

Список литературы

- [1] Abbattista, F., Carofiglio, V., and Koppen, M. (1999) Scout algorithms and genetic algorithms: A comparative study. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 769, Morgan Kaufmann.
- [2] Adamopoulos, A. V., Georgopoulos, E. F., Likothanassis, S. D., and Anninos, P. A. (1999) Forecasting the magnetoencephalogram (meg) of epileptic patients using genetically optimized neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1457–1462, Morgan Kaufmann.
- [3] Agapie, A. (1999) Random systems with complete connections. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 770, Morgan Kaufmann.
- [4] Aguilar, J. and Miranda, P. (1999) Approaches based on genetic algorithms for multiobjective optimization problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 3–10, Morgan Kaufmann.
- [5] Aguilar, J., Riquelme, J., and Toro, M. (1999) Three geometric approaches for representing decision rules in a supervised learning system. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 771, Morgan Kaufmann.
- [6] Aguirre, H. E., Tanaka, K., and Sugimura, T. (1999) Cooperative crossover and mutation operators in genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 772, Morgan Kaufmann.
- [7] Ahluwalia, M. and Bull, L. (1999) A genetic programming-based classifier system. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 11–18, Morgan Kaufmann.
- [8] Ahluwalia, M. and Bull, L. (1999) Coevolving functions in genetic programming: Classification using k-nearest-neighbour. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 947–952, Morgan Kaufmann.
- [9] Alba, E., Cotta, C., and Troya, J. M. (1999) Entropic and real-time analysis of the search with panmictic, structured, and parallel distributed genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 773, Morgan Kaufmann.
- [10] Aparicio, J. N., Correia, L., and Moura-Pires, F. (1999) Populations are multisets-plato. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1845–1850, Morgan Kaufmann.
- [11] Bael, P. V., Devogelaere, D., and Rijckaert, M. (1999) The job shop problem solved with simple, basic evolutionary search elements. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 665–669, Morgan Kaufmann.

- [12] Bagnall, A. J. and Smith, G. D. (1999) Using an adaptive agent to bid in a simplified model of the uk market in electricity. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 774, Morgan Kaufmann.
- [13] Barry, A. (1999) Aliasing in xcs and the consecutive state problem: 1 - effects. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 19–26, Morgan Kaufmann.
- [14] Barry, A. (1999) Aliasing in xcs and the consecutive state problem: 2 - solutions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 27–34, Morgan Kaufmann.
- [15] Battle, D., Homaifar, A., Tunstel, E., and Dozier, G. (1999) Genetic programming of full knowledge bases for fuzzy logic controllers. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1463–1468, Morgan Kaufmann.
- [16] Beck, M. A. and Parmee, I. C. (1999) Extending the bounds of the search space: A multi-population approach. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1469–1476, Morgan Kaufmann.
- [17] Beligiannis, G. N., Demiris, E. N., and Likothanassis, S. D. (1999) Evolutionary multimodel partitioning filters for nonlinear systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1227, Morgan Kaufmann.
- [18] III, F. H. B., Koza, J. R., Shipman, J., and Stiffelman, O. (1999) Building a parallel computer system for \$18,000 that performs a half peta-flop per day. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1484–1490, Morgan Kaufmann.
- [19] III, F. H. B., Koza, J. R., Keane, M. A., Yu, J., Mydlowec, W., and Stiffelman, O. (1999) Evolution by means of genetic programming of analog circuits that perform digital functions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1477–1483, Morgan Kaufmann.
- [20] Bentley, P. and Kumar, S. (1999) Three ways to grow designs: A comparison of embryogenies for an evolutionary design problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 35–43, Morgan Kaufmann.
- [21] Berger, J., Sassi, M., and Salois, M. (1999) A hybrid genetic algorithm for the vehicle routing problem with time windows and itinerary constraints. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 44–51, Morgan Kaufmann.
- [22] Best, M. L. (1999) Coevolving mutualists guide simulated evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 941, Morgan Kaufmann.

- [23] Beyer, H.-G. and Arnold, D. V. (1999) Fitness noise and localization errors of the optimum in general quadratic fitness models. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 817–824, Morgan Kaufmann.
- [24] Boettcher, S. and Percus, A. G. (1999) Extremal optimization: Methods derived from co-evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 825–832, Morgan Kaufmann.
- [25] Bojarczuk, C. C., Lopes, H. S., and Freitas, A. A. (1999) Discovering comprehensible classification rules by using genetic programming: a case study in a medical domain. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 953–958, Morgan Kaufmann.
- [26] Bonarini, A. (1999) Comparing reinforcement learning algorithms applied to crisp and fuzzy learning classifier systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 52–59, Morgan Kaufmann.
- [27] Bonham, C. R. and Parmee, I. C. (1999) An investigation of exploration and exploitation within cluster oriented genetic algorithms (cogas). Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1491–1497, Morgan Kaufmann.
- [28] Bosman, P. A. N. and Thierens, D. (1999) Linkage information processing in distribution estimation algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 60–67, Morgan Kaufmann.
- [29] Brameier, M., Hoffmann, F., Nordin, P., Banzhaf, W., and Francone, F. (1999) Parallel machine code genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1228, Morgan Kaufmann.
- [30] Branke, J., Cutaia, M., and Dold, H. (1999) Reducing genetic drift in steady state evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 68–74, Morgan Kaufmann.
- [31] Brizuela, C. A. and Sannomiya, N. (1999) A diversity study in genetic algorithms for job shop scheduling problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 75–82, Morgan Kaufmann.
- [32] Bull, L. (1999) On using zcs in a simulated continuous double-auction market. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 83–90, Morgan Kaufmann.
- [33] Calderoni, S. (1999) Behavior-based control system in multiagent domain. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1439, Morgan Kaufmann.
- [34] Cangelosi, A. (1999) Heterochrony and adaptation in developing neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1241–1248, Morgan Kaufmann.

- [35] Cantu-Paz, E. (1999) Migration policies and takeover times in genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 775, Morgan Kaufmann.
- [36] Cantu-Paz, E. (1999) Topologies, migration rates, and multi-population parallel genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 91–98, Morgan Kaufmann.
- [37] Cao, L., (Francis), T. E. H., Lawrence, M., and Yeong, W. C. (1999) Classification of the market states using neural network. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 776, Morgan Kaufmann.
- [38] Cao, H., Kang, L., and Chen, Y. (1999) Evolutionary modeling of ordinary differential equations for dynamic systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 959–965, Morgan Kaufmann.
- [39] Cao, L. and (Francis), T. E. H. (1999) Neuro-genetic based method to the classification of acupuncture needle: A case study. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 99–105, Morgan Kaufmann.
- [40] Castillo, P. A., Rivas, V., Merelo, J. J., Gonzalez, J., Prieto, A., and Romero, G. (1999) G-prop-iii: Global optimization of multilayer perceptrons using an evolutionary algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 942, Morgan Kaufmann.
- [41] Cattral, R., Oppacher, F., and Deugo, D. (1999) Rule acquisition with a genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 778, Morgan Kaufmann.
- [42] Chan, Z. S. H., Ngan, H. W., and Rad, A. B. (1999) Minimum-allele-reserve-keeper (mark): A fast and effective mutation scheme for genetic algorithm (ga). Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 106–113, Morgan Kaufmann.
- [43] Chen, S.-H., Lin, W.-Y., and Tsao, C.-I. (1999) Genetic algorithms, trading strategies and stochastic processes: Some new evidence from monte carlo simulations. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 114–121, Morgan Kaufmann.
- [44] Chen, S. and Smith, S. F. (1999) Improving genetic algorithms by search space reductions (with applications to flow shop scheduling). Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 135–140, Morgan Kaufmann.
- [45] Chen, S. and Smith, S. F. (1999) Introducing a new advantage of crossover: Commonality-based selection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 122–128, Morgan Kaufmann.

