Список литературы

[1] Adnan Acan, *Clonal selection algorithm with operator multiplicity*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1909–1915.

[2] Hernan Aguirre and Kiyoshi Tanaka, *Effects of elitism and population climbing on multiobjective mnk-landscapes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 449–456.

[3] ———, *Insights on properties of multiobjective mnk-landscapes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 196–203.

[4] Mohammed Aldasht, Julio Ortega, Carlos G. Puntonet, and Antonio F. Diaz, *A genetic exploration of dynamic load balancing algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1158–1163.

[5] Sree Harsha Aleti and Hugo de Garis, *Evolutionary algorithms based on machine learning accelerate mathematical function optimization but not neural net evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1172–1177.

[6] Yaser Alkhalifah and Roger Wainwright, *A genetic algorithm applied to graph problems involving subsets of vertices*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 303–308.

[7] Carl Anderson, Eric Bonabeau, and John Scott, *Evolutionary testing as both a testing and redesign tool: a study of a shipboard firemain's valve and pump controls*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1089–1097.

[8] Shin Ando and Hitoshi Iba, *Estimation of gene network using real-coded ga and robustness analysis*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 827–834.

[9] Rajeev Annaluru, Sanjoy Das, and Anil Pahwa, *Multi-level ant colony algorithm for optimal placement of capacitors in distribution systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1932–1937.

[10] Dirk Arnold, *An analysis of evolutionary gradient search*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 47–54.

[11] Trent Ashburn and Eric Bonabeau, *Interactive inversion of financial markets agent-based models*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 522–529.

[12] Daniel Ashlock and Kenneth Bryden, *Evolutionary control of lsystem interpretation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2273–2279.

[13] Daniel Ashlock, Kenneth Bryden, and Steven Corns, *On taxonomy of evolutionary computation problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1713–1719.

[14] Daniel Ashlock and James Lathrop, *Program induction: Building a wall*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1844–1850.

[15] Daniel Ashlock and Jessica Oftelie, *Simulation of floral specialization in bees*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1859–1864.

[16] Daniel Ashlock and Brad Powers, *The effect of tag recognition on non-local adaptation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2045–2051.

[17] Daniel Ashlock, Stephen Willson, and Nicole Leahy, *Coevolution and tartarus*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1618–1624.

[18] Daniel Ashlock, Eun youn Kim, and Warren von Roeschlaub, *Fingerprints: Enabling visualization and automatic analysis of strategies for two player games*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 381–387.

[19] Antonino Augugliaro, Luigi Dusonchet, Salvatore Favuzza, and Eleonora Riva Sanseverino, *A fuzzy-logic based evolutionary multiobjective approach for automated distribution networks management*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 847–854.

[20] Stuart Bain, John Thornton, and Abdul Sattar, *Evolving algorithms for constraint satisfaction*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 265–272.

[21] Andrei Bajurnow and Vic Ciesielski, *Layered learning for evolving goal scoring behavior in soccer players*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1828–1835.

[22] Oliver Bandte, *Visualizing information in an interactive evolutionary design process*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 691–698.

[23] Thomas Bartz-Beielstein and Sandor Markon, *Tuning search algorithms for real-world applications: A regression tree based approach*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1111–1118.

[24] Yaniv Bernstein, Xiaodong Li, Vic Ciesielski, and Andy Song, *Multiobjective parsimony enforcement for superior generalisation performance*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 83–89.

[25] Stefan Bleuler, Amela Prelic, and Eckart Zitzler, *An ea framework for biclustering of gene expression data*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 166–173.

[26] Joseph Blumenthal and Gary Parker, *Punctuated anytime learning for evolving multi-agent capture strategies*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1820–1827.

[27] Dario Bonino, Fulvio Corno, and Giovanni Squillero, *Dynamic optimization of semantic annotation relevance*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1301–1308.

