Gary A Montague

List of Publications by Year
in descending order

48 papers	1,463 citations	393982 19 h-index	329751 37 g-index
48 all docs	48 docs citations	48 times ranked	1032 citing authors

#	Article	IF	Citations
1	Neural-network contributions in biotechnology. Trends in Biotechnology, 1994, 12, 312-324.	4.9	176
2	Process monitoring of an industrial fed-batch fermentation. Biotechnology and Bioengineering, 2001, 74, 125-135.	1.7	153
3	Soft-sensors for process estimation and inferential control. Journal of Process Control, 1991, 1, 3-14.	1.7	140
4	Robust probabilistic PCA with missing data and contribution analysis for outlier detection. Computational Statistics and Data Analysis, 2009, 53, 3706-3716.	0.7	100
5	Industrial application of neural networksÂâ€" an investigation. Journal of Process Control, 2001, 11, 497-507.	1.7	80
6	The development of an industrial-scale fed-batch fermentation simulation. Journal of Biotechnology, 2015, 193, 70-82.	1.9	71
7	Enhancing bioprocess operability with generic software sensors. Journal of Biotechnology, 1992, 25, 183-201.	1.9	70
8	Artificial neural network based experimental design procedure for enhancing fermentation development. Biotechnology and Bioengineering, 1994, 44, 397-405.	1.7	64
9	Bioprocess supervision: neural networks and knowledge based systems. Journal of Biotechnology, 1997, 52, 201-205.	1.9	54
10	Modelling and adaptive control of fedâ€batch penicillin fermentation. Canadian Journal of Chemical Engineering, 1986, 64, 567-580.	0.9	47
11	Application of radial basis function and feedforward artificial neural networks to the Escherichia coli fermentation process. Neurocomputing, 1998, 20, 67-82.	3.5	47
12	Rapid high-throughput characterisation, classification and selection of recombinant mammalian cell line phenotypes using intact cell MALDI-ToF mass spectrometry fingerprinting and PLS-DA modelling. Journal of Biotechnology, 2014, 184, 84-93.	1.9	46
13	An assessment of seed quality and its influence on productivity estimation in an industrial antibiotic fermentation. Biotechnology and Bioengineering, 2002, 78, 658-669.	1.7	42
14	Comparison of cleaning of toothpaste from surfaces and pilot scale pipework. Food and Bioproducts Processing, 2010, 88, 392-400.	1.8	36
15	Fermentation Monitoring and Control: A Perspective. Biotechnology and Genetic Engineering Reviews, 1989, 7, 147-188.	2.4	34
16	Hybrid approach to modeling an industrial polyethylene process. AICHE Journal, 2003, 49, 3127-3137.	1.8	31
17	Fermentation process tracking through enhanced spectral calibration modeling. Biotechnology and Bioengineering, 2007, 97, 554-567.	1.7	26
18	Maintenance affects the stability of a two-tiered microbial â€˜food chainâ€™?. Journal of Theoretical Biology, 2011, 276, 35-41.	0.8	25

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19	Fermentation seed quality analysis with self-organising neural networks. , 1999, 64, 82-91.		24
20	Issues in the development of an industrial bioprocess advisory system. Trends in Biotechnology, 2000, 18, 136-141.	4.9	22
21	Automated Production Support for the Bioprocess Industry. Biotechnology Progress, 2002, 18, 269-275.	1.3	21
22	Acrylamide in industrial potato crisp manufacturing: A potential tool for its reduction. LWT - Food Science and Technology, 2020, 123, 109111.	2.5	18
23	Correlating polymer resin and end-use properties to molecular-weight distribution. AICHE Journal, 2003, 49, 2609-2618.	1.8	16
24	Forecasting for fermentation operational decision making. Biotechnology Progress, 2008, 24, 1033-1041.	1.3	12
25	On the applicability of adaptive bioprocess state estimators. Biotechnology and Bioengineering, 1993, 42, 1311-1321.	1.7	10
26	MALDI-ToF mass spectrometry coupled with multivariate pattern recognition analysis for the rapid biomarker profiling of Escherichia coli in different growth phases. Analytical and Bioanalytical Chemistry, 2013, 405, 8251-8265.	1.9	10
27	Application of agentâ€based system for bioprocess description and process improvement. Biotechnology Progress, 2010, 26, 706-716.	1.3	9
28	Towards online Near-Infrared spectroscopy to optimise food product mixing. Journal of Food Engineering, 2019, 263, 227-236.	2.7	9
29	Operational considerations for hot-washing in potato crisp manufacture. Food and Bioproducts Processing, 2020, 124, 387-396.	1.8	9
30	Handling uncertain decisions in whole process design. Production Planning and Control, 2014, 25, 1028-1038.	5.8	8
31	From process experts to a real-time knowledge-based system. Expert Systems, 2002, 19, 69-79.	2.9	7
32	A quality by design approach to process plant cleaning. Chemical Engineering Research and Design, 2013, 91, 1095-1105.	2.7	6
33	Influence of Incident Wavelength and Detector Material Selection on Fluorescence in the Application of Raman Spectroscopy to a Fungal Fermentation Process. Bioengineering, 2018, 5, 79.	1.6	6
34	Real Time Optimisation of Industrial Gas Supply Networks. IFAC-PapersOnLine, 2015, 48, 355-360.	0.5	5
35	Utilisation of key descriptors from protein sequence data to aid bioprocess route selection. Food and Bioproducts Processing, 2012, 90, 755-761.	1.8	4
36	Numerical analysis of in-flight freezing droplets: Application to novel particle engineering technology. Food and Bioproducts Processing, 2019, 116, 30-40.	1.8	4

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37	Practical Inferential Estimation Using Artificial Neural Networks. Measurement and Control, 2002, 35, 5-9.	0.9	3
38	Importance of Heterogeneous Energy Dissipation in the Modeling and Optimization of Batch Cooling Crystallization. Industrial & Engineering Chemistry Research, 2007, 46, 7177-7187.	1.8	3
39	Towards advanced control for anaerobic digesters: volatile solids inferential sensor. Water Practice and Technology, 2013, 8, 7-17.	1.0	3
40	Optimization of cleaning detergent use in brewery fermenter cleaning. Journal of the Institute of Brewing, 2017, 123, 70-76.	0.8	3
41	Opportunities for Process Control and Quality Assurance Using Online NIR Analysis to a Continuous Wet Granulation Tableting Line. Journal of Pharmaceutical Innovation, 2020, 15, 26-40.	1.1	3
42	Estimating the immeasurable without mechanistic models. Trends in Biotechnology, 1990, 8, 82-83.	4.9	2
43	Neural network model-based predictive control of a distillation columnâ€"a neural network modelling methodology. Transactions of the Institute of Measurement and Control, 1996, 18, 42-50.	1.1	2
44	Multivariate decision trees for the interrogation of bioprocess data. Computer Aided Chemical Engineering, 2005, 20, 1129-1134.	0.3	1
45	Case Studies in Modelling, Control in Food Processes. Advances in Biochemical Engineering/Biotechnology, 2017, 161, 93-120.	0.6	1
46	A model discrimination based approach to the determination of operating regimes for chemical reactors. Computer Aided Chemical Engineering, 2006, 21, 273-278.	0.3	0
47	Particle size control of detergents in mixed flow spray dryers. Journal of Engineering, 2015, 2015, 102-107.	0.6	0
48	Industry Embedded Training in (Bio)Process Systems. Computer Aided Chemical Engineering, 2012, 31, 970-974.	0.3	0