

Список литературы

- [Abbass et al. 2002] H. A. Abbass, N. X. Hoai, and R. I. McKay, Anttag: A new method to compose computer programs using colonies of ants, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1654–1659, IEEE Press, 2002.
- [Abbass 2002] H. A. Abbass, The self-adaptive pareto differential evolution algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 831–836, IEEE Press, 2002.
- [Acan 2002] A. Acan, Reciprocal translocation with adaptive segment length, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 646–651, IEEE Press, 2002.
- [Aguirre and Tanaka 2002] H. Aguirre and K. Tanaka, Parallel varying mutation genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 795–800, IEEE Press, 2002.
- [Aizawa 2002] A. Aizawa, A co-evolutionary framework for clustering in information retrieval systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1787–1792, IEEE Press, 2002.
- [Aktan et al. 2002] B. Aktan, G. Greenwood, and M. Shor, Improving evolutionary algorithm performance on maximizing functional test coverage of asics using adaptation of the fitness criteria, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1825–1829, IEEE Press, 2002.
- [Al-kazemi and Mohan 2002] B. Al-kazemi and C. K. Mohan, Multi-phase generalization of the particle swarm optimization algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 489–494, IEEE Press, 2002.
- [Al-Yamani et al. 2002] A. Al-Yamani, S. M. Sait, and H. R. Barada, Hpts: Heterogeneous parallel tabu search for vlsi placement, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 351–355, IEEE Press, 2002.

- [Alves da Silva and Abrao 2002] A. P. Alves da Silva and P. J. Abrao, Applications of evolutionary computation in electric power systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1057–1062, IEEE Press, 2002.
- [Anastasoff 2002] S. J. Anastasoff, The presence of old alus in gc-rich regions of the human genome - a genetic algorithm perspective, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 7–12, IEEE Press, 2002.
- [Anchor et al. 2002a] K. Anchor, G. Lamont, and G. Gunsch, An evolutionary programming approach for detecting novel computer network attacks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1618–1623, IEEE Press, 2002.
- [Anchor et al. 2002b] K. P. Anchor, P. D. Williams, G. H. Gunsch, and G. B. Lamont, The computer defense immune system: Current and future research in intrusion detection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1027–1032, IEEE Press, 2002.
- [Ando and Iba 2002] S. Ando and H. Iba, Ant algorithm for construction of evolutionary tree, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1552–1557, IEEE Press, 2002.
- [Ando et al. 2002] S. Ando, H. Iba, and E. Sakamoto, Modeling genetic network by hybrid gp, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 291–296, IEEE Press, 2002.
- [Ang et al. 2002] K. H. Ang, G. Chong, and Y. Li, Preliminary statement on the current progress of multi-objective evolutionary algorithm performance measurement, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1139–1144, IEEE Press, 2002.
- [Ashlock et al. 2002a] D. Ashlock, L. Guo, and F. Qiu, Greedy closure evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1296–1301, IEEE Press, 2002.

- [Ashlock et al. 2002b] D. Ashlock, A. Wittrock, and T.-J. Wen, Training finite state machines to improve pcr primer design, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 13–18, IEEE Press, 2002.
- [Avgerinos et al. 2002] E. Avgerinos, A. M. S. Zalzal, and G. Zografos, Towards evolutionary optimisation for high resolution bathymetry from sidescan sonars, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1244–1249, IEEE Press, 2002.
- [Bahuman et al. 2002] A. Bahuman, K. Rasheed, and B. Bishop, An evolutionary approach for vlsi standard cell design, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 431–436, IEEE Press, 2002.
- [Balthrop et al. 2002] J. Balthrop, S. Forrest, and M. R. Glickman, Revisiting lissys: Parameters and normal behavior, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1045–1050, IEEE Press, 2002.
- [Basseur et al. 2002] M. Basseur, F. Seynhaeve, and E. ghazali Talbi, Design of multi-objective evolutionary algorithms: Application to the flow-shop scheduling problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1151–1156, IEEE Press, 2002.
- [Beielstein and Markon 2002] T. Beielstein and S. Markon, Threshold selection, hypothesis tests, and doe methods, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 777–782, IEEE Press, 2002.
- [Beielstein et al. 2002] T. Beielstein, J. Dienstuhl, C. Feist, and M. Pompl, Circuit design using evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1904–1909, IEEE Press, 2002.
- [Bendtsen and Krink 2002a] C. N. Bendtsen and T. Krink, Dynamic memory model for non-stationary optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 145–150, IEEE Press, 2002.
- [Bendtsen and Krink 2002b] C. N. Bendtsen and T. Krink, Phone routing using the dynamic memory model, in *Proceedings of the 2002*

- Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 992–997, IEEE Press, 2002.
- [Bersini 2002] H. Bersini, And the winner is not the fittest, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1510–1515, IEEE Press, 2002.
- [Bin et al. 2002] W. Bin, Z. Yi, L. Shaohui, and S. Zhongzhi, Csim: A document clustering algorithm based on swarm intelligence, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 477–482, IEEE Press, 2002.
- [Bird and Layzell 2002] J. Bird and P. Layzell, The evolved radio and its implications for modelling the evolution of novel sensors, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1836–1841, IEEE Press, 2002.
- [Bjarnason and Peterson 2002] R. Bjarnason and T. Peterson, Multi-agent learning via implicit opponent modeling, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1534–1539, IEEE Press, 2002.
- [Blackwell and Bentley 2002a] T. Blackwell and P. J. Bentley, Don’t push me! collision-avoiding swarms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1691–1696, IEEE Press, 2002.
- [Blackwell and Bentley 2002b] T. Blackwell and P. J. Bentley, Improvised music with swarms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1462–1467, IEEE Press, 2002.
- [Blaha and Wunsch 2002] B. Blaha and D. Wunsch, Evolutionary programming to optimize an assembly program, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1901–1903, IEEE Press, 2002.
- [Blum and Sampels 2002] C. Blum and M. Sampels, Ant colony optimization for fop shop scheduling: A case study on different pheromone representations, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba,

- P. Marrow, and M. Shackleton, pp. 1558–1563, IEEE Press, 2002.
- [Bongard 2002] J. C. Bongard, Evolving modular genetic regulatory networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1872–1877, IEEE Press, 2002.
- [Boonlong et al. 2002] K. Boonlong, N. Chaiyaratana, and S. Kuntanapreeda, Using a co-operative co-evolutionary genetic algorithm to solve optimal control problems in a hysteresis system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1504–1509, IEEE Press, 2002.
- [Bradley and Tyrrell 2002] D. Bradley and A. Tyrrell, A hardware immune system for benchmark state machine error detection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 813–818, IEEE Press, 2002.
- [Brewster et al. 2002] J. Brewster, R. G. Reynolds, and M. A. Brockmeyer, Not in my backyard: A simulation of the effects of agent mobility on environmental poisoning, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 849–854, IEEE Press, 2002.
- [Burczynski et al. 2002] T. Burczynski, W. Kus, E. Majchrzak, P. Orantek, and M. Dziejowski, Evolutionary computation in identification of a tumor, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1250–1254, IEEE Press, 2002.
- [Burke et al. 2002] E. K. Burke, P. De Causmaecker, S. Petrovic, and G. V. Berghe, A multi criteria meta-heuristic approach to nurse rostering, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1197–1202, IEEE Press, 2002.
- [Cambier et al. 2002] C. Cambier, M. Piron, and A. Cardon, Self-adaptive systems using a massive multi-agent system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 345–350, IEEE Press, 2002.
- [Canham and Tyrrell 2002] R. O. Canham and A. M. Tyrrell, Evolved fault tolerance in evolvable hardware, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B.

- Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1267–1271, IEEE Press, 2002.
- [Cartlidge and Bullock 2002] J. Cartlidge and S. Bullock, Learning lessons from the common cold: How reducing parasite virulence improves coevolutionary optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1420–1425, IEEE Press, 2002.
- [Caswell and Lamont 2002] D. J. Caswell and G. B. Lamont, Wire-antenna geometry design with multiobjective genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 103–108, IEEE Press, 2002.
- [Cayzer and Aickelin 2002] S. Cayzer and U. Aickelin, A recommender system based on the immune network, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 807–812, IEEE Press, 2002.
- [Cazangi and Figueiredo 2002] R. R. Cazangi and M. Figueiredo, Simultaneous emergence of conflicting basic behaviors and their coordination in an evolutionary autonomous navigation system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 466–471, IEEE Press, 2002.
- [Chan et al. 2002] C. K. Chan, H. B. Gooi, and M. H. Lim, A co-evolutionary algorithm approach to a university timetable system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1946–1951, IEEE Press, 2002.
- [Chang et al. 2002] M. Chang, K. Ohkura, K. Ueda, and M. Sugiyama, A symbiotic evolutionay algorithm for dynamic facility layout problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1745–1750, IEEE Press, 2002.
- [Chavali et al. 2002] S. Chavali, A. Pahwa, and S. Das, A genetic algorithm approach for optimal distribution feeder restoration during cold load pickup, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1816–1819, IEEE Press, 2002.
- [Cheh 2002] J. J. Cheh, A heuristic approach to efficient production of detector sets for an artificial immune algorithm-based

- bankruptcy prediction system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 932–937, IEEE Press, 2002.
- [Chen and Li 2002] S. Y. Chen and Y. F. Li, Optimum viewpoint planning for model-based robot vision, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 634–639, IEEE Press, 2002.
- [Chiba and Sugawara 2002] S. Chiba and K. Sugawara, Estimation of protein function with an evolutionary dictionary, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 315–320, IEEE Press, 2002.
- [Cho and Zhang 2002] D.-Y. Cho and B.-T. Zhang, Evolutionary optimization by distribution estimation with mixtures of factor analyzers, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1396–1401, IEEE Press, 2002.
- [Chrzanowska-Jeske et al. 2002] M. Chrzanowska-Jeske, G. Greenwood, and B. Wang, Combining evolution strategies with lagrangian relaxation for constructing nonslicing vlsi floorplans with soft modules, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1261–1266, IEEE Press, 2002.
- [Chu et al. 2002] C.-H. Chu, J. Gu, X. D. Hou, and Q. Gu, A heuristic ant algorithm for solving qos multicast routing problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1630–1635, IEEE Press, 2002.
- [Ciesielski and Mawhinney 2002] V. Ciesielski and D. Mawhinney, Prevention of early convergence in genetic programming by replacement of similar programs, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 67–72, IEEE Press, 2002.
- [Ciftcioglu 2002] O. Ciftcioglu, GA with orthogonal transformation for RBFN configuration, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1934–1939, IEEE Press, 2002.
- [Cincotti et al. 2002] A. Cincotti, V. Cutello, and M. Pavone, Graph partitioning with genetic algorithms using odpx, in

- Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 402–406, IEEE Press, 2002.
- [Clergue and Collard 2002] M. Clergue and P. Collard, Ga-hard functions built by combination of trap functions, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 249–254, IEEE Press, 2002.
- [Cliff 2002] D. Cliff, Evolution of market mechanism through a continuous space of auction-types, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2029–2034, IEEE Press, 2002.
- [Coello and Cortes 2002] C. A. C. Coello and N. C. Cortes, A parallel implementation of the artificial immune system to handle constraints in genetic algorithms: Preliminary results, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 819–824, IEEE Press, 2002.
- [Coello and Lechuga 2002] C. A. C. Coello and M. S. Lechuga, Mopso: A proposal for multiple objective particle swarm optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1051–1056, IEEE Press, 2002.
- [Coletti 2002] M. Coletti, A preliminary study of learnable evolution methodology implemented with c4. 5, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 588–593, IEEE Press, 2002.
- [Collet et al. 2002] P. Collet, J. Louchet, and E. Lutton, Issues on the optimisation of evolutionary algorithms code, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1103–1108, IEEE Press, 2002.
- [Corno et al. 2002] F. Corno, G. Cumani, M. S. Reorda, and G. Squillero, Efficient machine-code test-program induction, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1486–1491, IEEE Press, 2002.
- [Costa and Oliveira 2002] L. Costa and P. Oliveira, An evolution strategy for multiobjective optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood,

- H. Iba, P. Marrow, and M. Shackleton, pp. 97–102, IEEE Press, 2002.
- [Costa et al. 2002] A. M. Costa, P. A. Vargas, F. J. Von Zuben, and P. M. Franca, Makespan minimization on parallel processors: An immune-based approach, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 920–925, IEEE Press, 2002.
- [Cowling et al. 2002] P. Cowling, G. Kendall, and L. Han, An investigation of a hyperheuristic genetic algorithm applied to a trainer scheduling problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1185–1190, IEEE Press, 2002.
- [Craenen and Eiben 2002] B. G. W. Craenen and A. E. Eiben, An experimental comparison of sawing eas for a new class of random binary csps, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 878–883, IEEE Press, 2002.
- [Crutchley and Zvolinski 2002] D. Crutchley and M. Zvolinski, Using evolutionary and hybrid algorithms for dc operating point analysis of nonlinear circuits, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 753–758, IEEE Press, 2002.
- [Cupertino et al. 2002] F. Cupertino, D. Naso, L. Salvatore, and B. Turchiano, Design of cascaded controllers for dc drives using evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1255–1260, IEEE Press, 2002.
- [Cutello et al. 2002] V. Cutello, E. Mastriani, and F. Pappalardo, An evolutionary algorithm for the t-constrained variation of minimum hitting set problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 366–371, IEEE Press, 2002.
- [Cyre 2002] W. Cyre, Learning grammars with a modified classifier system, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1366–1371, IEEE Press, 2002.
- [Daida 2002] J. M. Daida, Limits to expression in genetic programming: Lattice-aggregate modeling, in *Proceedings of the 2002*

- Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 273–278, IEEE Press, 2002.
- [Darwen 2002] P. J. Darwen, Search landscape of a realistic single-machine scheduling task: Peaks with big differences, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1191–1196, IEEE Press, 2002.
- [Das 2002] S. Das, Gene spill: An evolutionary algorithm based on bacterial gene exchange, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1338–1342, IEEE Press, 2002.
- [Dasgupta and Majumdar 2002] D. Dasgupta and N. S. Majumdar, Anomaly detection in multidimensional data using negative selection algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1039–1044, IEEE Press, 2002.
- [Dasgupta and Stoliartchouk 2002] D. Dasgupta and A. Stoliartchouk, Evolving pc system hardware configurations, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 517–522, IEEE Press, 2002.
- [Davis and Kendall 2002] J. E. Davis and G. Kendall, An investigation, using co-evolution, to evolve an awari player, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1408–1413, IEEE Press, 2002.
- [Day et al. 2002] R. O. Day, J. B. Zydallis, G. Lamont, and R. Pachter, Analysis of fine granularity and building block sizes in the parallel fast messy ga, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 127–132, IEEE Press, 2002.
- [de Castro and Timmis 2002] L. N. de Castro and J. Timmis, An artificial immune network for multimodal function optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 699–704, IEEE Press, 2002.
- [De Falco et al. 2002] I. De Falco, A. D. Cioppa, and E. Tarantino, Unsupervised spectral pattern recognition for multispectral images by means of a genetic programming approach, in *Proceedings of the 2002 Congress on Evolutionary Computation*

- CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 231–236, IEEE Press, 2002.
- [de Garis 2002] H. de Garis, Evolvability limits : A case study concerning the modular evolvable capacities (mecs) of a new neural net model for a second generation brain building machine bm2, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 454–459, IEEE Press, 2002.
- [Deb et al. 2002a] K. Deb, D. Joshi, and A. Anand, Real-coded evolutionary algorithms with parent-centric recombination, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 61–66, IEEE Press, 2002.
- [Deb et al. 2002b] K. Deb, L. Thiele, M. Laumanns, and E. Zitzler, Scalable multi-objective optimization test problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 825–830, IEEE Press, 2002.
- [Delgado et al. 2002] M. R. Delgado, F. Von Zuben, and F. Gomide, Coevolutionary design of takagi-sugeno fuzzy systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1384–1389, IEEE Press, 2002.
- [Ding and Ren 2002] Y. Ding and L. Ren, A new dna-based evolutionary algorithm with application to the design of fuzzy controllers, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1982–1987, IEEE Press, 2002.
- [Dozier 2002] G. Dozier, A comparison of adaptive virtual constraint identification strategies for recurrent dynamic constraint satisfaction, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 552–557, IEEE Press, 2002.
- [Droste 2002] S. Droste, Analysis of the (1+1) ea for a dynamically changing onemax-variant, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 55–60, IEEE Press, 2002.
- [Dukkipati and Murty 2002] A. Dukkipati and M. N. Murty, Selection by parts: ‘selection in two episodes’ in evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary*

- Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 657–662, IEEE Press, 2002.
- [Eberbach 2002] E. Eberbach, On expressiveness of evolutionary computation: Is ec algorithmic?, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 564–569, IEEE Press, 2002.
- [Edwards et al. 2002] D. C. Edwards, K. E. Brown, and N. K. Taylor, An evolutionary method for the design of generic neural networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1769–1774, IEEE Press, 2002.
- [Eiben and Jelasity 2002] A. E. Eiben and M. Jelasity, A critical note on experimental research methodology in ec, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 582–587, IEEE Press, 2002.
- [Eklund 2002] S. E. Eklund, A massively parallel GP engine in VLSI, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 629–633, IEEE Press, 2002.
- [Endou and Zhao 2002] T. Endou and Q. Zhao, Generation of comprehensible decision trees through evolution of training data, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1221–1225, IEEE Press, 2002.
- [Etzel 2002] J. A. Etzel, "marigolds:"an evolutionary algorithm simulation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 327–332, IEEE Press, 2002.
- [Everson et al. 2002] M. P. Everson, C. G. E. Mangin, C. Stumpo, J. M. Schwartz, and D. A. Ostrowski, Evaluating strategies for foreign exchange risk reduction, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 735–740, IEEE Press, 2002.
- [Falcao 2002] D. M. Falcao, Genetic algorithms applications in electrical distribution systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1063–1068, IEEE Press, 2002.

- [Farhang-Mehr and Azarm 2002] A. Farhang-Mehr and S. Azarm, Diversity assessment of pareto-optimal solution sets: An entropy approach, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 723–728, IEEE Press, 2002.
- [Farina 2002] M. Farina, A neural network based generalized response surface multiobjective evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 956–961, IEEE Press, 2002.
- [Fischer 2002] M. M. Fischer, A novel modular product unit neural network for modelling constrained spatial interaction flows, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1215–1220, IEEE Press, 2002.
- [Fogel et al. 2002] D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, editors, *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, IEEE Press, 2002.
- [Fu and Wang 2002a] X. Fu and L. Wang, A GA-based novel RBF classifier with class-dependent features, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1890–1894, IEEE Press, 2002.
- [Fu and Wang 2002b] X. Fu and L. Wang, Rule extraction from an rbf classifier based on class-dependent features, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1916–1921, IEEE Press, 2002.
- [Galeano et al. 2002] G. Galeano, F. Fernandez, M. Tomassini, and L. Vanneschi, Studying the influence of synchronous and asynchronous parallel gp on programs’ length evolution, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1727–1732, IEEE Press, 2002.
- [Galvao et al. 2002] R. K. H. Galvao, V. M. Becerra, and M. Abou-Seada, Variable selection for financial distress classification using a genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2000–2005, IEEE Press, 2002.
- [Gan and Warwick 2002] J. Gan and K. Warwick, Modelling niches of arbitrary shape in genetic algorithms using niche linkage in the dynamic niche clustering framework, in *Proceedings of the*

- 2002 Congress on Evolutionary Computation CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 43–48, IEEE Press, 2002.
- [Geard and Wiles 2002] N. Geard and J. Wiles, Diversity maintenance on neutral landscapes - an argument for recombination, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 211–213, IEEE Press, 2002.
- [Geard et al. 2002] N. Geard, J. Wiles, J. Hallinan, B. Tonkes, and B. Skellett, A comparison of neutral landscapes - nk, nkp and nkq, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 205–210, IEEE Press, 2002.
- [Ghezelayagh and Lee 2002] H. Ghezelayagh and K. Y. Lee, Intelligent predictive control of a power plant with evolutionary programming optimizer and neuro-fuzzy identifier, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1308–1313, IEEE Press, 2002.
- [Golovkin et al. 2002] I. E. Golovkin, S. J. Louis, and R. C. Mancini, Parallel implementation of niched pareto genetic algorithm code for x-ray plasma spectroscopy, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1820–1824, IEEE Press, 2002.
- [Gonzalez et al. 2002] F. Gonzalez, D. Dasgupta, and R. Kozma, Combining negative selection and classification techniques for anomaly detection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 705–710, IEEE Press, 2002.
- [Goodhall et al. 2002] S. Goodhall, R. G. Reynolds, and R. Whallon, Altruism, selfishness, and survival: An agent-based model of sharing behavior, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 867–871, IEEE Press, 2002.
- [Goto and Sato 2002] R. Goto and Y. Sato, Applicability of genetic algorithms to motion analysis of a moving object, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 765–770, IEEE Press, 2002.
- [Greer et al. 2002] B. Greer, H. Hakonen, R. Lahdelma, and R. Miikkulainen, Numerical optimization with neuroevolution, in

- Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 396–401, IEEE Press, 2002.
- [Guinea et al. 2002] M. A. Guinea, G. Gutierrez, I. Galvan, A. Sanchis, and J. M. Molina, Generative capacities of grammars codification for evolution of nn architectures, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 611–616, IEEE Press, 2002.
- [Hafner and Salomon 2002] V. Hafner and R. Salomon, Evolving neural controllers for visual navigation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 669–674, IEEE Press, 2002.
- [Hamada et al. 2002] T. Hamada, H. Kawamura, M. Yamamoto, and A. Ohuchi, A study on behavioral structure of artificial market based on adaptive game, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2011–2016, IEEE Press, 2002.
- [Hamida and Schoenauer 2002] S. B. Hamida and M. Schoenauer, Aschea: New results using adaptive segregational constraint handling, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 884–889, IEEE Press, 2002.
- [Hamilton-Wright and Stacey 2002] A. Hamilton-Wright and D. Stacey, Fault-tolerant network computation of individuals in genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1721–1726, IEEE Press, 2002.
- [Harris and Bullock 2002] D. Harris and S. Bullock, Enhancing game theory with coevolutionary simulation models of honest signaling, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1594–1599, IEEE Press, 2002.
- [Harvey et al. 2002] P. R. W. Harvey, D. M. Booth, and J. F. Boyce, Evolving the mapping between input neurons and multi-source imagery, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1878–1883, IEEE Press, 2002.
- [Hatanaka et al. 2002] T. Hatanaka, K. Uosaki, and M. Koga, Evolutionary computation approach to wiener model identification,

- in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 914–919, IEEE Press, 2002.
- [Hercog and Fogarty 2002] L. M. Hercog and T. C. Fogarty, Co-evolutionary classifier systems for multi-agent simulation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1798–1803, IEEE Press, 2002.
- [Hernandez et al. 2002] J. C. Hernandez, P. Isasi, and A. Ribagorda, Easing collision finding in cryptographic primitives with genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 535–539, IEEE Press, 2002.
- [Hingston et al. 2002] P. Hingston, L. Barone, and L. While, Evolving crushers, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1109–1114, IEEE Press, 2002.
- [Ho. and Chen 2002] S.-Y. H. S.-J. Ho. and T.-K. Chen, Design of high performance fuzzy controllers using flexible parameterized membership functions and intelligent genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1378–1383, IEEE Press, 2002.
- [Ho et al. 2002a] C. K. Ho, Y. P. Singh, and S. W. Lee, Enhancement of a genetic algorithm for optical orthogonal code design using simulated annealing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 449–453, IEEE Press, 2002.
- [Ho et al. 2002b] S.-Y. Ho, S.-J. Ho, and Z.-B. Huang, An evolutionary approach for pose determination and interpretation of occluded articulated objects, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1092–1097, IEEE Press, 2002.
- [Ho et al. 2002c] S.-Y. Ho, C.-C. Liu, S. Liu, and J.-W. Jou, Design of an optimal nearest neighbor classifier using an intelligent genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 594–599, IEEE Press, 2002.
- [Hoai et al. 2002] N. X. Hoai, R. I. McKay, D. Essam, and R. Chau, Solving the symbolic regression problem with tree-adjunct