[28] Anthony Brabazon, Arlindo Silva, Tiago Ferra de Sousa, Michael O'Neill, Robin Matthews, and Ernesto Costa, *Investigating organizational strategic inertia using a particle swarm model*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 652–659.

[29] Juergen Branke, Hartmut Schmeck, Kalyan Deb, and Reddy.S Maheshwar, *Parallelizing multi-objective evolutionary algorithms: Cone separation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1952–1957.

[30] Jon Brewster and Robert G. Reynolds, *Alternative fuel adoption*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2364–2371.

[31] Kenneth Bryden, Daniel Ashlock, and Douglas McCorkle, *An application of graph based evolutionary algorithms for diversity preservation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 419–426.

[32] Adrian Burian and Jarmo Takala, *Evolved gate arrays for image restoration*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1185–1192.

[33] P. Buzing, A. Eiben, M. Schut, and T. Toma, *Cooperation and communication in evolving artificial societies*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2030–2037.

[34] Leticia Cagnina, Susana Esquivel, and Raul Gallard, *Particle swarm optimization for sequencing problems: A case study*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 536–541.

[35] Flor Castillo, Jeff Sweeney, and Wayne Zirk, *Using evolutionary algorithms to suggest variable transformations in linear model lack-of-fit situations*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 556–560.

[36] Uday Chakraborty, *Analysis of encoding in 1+1-ea*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 911–917.

[37] Kit Yan Chan, Emin Aydin, and Terry Fogarty, *An empirical study on the performance of factorial design based crossover on parametrical problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 620–627.

[38] ———, *Parameterisation of mutation in evolutionary algorithms using the estimated main effect of genes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1972–1979.

[39] Ming Chang, Kazuhiro Ohkura, Kanji Ueda, and Masaharu Sugiyama, *Modeling coevolutionary genetic algorithms on two-bit landscapes: Partnering strategies*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2349–2356.

[40] Anthony Chen, Piya Chootinan, and Surachet Pravinvongvuth, *An evolutionary approach for finding optimal automatic vehicle identification reader locations in transportation networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 181–187.

[41] Hua Chen and Deng guo Feng, *An effective evolutionary strategy for bijective s-boxes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2120–2123.

[42] Jun Chen and Mark Wineberg, *Enhancement of the shifting balance genetic algorithm for highly multimodal problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 744–751.

[43] Cheng-Hsiung Chiang and Liang-Hsuan Chen, *A new cellular automaton: Five elements balance chart and its application to forest industry ecosystem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1901–1908.

[44] Sung-Bae Cho and Chanho Park, *Speciated ga for optimal ensemble classifiers in dna microarray classification*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 590–597.

[45] Siang Yew Chong and Xin Yao, *The impact of noise on iterated prisoner's dilemma with multiple levels of cooperation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 348–355.

[46] Rick Chow, *Effects of phenotypic feedback and the coupling of genotypic and phenotypic spaces in genetic searches*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 242–249.

[47] Huang Chung-Yuan and Sun Chuen-Tsai, *Self-adaptive routing based on learning classifier systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 678–682.

[48] Vic Ciesielski and Xiang Li, *Experiments with explicit for-loops in genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 494–501.

[49] John A. Clark, Jeremy L. Jacob, and Susan Stepney, *The design of s-boxes by simulated annealing*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1533–1537.

[50] _____, *Searching for cost functions*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1517–1524.

[51] Rajan Filomeno Coelho and Philippe Bouillard, *Pamuc ii for multicriteria optimization of mechanical designs with expert rules*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 17–22.

[52] David Cohen, *Ea-lect: An evolutionary algorithm for constructing logical rules to predict election into cooperstown*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1354–1361.

[53] _____, *Using sat scores as predictors for future academic success*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 671–677.

[54] Nicholas Cole, Sushil Louis, and Chris Miles, *Using a genetic algorithm to tune first-person shooter bots*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 139–145.

[55] David Corne and Carey Pridgeon, *Investigating issues in the reconstructability of genetic regulatory networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 582–589.

