Eugnio C Ferreira

List of Publications by Year in Descending Order

175 papers	3,506 citations	33 h-index	51 g-index
189 ext. papers	4,024 ext. citations	5.1 avg, IF	5.39 L-index

#	Paper	IF	Citations
175	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	6.8	0
174	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	6.8	2
173	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	5.4	0
172	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	8.4	1
171	Quantitative image analysis as a robust tool to assess effluent quality from an aerobic granular sludge system treating industrial wastewater. *Chemosphere*, **2021**, 132773	8.4	1
170	A kinetic model of the central carbon metabolism for acrylic acid production in Escherichia coli. *PLoS Computational Biology*, **2021**, 17, e1008704	5	5
169	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,	4.9	5
168	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	6.7	7
167	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	7.9	4
166	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	10.2	15
165	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	7	5
164	High Carbon Load in Food Processing Industrial Wastewater is a Driver for Metabolic Competition in Aerobic Granular Sludge. *Frontiers in Environmental Science*, **2021**, 9,	4.8	2
163	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	7.9	2
162	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	6.8	11
161	Degradation of widespread pharmaceuticals by activated sludge: Kinetic study, toxicity assessment, and comparison with adsorption processes. *Journal of Water Process Engineering*, **2020**, 33, 101061	6.7	8
160	Environmentally-friendly technology for rapid identification and quantification of emerging pollutants from wastewater using infrared spectroscopy. *Environmental Toxicology and Pharmacology*, **2020**, 80, 103458	5.8	4
159	Bio-Based Nanoparticles as a Carrier of β-Carotene: Production, Characterisation and In Vitro Gastrointestinal Digestion. *Molecules*, **2020**, 25,	4.8	12

158	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	11.1	12
157	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	8.3	16
156	SamPler - a novel method for selecting parameters for gene functional annotation routines. *BMC Bioinformatics*, **2019**, 20, 454	3.6	3
155	Discrimination of Camellia japonica cultivars and chemometric models: An interlaboratory study. *Computers and Electronics in Agriculture*, **2019**, 159, 28-33	6.5	2
154	Optimization of bacterial nanocellulose fermentation using recycled paper sludge and development of novel composites. *Applied Microbiology and Biotechnology*, **2019**, 103, 9143-9154	5.7	8
153	NIR spectroscopy applied to the determination of 2-phenylethanol and l-phenylalanine concentrations in culture medium of Yarrowia lipolytica. *Journal of Chemical Technology and Biotechnology*, **2019**, 94, 812-818	3.5	8
152	Quantification of pharmaceutical compounds in wastewater samples by near infrared spectroscopy (NIR). *Talanta*, **2019**, 194, 507-513	6.2	20
151	Mapping Salmonella typhimurium pathways using C metabolic flux analysis. *Metabolic Engineering*, **2019**, 52, 303-314	9.7	1
150	An Overview of the Evolution of Infrared Spectroscopy Applied to Bacterial Typing. *Biotechnology Journal*, **2018**, 13, 1700449	5.6	47
149	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	2.1	2
148	Reconstructing High-Quality Large-Scale Metabolic Models with merlin. *Methods in Molecular Biology*, **2018**, 1716, 1-36	1.4	10
147	New PLS analysis approach to wine volatile compounds characterization by near infrared spectroscopy (NIR). *Food Chemistry*, **2018**, 246, 172-178	8.5	47
146	Genome-Wide Semi-Automated Annotation of Transporter Systems. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2017**, 14, 443-456	3	10
145	Quantitative image analysis of polyhydroxyalkanoates inclusions from microbial mixed cultures under different SBR operation strategies. *Environmental Science and Pollution Research*, **2017**, 24, 15148-15156	5.1	3
144	Simultaneous partial nitrification and 2-fluorophenol biodegradation with aerobic granular biomass: Reactor performance and microbial communities. *Bioresource Technology*, **2017**, 238, 232-240	11	18
143	Online Analysis for Industrial Bioprocesses: Broth Analysis **2017**, 679-704		6
142	Monitoring biological wastewater treatment processes: recent advances in spectroscopy applications. *Reviews in Environmental Science and Biotechnology*, **2017**, 16, 395-424	13.9	33
141	Exploiting intrinsic fluorescence spectroscopy to discriminate between Acinetobacter calcoaceticus–Acinetobacter baumannii complex species. *RSC Advances*, **2017**, 7, 8581-8588	3.7	3