- grammar guided genetic programming: The comparative results, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1326–1331, IEEE Press, 2002.
- [Hoar et al. 2002] R. Hoar, J. Penner, and C. Jacob, Evolutionary swarm traffic: If ant roads had traffic lights, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1910–1915, IEEE Press, 2002.
- [Homma et al. 2002] N. Homma, T. Aoki, and T. Higuchi, Graph-based individual representation for evolutionary synthesis of arithmetic circuits, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1492–1497, IEEE Press, 2002.
- [Hsieh 2002] F.-S. Hsieh, Design of evolvable manufacturing processes, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 339–344, IEEE Press, 2002.
- [Hsu et al. 2002] C.-C. Hsu, W.-Y. Wang, and C.-Y. Yu, Genetic algorithms-derived digital integrators and their applications in discretization of continuous systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 443–448, IEEE Press, 2002.
- [Hu and Eberhart 2002a] X. Hu and R. Eberhart, Adaptive particle swarm optimization: Detection and response to dynamic systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1666–1670, IEEE Press, 2002.
- [Hu and Eberhart 2002b] X. Hu and R. Eberhart, Multiobjective optimization using dynamic neighborhood particle swarm optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1677–1681, IEEE Press, 2002.
- [Hu and Goodman 2002] J. Hu and E. D. Goodman, The hierarchical fair competition (hfc) model for parallel evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 49–54, IEEE Press, 2002.
- [Hughes 2002] E. J. Hughes, Multi-objective evolutionary guidance for swarms, in *Proceedings of the 2002 Congress on*

- Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1127–1132, IEEE Press, 2002.
- [Hutter 2002] M. Hutter, Fitness uniform selection to preserve genetic diversity, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 783–788, IEEE Press, 2002.
- [Isaacs et al. 2002] J. Isaacs, R. Watkins, and S. Foo, Evolving ant colony systems in hardware for random number generation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1450–1455, IEEE Press, 2002.
- [Ishibushi et al. 2002] H. Ishibushi, T. Yoshida, and T. Murata, Selection of initial solutions for local search in multiobjective genetic local search, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 950–955, IEEE Press, 2002.
- [Ishida and Pozo 2002] C. Y. Ishida and A. T. R. Pozo, Gpsql miner: Sql-grammar genetic programming in data mining, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1226–1231, IEEE Press, 2002.
- [Iwamatsu 2002] M. Iwamatsu, Co-evolutionary global optimization algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1180–1184, IEEE Press, 2002.
- [Iwashita and Iba 2002] M. Iwashita and H. Iba, Island model gp with immigrants aging and depth-dependent crossover, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 267–272, IEEE Press, 2002.
- [Janssen and Stow 2002] M. A. Janssen and D. W. Stow, An application of immunocomputing to the evolution of rules for ecosystem management, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 687–692, IEEE Press, 2002.
- [Jelasity et al. 2002] M. Jelasity, M. Preuss, and B. Paechter, A scalable and robust framework for distributed applications, in *Proceedings of the 2002 Congress on Evolutionary*

- Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1540–1545, IEEE Press, 2002.
- [Jeong and Oh 2002] H.-K. Jeong and S.-Y. Oh, Evolutionary programming integrating 3-generation based mutation and local competition based selection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 220–224, IEEE Press, 2002.
- [Jimenez et al. 2002] F. Jimenez, A. F. Gomez-Skarmeta, G. Sanchez, and K. Deb, An evolutionary algorithm for constrained multi-objective optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1133–1138, IEEE Press, 2002.
- [Joines and Kay 2002] J. A. Joines and M. G. Kay, Hybrid genetic algorithms and random linkage, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1733–1738, IEEE Press, 2002.
- [Jonker et al. 2002] C. M. Jonker, A. P. G. de Kock, J. Meijer, and B. J. Vermeulen, Deliberate evolution agents: Comparing reproduction strategies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 333–338, IEEE Press, 2002.
- [Julstrom 2002] B. A. Julstrom, A scalable genetic algorithm for the rectilinear steiner problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1169–1173, IEEE Press, 2002.
- [Kacprzyk and Szkatula 2002] J. Kacprzyk and G. Szkatula, An integer programming approach to inductive learning using genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 181–186, IEEE Press, 2002.
- [Kadrovach et al. 2002] B. A. Kadrovach, J. B. Zydallis, and G. B. Lamont, Use of mendelian pressure in a multi-objective genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 962–967, IEEE Press, 2002.
- [Kaiser et al. 2002] M. J. Kaiser, K. C. Tsui, and J. Liu, Adaptive distributed caching, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B.

- Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1810–1815, IEEE Press, 2002.
- [Karr et al. 2002] C. L. Karr, T. A. Zeiler, and R. Mehrotra, Determining critical gust loads on aircraft structures using an evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 759–764, IEEE Press, 2002.
- [Kassabalidis et al. 2002] I. N. Kassabalidis, M. A. El-Sharkawi, and R. J. M. II, Border identification for power system security assessment using neural network inversion: An overview, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1075–1079, IEEE Press, 2002.
- [Katsumata et al. 2002] Y. Katsumata, S. Kurahashi, and T. Terano, We need multiple solutions for electric equipments configuration in a power plant - applying bayesian optimization algorithm with tabu search, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1402–1407, IEEE Press, 2002.
- [Kennedy and Mendes 2002] J. Kennedy and R. Mendes, Population structure and particle swarm performance, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1671–1676, IEEE Press, 2002.
- [Khan et al. 2002] J. A. Khan, S. M. Sait, and M. R. Minhas, Fuzzy biasless simulated evolution for multiobjective vlsi placement, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1642–1647, IEEE Press, 2002.
- [Khoo and Suganthan 2002] K. G. Khoo and P. N. Suganthan, Objective function decomposition within genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 356–359, IEEE Press, 2002.
- [Kim and Bentley 2002] J. Kim and P. J. Bentley, Toward an artificial immune system for network intrusion detection: An investigation of dynamic clonal selection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1015–1020, IEEE Press, 2002.
- [Kim and Cho 2002] K. J. Kim and S.-B. Cho, Evolving speciated checkers players with crowding algorithm, in *Proceedings of the*

- 2002 Congress on Evolutionary Computation CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 407–412, IEEE Press, 2002.
- [Kim et al. 2002a] D. H. Kim, W. pyo Hong, and J. I. Park, Auto-tuning of reference based pid controller using immune algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 483–488, IEEE Press, 2002.
- [Kim et al. 2002b] J.-W. Kim, S. W. Kim, P. Park, and T. J. Park, On the similarities between binary-coded ga and real-coded ga in wide search space, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 681–686, IEEE Press, 2002.
- [Kim et al. 2002c] N. G. Kim, J. M. Won, J. S. Lee, and S. W. Kim, Local convergence rate of evolutionary algorithm with combined mutation operator, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 261–266, IEEE Press, 2002.
- [Kim et al. 2002d] P. K. Kim, P. Vadakkepat, T.-H. Lee, and X. Peng, Evolution of control systems for mobile robots, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 617–622, IEEE Press, 2002.
- [Kim et al. 2002e] S.-J. Kim, J.-S. Kim, J.-Y. Seo, H.-C. Cho, and H.-T. Jeon, Optimal initial structure of the rbf networks using time-frequency localization and genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1964–1969, IEEE Press, 2002.
- [Kim 2002] D. H. Kim, Tuning of 2-dof pid controller by immune algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 675–680, IEEE Press, 2002.
- [Kimiagharam et al. 2002] B. Kimiagharam, A. Homaifar, M. Bikdash, and B. Sayyarrodsari, Genetic algorithm based gain scheduling, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 540–545, IEEE Press, 2002.
- [Knowles and Corne 2002] J. Knowles and D. Corne, On metrics for comparing non-dominated sets, in *Proceedings of the 2002 Congress*

- on *Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 711–716, IEEE Press, 2002.
- [Kojima et al. 2002] K. Kojima, H. Matsuo, and M. Ishigame, Reduction of communication quantity for network based parallel ga, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1715–1720, IEEE Press, 2002.
- [Koo et al. 2002] J. H. Koo, T. S. Kim, S. S. Dong, and C. H. Lee, Development of fpga based adaptive image enhancement filter system using genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1480–1485, IEEE Press, 2002.
- [Kordon et al. 2002] A. Kordon, G. Smits, E. Jordaan, and E. Rightor, Robust soft sensors based on integration of genetic programming, analytical neural networks, and support vector machines, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 896–901, IEEE Press, 2002.
- [Kovacs 2002] T. Kovacs, Performance and population state metrics for rule-based learning systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1781–1786, IEEE Press, 2002.
- [Krink et al. 2002] T. Krink, J. S. Vesterstrøm, and J. Riget, Particle swarm optimisation with spatial particle extension, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1474–1479, IEEE Press, 2002.
- [Krohling et al. 2002] R. A. Krohling, H. Knidel, and Y. Shi, Solving numerical equations of hydraulic problems using particle swarm optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1688–1690, IEEE Press, 2002.
- [Kumar et al. 2002] R. Kumar, P. P. Parida, and M. Gupta, Topological design of communication networks using multiobjective genetic optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 425–430, IEEE Press, 2002.
- [Lampinen 2002] J. Lampinen, A constraint handling approach for the differential evolution algorithm, in *Proceedings of the 2002*

Congress on Evolutionary Computation CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1468–1473, IEEE Press, 2002.