[56] Fulvio Corno, Ernesto Sanchez, and Giovanni Squillero, *On the evolution of corewar warriors*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 133–138.

[57] Alfredo Cruz, *A hybrid deterministic/genetic test generator to improve fault*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1325–1330.

[58] Zhihua Cui, Jianchao Zeng, and Xingjuan Cai, *A new stochastic particle swarm optimizer*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 316–319.

[59] Dara Curran and Colm O'Riordan, *The effect of noise on the performance of cultural evolution in multi-agent systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1767–1773.

[60] Andrew Czarn, Cara MacNish, Kaipillil Vijayan, and Berwin Turlach, *Statistical exploratory analysis of genetic algorithms: The importance of interaction*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2288–2295.

[61] Keshav P. Dahal, Tomasz A. Siewierski, Stuart J. Galloway, Graeme M. Burt, and Jim R. McDonald, *An evolutionary generation scheduling in an open electricity market*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1135–1142.

[62] Jason Daida, Michael Samples, Bryan Hart, Jeffry Halim, and Aditya Kumar, *Demonstrating constraints to diversity with a tunably difficulty problem for genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1217–1224.

[63] Jason Daida, David Ward, Adam Hilss, Stephen Long, and Mark Hodges, *Visualizing the loss of diversity in genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1225–1232.

[64] Yoginder Dandass, *Genetic list scheduling for soft real-time parallel applications*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1164–1171.

[65] Moayed Daneshyari and Gary Yen, *Talent based social algorithm for optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 786–791.

[66] Mohammed Daoud, Nawwaf Kharma, Ali Haidar, and Julius Popoola, *Ayo, the awari player, or how better representation trumps deeper search*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1001–1006.

[67] Richard Day, Mark Kleeman, and Gary Lamont, *Multi-objective fast messy genetic algorithm solving deception problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1502–1509.

[68] Richard Day and Gary Lamont, *Force field approximations using artificial neural networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1020–1027.

[69] Hugo de Garis and Thayne Batty, *"multi-mod": A pc based software system for handling the interconnectivity and neural signaling of an artificial brain containing 10,000 evolved neural net modules*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 816–819.

[70] ———, *Robust, reversible, nano-scale, femto-second-switching circuits and their evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 639–645.

[71] Edwin De Jong, *Towards a bounded pareto-coevolution archive*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2341–2348.

[72] Jesus Manuel de la Cruz-Garcia, Jose Luis Risco-Martin, Alberto Herran-Gonzalez, and Pablo Fernandez-Blanco, *Hybrid heuristic and mathematical programming in oil pipelines networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1479–1486.

[73] Fabricio de Paula, Leandro de Castro, and Paulo de Geus, *An intrusion detection system using ideas from the immune system*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1059–1066.

[74] Maria De San Pedro, Daniel Pandolfi, Andrea Villagra, Marta Lasso, and Raul Gallard, *Effect of crossover operators under multirecombination: Weighted tardiness, a test case*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 699–705.

[75] Orhan Dengiz, Gerry V. Dozier, and Alice E. Smith, *Non-deterministic decoding with memory to enhance precision in binary-coded genetic algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2166–2172.

[76] Joerg Denzinger, Ben Chan, Darryl Gates, Kevin Loose, and John Buchanan, *Evolutionary behavior testing of commercial computer games*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 125–132.

[77] Alain Deschenes and Kay C. Wiese, *Using stacking-energies (inn and inn-hb) for improving the accuracy of rna secondary structure prediction with an evolutionary algorithm - a comparison to known structures*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 598–606.

[78] Dwight Deugo and Darrell Ferguson, *Evolution to the xtreme: Evolving evolutionary strategies using a meta-level approach*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 31–38.

[79] Deepak Devicharan and Chilukuri Mohan, *Particle swarm optimization with adaptive linkage learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 530–535.