- [46] Chen, S., Guerra-Salcedo, C., and Smith, S. F. (1999) Non-standard crossover for a standard representation – commonality-based feature subset selection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 129–134, Morgan Kaufmann.
- [47] Chen, S.-H. and Kuo, T.-W. (1999) Towards an agent-based foundation of financial econometrics: An approach based on genetic-programming artificial markets. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 966, Morgan Kaufmann.
- [48] Chikara, M. and Masayasu, A. (1999) Collaborative learning agents with structural classifier systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 777, Morgan Kaufmann.
- [49] Chong, F. S. and Langdon, W. B. (1999) Java based distributed genetic programming on the internet. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1229, Morgan Kaufmann.
- [50] Chu, C.-H., Premkumar, G., Chou, C., and Sun, J. (1999) Dynamic degree constrained network design: A genetic algorithm approach. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 141–148, Morgan Kaufmann.
- [51] Coletti, M., Lash, T. D., Michalski, R., Mandsager, C., and Moustafa, R. (1999) Comparing performance of the learnable evolution model and genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 779, Morgan Kaufmann.
- [52] Collet, P., Lutton, E., Raynal, F., and Schoenauer, M. (1999) Individual gp: an alternative viewpoint for the resolution of complex problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 974–981, Morgan Kaufmann.
- [53] Collins, T. D. (1999) A comparison of search space visualization techniques. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 780, Morgan Kaufmann.
- [54] Collins, J. J., Sheehan, L., and Casey, C. (1999) Genetic planner for a mobile robot navigation system. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 782, Morgan Kaufmann.
- [55] Collins, J. J. and Ryan, C. (1999) Non-stationary function optimization using polygenic inheritance. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 781, Morgan Kaufmann.
- [56] Corney, D. and Parmee, I. (1999) N-dimensional surface mapping using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1230, Morgan Kaufmann.

- [57] Costa, L. and Oliveira, P. (1999) Gas in global optimization of mixed integer non-linear problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1773, Morgan Kaufmann.
- [58] Cotta, C., Alba, E., and Troya, J. M. (1999) Improving the scalability of dynastically optimal forma recombination by tuning the granularity of the representation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 783, Morgan Kaufmann.
- [59] Crawford, K. D., McCormack, M. D., and MacAllister, D. J. (1999) Modified gradient techniques for normalized solution vectors. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1498–1503, Morgan Kaufmann.
- [60] III, H. B. C. (1999) Aircraft maneuvering via genetics-based adaptive agent. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1249–1256, Morgan Kaufmann.
- [61] Cvetkovic, D. and Parmee, I. C. (1999) Use of preferences for ga-based multi-objective optimisation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1504–1509, Morgan Kaufmann.
- [62] Daida, J. M., Ampy, D. S., Ratanasavetavadhana, M., Li, H., and Chaudhri, O. A. (1999) Challenges with verification, repeatability, and meaningful comparison in genetic programming: Gibson’s magic. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1851–1858, Morgan Kaufmann.
- [63] Daida, J. M., Polito, J. A., Stanhope, S. A., Bertram, R. R., Khoo, J. C., and Chaudhary, S. A. (1999) What makes a problem gp-hard? analysis of a tunably difficult problem in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 982–989, Morgan Kaufmann.
- [64] Dasgupta, D., Cao, Y., and Yang, C. (1999) An immunogenetic approach to spectra recognition. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 149–155, Morgan Kaufmann.
- [65] Davenport, G. F., Ryan, M. D., and Rayward-Smith, V. J. (1999) Rule induction using a reverse polish representation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 990–995, Morgan Kaufmann.
- [66] Deaton, R. (1999) Reaction temperature constraints in dna computing. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1803–1804, Morgan Kaufmann.
- [67] Deb, K. (1999) Construction of test problems for multi-objective optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 164–171, Morgan Kaufmann.
- [68] Deb, K. and Beyer, H.-G. (1999) Self-adaptation in real-parameter genetic algorithms with simulated binary crossover. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 172–179, Morgan Kaufmann.

- [69] Delgado, M., Zuben, F. V., and Gomide, F. (1999) Modular and hierarchial evolutionary design of fuzzy systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 180–187, Morgan Kaufmann.
- [70] Desjarlais, L. M., Akbarzadeh-T., M.-R., and Wright, C. W. (1999) Control system optimization using genetic algorithms within the softlab toolkit. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1774, Morgan Kaufmann.
- [71] Dessi, A., Giani, A., and Starita, A. (1999) An analysis of automatic subroutine discovery in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 996–1001, Morgan Kaufmann.
- [72] Digby, D. and Seffens, W. (1999) Evolutionary algorithm analysis of the biological genetic codes. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1440, Morgan Kaufmann.
- [73] van Dijk, S., Thierens, D., and de Berg, M. (1999) On the design of genetic algorithms for geographical applications. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 188–195, Morgan Kaufmann.
- [74] Dimopoulos, C. and Zalzal, A. M. (1999) Evolving scheduling policies through a genetic programming framework. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1231, Morgan Kaufmann.
- [75] Dittrich, P., Skusa, A., Kantschik, W., and Banzhaf, W. (1999) Dynamical properties of the fitness landscape of a gp controlled random morphology robot. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1002–1008, Morgan Kaufmann.
- [76] Droste, S., Jansen, T., and Wegener, I. (1999) Perhaps not a free lunch but at least a free appetizer. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 833–839, Morgan Kaufmann.
- [77] Dupas, R., Cavory, G., and Goncalves, G. (1999) Real-world applications. optimising the throughput of a manufacturing production line using a genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1775, Morgan Kaufmann.
- [78] East, E. W. (1999) Infrastructure work order planning using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1510–1516, Morgan Kaufmann.
- [79] Ebner, M. and Zell, A. (1999) Evolving a behavior-based control architecture- from simulations to the real world. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1009–1014, Morgan Kaufmann.
- [80] Edelson, W. and Gargano, M. L. (1999) Efficient calculation of compute-intensive fitness in genetic computations using a survival indicator for population members. Banzhaf, W., Daida,

