Hugh M Cartwright

List of Publications by Year
in descending order

44 papers	3,187 citations	687220 13 h-index	477173 29 g-index
47 all docs	47 docs citations	47 times ranked	4711 citing authors

#	Article	IF	Citations
1	Machine learning for molecular and materials science. Nature, 2018, 559, 547-555.	13.7	2,387
2	SpecAlign--processing and alignment of mass spectra datasets. Bioinformatics, 2005, 21, 2088-2090.	1.8	168
3	Application of Fast Fourier Transform Cross-Correlation for the Alignment of Large Chromatographic and Spectral Datasets. Analytical Chemistry, 2005, 77, 5655-5661.	3.2	162
4	Neural networks applied in chemistry. I. Determination of the optimal topology of multilayer perceptron neural networks. Journal of Chemometrics, 2011, 25, 527-549.	0.7	77
5	Low-lying electronic states of magnesium hydride. Chemical Physics Letters, 1975, 32, 82-85.	1.2	44
6	msmsEval: tandem mass spectral quality assignment for high-throughput proteomics. BMC Bioinformatics, 2007, 8, 51.	1.2	41
7	A neural network approach to prediction of glass transition temperature of polymers. International Journal of Intelligent Systems, 2008, 23, 22-32.	3.3	40
8	Simultaneous optimization of chemical flowshop sequencing and topology using genetic algorithms. Industrial & Engineering Chemistry Research, 1993, 32, 2706-2713.	1.8	36
9	Analysis of the distribution of airborne pollution using genetic algorithms. Atmospheric Environment Part A General Topics, 1993, 27, 1783-1791.	1.3	32
10	Artificial Neural Networks. Methods in Molecular Biology, 2015, 1260, v.	0.4	29
11	Determination of the dimensionality of spectroscopic data by submatrix analysis. Journal of Chemometrics, 1987, 1, 111-120.	0.7	25
12	Artificial Neural Networks in Biology and Chemistry—The Evolution of a New Analytical Tool. Methods in Molecular Biology, 2008, 458, 1-13.	0.4	23
13	Neural Networks Applied in Chemistry. II. Neuro-Evolutionary Techniques in Process Modeling and Optimization. Industrial & Engineering Chemistry Research, 2013, 52, 12673-12688.	1.8	18
14	Color perception and factor analysis. Journal of Chemical Education, 1986, 63, 984.	1.1	12
15	Genetic algorithms and flowshop scheduling: towards the development of a real-time process control system. Lecture Notes in Computer Science, 1994, , 277-290.	1.0	10
16	The genetic algorithm in science. Pest Management Science, 1995, 45, 171-178.	0.6	8
17	A spectrometer in the bedroom—the development and potential of internet-based experiments. Computers and Education, 2002, 38, 53-64.	5.1	8
18	Factor analysis of the tungsten(VI)-rutin system. Microchemical Journal, 1986, 34, 313-318.	2.3	7

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19	Deterministic projection by growing cell structure networks for visualization of high-dimensionality datasets. Journal of Biomedical Informatics, 2005, 38, 322-330.	2.5	6
20	Swarm Intelligence. By James Kennedy and Russell C Eberhart with Yuhui Shi. Morgan Kaufmann Publishers: San Francisco, 2001. ï¿½43.95. xxvii + 512 pp. ISBN 1-55860-595-9. The Chemical Educator, 2002, 7, 123-124.	0.0	5
21	The application of submatrix analysis to disordered spectroscopic data. Journal of Chemometrics, 1988, 2, 111-119.	0.7	3
22	The Applications of Artificial Neural Networks in the Identification of Quantitative Structure-Activity Relationships for Chemotherapeutic Drug Carcinogenicity. Lecture Notes in Computer Science, 2010, , 137-146.	1.0	2
23	Evolutionary design of synthetic routes in chemistry. Lecture Notes in Computer Science, 1996, , 23-38.	1.0	2
24	The second derivative visible spectrum of iodine. Journal of Chemical Education, 1983, 60, 606.	1.1	1
25	Intelligent algorithmic interpretation of pollutant discharges from multi-unit industrial complexes. International Journal of Intelligent Systems, 1997, 12, 655-672.	3.3	1
26	Quick Selection Guide to Chemical Protective Clothing by Krister Forsberg and S. Z. Mansdorf. The Chemical Educator, 1998, 3, 1-2.	0.0	1
27	A Working Method Approach for Introductory Physical Chemistry Calculations by Brian Murphy, Clair Murphy, and Brian J. Hathaway. The Chemical Educator, 1998, 3, 1-2.	0.0	1
28	Undergraduate Projects in the Application of Artificial Intelligence to Chemistry. II Self-Organizing Maps. The Chemical Educator, 2000, 5, 196-204.	0.0	1
29	Physical Chemistry. By Peter Atkins, Oxford University Press: Oxford, U.K. xvi + 997 pp. ï¿½28.99. Includes CD. ISBN 0-19-850101-3. Student?s Solutions Manual and Instructor?s Solutions Manual are also available. The Chemical Educator, 2001, 6, 262-263.	0.0	1
30	Genetic algorithms for the analysis of the movement of airborne pollution. , 0, , .		1
31	Shrinking molecules. Journal of Chemical Education, 1977, 54, 478.	1.1	0
32	Parallel computing in computational chemistry. Endeavour, 1996, 20, 43.	0.1	0
33	Chemiluminescent Delay: An Experiment in StoppedF?low Kinetics. The Chemical Educator, 1997, 1, 1-12.	0.0	0
34	Applied Mathematics for Physical Chemistry. The Chemical Educator, 1998, 3, 1-2.	0.0	0
35	On the Surface of Things, by Felice Frankel and George M. Whitesides. The Chemical Educator, 1998, 3, 1-2.	0.0	0
36	Undergraduate Projects in the Application of Artificial Intelligence to Chemistry. I. Background. The Chemical Educator, 1999, 4, 238-241.	0.0	0

#	Article	IF	Citations
37	Undergraduate Projects in the Application of Artificial Intelligence to Chemistry. III. Cellular Automata. The Chemical Educator, 2001, 6, 247-254.	0.0	0
38	Instruments and Experimentation in the History of Chemistry. Frederic L. Homes and Trevor H. Levere, Editors. The MIT Press: Cambridge, Mass., 2000. ï¿½34.50. xvii + 415 pp. ISBN 0-262-08282-9. The Chemical Educator, 2001, 6, 263-263.	0.0	0
39	Prediction of Polymer Optical Fiber Properties Using Artificial Neural Networks. , 2007, , .		0
40	Engineering polymeric optical fibers with desired properties. , 2007, , .		0
41	Artificial Intelligence Methods: Challenge in Computer Based Polymer Design. , 2009, , .		0
42	Legs-11. Nature, 2017, 547, 252-252.	13.7	0
43	Web-based experiments in physics and chemistry. New Directions in the Teaching of Physical Sciences, 2003, , 37-38.	0.4	0
44	The Use of Computational Intelligence in the Design of Polymers and in Property Prediction. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2014, , 199-207.	0.2	0