140	Estimation of effluent quality parameters from an activated sludge system using quantitative image analysis. *Chemical Engineering Journal*, **2016**, 285, 349-357	14.7	25
139	Quantitative image analysis as a tool for Yarrowia lipolytica dimorphic growth evaluation in different culture media. *Journal of Biotechnology*, **2016**, 217, 22-30	3.7	13
138	A Comparative Proteome Analysis of Δ Mutant Cells. *Frontiers in Bioengineering and Biotechnology* , **2016**, 4, 78	5.8	3
137	Discrimination of clinically relevant Candida species by Fourier-transform infrared spectroscopy with attenuated total reflectance (FTIR-ATR). *RSC Advances*, **2016**, 6, 92065-92072	3.7	7
136	Near-infrared spectroscopy for the detection and quantification of bacterial contaminations in pharmaceutical products. *International Journal of Pharmaceutics*, **2015**, 492, 199-206	6.5	12
135	Economic analysis and environmental impact assessment of three different fermentation processes for fructooligosaccharides production. *Bioresource Technology*, **2015**, 198, 673-81	11	20
134	Reconstructing genome-scale metabolic models with merlin. *Nucleic Acids Research*, **2015**, 43, 3899-910	20.1	82
133	Aroma production by Yarrowia lipolytica in airlift and stirred tank bioreactors: Differences in yeast metabolism and morphology. *Biochemical Engineering Journal*, **2015**, 93, 55-62	4.2	29
132	Salmonella typhimurium and Escherichia coli dissimilarity: Closely related bacteria with distinct metabolic profiles. *Biotechnology Progress*, **2015**, 31, 1217-25	2.8	10
131	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	6.6	12
130	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, 2132-42	3.2	3
129	Optimization of fed-batch fermentation processes with bio-inspired algorithms. *Expert Systems With Applications*, **2014**, 41, 2186-2195	7.8	39
128	Monitoring intracellular polyphosphate accumulation in enhanced biological phosphorus removal systems by quantitative image analysis. *Water Science and Technology*, **2014**, 69, 2315-23	2.2	0
127	iOD907, the first genome-scale metabolic model for the milk yeast Kluyveromyces lactis. *Biotechnology Journal*, **2014**, 9, 776-90	5.6	31
126	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	4.5	11
125	Population dynamics of a Salmonella lytic phage and its host: implications of the host bacterial growth rate in modelling. *PLoS ONE*, **2014**, 9, e102507	3.7	40
124	Prediction of intracellular storage polymers using quantitative image analysis in enhanced biological phosphorus removal systems. *Analytica Chimica Acta*, **2013**, 770, 36-44	6.6	14
123	Quantitative image analysis for the characterization of microbial aggregates in biological wastewater treatment: a review. *Environmental Science and Pollution Research*, **2013**, 20, 5887-912	5.1	28