[Land, Jr. et al. 2002]

W. H. Land, Jr., M. Bryden, D. W. McKee, J. Y. Lo, and F. R. Anderson, Performance tradeoff between evolutionary computation (ec)/adaptive boosting (ab) hybrid and support vector machine breast cancer classification paradigms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 187–192, IEEE Press, 2002.

[Landavazo and Fogel 2002]

D. Landavazo and G. B. Fogel, Evolved neural networks for quantitative structure-activity relationships of anti-hiv compounds, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 199–204, IEEE Press, 2002.

[Laskari et al. 2002a]

E. C. Laskari, K. E. Parsopoulos, and M. N. Vrahatis, Particle swarm optimization for integer programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1582–1587, IEEE Press, 2002.

[Laskari et al. 2002b]

E. C. Laskari, K. E. Parsopoulos, and M. N. Vrahatis, Particle swarm optimization for minimax problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1576–1581, IEEE Press, 2002.

[Lee and Antonsson 2002]

C.-Y. Lee and E. K. Antonsson, Reinforcement learning in steady-state cellular genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1793–1797, IEEE Press, 2002.

[Lee and Cho 2002a]

J.-H. Lee and S.-B. Cho, Analysis of direct manipulation in interactive evolutionary computation on fitness landscape, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 460–465, IEEE Press, 2002.

[Lee and Cho 2002b]

S.-I. Lee and S.-B. Cho, Measuring evolvability in evolutionary robotics, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 163–168, IEEE Press, 2002.

- [Lee and Mohamed 2002] K. Y. Lee and P. S. Mohamed, A real-coded genetic algorithm involving a hybrid crossover method for power plant control system design, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1069–1074, IEEE Press, 2002.
- [Lee et al. 2002] K.-H. Lee, C.-H. Lee, J.-H. Kim, H.-L. Choi, and M.-J. Tahk, Evolutionary optimized pitching motion control for f-16 aircraft, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1940–1945, IEEE Press, 2002.
- [Leung et al. 2002] K. S. Leung, K. H. Lee, and S. M. Cheang, Evolving parallel machine programs for a multi-alu processor, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1703–1708, IEEE Press, 2002.
- [Li and Kang 2002] Y. Li and L. Kang, Analysis of optimal trajectory on evolutionary algorithm and some control strategies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 558–563, IEEE Press, 2002.
- [Li and Kirley 2002] X. Li and M. Kirley, The effects of varying population density in a fine-grained parallel genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1709–1714, IEEE Press, 2002.
- [Li and Kwan 2002] J. Li and R. Kwan, A fuzzy evolutionary approach with taguchi parameter setting for the set covering problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1203–1208, IEEE Press, 2002.
- [Liang and Leung 2002] Y. Liang and K.-S. Leung, Two-way mutation evolution strategies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 789–794, IEEE Press, 2002.
- [Liang et al. 2002a] S. Liang, A. N. Zincir-Heywood, and M. I. Heywood, The effect of routing under local information using a social insect metaphor, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1438–1443, IEEE Press, 2002.

- [Liang et al. 2002b] Y.-C. Liang, S. Kulturel-Konak, and A. E. Smith, Meta heuristics for the orienteering problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 384–389, IEEE Press, 2002.
- [Lin et al. 2002] Y.-C. Lin, K.-S. Hwang, and F.-S. Wang, Hybrid differential evolution with multiplier updating method for nonlinear constrained optimization problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 872–877, IEEE Press, 2002.
- [Lindblad et al. 2002] F. Lindblad, P. Nordin, and K. Wolff, Evolving 3D model interpretation of images using graphics hardware, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 225–230, IEEE Press, 2002.
- [Ling et al. 2002] S. H. Ling, H. K. Lam, F. H. F. Leung, and P. K. S. Tam, Learning of neural network parameters using a fuzzy genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1928–1933, IEEE Press, 2002.
- [Liu and Iba 2002] J. Liu and H. Iba, Selecting informative genes using a multiobjective evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 297–302, IEEE Press, 2002.
- [Liu and Yao 2002] Y. Liu and X. Yao, How to control search step size in fast evolutionary programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 652–656, IEEE Press, 2002.
- [Lohn et al. 2002] J. Lohn, W. F. Kraus, and G. L. Haith, Comparing a coevolutionary genetic algorithm for multiobjective optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1157–1162, IEEE Press, 2002.
- [Lones and Tyrrell 2002] M. Lones and A. Tyrrell, Crossover and bloat in the functionality model of enzyme genetic programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 986–991, IEEE Press, 2002.

- [Løvbjerg and Krink 2002] M. Løvbjerg and T. Krink, Extending particle swarm optimisers with self-organized criticality, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1588–1593, IEEE Press, 2002.
- [Lu and Yen 2002a] H. Lu and G. Yen, Rank-density based multiobjective genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 944–949, IEEE Press, 2002.
- [Lu and Yen 2002b] H. Lu and G. G. Yen, Dynamic population size in multiobjective evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1648–1653, IEEE Press, 2002.
- [Lucas 2002] S. Lucas, Evolving spring-mass models: a test-bed for graph encoding schemes, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1952–1957, IEEE Press, 2002.
- [Mabu et al. 2002] S. Mabu, K. Hirasawa, J. Hu, and J. Murata, Online learning of genetic network programming (gnp), in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 321–326, IEEE Press, 2002.
- [Madavan 2002] N. Madavan, Multiobjective optimization using a pareto differential evolution approach, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1145–1150, IEEE Press, 2002.
- [Madureira et al. 2002] A. Madureira, C. Ramos, and S. do Carmo Silva, A coordination mechanism for real world scheduling problems using genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 175–180, IEEE Press, 2002.
- [Mahnig and Muehlenbein 2002] T. Mahnig and H. Muehlenbein, A comparison of stochastic local search and population based search, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 255–260, IEEE Press, 2002.
- [Majumdar and Dasgupta 2002] N. S. Majumdar and D. Dasgupta, Determining optimal configuration for turbine generator cooler, in *Proceedings*

- of the 2002 Congress on Evolutionary Computation CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1009–1014, IEEE Press, 2002.
- [Matsumaru et al. 2002] N. Matsumaru, S. Colombano, and K.-P. Zauner, Scouting enzyme behavior, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 19–24, IEEE Press, 2002.
- [Matsumura et al. 2002] Y. Matsumura, K. Ohkura, and K. Ueda, Advantages of global discrete recombination in (mu, mu, lambda) evolution strategies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1848–1853, IEEE Press, 2002.
- [Mazza, III and Congdon 2002] R. H. Mazza, III and C. B. Congdon, Towards a genetic algorithms approach to designing 3D polygonal tree models, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1842–1847, IEEE Press, 2002.
- [Meade et al. 2002] A. Meade, D. Corne, and R. Sibly, Discovering patterns in microsatellite flanks with evolutionary computation by evolving discriminatory dna motifs, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1–6, IEEE Press, 2002.
- [Michelan and Von Zuben 2002] R. Michelan and F. J. Von Zuben, Decentralized control system for autonomous navigation based on an evolved artificial immune network, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1021–1026, IEEE Press, 2002.
- [Milone et al. 2002] D. H. Milone, J. J. Merelo, and H. L. Rufiner, Evolutionary algorithm for speech segmentation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1115–1120, IEEE Press, 2002.
- [Minami et al. 2002] M. Minami, A. Tamamura, and T. Asakura, Machine intelligence of a mobile manipulator to utilize dynamically interfered motion and nonlinear friction, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1232–1237, IEEE Press, 2002.