- J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 784, Morgan Kaufmann.
- [81] Eiben, A. E., Elia, D., and van Hemert, J. I. (1999) Population dynamics and emerging mental features in aegis. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1257–1264, Morgan Kaufmann.
 - [82] El-Beltagy, M. A., Nair, P. B., and Keane, A. J. (1999) Metamodeling techniques for evolutionary optimization of computationally expensive problems: Promises and limitations. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 196–203, Morgan Kaufmann.
 - [83] Eldershaw, C. and Cameron, S. (1999) Real-world applications: Motion planning using gas. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1776, Morgan Kaufmann.
 - [84] Evett, M., Khoshgoftaar, T., der Chien, P., and Allen, E. (1999) Modelling software quality with gp. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1232, Morgan Kaufmann.
 - [85] i Fabrega, F. X. L. and i Guiu, J. M. G. (1999) Genifer: A nearest neighbour based classifier system using ga. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 797, Morgan Kaufmann.
 - [86] Falco, I. D., Iazzetta, A., Tarantino, E., Cioppa, A. D., and Iacueli, A. (1999) Towards a simulation of natural mutation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 156–163, Morgan Kaufmann.
 - [87] Federman, F., Sparkman, G., and Watt, S. (1999) Representation of music in a learning classifier system utilizing bach chorales. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 785, Morgan Kaufmann.
 - [88] Fernandes, C., Caldeira, J. P., Melicio, F., and Rosa, A. (1999) Evolutionary algorithm for school timetabling. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1777, Morgan Kaufmann.
 - [89] Fernandez Jr., J. J. and Walker, I. D. (1999) A biologically inspired fitness function for robotic grasping. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1517–1522, Morgan Kaufmann.
 - [90] Folino, G., Pizzuti, C., and Spezzano, G. (1999) A cellular genetic programming approach to classification. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1015–1020, Morgan Kaufmann.
 - [91] Francone, F. D., Conrads, M., Banzhaf, W., and Nordin, P. (1999) Homologous crossover in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1021–1026, Morgan Kaufmann.

- [92] Fuchs, M., Fuchs, D., and Fuchs, M. (1999) Generating lemmas for tableau-based proof search using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1027–1032, Morgan Kaufmann.
- [93] Fuchs, M. (1999) Large populations are not always the best choice in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1033–1038, Morgan Kaufmann.
- [94] Fukunaga, A. S. (1999) Portfolios of genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 786, Morgan Kaufmann.
- [95] Fukuyama, Y., Takayama, S., Nakanishi, Y., and Yoshida, H. (1999) A particle swarm optimization for reactive power and voltage control in electric power systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1523–1528, Morgan Kaufmann.
- [96] Furutani, H. (1999) Analytical solutions for infinite population genetic algorithms on multiplicative landscape. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 204–211, Morgan Kaufmann.
- [97] Gaivoronski, A. A. (1999) Modeling of complex economic systems with agent nets. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1265–1272, Morgan Kaufmann.
- [98] Gallagher, J. C. and Beer, R. D. (1999) Evolution and analysis of dynamical neural networks for agents integrating vision, locomotion, and short-term memory. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1273–1280, Morgan Kaufmann.
- [99] Gallagher, M., Frean, M., and Downs, T. (1999) Real-valued evolutionary optimization using a flexible probability density estimator. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 840–846, Morgan Kaufmann.
- [100] de Garis, H., Buller, A., Korkin, M., Gers, F., Nawa, N. E., and Hough, M. (1999) Atr’s artificial brain (“cam-brain”) project: A sample of what individual “codi-1bit” model evolved neural net modules can do with digital and analog i/o. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1233, Morgan Kaufmann.
- [101] Garzon, M. H., Deaton, R. J., and Barnes, K. (1999) On self-assembling graphs in vitro. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1805–1809, Morgan Kaufmann.
- [102] Ghanea-Hercock, R., Ndumu, D. T., and Collis, J. (1999) Distributed genetic programming with mobile agents. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1441, Morgan Kaufmann.

- [103] Glickman, M. R. and Sycara, K. (1999) Evolution of goal-directed behavior from limited information in a complex environment. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1281–1288, Morgan Kaufmann.
- [104] Goldberg, D. E. and Voessner, S. (1999) Optimizing global-local search hybrids. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 220–228, Morgan Kaufmann.
- [105] Goldberg, D. E. (1999) Using time efficiently: Genetic-evolutionary algorithms and the continuation problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 212–219, Morgan Kaufmann.
- [106] Golovkin, I. E., Mancini, R. C., and Louis, S. J. (1999) Plasma x-ray spectra analysis using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1529–1534, Morgan Kaufmann.
- [107] Gordillo, F., Alcalá, I., and Aracil, J. (1999) A tool for solving differential games with co-evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1535–1542, Morgan Kaufmann.
- [108] Gordon, V. S., Pirie, R., Wachter, A., and Sharp, S. (1999) Terrain-based genetic algorithm (tbga): Modeling parameter space as terrain. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 229–235, Morgan Kaufmann.
- [109] Gorges-Schleuter, M. (1999) An analysis of local selection in evolution strategies. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 847–854, Morgan Kaufmann.
- [110] Gottlieb, J. (1999) Evolutionary algorithms for multidimensional knapsack problems: the relevance of the boundary of the feasible region. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 787, Morgan Kaufmann.
- [111] Gronroos, M. (1999) A comparison of some methods for evolving neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1442, Morgan Kaufmann.
- [112] Guerra-Salcedo, C. and Whitley, D. (1999) Genetic approach to feature selection for ensemble creation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 236–243, Morgan Kaufmann.
- [113] Guigue, A., Oussedik, S., and Delahaye, D. (1999) Sequencing aircraft landings by genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 788, Morgan Kaufmann.
- [114] Hackworth, T. (1999) India and pakistan, a classic “richardson” arms race: A genetic algorithmic approach. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1543–1550, Morgan Kaufmann.

- [115] Haith, G. L., Colombano, S. P., Lohn, J. D., and Stassinopoulos, D. (1999) Coevolution for problem simplification. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 244–251, Morgan Kaufmann.
- [116] Handa, H., Katai, O., Konishi, T., and Baba, M. (1999) Coevolutionary genetic algorithms for solving dynamic constraint satisfaction problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 252–257, Morgan Kaufmann.
- [117] Hara, A. and Nagao, T. (1999) Emergence of the cooperative behavior using adg; automatically defined groups. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1039–1046, Morgan Kaufmann.
- [118] Harik, G. R. and Lobo, F. G. (1999) A parameter-less genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 258–265, Morgan Kaufmann.
- [119] Harrell, L. J. and Ranjithan, S. R. (1999) Evaluation of alternative penalty function implementations in a watershed management design problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1551–1558, Morgan Kaufmann.
- [120] Harris, S. D., Mustata, R., Elliott, L., Ingham, D. B., and Lesnic, D. (1999) Parameter identification within rocks using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1779, Morgan Kaufmann.
- [121] Harris, S. D., Elliott, L., Ingham, D. B., Pourkashanian, M., and Wilson, C. W. (1999) The retrieval of chemical reaction rates using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1780, Morgan Kaufmann.
- [122] Hart, E. and Ross, P. (1999) An immune system approach to scheduling in changing environments. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1559–1566, Morgan Kaufmann.
- [123] Hart, W. E. (1999) Comparing evolutionary programs and evolutionary pattern search algorithms: A drug docking application. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 855–862, Morgan Kaufmann.
- [124] Hartley, A. R. (1999) Accuracy-based fitness allows similar performance to humans in static and dynamic classification environments. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 266–273, Morgan Kaufmann.
- [125] Harvey, B., Foster, J., and Frincke, D. (1999) Towards byte code genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1234, Morgan Kaufmann.