[80] Anthony Di Pietro, Lyndon While, and Luigi Barone, *Applying evolutionary algorithms to problems with noisy, time-consuming fitness functions*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1254–1261.

[81] Christos Dimopoulos, *A review of evolutionary multiobjective optimization applications in the area of production research*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1487–1494.

[82] Shengchao Ding, Juan Liu, Chanle Wu, and Qing Yang, *A genetic algorithm applied to optimal gene subset selection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1654–1660.

[83] Sheetal Doctor, Ganesh Venayagamoorthy, and Venu Gudise, *Optimal pso for collective robotic search applications*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1390–1395.

[84] Nathan Dorris, Brian Carnahan, Luke Orsini, and Lois-Ann Kuntz, *Interactive evolutionary design of anthropomorphic symbols*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 433–440.

[85] Bernabe Dorronsoro, Enrique Alba, Mario Giacobini, and Marco Tomassini, *The influence of grid shape and asynchronicity on cellular evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2152–2158.

[86] David Doty, *Non-local evolutionary adaptation in gridplants*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1602–1609.

[87] Gerry V. Dozier, *Recurrent distributed constraint satisfaction via genetic and evolutionary societies of hill-climbers*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 273–279.

[88] Gerry V. Dozier, Douglas Brown, John Hurley, and Krystal Cain, *Vulnerability analysis of ais-based intrusion detection systems via genetic and particle swarm red teams*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 111–116.

[89] Ambedkar Dukkipati, Narsimha Murty Musti, and Shalabh Bhatnagar, *Cauchy annealing schedule: An annealing schedule for boltzmann selection scheme in evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 55–62.

[90] Enrique Dunn, Gustavo Olague, Evelyne Lutton, and Marc Schoenauer, *Pareto optimal sensing strategies for an active vision system*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 457–463.

[91] Eugene Eberbach and Andrew Eberbach, *On designing co$t: A new approach and programming environment for distributed problem solving based on evolutionary computation and anytime algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1836–1843.

[92] Toru Eguchi, Kotaro Hirasawa, Jinglu Hu, and Sandor Markon, *Elevator group supervisory control systems using genetic network programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1661–1667.

[93] Gilles Enee and Cathy Escazut, *Evolution of communication in a genetic based multi-agent system: Use wise resources*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2038–2044.

[94] Thomas English, *No more lunch: Analysis of sequential search*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 227–234.

[95] Roger Eriksson and Bjorn Olsson, *On the performance of evolutionary algorithms with life-time adaptation in dynamic fitness landscapes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1293–1300.

[96] Brent Eskridge and Dean Hougen, *Imitating success: A memetic crossover operator for genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 809–815.

[97] Susana Esquivel, Marcos Garcia, Guillermo Leguizamon, and Maximiliano Ribba, *A comparison of two mutation operators for the path planning problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 879–883.

[98] Shinji Eto, Kotaro Hirasawa, and Jinglu Hu, *Functional localization of genetic network programming and its application to a pursuit problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 683–690.

[99] Zhun Fan, Erik Goodman, Wang Jiachuan, Rosenberg Ronald, Seo Kisung, and Hu Jianjun, *Hierarchical evolutionary synthesis of mems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2320–2327.

[100] Marco Farina and Massimiliano Gobbi, *A fuzzy-optima definition based multiobjective optimization of a racing car tyre-suspension system*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 9–16.

[101] Elsa Fernandez, Manuel Grana, and Jesus Ruiz-Cabello, *An instantaneous memetic algorithm for illumination correction*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1105–1110.

[102] Tiago Ferreira, Germano Vasconcelos, and Paulo Adeodato, *A hybrid intelligent system approach for improving the prediction of real world time series*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 736–743.

[103] Bogdan Filipic and Tea Robic, *A comparative study of coolant flow optimization on a steel casting machine*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 569–573.

[104] Jeffrey Fletcher and Martin Zwick, *Hamilton's rule applied to reciprocal altruism*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 994–1000.