- [Minerva and Paterlini 2002] T. Minerva and S. Paterlini, Evolutionary approaches for statistical modelling, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2023–2028, IEEE Press, 2002.
- [Miranda and Fonseca 2002] V. Miranda and N. Fonseca, Epso - best-of-two worlds meta-heuristic applied to power system problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1080–1085, IEEE Press, 2002.
- [Monakhov and Monakhova 2002] O. Monakhov and E. Monakhova, Using evolutionary algorithm for generation of dense families of circulant networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1854–1859, IEEE Press, 2002.
- [Mordaunt and Zalzalá 2002] P. Mordaunt and A. Zalzalá, Towards an evolutionary neural network for gait analysis, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1922–1927, IEEE Press, 2002.
- [MORI et al. 2002] K. MORI, S. Nishi, T. Fuchida, and S. Murashima, Two dimensional resolution improvement of frame images by genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 640–645, IEEE Press, 2002.
- [Moroni et al. 2002] A. Moroni, F. Von Zuben, J. Manzolli, and A. Mammana, Capturing human judgment to simulate objective function, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 529–534, IEEE Press, 2002.
- [Mostaghim et al. 2002] S. Mostaghim, J. Teich, and A. Tyagi, Comparison of data structures for storing pareto-sets in moeas, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 843–848, IEEE Press, 2002.
- [Mueller et al. 2002] S. D. Mueller, N. N. Schraudolph, and P. D. Koumoutsakos, Step size adaptation in evolution strategies using reinforcement learning, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 151–156, IEEE Press, 2002.

- [Munetomo 2002] M. Munetomo, Linkage identification based on epistasis measures to realize efficient genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1332–1337, IEEE Press, 2002.
- [Murakami et al. 2002] Y. Murakami, H. Sato, and A. Namatame, Realizing unstable social efficiency with mutual learning of meta-rules, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1522–1527, IEEE Press, 2002.
- [Murao et al. 2002] H. Murao, H. Tamaki, and S. Kitamura, A coevolutionary approach to adapt the genotype-phenotype map in genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1612–1617, IEEE Press, 2002.
- [Murata et al. 2002] T. Murata, H. Nozawa, Y. Tsujimura, M. Gen, and H. Ishibuchi, Effect of local search on the performance of cellular multi-objective genetic algorithms for designing fuzzy rule-based classification systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 663–668, IEEE Press, 2002.
- [Nakatsugawa et al. 2002] M. Nakatsugawa, M. Yamamoto, T. Shiba, and A. Ohuchi, Design of a pcr protocol for improving reliability of pcr in dna computing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 91–96, IEEE Press, 2002.
- [Nguyen et al. 2002] H. D. Nguyen, I. Yoshihara, K. Yamamori, and M. Yasunaga, A parallel hybrid genetic algorithm for multiple protein sequence alignment, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 309–314, IEEE Press, 2002.
- [Nikolaev et al. 2002] N. Nikolaev, L. M. de Menezes, and H. Iba, Overfitting avoidance in genetic programming of polynomials, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1209–1214, IEEE Press, 2002.
- [Nino and Beltran 2002] F. Nino and O. Beltran, A change detection software agent based on immune mixed selection, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 693–698, IEEE Press, 2002.

- [Oeda et al. 2002] S. Oeda, T. Ichimura, and T. Yamashita, Biological immune system by evolutionary adaptive learning of neural networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1976–1981, IEEE Press, 2002.
- [Oh et al. 2002] S.-K. Oh, C.-Y. Lee, and J.-J. Lee, A new distributed evolutionary algorithm for optimization in nonstationary environments, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 378–383, IEEE Press, 2002.
- [Ono et al. 2002] I. Ono, H. Fujiki, M. Ootsuka, N. Nakashima, N. Ono, and S. Tate, Global optimization of protein 3-dimensional structures in nmr by a genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 303–308, IEEE Press, 2002.
- [Ord and Blair 2002] T. Ord and A. Blair, Exploitation and peacekeeping: introducing more sophisticated interactions to the iterated prisoner’s dilemma, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1606–1611, IEEE Press, 2002.
- [Ostrowski et al. 2002] D. Ostrowski, T. Tassier, M. P. Everson, and R. G. Reynolds, Using cultural algorithms to evolve strategies in agent-based models, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 741–746, IEEE Press, 2002.
- [Popela et al. 2002] P. Popela, J. Roupec, P. Osmera, and R. Matousek, The formal stochastic framework for comparison of genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 576–581, IEEE Press, 2002.
- [Portillo 2002] A. B. J. G.-H. J. M. M. J. B. J. Portillo, Ocr parameters tuning by means of evolution strategies for aircraft’s tail number recognition, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 902–907, IEEE Press, 2002.
- [Pullan 2002] W. Pullan, Optimising multiple aspects of network survivability, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B.

- Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 115–120, IEEE Press, 2002.
- [Qiao and WeiXin 2002] Y. Qiao and X. WeiXin, A network ids with low false positive rate, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1121–1126, IEEE Press, 2002.
- [Rasheed et al. 2002] K. Rasheed, X. Ni, and S. Vattam, Comparison of methods for developing dynamic reduced models for design optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 390–395, IEEE Press, 2002.
- [Ray 2002] T. Ray, Constrained robust optimal design using a multiobjective evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 419–424, IEEE Press, 2002.
- [Revello and McCartney 2002] T. E. Revello and R. McCartney, Generating war game strategies using a genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1086–1091, IEEE Press, 2002.
- [Reynolds and Lazar 2002] R. G. Reynolds and A. Lazar, Simulating the evolution of the archaic states, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 861–866, IEEE Press, 2002.
- [Rojas et al. 2002] F. Rojas, C. G. Puntonet, I. Rojas, J. Ortega, and A. Prieto, Genetic algorithm approach to nonlinear blind source separation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1098–1102, IEEE Press, 2002.
- [Rowland and Taylor 2002] J. J. Rowland and J. Taylor, Adaptive denoising in spectral analysis by genetic programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 133–138, IEEE Press, 2002.
- [Runarsson and Yao 2002] T. P. Runarsson and X. Yao, Continuous selection and self-adaptive evolution strategies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao,

- G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 279–284, IEEE Press, 2002.
- [Rychtyckyj and Reynolds 2002] N. Rychtyckyj and R. G. Reynolds, Knowledge base maintenance using cultural algorithms: Application to the dlms manufacturing process system at ford motor company, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 855–860, IEEE Press, 2002.
- [Sadati and Kuchakkhani 2002] N. Sadati and S. Kuchakkhani, Genetic approach to pole placement by static output feedback, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1174–1179, IEEE Press, 2002.
- [Sait et al. 2002] S. M. Sait, M. R. Minhas, and J. A. Khan, Performance and low power driven vlsi standard cell placement using tabu search, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 372–377, IEEE Press, 2002.
- [Salomon 2002] R. Salomon, The force model: Reducing the complexity by reformulating the problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1498–1503, IEEE Press, 2002.
- [Sano and Kita 2002] Y. Sano and H. Kita, Optimization of noisy fitness functions by means of genetic algorithms using history of search with test of estimation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 360–365, IEEE Press, 2002.
- [Santana and Muehlenbein 2002] R. Santana and H. Muehlenbein, Blocked stochastic sampling versus estimation of distribution algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1390–1395, IEEE Press, 2002.
- [Sarafis et al. 2002] I. Sarafis, A. M. S. Zalazala, and P. Trinder, A genetic rule-based data clustering toolkit, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1238–1243, IEEE Press, 2002.
- [Satoh et al. 2002] T. Satoh, H. Kuwabara, Masakazu, Kanezashi, and K. Nara, Artificial life system and its application to multiple-fuel economic load dispatch problem, in

- Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1432–1437, IEEE Press, 2002.
- [Schleis and Rizki 2002] G. Schleis and M. Rizki, Learning from a random player using the reference neuron model, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 747–752, IEEE Press, 2002.
- [Schoofs and Naudts 2002] L. Schoofs and B. Naudts, Swarm intelligence on the binary constraint satisfaction problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1444–1449, IEEE Press, 2002.
- [Schreyer and Raidl 2002] M. Schreyer and G. R. Raidl, Letting ants labeling point features, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1564–1569, IEEE Press, 2002.
- [Seth 2002] A. K. Seth, Distinguishing adaptive from non-adaptive evolution using ashby’s law of requisite variety, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1163–1168, IEEE Press, 2002.
- [Shi and Krohling 2002] Y. Shi and R. A. Krohling, Co-evolutionary particle swarm optimization to solve min-max problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1682–1687, IEEE Press, 2002.
- [Shin et al. 2002] S.-Y. Shin, D.-M. Kim, I.-H. Lee, and B.-T. Zhang, Evolutionary sequence generation for reliable dna computing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 79–84, IEEE Press, 2002.
- [Shinkai et al. 2002] M. Shinkai, H. Aguirre, and K. Tanaka, Mutation strategy improves ga’s performance on epistatic problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 968–973, IEEE Press, 2002.
- [Shipman et al. 2002] R. Shipman, M. Shackleton, and M. Ebner, Issues in designing a neutral genotype-phenotype mapping, in *Proceedings of the 2002 Congress on Evolutionary*

- Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1360–1365, IEEE Press, 2002.
- [Singh et al. 2002] S. P. N. Singh, S. M. Thayer, and W. P. Thayer, A foundation for kilorobotic exploration, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1033–1038, IEEE Press, 2002.
- [Smith et al. 2002] T. Smith, A. Philippides, P. Husbands, and M. O’Shea, Neutrality and ruggedness in robot landscapes, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1348–1353, IEEE Press, 2002.
- [Socha and Kisiel-Dorohinicki 2002] K. Socha and M. Kisiel-Dorohinicki, Agent-based evolutionary multiobjective optimisation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 109–114, IEEE Press, 2002.
- [Sofge et al. 2002] D. Sofge, K. De Jong, and A. Schultz, A blended population approach to cooperative coevolution for decomposition of complex problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 413–418, IEEE Press, 2002.
- [Song et al. 2002] A. Song, V. Ciesielski, and H. Williams, Texture classifiers generated by genetic programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 243–248, IEEE Press, 2002.
- [Srinivasan et al. 2002] D. Srinivasan, T. H. Seow, and J. X. Xu, Automated time table generation using multiple context reasoning for university modules, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1751–1756, IEEE Press, 2002.
- [Stanley and Miikkulainen 2002] K. O. Stanley and R. Miikkulainen, Efficient evolution of neural network topologies, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1757–1762, IEEE Press, 2002.
- [Stejic et al. 2002] Z. Stejic, E. M. Iyoda, Y. Takama, and K. Hirota, Image similarity computation using local similarity patterns generated by genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited

- by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 771–776, IEEE Press, 2002.
- [Stoica et al. 2002] A. Stoica, R. Zebulum, D. Keymeulen, M. I. Ferguson, and V. Duong, Fuzzy controller implementations with fewer than ten transistors?, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1830–1835, IEEE Press, 2002.
- [Subbu and Sanderson 2002] R. Subbu and A. C. Sanderson, Network performance of distributed coevolutionary agents, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1414–1419, IEEE Press, 2002.
- [sung Hwang and bae Cho 2002] K. sung Hwang and S. bae Cho, Evolving diverse hardwares using speciated genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 437–442, IEEE Press, 2002.
- [Sutcliffe et al. 2002] A. Sutcliffe, W.-C. Chang, and R. Neville, Optimizing system requirements with evolutionary computation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 495–499, IEEE Press, 2002.
- [Svangard et al. 2002] N. Svangard, S. Lloyd, P. Nordin, and C. Wihlborg, Evolving short-term trading strategies using genetic programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2006–2010, IEEE Press, 2002.
- [Takenaka and Hashimoto 2002] Y. Takenaka and A. Hashimoto, Dna computing by competitive hybridization for maximum satisfiability problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 472–476, IEEE Press, 2002.
- [Tan et al. 2002a] K. C. Tan, C. M. Chew, K. K. Tan, L. F. Wang, and Y. J. Chen, Autonomous robot navigation via intrinsic evolution, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1272–1277, IEEE Press, 2002.
- [Tan et al. 2002b] K. C. Tan, T. H. Lee, J. Cai, and Y. H. Chew, Automating the drug scheduling of cancer chemotherapy

- via evolutionary computation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 908–913, IEEE Press, 2002.
- [Tan et al. 2002c] K. C. Tan, K. Sengupta, T. H. Lee, and R. Sathikannan, Autonomous registration of disparate spatial data via an evolutionary algorithm toolbox, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 31–36, IEEE Press, 2002.
- [Tan et al. 2002d] K. C. Tan, A. Tay, T. H. Lee, and C. M. Heng, Mining multiple comprehensible classification rules using genetic programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1302–1307, IEEE Press, 2002.
- [Tanaka et al. 2002] F. Tanaka, M. Nakatsugawa, M. Yamamoto, T. Shiba, and A. Ohuchi, Towards a general-purpose sequence design system in dna computing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 73–78, IEEE Press, 2002.
- [Tarakanov and Skormin 2002] A. Tarakanov and V. Skormin, Pattern recognition by immunocomputing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 938–943, IEEE Press, 2002.
- [Tassier et al. 2002] T. Tassier, M. P. Everson, and D. Ostrowski, Agent-based models as a complement to economic theory: A durable goods example, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 729–734, IEEE Press, 2002.
- [Taylor et al. 2002] D. Taylor, D. Corne, D. Taylor, and J. Harkness, Predicting alarms in supermarket refrigeration systems using evolved neural networks and evolved rulesets, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1988–1993, IEEE Press, 2002.
- [Thierens 2002] D. Thierens, Adaptive mutation rate control schemes in genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 980–985, IEEE Press, 2002.

- [Thomsen et al. 2002] R. Thomsen, G. B. Fogel, and T. Krink, A clustal alignment improver using evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 121–126, IEEE Press, 2002.
- [Thomson and Arslan 2002] R. Thomson and T. Arslan, An evolutionary algorithm for the multi-objective optimisation of vlsi primitive operator filters, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 37–42, IEEE Press, 2002.
- [Torres-Velazquez and Estivill-Castro 2002] R. Torres-Velazquez and V. Estivill-Castro, A memetic algorithm instantiated with selection sort consistently finds global optima for the error-correcting graph isomorphism, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1958–1963, IEEE Press, 2002.
- [Toussaint and Igel 2002] M. Toussaint and C. Igel, Neutrality: A necessity for self-adaptation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1354–1359, IEEE Press, 2002.
- [Tsai et al. 2002a] C.-F. Tsai, C.-W. Tsai, and C.-P. Chen, A novel multiple-searching genetic algorithm for multimedia multicast routing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 506–511, IEEE Press, 2002.
- [Tsai et al. 2002b] C.-F. Tsai, C.-W. Tsai, and C.-C. Tseng, A new approach for solving large traveling salesman problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1636–1641, IEEE Press, 2002.
- [Tsai et al. 2002c] H.-K. Tsai, J.-M. Yang, and C.-Y. Kao, Solving traveling salesman problems by combining global and local search mechanisms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1290–1295, IEEE Press, 2002.
- [Tsui and Liu 2002a] K. C. Tsui and J. Liu, Evolutionary diffusion optimization, part i: Description of the algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 169–174, IEEE Press, 2002.

- [Tsui and Liu 2002b] K. C. Tsui and J. Liu, Evolutionary diffusion optimization, part ii: Performance assessment, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1284–1289, IEEE Press, 2002.
- [Tsujimura et al. 2002] Y. Tsujimura, M. Gen, and A. Syarif, Solving a nonlinear side constrained transportation problem by using spanning tree-based genetic algorithm with fuzzy logic controller, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 546–551, IEEE Press, 2002.
- [Tsutsui and Goldberg 2002] S. Tsutsui and D. E. Goldberg, Simplex crossover and linkage identification: Single-stage evolution vs. multi-stage evolution, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 974–979, IEEE Press, 2002.
- [Tuci et al. 2002] E. Tuci, M. Quinn, and I. Harvey, Evolving fixed-weight networks for learning robots, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1970–1975, IEEE Press, 2002.
- [Ursem and Krink 2002] R. K. Ursem and T. Krink, Genetic programming with smooth operators for arithmetic expressions: Diviplication and subdition, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1372–1377, IEEE Press, 2002.
- [v. E. Conradie et al. 2002] A. v. E. Conradie, R. Mikkulainen, and C. Aldrich, Intelligent process control utilising symbiotic memetic neuro-evolution, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 623–628, IEEE Press, 2002.
- [Valenzuela 2002] C. Valenzuela, A simple evolutionary algorithm for multi-objective optimization (seamo), in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 717–722, IEEE Press, 2002.
- [van Bragt and La Poutre 2002] D. D. B. van Bragt and J. A. La Poutre, Co-evolving automata negotiate with a variety of opponents, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1426–1431, IEEE Press, 2002.