- [126] Harvey, K. B. and Pettey, C. C. (1999) The outlaw method for solving multimodal functions with split ring parallel genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 274-280, Morgan Kaufmann.
- [127] Heckendorn, R. B., Rana, S., and Whitley, D. (1999) Polynomial time summary statistics for a generalization of maxsat. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 281-288, Morgan Kaufmann.
- [128] Helmer, G., Wong, J., Honavar, V., and Miller, L. (1999) Feature selection using a genetic algorithm for intrusion detection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1781, Morgan Kaufmann.
- [129] Hernandez, G., Goldstein, J. A., and Niao, F. (1999) Stochastic differential model for evolutionary algorithms over continuous spaces. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 863-870, Morgan Kaufmann.
- [130] Hinchliffe, M., Willis, M., and Tham, M. (1999) Dynamic chemical process modelling using a multiple basis function genetic programming algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1782, Morgan Kaufmann.
- [131] Ho, S.-Y. and Chang, X.-I. (1999) An efficient generalized multiobjective evolutionary algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 871-878, Morgan Kaufmann.
- [132] Ho, S.-Y., Shu, L.-S., and Chen, H.-M. (1999) Intelligent genetic algorithm with a new intelligent crossover using orthogonal arrays. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 289-296, Morgan Kaufmann.
- [133] Ho, S.-Y., Chen, H.-M., and Shu, L.-S. (1999) Solving large knowledge base partitioning problems using an intelligent genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1567-1572, Morgan Kaufmann.
- [134] Hoehn, T. P. and Pettey, C. C. (1999) Parental and cyclic-rate mutation in genetic algorithms: An initial investigation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 297-304, Morgan Kaufmann.
- [135] Hofmeyr, S. A. and Forrest, S. (1999) Immunity by design: An artificial immune system. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1289-1296, Morgan Kaufmann.
- [136] Holmes, J. H. (1999) Evaluating learning classifier system performance in two-choice decision tasks: An lcs metric toolkit. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 789, Morgan Kaufmann.

- [137] Hong, T.-P., Wang, H.-S., and Chen, W.-C. (1999) Simultaneously applying multiple crossover and mutation operators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 790, Morgan Kaufmann.
- [138] Horn, J. (1999) Controlling the cooperative-competitive boundary in niched genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 305–312, Morgan Kaufmann.
- [139] Hornby, G. S., Fujita, M., Takamura, S., Yamamoto, T., and Hanagata, O. (1999) Autonomous evolution of gaits with the sony quadruped robot. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1297–1304, Morgan Kaufmann.
- [140] Hornby, G. S. and Mirtich, B. (1999) Diffuse versus true coevolution in a physics-based world. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1305–1312, Morgan Kaufmann.
- [141] Howard, D. and Roberts, S. C. (1999) A staged genetic programming strategy for image analysis. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1047–1052, Morgan Kaufmann.
- [142] Hsu, W. H., Pottenger, W. M., Welge, M., Wu, J., and Yang, T.-H. (1999) Genetic algorithms for attribute synthesis in large-scale data mining. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1783, Morgan Kaufmann.
- [143] Huang, H.-D., Yang, J. T., Shen, S. F., and Horng, J.-T. (1999) An evolution strategy to solve sports scheduling problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 943, Morgan Kaufmann.
- [144] Iba, H. (1999) Bagging, boosting, and bloating in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1053–1060, Morgan Kaufmann.
- [145] Igel, C. and Chellapilla, K. (1999) Investigating the influence of depth and degree of genotypic change on fitness in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1061–1068, Morgan Kaufmann.
- [146] Iima, H. and Sannomiya, N. (1999) Genetic algorithm for a large-scale scheduling problem in an electric wire production process. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1784, Morgan Kaufmann.
- [147] Jelasity, M. (1999) The adaptationist stance and evolutionary computation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1859–1864, Morgan Kaufmann.
- [148] Jo, Y.-G. and Kang, H. (1999) Evolutionary cellular automata for optimal path planning of mobile robots. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1443, Morgan Kaufmann.

- [149] John, M., Panton, D., and White, K. (1999) Genetic algorithm for regional surveillance. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1573–1579, Morgan Kaufmann.
- [150] Julstrom, B. A. (1999) Redundant genetic encodings may not be harmful. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 791, Morgan Kaufmann.
- [151] Kalganova, T., Miller, J. F., and Fogarty, T. C. (1999) Evolution of the digital circuits with variable layouts. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1235, Morgan Kaufmann.
- [152] Karanta, I., Mikkola, T., Bounsaythip, C., Jokinen, O., and Savola, J. (1999) Solving wood collection problem using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1787, Morgan Kaufmann.
- [153] Kargupta, H. and Sarkar, K. (1999) Function induction, gene expression, and evolutionary representation construction. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 313–320, Morgan Kaufmann.
- [154] Karr, C. L. and Borgelt, K. (1999) Modeling a grinding circuit using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1785, Morgan Kaufmann.
- [155] Karr, C. L. and Weck, B. (1999) Solutions to systems of nonlinear equations via genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1786, Morgan Kaufmann.
- [156] Kaschel, J., Kobernik, G., Meier, B., and Teich, T. (1999) Genetic algorithm, avoiding of deadlocks and gantt-chart-generation for the job shop scheduling problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 792, Morgan Kaufmann.
- [157] Katayama, K. and Narihisa, H. (1999) Iterated local search approach using genetic transformation to the traveling salesman problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 321–328, Morgan Kaufmann.
- [158] Keedwell, E., Narayanan, A., and Savic, D. (1999) Using genetic algorithms to extract rules from trained neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 793, Morgan Kaufmann.
- [159] Keijzer, M. and Babovic, V. (1999) Dimensionally aware genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1069–1076, Morgan Kaufmann.
- [160] Keller, R. E. and Banzhaf, W. (1999) The evolution of genetic code in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1077–1082, Morgan Kaufmann.