[105] David B. Fogel, *Evolving strategies in blackjack*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1427–1434.

[106] David B. Fogel, Timothy Hays, and Douglas Johnson, *A platform for evolving characters in competitive games*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1420–1426.

[107] Gary B. Fogel, Dana G. Weekes, Rangarajan Sampath, and David J. Ecker, *Parameter optimization of an evolutionary algorithm for rna structure discovery*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 607–613.

[108] Nelis Franken and Andries Engelbrecht, *Pso approaches to co-evolve ipd strategies*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 356–363.

[109] Joanne Fuller, William Millan, and Ed Dawson, *Multi-objective optimisation of bijective s-boxes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1525–1532.

[110] Pablo Funes, Eric Bonabeau, Jerome Herve, and Yves Morieux, *Interactive multi-participant task allocation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1699–1705.

[111] Wei Gao, *Fast immunized evolutionary programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 666–670.

[112] Simon Garrett, *Parameter-free, adaptive clonal selection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1052–1058.

[113] Michel Goldstein and Gary Yen, *An evolutionary algorithm method for sampling n-partite graphs*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2250–2257.

[114] Jonatan Gomez, *Evolution of fuzzy rule based classifiers*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1727–1734.

[115] ———, *Self adaptation of operator rates in evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1720–1726.

[116] Luis Gonzalez and James Cannady, *A self-adaptive negative selection approach for anomaly detection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1561–1568.

[117] Scott Gordon and Zach Matley, *Evolving sparse direction maps for maze pathfinding*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 835–838.

[118] Scott Gordon and Terrill Slocum, *The knight's tour - evolutionary vs. depth-first search*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1435–1440.

[119] Garrison Greenwood, *Differing mathematical perspectives of genotype space in combinatorial problems: Metric spaces vs pretopological spaces*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 258–264.

[120] Crina Grosan, *Improving the performance of evolutionary algorithms for the multiobjective 0/1 knapsack problem using epsilon -dominance*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1958–1963.

[121] Zigang Guo and K.L. Mak, *A heuristic ga for the stochastic vehicle routing problems with soft time windows*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1449–1456.

[122] Celia Gutierrez, *Heuristics in a general scheduling problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 660–665.

[123] Sami Habib and Alice Parker, *Synthesizing complex multimedia network topologies using an evolutionary approach*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1193–1200.

[124] Janna Hamaker and Lois Boggess, *Non-euclidean distance measures in airs, an artificial immune classification system*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1067–1073.

[125] Simon Harding and Julian Miller, *Evolution in materio : A tone discriminator in liquid crystal*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1800–1807.

[126] Pitoyo Hartono, Shuji Hashimoto, and Mattias Wahde, *Labeled-ga with adaptive mutation rate*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1851–1858.

[127] Toshiharu Hatanaka, Yoshio Kawaguchi, and Katsuji Uosaki, *Nonlinear system identification based on evolutionary fuzzy modeling*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 646–651.

[128] Subhas Hati and Somanth Sengupta, *A ga-based integrated approach to model-assisted matching and pose estimation for automated visual inspection applications*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1346–1353.

[129] Serge Hayward, *Setting up performance surface of an artificial neural network with genetic algorithm optimization: in search of an accurate and profitable prediction for stock trading*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 948–954.

[130] Jun He, Xin Yao, and Qingfu Zhang, *To understand one-dimensional continuous fitness landscapes by drift analysis*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1248–1253.

[131] German Hernandez, Dipankar Dasgupta, Fernando Nino, and Julian Garcia, *On geometric and statistical properties of the attractors of a generic evolutionary algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1240–1247.

[132] Julio Cesar Hernandez and Pedro Isasi, *New results on the genetic cryptanalysis of tea and reduced-round versions of xtea*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2124–2129.

[133] Julio Cesar Hernandez, Pedro Isasi, and Andre Seznec, *On the design of state-of-the-art pseudorandom number generators by means of genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1510–1516.