- [Verma and Ghosh 2002] B. Verma and R. Ghosh, A novel evolutionary neural learning algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1884–1889, IEEE Press, 2002.
- [Vesterstrøm et al. 2002] J. S. Vesterstrøm, J. Riget, and T. Krink, Division of labor in particle swarm optimisation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1570–1575, IEEE Press, 2002.
- [Vincent 2002] J. Vincent, A comparison of reproductive success and the effect of mating restrictions in coarse-grained parallel genetic algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1697–1702, IEEE Press, 2002.
- [Volkert 2002] L. G. Volkert, Levels of adaptation: Insights into survival in dynamic environments, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 139–144, IEEE Press, 2002.
- [Wai et al. 2002] Y. Y. Wai, C. K. Chow, and T. Lee, Resolving ambiguity in depth extraction for motion capture using genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1804–1809, IEEE Press, 2002.
- [Wang and Lu 2002] Y. Wang and Y. Lu, The fast neural network solution for problems based on slow genetic algorithm solutions, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1763–1768, IEEE Press, 2002.
- [Wang et al. 2002] C. Wang, Y. C. Soh, H. Wang, and H. Wang, A hierarchical genetic algorithm for path planning in a static environment with obstacles, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 500–505, IEEE Press, 2002.
- [Watanabe et al. 2002] I. Watanabe, K. Okada, K. ichi Tokoro, and S. Matsui, Adaptive multiagent model of electric power market with congestion management, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 523–528, IEEE Press, 2002.

- [Watkins and Boggess 2002a] A. Watkins and L. Boggess, A new classifier based on resource limited artificial immune systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1546–1551, IEEE Press, 2002.
- [Watkins and Boggess 2002b] A. B. Watkins and L. C. Boggess, A resource limited artificial immune classifier, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 926–931, IEEE Press, 2002.
- [Watson and Wiles 2002] J. Watson and J. Wiles, The rise and fall of learning: A neural network model of the genetic assimilation of acquired traits, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 600–605, IEEE Press, 2002.
- [Watts and Kasabov 2002] M. Watts and N. Kasabov, Evolutionary optimisation of evolving connectionist systems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 606–610, IEEE Press, 2002.
- [Watts et al. 2002] M. Watts, L. Major, and W. Tate, Evolutionary optimisation of mlp for modeling protein synthesis termination signal efficiency, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 193–198, IEEE Press, 2002.
- [Wei et al. 2002] C. Wei, Z. He, Y. Zhang, and W. Pei, Swarm directions embedded in fast evolutionary programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1278–1283, IEEE Press, 2002.
- [Weingaertner et al. 2002] D. Weingaertner, V. K. Tatai, R. R. Gudwin, and F. J. V. Zuben, Hierarchical evolution of heterogeneous neural networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1775–1780, IEEE Press, 2002.
- [Wen and Eberhart 2002] C. Wen and R. C. Eberhart, Genetic algorithm for logistics scheduling problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 512–516, IEEE Press, 2002.

- [Wenjian et al. 2002] L. Wenjian, C. Xianbin, and W. Xufa, An immune genetic algorithm based on immune regulation, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 801–806, IEEE Press, 2002.
- [Wiegand et al. 2002] R. P. Wiegand, W. Liles, and K. De Jong, Analyzing cooperative coevolution with evolutionary game theory, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1600–1605, IEEE Press, 2002.
- [Wiles and Tonkes 2002] J. Wiles and B. Tonkes, Visualisation of hierarchical cost surfaces for evolutionary computing, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 157–162, IEEE Press, 2002.
- [Willadsen and Wiles 2002] K. Willadsen and J. Wiles, All binary representations are equal: but some are more equal than others, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 570–575, IEEE Press, 2002.
- [Wittner and Helvik 2002] O. Wittner and B. E. Helvik, Cross entropy guided ant-like agents finding dependable primary/backup path patterns in networks, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1528–1533, IEEE Press, 2002.
- [Wong et al. 2002] M. L. Wong, S. Y. Lee, and K. S. Leung, A hybrid approach to learn bayesian networks using evolutionary programming, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1314–1319, IEEE Press, 2002.
- [Wright et al. 2002] A. H. Wright, J. E. Rowe, and J. R. Neil, Analysis of the simple genetic algorithm on the single-peak and double-peak landscapes, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 214–219, IEEE Press, 2002.
- [Wu et al. 2002] X. Wu, C.-H. Chu, Y. Wang, and W. Yan, A genetic algorithm for integrated cell formation and layout decision, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1866–1871, IEEE Press, 2002.

- [Xie et al. 2002] X. Xie, W. Zhang, and Z. Yang, A dissipative particle swarm optimization, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1456–1461, IEEE Press, 2002.
- [Xin et al. 2002] L. Xin, P. Vadakkepat, T. H. Lee, X. Peng, and P. K. Kim, Comparison of robot navigation by evolutionary neural networks and pain-based algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1994–1999, IEEE Press, 2002.
- [Xu et al. 2002a] J. Xu, T. Arslan, and D. W. Qing-Wang, Gps attitude determination using a genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 998–1002, IEEE Press, 2002.
- [Xu et al. 2002b] J.-X. Xu, S. K. Panda, and Q. Zheng, Multiobjective optimization of current waveforms for switched reluctance motors by genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1860–1865, IEEE Press, 2002.
- [Xu et al. 2002c] X. Xu, H. gen He, and D. Hu, Evolutionary adaptive-critic methods for reinforcement learning, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1320–1325, IEEE Press, 2002.
- [Yamamoto et al. 2002a] K. Yamamoto, T. Yoshikawa, T. Furuhashi, T. Shinogi, and S. Tsuruoka, Evaluation of search performance of bacterial evolutionary algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1343–1347, IEEE Press, 2002.
- [Yamamoto et al. 2002b] M. Yamamoto, A. Kameda, N. Matsuura, T. Shiba, and A. Ohuchi, Simulation analysis of hybridization process for dna computing with concentration control, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 85–90, IEEE Press, 2002.
- [Yamasaki et al. 2002] K. Yamasaki, K. Kitakaze, and M. Sekiguchi, Dynamic optimization by evolutionary algorithms applied to financial time series, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 2017–2022, IEEE Press, 2002.

- [Yang et al. 2002] J. T. Yang, H.-D. Huang, and J.-T. Horng, Devising a cost effective baseball scheduling by evolutionary algorithms, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1660–1665, IEEE Press, 2002.
- [Yasunaga et al. 2002] M. Yasunaga, K. Ushiyama, H. Fujiwara, I. Yoshihara, J. H. Kim, and N. Aibe, An evolutionary kernel-based reasoning system using reconfigurable vlsis: Its hardware prototyping and application to the splicing boundary problem, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 285–290, IEEE Press, 2002.
- [Yen and Lu 2002] G. G. Yen and H. Lu, Hierarchical rank density genetic algorithm for radial-basis function neural network design, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 25–30, IEEE Press, 2002.
- [Yen and Nithianandan 2002] G. G. Yen and N. Nithianandan, Facial feature extraction using genetic algorithm, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1895–1900, IEEE Press, 2002.
- [Yuan 2002] B. Yuan, Deterministic crowding, recombination and self-similarity, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1516–1521, IEEE Press, 2002.
- [Yuizono et al. 2002] T. Yuizono, Y. Wang, K. Satoh, and S. Nakayama, Study on individual recognition for ear images by using genetic local search, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 237–242, IEEE Press, 2002.
- [Zhang et al. 2002a] R. Zhang, W. K. King, and Q. Wang, Applying evolutionary programming to improve branch classification in the hybrid branch prediction method using switch-counter, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1739–1744, IEEE Press, 2002.
- [Zhang et al. 2002b] Y. Zhang, L. O. Hall, D. B. Goldgof, and S. Sarkar, A constrained genetic approach for reconstructing young’s modulus of elastic objects from boundary displacement measurements, in *Proceedings of the 2002 Congress on*

Evolutionary Computation CEC2002, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 1003–1008, IEEE Press, 2002.

[Zhu and Leung 2002]

Z.-Y. Zhu and K.-S. Leung, Asynchronous self-adjustable island genetic algorithm for multi-objective optimization problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 837–842, IEEE Press, 2002.

[Zou et al. 2002]

X. Zou, L. Kang, and Y. Li, A dynamical evolutionary algorithm for constrained optimization problems, in *Proceedings of the 2002 Congress on Evolutionary Computation CEC2002*, edited by D. B. Fogel, M. A. El-Sharkawi, X. Yao, G. Greenwood, H. Iba, P. Marrow, and M. Shackleton, pp. 890–895, IEEE Press, 2002.