- [161] Kennedy, C. J. and Giraud-Carrier, C. (1999) A depth controlling strategy for strongly typed evolutionary programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 879–885, Morgan Kaufmann.
- [162] Key, C. (1999) Non-reciprocal altruism and the evolution of paternal care. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1313–1320, Morgan Kaufmann.
- [163] Klyce, B. (1999) In real or artificial life, is evolutionary progress in a closed system possible? Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1444, Morgan Kaufmann.
- [164] Knowles, J., Corne, D., and Oates, M. (1999) A new evolutionary approach to the degree constrained minimum spanning tree problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 794, Morgan Kaufmann.
- [165] Koehler, G. J. (1999) Computing simple ga expected waiting times. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 795, Morgan Kaufmann.
- [166] Kokai, G., Toth, Z., and Vanyi, R. (1999) Generic evolution algorithms programming library. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1867, Morgan Kaufmann.
- [167] Kokai, G., Vanyi, R., and Toth, Z. (1999) Parametric l-system description of the retina with combined evolutionary operators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1588–1595, Morgan Kaufmann.
- [168] Kopp, S., Mortveit, H. S., and Reidys, C. M. (1999) Sequential dynamical systems and simulation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1445, Morgan Kaufmann.
- [169] Kovacs, T. (1999) Deletion schemes for classifier systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 329–336, Morgan Kaufmann.
- [170] Koza, J. R., Keane, M. A., III, F. H. B., Yu, J., Mydlowec, W., and Stiffelman, O. (1999) Searching for the impossible using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1083–1091, Morgan Kaufmann.
- [171] Krasnogor, N., Hart, W. E., Smith, J., and Pelta, D. A. (1999) Protein structure prediction with evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1596–1601, Morgan Kaufmann.
- [172] Krink, T., Mayoh, B. H., and Michalewicz, Z. (1999) A patchwork model for evolutionary algorithms with structured and variable size populations. Banzhaf, W., Daida, J., Eiben, A. E.,

- Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1321–1328, Morgan Kaufmann.
- [173] Kundu, S. (1999) Complexity engineering, evolution and optimality of structures. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 796, Morgan Kaufmann.
 - [174] Langdon, W. B. (1999) Size fair and homologous tree genetic programming crossovers. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1092–1097, Morgan Kaufmann.
 - [175] Langham, A. E. and Grant, P. W. (1999) A multilevel k-way partitioning algorithm for finite element meshes using competing ant colonies. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1602–1608, Morgan Kaufmann.
 - [176] Lanzi, P. L. and Colombetti, M. (1999) An extension to the xcs classifier system for stochastic environments. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 353–360, Morgan Kaufmann.
 - [177] Lanzi, P. L. (1999) Extending the representation of classifier conditions part i: From binary to messy coding. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 337–344, Morgan Kaufmann.
 - [178] Lanzi, P. L. and Perrucci, A. (1999) Extending the representation of classifier conditions part ii: From messy coding to s-expressions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 345–352, Morgan Kaufmann.
 - [179] Lee, C.-Y. and Song, Y. (1999) Evolutionary programming using the levy probability distribution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 886–893, Morgan Kaufmann.
 - [180] Lee, J.-Y. and Cho, S.-B. (1999) Incorporating human preference into content-based image retrieval using interactive genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1788, Morgan Kaufmann.
 - [181] Lerena, P. and Courant, M. (1999) Complexity in mate choice. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1446, Morgan Kaufmann.
 - [182] Levenick, J. R. (1999) Swappers: Introns promote flexibility, diversity and invention. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 361–368, Morgan Kaufmann.
 - [183] Li, Y., Man, K. F., and Tang, K. S. (1999) Multiobjective genetic algorithm for rolling-horizon production planning. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1789, Morgan Kaufmann.

- [184] Lim, I. S. and Thalmann, D. (1999) How not to be a black-box: Evolution and genetic-engineering of high-level behaviours. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1329–1335, Morgan Kaufmann.
- [185] Lin, W.-Y. (1999) Improving parallel ordering of sparse matrices using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1790, Morgan Kaufmann.
- [186] Loughlin, D. H. and Ranjithan, S. R. (1999) Chance-constrained genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 369–376, Morgan Kaufmann.
- [187] Louis, S. J. and Zhang, Y. (1999) A sequential similarity metric for case injected genetic algorithms applied to tsp. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 377–384, Morgan Kaufmann.
- [188] Louis, S. J. and Tang, R. (1999) Interactive genetic algorithms for the traveling salesman problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 385–392, Morgan Kaufmann.
- [189] Luke, S., Hamahashi, S., and Kitano, H. (1999) “genetic” programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1098–1105, Morgan Kaufmann.
- [190] Maley, C. C. (1999) Four steps toward open-ended evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1336–1343, Morgan Kaufmann.
- [191] Marchiori, E. and Rossi, C. (1999) A flipping genetic algorithm for hard 3-sat problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 393–400, Morgan Kaufmann.
- [192] Mariano, C. E. and M., E. M. (1999) Moaq an ant-q algorithm for multiple objective optimization problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 894–901, Morgan Kaufmann.
- [193] Marin, J. and Sole, R. V. (1999) Evolutionary optimization through extinction dynamics. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1344–1349, Morgan Kaufmann.
- [194] Marks, R. E., Midgley, D. F., Cooper, L. G., and Shiraz, G. M. (1999) Coevolution with the genetic algorithm: Repeated differentiated oligopolies. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1609–1615, Morgan Kaufmann.
- [195] Martin, L., Moal, F., and Vrain, C. (1999) Declarative expression of biases in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 401–408, Morgan Kaufmann.

- [196] Mattfeld, D. C. (1999) Scalable search spaces for scheduling problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1616–1621, Morgan Kaufmann.
- [197] Mautner, C. and Belew, R. K. (1999) Coupling morphology and control in a simulated robot. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1350–1357, Morgan Kaufmann.
- [198] Maxwell, B. and Anderson, S. (1999) Training hidden markov models using population-based learning. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 944, Morgan Kaufmann.
- [199] McKay, B., Willis, M., Searson, D., and Montague, G. (1999) Non-linear continuum regression using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1106–1111, Morgan Kaufmann.
- [200] McPhee, N. F. and Hopper, N. J. (1999) Analysis of genetic diversity through population history. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1112–1120, Morgan Kaufmann.
- [201] Mengshoel, O. J. and Goldberg, D. E. (1999) Probabilistic crowding: Deterministic crowding with probabilistic replacement. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 409–416, Morgan Kaufmann.
- [202] Merz, P. and Freisleben, B. (1999) Genetic algorithms for binary quadratic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 417–424, Morgan Kaufmann.
- [203] Meysenburg, M. M. and Foster, J. A. (1999) Randomness and ga performance, revisited. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 425–432, Morgan Kaufmann.
- [204] Meysenburg, M. M. and Foster, J. A. (1999) Random generator quality and gp performance. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1121–1126, Morgan Kaufmann.
- [205] Miagkikh, V. V. and III, W. F. P. (1999) An approach to solving combinatorial optimization problems using a population of reinforcement learning agents. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1358–1365, Morgan Kaufmann.
- [206] Miller, J. F. (1999) An empirical study of the efficiency of learning boolean functions using a cartesian genetic programming approach. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1135–1142, Morgan Kaufmann.
- [207] Miller, J. F. (1999) Digital filter design at gate-level using evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1127–1134, Morgan Kaufmann.