[134] Arturo Hernandez-Aguirre, Salvador Botello-Rionda, and Carlos Coello-Coello, *Passss: An implementation of a novel diversity strategy for handling constraints*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 403–410.

[135] Arturo Hernandez-Aguirre and Carlos Coello-Coello, *Mutual information-based fitness functions for evolutionary circuit synthesis*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1309–1316.

[136] Philip Hingston and Graham Kendall, *Learning versus evolution in iterated prisoner's dilemma*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 364–372.

[137] Nhu Binh Ho and Joc Cing Tay, *Genace: An efficient cultural algorithm to solve the flexible job-shop problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1759–1766.

[138] Jin-Hyuk Hong and Sung-Bae Cho, *Evolution of emergent behaviors for shooting game characters in robocode*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 634–638.

[139] Peter Eggenberger Hotz, *Asymmetric cell division in artificial evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2180–2186.

[140] ———, *Comparing direct and developmental encoding schemes in artificial evolution: A case study in evolving lens shapes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 752–757.

[141] Haiyu Hou and Gerry V. Dozier, *Comparing performance of binary-coded and constraint-based detectors*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 772–777.

[142] Jianjun Hu and Erik Goodman, *Wireless access point configuration by genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1178–1184.

[143] Xiaohui Hu, Yuhui Shi, and Russell Eberhart, *Recent advances in particle swarm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 90–97.

[144] Evan Hughes, *Swarm guidance using a multi-objective co-evolutionary on-line evolutionary algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2357–2363.

[145] David Hunter, *Some lessons learned on constructing an automated testbench for evolvable hardware experiments*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1808–1812.

[146] Yutaka Inoue, Takahiro Tohge, and Hitoshi Iba, *Object transportation by two humanoid robots using cooperative learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1201–1208.

[147] Mariano Ippolito, Eleonora Riva Sanseverino, and Ferruccio Vuinovich, *Multiobjective ant colony search algorithm for optimal electrical distribution system strategical planning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1924–1931.

[148] Jason Isaacs and Simon Foo, *Optimized wavelet hand pose estimation for american sign language recognition*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 797–802.

[149] Hisao Ishibuchi and Kaname Narukawa, *Performance evaluation of simple multiobjective genetic local search algorithms on multiobjective 0/1 knapsack problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 441–448.

[150] Jun-Su Jang, Kuk-Hyun Han, and Jong-Hwan Kim, *Face detection using quantum-inspired evolutionary algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2100–2106.

[151] Zhaowang Ji, Anthony Chen, and Kitti Subprasom, *Finding multi-objective paths in stochastic networks: A simulation-based genetic algorithm approach*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 174–180.

[152] Zhou Ji and Dipankar Dasgupta, *Augmented negative selection algorithm with variable-coverage detectors*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1081–1088.

[153] Yaochu Jin, Tatsuya Okabe, and Bernhard Sendhoff, *Neural network regularization and ensembling using multi-objective evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1–8.

[154] Rodney Johnson, Michael Melich, Zbigniew Michalewicz, and Martin Schmidt, *Coevolutionary tempo game*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1610–1617.

[155] Philip Jones, Ashutosh Tiwari, Rajkumar Roy, and John Corbett, *Optimisation of the high efficiency deep grinding process with fuzzy fitness function and constraints*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 574–581.

[156] Shotaro Kamio and Hitoshi Iba, *Evolutionary construction of a simulator for real robots*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2202–2209.

[157] Lishan Kang, Aimin Zhou, Robert I. McKay, Yan Li, and Zhuo Kang, *Benchmarking algorithms for dynamic travelling salesman problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1286–1292.

[158] Yoshiaki Katada, Kazuhiro Ohkura, and Kanji Ueda, *The nei's standard genetic distance in artificial evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1233–1239.

[159] Santhoji Katare, Alex Kalos, and David West, *A hybrid swarm optimizer for efficient parameter estimation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 309–315.