122	Activated sludge characterization through microscopy: a review on quantitative image analysis and chemometric techniques. *Analytica Chimica Acta*, **2013**, 802, 14-28	6.6	45
121	Molecular aspects and comparative genomics of bacteriophage endolysins. *Journal of Virology*, **2013**, 87, 4558-70	6.6	158
120	Automatic identification of activated sludge disturbances and assessment of operational parameters. *Chemosphere*, **2013**, 91, 705-10	8.4	29
119	Metabolic responses to recombinant bioprocesses in Escherichia coli. *Journal of Biotechnology*, **2013**, 164, 396-408	3.7	59
118	Energy recovery and impact on land use of Maltese municipal solid waste incineration. *Energy*, **2013** , 49, 1-11	7.9	33
117	Genome scale metabolic network reconstruction of the pathogen Enterococcus faecalis. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 131-136		1
116	Identification of metabolic engineering targets through analysis of optimal and sub-optimal routes. *PLoS ONE*, **2013**, 8, e61648	3.7	15
115	Image Analysis for Automatic Characterization of Polyhydroxyalcanoates Granules. *Lecture Notes in Computer Science*, **2013**, 790-797	0.9	3
114	Exploring the gap between dynamic and constraint-based models of metabolism. *Metabolic Engineering*, **2012**, 14, 112-9	9.7	26
113	Kinetic and stoichiometric characterization of a fixed biofilm reactor by pulse respirometry. *Journal of Biotechnology*, **2012**, 157, 173-9	3.7	14
112	Influence of the RelA Activity on E. coli Metabolism by Metabolite Profiling of Glucose-Limited Chemostat Cultures. *Metabolites*, **2012**, 2, 717-32	5.6	8
111	State and specific growth estimation in heterologous protein production by Pichia pastoris. *AICHE Journal*, **2012**, 58, 2966-2979	3.6	11
110	Random sampling of elementary flux modes in large-scale metabolic networks. *Bioinformatics*, **2012** , 28, i515-i521	7.2	53
109	Genome-wide metabolic (re-) annotation of Kluyveromyces lactis. *BMC Genomics*, **2012**, 13, 517	4.5	12
108	Characterization of activated sludge abnormalities by image analysis and chemometric techniques. *Analytica Chimica Acta*, **2011**, 705, 235-42	6.6	27
107	Metabolic footprint analysis of recombinant Escherichia coli strains during fed-batch fermentations. *Molecular BioSystems*, **2011**, 7, 899-910		27
106	A Study of the Short and Long-term Regulation of E. coli Metabolic Pathways. *Journal of Integrative Bioinformatics*, **2011**, 8, 195-209	3.8	7
105	Identification of minimal metabolic pathway models consistent with phenotypic data. *Journal of Process Control*, **2011**, 21, 1483-1492	3.9	7

104	Critical perspective on the consequences of the limited availability of kinetic data in metabolic dynamic modelling. *IET Systems Biology*, **2011**, 5, 157-63	1.4	17
103	Stringent response of Escherichia coli: revisiting the bibliome using literature mining. *Microbial Informatics and Experimentation*, **2011**, 1, 14		9
102	Modeling formalisms in Systems Biology. *AMB Express*, **2011**, 1, 45	4.1	107
101	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	4.2	14
100	Identifying different types of bulking in an activated sludge system through quantitative image analysis. *Chemosphere*, **2011**, 85, 643-52	8.4	56
99	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		1
98	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, 1390-7	5.1	6
97	Semantic annotation of biological concepts interplaying microbial cellular responses. *BMC Bioinformatics*, **2011**, 12, 460	3.6	5
96	Genomic and proteomic characterization of the broad-host-range Salmonella phage PVP-SE1: creation of a new phage genus. *Journal of Virology*, **2011**, 85, 11265-73	6.6	73
95	Challenges in integrating Escherichia coli molecular biology data. *Briefings in Bioinformatics*, **2011**, 12, 91-103	13.4	4
94	Interpreting the Regulatory Interplay in E. coli Metabolic Pathways. *Advances in Intelligent and Soft Computing*, **2011**, 303-312		
93	A study of the short and long-term regulation of E. coli metabolic pathways. *Journal of Integrative Bioinformatics*, **2011**, 8, 183	3.8	1
92	A Comparison between bright field and phase-contrast image analysis techniques in activated sludge morphological characterization. *Microscopy and Microanalysis*, **2010**, 16, 166-74	0.5	18
91	Selection and characterization of a multivalent Salmonella phage and its production in a nonpathogenic Escherichia coli strain. *Applied and Environmental Microbiology*, **2010**, 76, 7338-42	4.8	35
90	Selection of Elementary Modes for Bioprocess Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 156-161		13
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		
88	Dilution and magnification effects on image analysis applications in activated sludge characterization. *Microscopy and Microanalysis*, **2010**, 16, 561-8	0.5	11
87	Merlin: Metabolic Models Reconstruction using Genome-Scale Information*. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 120-125		3