- [208] Mota, C., Ferreira, H., and Rosa, A. (1999) Independent and simultaneous evolution of fuzzy sleep classifiers by genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1622–1629, Morgan Kaufmann.
- [209] Moustafa, R. E., Jong, K. A. D., and Wegman, E. J. (1999) Using genetic algorithms for adaptive function approximation and mesh generation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 798, Morgan Kaufmann.
- [210] Munetomo, M. and Goldberg, D. E. (1999) Identifying linkage groups by nonlinearity/non-monotonicity detection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 433–440, Morgan Kaufmann.
- [211] Murata, T., Ishibuchi, H., and Gen, M. (1999) Specification of local search directions in genetic local search algorithms for multi-objective optimization problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 441–448, Morgan Kaufmann.
- [212] Muruzabal, J. (1999) Mining the space of generality with uncertainty-concerned cooperative classifiers. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 449–457, Morgan Kaufmann.
- [213] Myers, J. W., Laskey, K. B., and DeJong, K. A. (1999) Learning bayesian networks from incomplete data using evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 458–465, Morgan Kaufmann.
- [214] Naoki, M. and Hajime, K. (1999) The entropy evaluation method for the thermodynamical selection rule. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 799, Morgan Kaufmann.
- [215] Naudts, B. and Schippers, A. (1999) A motivated definition of exploitation and exploration. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 800, Morgan Kaufmann.
- [216] Nault, G., Rialle, V., and Meunier, J.-G. (1999) Progen: a genetic-based semi-automatic hypertext construction tool-first steps and experiment. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1630–1635, Morgan Kaufmann.
- [217] Navarro, P. L. K. G., de Oliveira, P. P. B., Ramos, F. M., and Campos-Velho, H. F. (1999) Magnetotelluric inversion using problem-specific genetic operators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1580–1587, Morgan Kaufmann.
- [218] Neves, J., Rocha, M., Rodrigues, H., Biscaia, M., and Alves, J. (1999) Adaptive strategies and the design of evolutionary applications. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 473–479, Morgan Kaufmann.

- [219] Neves, A., Silva, A., and Costa, E. (1999) Evolutionary path planning for nonholonomic robots. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 466–472, Morgan Kaufmann.
- [220] Niao, F., Hernandez, G., and Dasgupta, D. (1999) On evolution of stochastic dynamical neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 801, Morgan Kaufmann.
- [221] Nishikawa, A., Hagiya, M., and Yamamura, M. (1999) Virtual dna simulator and protocol design by ga. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1810–1816, Morgan Kaufmann.
- [222] O’Neill, M. and Ryan, C. (1999) Under the hood of grammatical evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1143–1148, Morgan Kaufmann.
- [223] Oates, M., Corne, D., and Loader, R. (1999) Variation in ea performance characteristics on the adaptive distributed database management problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 480–487, Morgan Kaufmann.
- [224] Obayashi, S., Sasaki, D., and Takeguchi, Y. (1999) Evolutionary computation of supersonic wing shape optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1791, Morgan Kaufmann.
- [225] Ochoa, G., Harvey, I., and Buxton, H. (1999) On recombination and optimal mutation rates. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 488–495, Morgan Kaufmann.
- [226] Ogihara, M. (1999) Relating the minimum model for dna computation and boolean circuits. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1817–1821, Morgan Kaufmann.
- [227] Oh, J. C. (1999) Effects of “physical body” on biased opponent selection in the iterated prisoner’s dilemma game. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1447, Morgan Kaufmann.
- [228] Olague, G. (1999) Analysis of genetic algorithms convergence applied to mensuration problems in computer vision. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1792, Morgan Kaufmann.
- [229] Olsson, B. (1999) Using evolutionary algorithms in the design of protein fingerprints. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1636–1642, Morgan Kaufmann.
- [230] Ono, I., Kita, H., and Kobayashi, S. (1999) A robust real-coded genetic algorithm using unimodal normal distribution crossover augmented by uniform crossover: Effects of self-adaptation of crossover probabilities. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 496–503, Morgan Kaufmann.

- [231] Opitz, D. W. (1999) An evolutionary approach to feature set selection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 803, Morgan Kaufmann.
- [232] Opitz, D. W., Basak, S. C., and Gute, B. D. (1999) Hazard assessment modeling: An evolutionary ensemble approach. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1643–1650, Morgan Kaufmann.
- [233] Oppacher, F. and Wineberg, M. (1999) The shifting balance genetic algorithm: Improving the ga in a dynamic environment. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 504–510, Morgan Kaufmann.
- [234] Oprea, M. and Forrest, S. (1999) How the immune system generates diversity: Pathogen space coverage with random and evolved antibody libraries. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1651–1656, Morgan Kaufmann.
- [235] Ostermeier, A. and Hansen, N. (1999) An evolution strategy with coordinate system invariant adaptation of arbitrary normal mutation distributions within the concept of mutative strategy parameter control. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 902–909, Morgan Kaufmann.
- [236] Palazzari, P. and Coli, M. (1999) Evolving probabilistic chromosomes in genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 511–518, Morgan Kaufmann.
- [237] Parker, G. B. and Mills, J. W. (1999) Adaptive hexapod gait control using anytime learning with fitness biasing. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 519–524, Morgan Kaufmann.
- [238] Parmee, I. C. and Watson, A. H. (1999) Preliminary airframe design using co-evolutionary multiobjective genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1657–1665, Morgan Kaufmann.
- [239] Pazos, A., del Riego, A. S., Dorado, J., and Cardalda, J. J. R. (1999) Adaptive aspects of rhythmic composition: Genetic music. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1794, Morgan Kaufmann.
- [240] Pazos, A., Pazos, J., and Paton, A. R. (1999) Dna assembly and recombination for hamiltonian paths and binary words. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1822–1824, Morgan Kaufmann.
- [241] Pazos, A., Dorado, J., Santos, A., and Rabunal, J. R. (1999) Optimization of ga parameters to train recurrent ann through weight adjustment and selection of activation functions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1793, Morgan Kaufmann.

- [242] Pelikan, M., Goldberg, D. E., and Cantu-Paz, E. (1999) Boa: The bayesian optimization algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 525–532, Morgan Kaufmann.
- [243] Pereira, F. B., Machado, P., Costa, E., and Cardoso, A. (1999) Graph based crossover-a case study with the busy beaver problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1149–1155, Morgan Kaufmann.
- [244] Pereira, A. G. (1999) Road design by evolutionary modelling of routes. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1778, Morgan Kaufmann.
- [245] Perkins, S. (1999) Evolving effective visual tracking through shaping. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1156–1161, Morgan Kaufmann.
- [246] Perrenoud, M., Tomassini, M., Sipper, M., and Zolla, M. (1999) Evolving high-quality random number generators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 804, Morgan Kaufmann.
- [247] Petrowski, A. and Hamida, S. B. (1999) A logarithmic mutation operator to solve constrained optimization problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 805, Morgan Kaufmann.
- [248] Pindor, A. J. (1999) Using genetic algorithm to manipulate polynomial expressions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1666–1671, Morgan Kaufmann.
- [249] Plagianakos, V. P. and Vrahatis, M. N. (1999) Training neural networks with 3-bit integer weights. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 910–915, Morgan Kaufmann.
- [250] Pohlheim, H. and Heissner, A. (1999) Optimal control of greenhouse climate using real-world weather data and evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1672–1677, Morgan Kaufmann.
- [251] Pohlheim, H. and Wegener, J. (1999) Testing the temporal behavior of real-time software modules using extended evolutionary algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1795, Morgan Kaufmann.
- [252] Pohlheim, H. (1999) Visualization of evolutionary algorithms - set of standard techniques and multidimensional visualization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 533–540, Morgan Kaufmann.
- [253] Poli, R. (1999) Schema theorems without expectations. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 806, Morgan Kaufmann.

