quantitative image analysis as a diagnostic tool for identifying structural changes during a revival process of anaerobic granular sludge. Water Research, 2007, 41, 1473-1480.	11.3	21
141	Development of an image analysis procedure for identifying protozoa and metazoa typical of activated sludge system. Water Research, 2007, 41, 2581-2589.	11.3	34
142	Raw data pre-processing in the protozoa and metazoa identification by image analysis and multivariate statistical techniques. Journal of Chemometrics, 2007, 21, 156-164.	1.3	5
143	Quantitative image analysis as a diagnostic tool for monitoring structural changes of anaerobic granular sludge during detergent shock loads. Biotechnology and Bioengineering, 2007, 98, 60-68.	3.3	20
144	Recognition of protozoa and metazoa using image analysis tools, discriminant analysis, neural networks and decision trees. Analytica Chimica Acta, 2007, 595, 160-169.	5.4	42

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145	Analysis of the effects of hyperbaric gases on S. cerevisiae cell cycle through a morphological approach. Process Biochemistry, 2007, 42, 1378-1383.	3.7	6
146	Development of a Method Using Image Analysis for the Measurement of Cellulose-Binding Domains Adsorbed onto Cellulose Fibers. Biotechnology Progress, 2007, 23, 1492-1497.	2.6	14
147	Evaluating Evolutionary Algorithms and Differential Evolution for the Online Optimization of Fermentation Processes., 2007,, 236-246.		5
148	Evaluating Simulated Annealing Algorithms in the Optimization of Bacterial Strains., 2007,, 473-484.		1
149	Knowledge-based fuzzy system for diagnosis and control of an integrated biological wastewater treatment process. Water Science and Technology, 2006, 53, 313-320.	2.5	8
150	DESIGN OF ON-LINE STATE ESTIMATORS FOR A RECOMBINANT E. COLI FED-BATCH FERMENTATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 67-72.	0.4	2
151	Activated sludge monitoring of a wastewater treatment plant using image analysis and partial least squares regression. Analytica Chimica Acta, 2005, 544, 246-253.	5.4	89
152	Assessment of yeast viability under hyperbaric conditions through a modeling approach. Journal of Chemical Technology and Biotechnology, 2005, 80, 872-877.	3.2	4
153	Determination of diffusion coefficients of glycerol and glucose from starch based thermoplastic compounds on simulated physiological solution. Journal of Materials Science: Materials in Medicine, 2005, 16, 239-246.	3.6	6
154	Evolutionary Algorithms for Static and Dynamic Optimization of Fed-batch Fermentation Processes. , 2005, , 288-291.		6
155	Effect of hyperbaric stress on yeast morphology: study by automated image analysis. Applied Microbiology and Biotechnology, 2004, 66, 318-324.	3.6	43
156	Development of image analysis techniques as a tool to detect and quantify morphological changes in anaerobic sludge: II. Application to a granule deterioration process triggered by contact with oleic acid. Biotechnology and Bioengineering, 2004, 87, 194-199.	3.3	26
157	Development of image analysis techniques as a tool to detect and quantify morphological changes in anaerobic sludge: I. Application to a granulation process. Biotechnology and Bioengineering, 2004, 87, 184-193.	3.3	19
158	Survey of Protozoa and Metazoa populations in wastewater treatment plants by image analysis and discriminant analysis. Environmetrics, 2004, 15, 381-390.	1.4	44
159	Evolutionary Algorithms for Optimal Control in Fed-Batch Fermentation Processes. Lecture Notes in Computer Science, 2004, , 84-93.	1.3	12
160	Identification of Yield Coefficients in an E.coli Model – An Optimal Experimental Design Using Genetic Algorithms. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 43-48.	0.4	0
161	Morphological analysis of Yarrowia lipolytica under stress conditions through image processing. Bioprocess and Biosystems Engineering, 2003, 25, 371-375.	3.4	36
162	Estimation of multiple biomass growth rates and biomass concentration in a class of bioprocesses. Bioprocess and Biosystems Engineering, 2003, 25, 395-406.	3.4	23

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163	Automated image analysis to improve bead ingestion toxicity test counts in the protozoan Tetrahymena pyriformis. Letters in Applied Microbiology, 2003, 37, 230-233.	2.2	5
164	Image analysis, methanogenic activity measurements, and molecular biological techniques to monitor granular sludge from an EGSB reactor fed with oleic acid. Water Science and Technology, 2003, 47, 181-188.	2.5	12
165	MODEL-BASED ADAPTIVE CONTROL OF ACETATE CONCENTRATION DURING THE PRODUCTION OF RECOMBINANT PROTEINS WITH E. COLI. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 461-466.	0.4	5
166	Stability, dynamics of convergence and tuning of observer-based kinetics estimators. Journal of Process Control, 2002, 12, 311-323.	3.3	42
167	On-line simultaneous monitoring of glucose and acetate with FIA during high cell density fermentation of recombinant E. coli. Analytica Chimica Acta, 2002, 462, 293-304.	5 . 4	44
168	An Integrated System for Advanced Monitoring and Control of Fed-Batch Fermevtations of Recombinant E. coli. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 349-354.	0.4	2
169	Can spreadsheet solvers solve demanding optimization problems?. Computer Applications in Engineering Education, 2001, 9, 49-56.	3.4	11
170	Influence of up-flow velocity on the performance of an anaerobic filter under oleic acid overloads. Biotechnology Letters, 2001, 23, 1833-1839.	2.2	2
171	The study of protozoa population in wastewater treatment plants by image analysis. Brazilian Journal of Chemical Engineering, 2001, 18, 103-111.	1.3	16
172	Staged and non-staged anaerobic filters: performance in relation to physical and biological characteristics of microbial aggregates. Journal of Chemical Technology and Biotechnology, 2000, 75, 601-609.	3.2	1
173	Tuning of observer-based estimators: theory and application to the on-line estimation of kinetic parameters. Control Engineering Practice, 2000, 8, 377-388.	5 . 5	85
174	Semi-automated recognition of protozoa by image analysis. Biotechnology Letters, 1999, 13, 111-118.	0.5	21
175	Modelling diffusion-reaction phenomena in yeast flocs of Saccharomyces cerevisiae. Bioprocess and Biosystems Engineering, 1998, 18, 335-342.	0.5	5
176	Mass transfer properties of glucose and O2 in Saccharomyces cerevisiae flocs. Biochemical Engineering Journal, 1998, 2, 35-43.	3.6	31
177	Modelling diffusion-reaction phenomena in yeast flocs of. Bioprocess and Biosystems Engineering, 1998, 18, 335.	0.5	0
178	A study on the convergence of observer-based kinetics estimators in stirred tank bioreactors. Journal of Process Control, 1996, 6, 367-371.	3.3	35
179	Adaptive linearizing control of bioreactors. , 1996, , .		4
180	Chapter 18 Dynamic Modelling of Complex Enzymatic Reactions. Data Handling in Science and Technology, 1990, 6, 211-220.	3.1	0