86	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		1
85	OptFlux: an open-source software platform for in silico metabolic engineering. *BMC Systems Biology*, **2010**, 4, 45	3.5	258
84	A chemometric tool to monitor high-rate anaerobic granular sludge reactors during load and toxic disturbances. *Biochemical Engineering Journal*, **2010**, 53, 38-43	4.2	9
83	BioDR: Semantic indexing networks for biomedical document retrieval. *Expert Systems With Applications*, **2010**, 37, 3444-3453	7.8	9
82	Hybrid dynamic modeling of Escherichia coli central metabolic network combining Michaelis-Menten and approximate kinetic equations. *BioSystems*, **2010**, 100, 150-7	1.9	40
81	Virtual laboratories in (bio)chemical engineering education. *Education for Chemical Engineers*, **2010**, 5, e22-e27	2.4	38
80	A Dynamical Model for the Fermentative Production of Fructooligosaccharides. *Computer Aided Chemical Engineering*, **2009**, 1827-1832	0.6	7
79	Determination of Kinetic and Stoichiometric Parameters of Pseudomonas putida F1 by Chemostat and In Situ Pulse Respirometry. *Chemical Product and Process Modeling*, **2009**, 4,	1.1	3
78	A Critical Review on Modelling Formalisms and Simulation Tools in Computational Biosystems. *Lecture Notes in Computer Science*, **2009**, 1063-1070	0.9	1
77	The 10th International Chemical and Biological Engineering Conference (CHEMPOR 2008). *International Journal of Chemical Engineering*, **2009**, 2009, 1-2	2.2	2
76	The use of antibiotics to improve phage detection and enumeration by the double-layer agar technique. *BMC Microbiology*, **2009**, 9, 148	4.5	60
75	Application of image analysis to the prediction of EBC barley kernel weight distribution. *Industrial Crops and Products*, **2009**, 30, 366-371	5.9	8
74	@Note: a workbench for biomedical text mining. *Journal of Biomedical Informatics*, **2009**, 42, 710-20	10.2	28
73	Study of saline wastewater influence on activated sludge flocs through automated image analysis. *Journal of Chemical Technology and Biotechnology*, **2009**, 84, 554-560	3.5	11
72	Advanced monitoring of high-rate anaerobic reactors through quantitative image analysis of granular sludge and multivariate statistical analysis. *Biotechnology and Bioengineering*, **2009**, 102, 445-56	4.9	12
71	Assessment of physiological conditions in E. coli fermentations by epifluorescent microscopy and image analysis. *Biotechnology Progress*, **2009**, 25, 882-91	2.8	10
70	Monitoring of activated sludge settling ability through image analysis: validation on full-scale wastewater treatment plants. *Bioprocess and Biosystems Engineering*, **2009**, 32, 361-7	3.7	28
69	Monitoring of fed-batch E. coli fermentations with software sensors. *Bioprocess and Biosystems Engineering*, **2009**, 32, 381-8	3.7	43