- [254] Poli, R., Page, J., and Langdon, W. B. (1999) Smooth uniform crossover, sub-machine code gp and demes: A recipe for solving high-order boolean parity problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1162–1169, Morgan Kaufmann.
- [255] Poon, J. (1999) Problem solving: Search, exploration and co-evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 541–548, Morgan Kaufmann.
- [256] Porter, M. A., Willis, M. J., and Montague, G. A. (1999) Modelling antibiotic production using standard and sequential hybridised symbolic annealing. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1796, Morgan Kaufmann.
- [257] Pratihari, D. K., Deb, K., and Ghosh, A. (1999) Design of a genetic-fuzzy system for planning optimal path and gait simultaneously of a six-legged robot. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1678–1684, Morgan Kaufmann.
- [258] Pujol, J. C. F. and Poli, R. (1999) Evolution of neural networks using weight mapping. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1170–1177, Morgan Kaufmann.
- [259] Puny, S. and Deo, B. (1999) Prediction of silicon content of hot metal using fuzzy-ga regression. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1685–1690, Morgan Kaufmann.
- [260] Radi, A. and Poli, R. (1999) Evolutionary discovery of learning rules for feedforward neural networks with step activation function. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1178–1183, Morgan Kaufmann.
- [261] Raich, A. M. and Ghaboussi, J. (1999) Frame design synthesis using implicit redundant genetic algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1691–1698, Morgan Kaufmann.
- [262] Raidl, G. R. (1999) An evolutionary approach to point-feature label placement. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 807, Morgan Kaufmann.
- [263] Rana, S. (1999) The distributional biases of crossover operators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 549–556, Morgan Kaufmann.
- [264] Rechsteiner, A. and Bedau, M. A. (1999) A generic neutral model for measuring excess evolutionary activity of genotypes. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1366–1373, Morgan Kaufmann.

- [265] Ren, F., Tanaka, H., Okayama, T., and Gojobori, T. (1999) Reconstructing molecular phylogenetic tree with multifurcation by using minimum complexity principle. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1825–1828, Morgan Kaufmann.
- [266] Rodriguez, A. O. (1999) Finding wavelet packet bases with an estimation distribution algorithm. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 802, Morgan Kaufmann.
- [267] Rose, J. A., Deaton, R. J., Franceschetti, D. R., Garzon, M., and Jr., S. E. S. (1999) A statistical mechanical treatment of error in the annealing biostep of dna computation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1829–1834, Morgan Kaufmann.
- [268] Rosete-Suarez, A., Ochoa-Rodriguez, A., and Sebag, M. (1999) Automatic graph drawing and stochastic hill climbing. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1699–1706, Morgan Kaufmann.
- [269] Ross, B. J. (1999) Logic-based genetic programming with definite clause translation grammars. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1236, Morgan Kaufmann.
- [270] Rowe, J. E. (1999) Finding attractors for periodic fitness functions. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 557–563, Morgan Kaufmann.
- [271] Ryan, M., Debusse, J., Smith, G., and Whittle, I. (1999) A hybrid genetic algorithm for the fixed channel assignment problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1707–1714, Morgan Kaufmann.
- [272] Salim, V. (1999) Genetic algorithms in road investment planning with computational comparisons to simulated annealing and heuristics. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 808, Morgan Kaufmann.
- [273] Salman, A. A., Mehrotra, K., and Mohan, C. K. (1999) Linkage crossover for genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 564–571, Morgan Kaufmann.
- [274] Salustowicz, R. P. and Schmidhuber, J. (1999) Sequence learning through pipe and automatic task decomposition. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1184–1191, Morgan Kaufmann.
- [275] Sarma, J. and Jong, K. D. (1999) The behavior of spatially distributed evolutionary algorithms in non-stationary environments. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 572–578, Morgan Kaufmann.
- [276] Sawai, H. and Adachi, S. (1999) Parallel distributed processing of a parameter-free hierarchical migration methods. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 579–586, Morgan Kaufmann.

- [277] Saxon, S. and Barry, A. (1999) Xcs and the monk's problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 809, Morgan Kaufmann.
- [278] Schleiffer, R. and Sebastian, H.-J. (1999) A fuzzy neighborhood based ga in fuzzy engineering design. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1797, Morgan Kaufmann.
- [279] Senin, N., Wallace, D. R., and Borland, N. (1999) Object-based design modeling and optimization with genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1715–1722, Morgan Kaufmann.
- [280] Serebinski, F. and Janikow, C. Z. (1999) Designing cellular automata-based scheduling algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 587–594, Morgan Kaufmann.
- [281] Shanahan, J. G., Baldwin, J. F., and Martin, T. P. (1999) Constructive induction of fuzzy cartesian granule feature models using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1237, Morgan Kaufmann.
- [282] Sharpe, O. (1999) Continuing beyond nfl: Dissecting real world problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 595–602, Morgan Kaufmann.
- [283] Sharpe, O. (1999) Persistence, search and autopoiesis. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1374–1381, Morgan Kaufmann.
- [284] Shimada, S. and Anzai, Y. (1999) Fast and robust convergence of chained classifiers by generating operons through niche formation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 810, Morgan Kaufmann.
- [285] Shimodaira, H. (1999) A diversity control oriented genetic algorithm (dcga): Development and experimental results. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 603–611, Morgan Kaufmann.
- [286] Silva, A., Neves, A., and Costa, E. (1999) Genetically programming networks to evolve memory mechanisms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1448, Morgan Kaufmann.
- [287] Simoes, A. B. and Costa, E. (1999) Transposition versus crossover: An empirical study. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 612–619, Morgan Kaufmann.
- [288] Sinclair, M. C. (1999) Optical mesh network topology design using node-pair encoding genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1192–1197, Morgan Kaufmann.

- [289] Smith, C. E. (1999) An application of genetic programming to investment system optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1798, Morgan Kaufmann.
- [290] Someya, H. and Yamamura, M. (1999) A genetic algorithm without parameters tuning and its application on the floorplan design problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 620–627, Morgan Kaufmann.
- [291] Song, G.-B. and Cho, S.-B. (1999) Adaptive behavior of incrementally evolved neural networks based on cellular automata. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1449, Morgan Kaufmann.
- [292] Soule, T. (1999) Voting teams: A cooperative approach to non-typical problems using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 916–922, Morgan Kaufmann.
- [293] Spalanzani, A., Selouani, S. A., and Kabre, H. (1999) Evolutionary algorithms for optimizing speech data projection. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1799, Morgan Kaufmann.
- [294] Steinberg, L. and Rasheed, K. (1999) Optimization by searching a tree of populations. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1723–1730, Morgan Kaufmann.
- [295] Stephens, C. R. (1999) Effect of mutation and recombination on the genotype-phenotype map. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1382–1389, Morgan Kaufmann.
- [296] Stewart, R. and Rosin, P. L. (1999) Neural network construction using voronoi dissections. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 811, Morgan Kaufmann.
- [297] Stoica, A., Lazaro, C.-S., Keymeulen, D., and Hayworth, K. (1999) Evolution of cmos circuits in simulations and directly in hardware on a programmable chip. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1198–1203, Morgan Kaufmann.
- [298] Sturgill, D. and Pant, G. (1999) Evaluation criteria for genetically-tuned problem-solving experts. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1390–1397, Morgan Kaufmann.
- [299] Sugai, K. (1999) Stochastic evolution on the hierarchical population. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 628–634, Morgan Kaufmann.
- [300] Suzuki, Y. and Tanaka, H. (1999) Practical and theoretical investigation of a collective work. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1450, Morgan Kaufmann.