68	Correlation between sludge settling ability and image analysis information using partial least squares. *Analytica Chimica Acta*, **2009**, 642, 94-101	6.6	37
67	Comparison of adsorption equilibrium of fructose, glucose and sucrose on potassium gel-type and macroporous sodium ion-exchange resins. *Analytica Chimica Acta*, **2009**, 654, 71-6	6.6	49
66	Quantitative monitoring of an activated sludge reactor using on-line UV-visible and near-infrared spectroscopy. *Analytical and Bioanalytical Chemistry*, **2009**, 395, 1159-66	4.4	46
65	Galacto-oligosaccharides production during lactose hydrolysis by free Aspergillus oryzae β-galactosidase and immobilized on magnetic polysiloxane-polyvinyl alcohol. *Food Chemistry*, **2009**, 115, 92-99	8.5	148
64	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	6.7	38
63	Morphology and physiology of anaerobic granular sludge exposed to an organic solvent. *Journal of Hazardous Materials*, **2009**, 167, 393-8	12.8	9
62	Air pollution control with semi-infinite programming. *Applied Mathematical Modelling*, **2009**, 33, 1957-1968	4.3	26
61	Principal component analysis and quantitative image analysis to predict effects of toxics in anaerobic granular sludge. *Bioresource Technology*, **2009**, 100, 1180-5	11	27
60	Large Scale Dynamic Model Reconstruction for the Central Carbon Metabolism of Escherichia coli. *Lecture Notes in Computer Science*, **2009**, 1079-1083	0.9	1
59	Data Integration Issues in the Reconstruction of the Genome-Scale Metabolic Model of Zymomonas Mobillis. *Advances in Soft Computing*, **2009**, 92-101		1
58	Computational Intelligence Techniques for Supervision and Diagnosis of Biological Wastewater Treatment Systems. *Studies in Computational Intelligence*, **2009**, 127-162	0.8	1
57	Evolutionary Approaches for Strain Optimization Using Dynamic Models under a Metabolic Engineering Perspective. *Lecture Notes in Computer Science*, **2009**, 140-151	0.9	2
56	A Software Tool for the Simulation and Optimization of Dynamic Metabolic Models. *Lecture Notes in Computer Science*, **2009**, 1071-1078	0.9	
55	Modelling of Biotechnological Processes – An Approach Based on Artificial Neural Networks. *Studies in Computational Intelligence*, **2009**, 311-332	0.8	
54	Biomedical Text Mining Applied to Document Retrieval and Semantic Indexing. *Lecture Notes in Computer Science*, **2009**, 954-963	0.9	
53	Natural computation meta-heuristics for the in silico optimization of microbial strains. *BMC Bioinformatics*, **2008**, 9, 499	3.6	75
52	Evaluating evolutionary multiobjective algorithms for the in silico optimization of mutant strains **2008**,		8
51	Activated sludge process monitoring through in situ near-infrared spectral analysis. *Water Science and Technology*, **2008**, 57, 1643-50	2.2	20

50	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		11
49	Stalked protozoa identification by image analysis and multivariable statistical techniques. *Analytical and Bioanalytical Chemistry*, **2008**, 391, 1321-5	4.4	14
48	Quantification of the CBD-FITC conjugates surface coating on cellulose fibres. *BMC Biotechnology*, **2008**, 8, 1	3.5	67
47	Kinetic and stoichiometric parameters estimation in a nitrifying bubble column through "in-situ" pulse respirometry. *Biotechnology and Bioengineering*, **2008**, 100, 94-102	4.9	16
46	Differential Evolution for the Offline and Online Optimization of Fed-Batch Fermentation Processes. *Studies in Computational Intelligence*, **2008**, 299-317	0.8	5
45	Raw data pre-processing in the protozoa and metazoa identification by image analysis and multivariate statistical techniques. *Journal of Chemometrics*, **2007**, 21, 156-164	1.6	5
44	Quantitative image analysis as a diagnostic tool for monitoring structural changes of anaerobic granular sludge during detergent shock loads. *Biotechnology and Bioengineering*, **2007**, 98, 60-8	4.9	19
43	Recognition of Protozoa and Metazoa using image analysis tools, discriminant analysis, neural networks and decision trees. *Analytica Chimica Acta*, **2007**, 595, 160-9	6.6	35
42	Analysis of the effects of hyperbaric gases on S. cerevisiae cell cycle through a morphological approach. *Process Biochemistry*, **2007**, 42, 1378-1383	4.8	5
41	Development of a method using image analysis for the measurement of cellulose-binding domains adsorbed onto cellulose fibers. *Biotechnology Progress*, **2007**, 23, 1492-7	2.8	13
40	. *IEEE International Conference on Fuzzy Systems*, **2007**,		4
39	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		
38	Quantitative image analysis as a diagnostic tool for identifying structural changes during a revival process of anaerobic granular sludge. *Water Research*, **2007**, 41, 1473-80	12.5	15
37	Development of an image analysis procedure for identifying protozoa and metazoa typical of activated sludge system. *Water Research*, **2007**, 41, 2581-9	12.5	30
36	Evaluating Simulated Annealing Algorithms in the Optimization of Bacterial Strains **2007**, 473-484		1
35	Evaluating Evolutionary Algorithms and Differential Evolution for the Online Optimization of Fermentation Processes **2007**, 236-246		4
34	Knowledge-based fuzzy system for diagnosis and control of an integrated biological wastewater treatment process. *Water Science and Technology*, **2006**, 53, 313-20	2.2	7
33	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		2