- [301] Swift, S. and Liu, X. (1999) Modelling and forecasting of glaucomatous visual fields using genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1731–1737, Morgan Kaufmann.
- [302] Takadama, K., Terano, T., and Shimohara, K. (1999) How to design good learning agents in organization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1398–1405, Morgan Kaufmann.
- [303] Takahashi, E., Murakawa, M., Toda, K., and Higuchi, T. (1999) An evolvable-hardware-based clock timing architecture towards gigahz digital systems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1204–1210, Morgan Kaufmann.
- [304] Terashima-Marin, H., Ross, P., and Valenzuela-Rendon, M. (1999) Evolution of constraint satisfaction strategies in examination timetabling. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 635–642, Morgan Kaufmann.
- [305] Thierens, D. (1999) Estimating the significant non-linearities in the genome problem-coding. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 643–648, Morgan Kaufmann.
- [306] Tian, Y., Sannomiya, N., and Yokokura, T. (1999) A simulation study on adaptive behavior of fish schools under environmental variation. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1451, Morgan Kaufmann.
- [307] Todd, D. S. and Sen, P. (1999) Directed multiple objective search of design spaces using genetic algorithms and neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1738–1743, Morgan Kaufmann.
- [308] Tomlinson, A. and Bull, L. (1999) On corporate classifier systems: Increasing the benefits of rule linkage. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 649–656, Morgan Kaufmann.
- [309] Trenaman, A. (1999) Further investigations into the evolution of agents with concurrent genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1452, Morgan Kaufmann.
- [310] Tsutsui, S., Yamamura, M., and Higuchi, T. (1999) Multi-parent recombination with simplex crossover in real coded genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 657–664, Morgan Kaufmann.
- [311] Tucker, A. and Liu, X. (1999) Extending evolutionary programming methods to the learning of dynamic bayesian networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 923–929, Morgan Kaufmann.

- [312] Uchibe, E., Nakamura, M., and Asada, M. (1999) Cooperative and competitive behavior acquisition for mobile robots through co-evolution. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1406–1413, Morgan Kaufmann.
- [313] Uno, K. and Namatame, A. (1999) Evolutionary behaviors emerged through strategic interactions in the large. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1414–1421, Morgan Kaufmann.
- [314] Valenzuela, C. L. (1999) Evolutionary divide and conquer (ii) for the tsp. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1744–1749, Morgan Kaufmann.
- [315] Vallejo, E. E. and Ramos, F. (1999) Result-sharing: A framework for cooperation in genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1238, Morgan Kaufmann.
- [316] Vekaria, K. and Clack, C. (1999) Biases introduced by adaptive recombination operators. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 670–677, Morgan Kaufmann.
- [317] Voss, M. S. and Foley, C. M. (1999) Evolutionary algorithm for structural optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 678–685, Morgan Kaufmann.
- [318] Vrajitoru, D. (1999) Genetic programming operators applied to genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 686–693, Morgan Kaufmann.
- [319] Vriend, N. J. (1999) The difference between individual and population genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 812, Morgan Kaufmann.
- [320] Wagner, K. (1999) Habitat, communication and cooperative strategies. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 694–701, Morgan Kaufmann.
- [321] Walker, R. L. (1999) Assessment of the web using genetic programming. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1750–1755, Morgan Kaufmann.
- [322] Walker, R. and Miglino, O. (1999) Simulating exploratory behavior in evolving neural networks. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1422–1428, Morgan Kaufmann.
- [323] Walsh, P. (1999) A functional style and fitness evaluation scheme for inducting high level programs. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1211–1216, Morgan Kaufmann.

- [324] Watabe, H. and Kawaoka, T. (1999) Solving combinatorial optimization problems with multi-step genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 813, Morgan Kaufmann.
- [325] Watson, J.-P. (1999) A performance assessment of modern niching methods for parameter optimization problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 702–709, Morgan Kaufmann.
- [326] Watson, R. A. and Pollack, J. B. (1999) Incremental commitment in genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 710–717, Morgan Kaufmann.
- [327] Weiss, G. M. (1999) Timeweaver: a genetic algorithm for identifying predictive patterns in sequences of events. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 718–725, Morgan Kaufmann.
- [328] White, T. and Pagurek, B. (1999) Application oriented routing with biologically-inspired agents. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1453, Morgan Kaufmann.
- [329] Whitley, D. (1999) A free lunch proof for gray versus binary encodings. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 726–733, Morgan Kaufmann.
- [330] Williams, K. P. and Williams, S. A. (1999) Two evolutionary representations for automatic parallelization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1429–1436, Morgan Kaufmann.
- [331] Wong, K. P., Yuryevich, J., and Li, A. (1999) Evolutionary programming based method for evaluation of power flow. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1756–1761, Morgan Kaufmann.
- [332] Wood, D., Chen, J., Lemieux, E. A. B., and Cedeno, W. (1999) A dna implementation of the max 1s problem. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1835–1842, Morgan Kaufmann.
- [333] Wright, A. H. and Zhao, Y. (1999) Markov chain models of genetic algorithms. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 734–741, Morgan Kaufmann.
- [334] Yang, J.-M. and Kao, C.-Y. (1999) An evolutionary algorithm for continuous global optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 930–938, Morgan Kaufmann.
- [335] Yang, C., Dasgupta, D., and Cao, Y. (1999) A group encoding technique for set partitioning problems. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 742–749, Morgan Kaufmann.

- [336] Yang, J., Tiyyagura, A., Chen, F., and Honavar, V. (1999) Feature subset selection for rule induction using ripper. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, p. 1800, Morgan Kaufmann.
- [337] Yen, J., Yang, L., Lee, B., and Liao, J. C. (1999) A supervisory simplex-ga approach for metabolic model optimization. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 750–757, Morgan Kaufmann.
- [338] Yoshimi, T. and Taura, T. (1999) A computational model of a viewpoint-forming process in a hierarchical classifier system. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, pp. 758–766, Morgan Kaufmann.
- [339] Zahran, M. M., Wahab, A. H. A., and Shaheen, S. I. (1999) Adaptive genetic algorithm for multiprocessor scheduling. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 1, p. 814, Morgan Kaufmann.
- [340] Zhang, B.-T. and Joung, J.-G. (1999) Genetic programming with incremental data inheritance. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1217–1224, Morgan Kaufmann.
- [341] Zitzler, E., Teich, J., and Bhattacharyya, S. S. (1999) Evolutionary algorithm based exploration of software schedules for digital signal processors. Banzhaf, W., Daida, J., Eiben, A. E., Garzon, M. H., Honavar, V., Jakiela, M., and Smith, R. E. (eds.), *Proceedings of the Genetic and Evolutionary Computation Conference*, Orlando, Florida, USA, 13-17 July, vol. 2, pp. 1762–1770, Morgan Kaufmann.