32	Activated sludge monitoring of a wastewater treatment plant using image analysis and partial least squares regression. *Analytica Chimica Acta*, **2005**, 544, 246-253	6.6	79
31	Assessment of yeast viability under hyperbaric conditions through a modeling approach. *Journal of Chemical Technology and Biotechnology*, **2005**, 80, 872-877	3.5	3
30	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, 239-46	4.5	6
29	Evolutionary Algorithms for Static and Dynamic Optimization of Fed-batch Fermentation Processes **2005**, 288-291		6
28	Effect of hyperbaric stress on yeast morphology: study by automated image analysis. *Applied Microbiology and Biotechnology*, **2004**, 66, 318-24	5.7	38
27	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, 194-9	4.9	24
26	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, 184-93	4.9	16
25	Survey of Protozoa and Metazoa populations in wastewater treatment plants by image analysis and discriminant analysis. *Environmetrics*, **2004**, 15, 381-390	1.3	33
24	Evolutionary Algorithms for Optimal Control in Fed-Batch Fermentation Processes. *Lecture Notes in Computer Science*, **2004**, 84-93	0.9	10
23	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		
22	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	2.2	8
21	Morphological analysis of Yarrowia lipolytica under stress conditions through image processing. *Bioprocess and Biosystems Engineering*, **2003**, 25, 371-5	3.7	28
20	Estimation of multiple biomass growth rates and biomass concentration in a class of bioprocesses. *Bioprocess and Biosystems Engineering*, **2003**, 25, 395-406	3.7	19
19	Automated image analysis to improve bead ingestion toxicity test counts in the protozoan Tetrahymena pyriformis. *Letters in Applied Microbiology*, **2003**, 37, 230-3	2.9	4
18	Stability, dynamics of convergence and tuning of observer-based kinetics estimators. *Journal of Process Control*, **2002**, 12, 311-323	3.9	40
17	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	6.6	40
16	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		5
15	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		

14	Can spreadsheet solvers solve demanding optimization problems?. *Computer Applications in Engineering Education*, **2001**, 9, 49-56	1.6	11
13	Influence of up-flow velocity on the performance of an anaerobic filter under oleic acid overloads. *Biotechnology Letters*, **2001**, 23, 1833-1839	3	2
12	The study of protozoa population in wastewater treatment plants by image analysis. *Brazilian Journal of Chemical Engineering*, **2001**, 18, 103-111	1.7	12
11	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	3.5	1
10	Tuning of observer-based estimators: theory and application to the on-line estimation of kinetic parameters. *Control Engineering Practice*, **2000**, 8, 377-388	3.9	75
9	Semi-automated recognition of protozoa by image analysis. *Biotechnology Letters*, **1999**, 13, 111-118		19
8	Modelling diffusion-reaction phenomena in yeast flocs of Saccharomyces cerevisiae. *Bioprocess and Biosystems Engineering*, **1998**, 18, 335-342		5
7	Mass transfer properties of glucose and O2 in Saccharomyces cerevisiae flocs. *Biochemical Engineering Journal*, **1998**, 2, 35-43	4.2	28
6	Modelling diffusion-reaction phenomena in yeast flocs of. *Bioprocess and Biosystems Engineering*, **1998**, 18, 335		5
5	A study on the convergence of observer-based kinetics estimators in stirred tank bioreactors. *Journal of Process Control*, **1996**, 6, 367-371	3.9	30
4	Adaptive linearizing control of bioreactors **1996**,		2
3	Chapter 18 Dynamic Modelling of Complex Enzymatic Reactions. *Data Handling in Science and Technology*, **1990**, 6, 211-220	2.7	
2	A Comparison of Algorithms for the Optimization of Fermentation Processes		13
1	merlinv4.0: an updated platform for the reconstruction of high-quality genome-scale metabolic models		3