[160] Yuji Katsumata and Takao Terano, *Cabling and scheduling for electric power plant operation via tabu-boa algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1675–1682.

[161] Graham Kendall and Kristian Spoerer, *Scripting the game of lemmings with a genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 117–124.

[162] Graham Kendall, Razali Yaakob, and Philip Hingston, *An investigation of an evolutionary approach to the opening of go*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2052–2059.

[163] James Kennedy, *Probability and dynamics in the particle swarm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 340–347.

[164] David Kephart and Jeff Lefevre, *Codegen: The generation and testing of dna code words*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1865–1873.

[165] Mohammed Khabzaoui, Clarisse Dhaenens, and El-Ghazali Talbi, *A multicriteria genetic algorithm to analyze dna microarray data*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1874–1881.

[166] Mozammel H.A. Khan and Marek A Perkowski, *Genetic algorithm based synthesis of multi-output ternary functions using quantum cascade of generalized ternary gates*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2194–2201.

[167] Rafal Kicinger, Tomasz Arciszewski, and Kenneth De Jong, *Morphogenesis and structural design: Cellular automata representations of steel structures in tall buildings*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 411–418.

[168] Steven Kimbrough, Ming Lu, and Soofi Safavi, *Exploring a financial product model with a two-population genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 855–862.

[169] Chi kin Chow and Hung tat Tsui, *Autonomous agent response learning by a multi-species particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 778–785.

[170] Mark Kleeman, Richard Day, and Gary Lamont, *Multi-objective evolutionary search performance with explicit building-block sizes for npc problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 728–735.

[171] Yoko Kobayashi and Eitaro Aiyoshi, *Optimization algorithm using multi-agents and reinforcement learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 63–68.

[172] Ziad Kobti, Robert G. Reynolds, and Tim Kohler, *The effect of kinship cooperation learning strategy and culture on the resilience of social systems in the village multi-agent simulation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1743–1750.

[173] Praveen Koduru, Sanjoy Das, Stephen Welch, and Judith L. Roe, *A multi-objective ga-simplex hybrid approach for gene regulatory network models*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2084–2091.

[174] Mario Koeppen, *No-free-lunch theorems and the diversity of algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 235–241.

[175] Jerzy J. Korczak and Piotr Lipinski, *Evolutionary building of stock trading experts in a real-time system*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 940–947.

[176] Arthur Kordon and Ching-Tai Lue, *Symbolic regression modeling of blown film process effects*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 561–568.

[177] Manabu Kotani and Daisuke Kato, *Feature extraction using coevolutionary genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 614–619.

[178] Thiemo Krink, Bogdan Filipic, Gary B. Fogel, and Rene Thomsen, *Noisy optimization problems - a particular challenge for differential evolution?*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 332–339.

[179] Renato A. Krohling, Frank Hoffmann, and Leandro dos Santos Coelho, *Co-evolutionary particle swarm optimization for min-max problems using gaussian distribution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 959–964.

[180] Dean Krusienski and W. Kenneth Jenkins, *Particle swarm optimization for adaptive iir filter structures*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 965–970.

[181] Gary Lamont, Mark Esslinger, Robert Ewing, and Hoda Abdel-Aty-Zohdy, *An artificial immune system strategy for robust chemical spectra classification via distributed heterogeneous sensors*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1036–1043.

[182] Marta Lasso, Daniel Pandolfi, Maria De San Pedro, Andrea Villagra, and Raul Gallard, *Solving dynamic tardiness problems in single machine environments*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1143–1149.

[183] Greg Lee, Vadim Bulitko, and Ilya Levner, *Automated selection of vision operator libraries with evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1127–1134.

[184] Shane Legg, Marcus Hutter, and Akshat Kumar, *Tournament versus fitness uniform selection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2144–2151.

[185] Elizabeth Leon, Olfa Nasraoui, and Jonatan Gomez, *Anomaly detection based on unsupervised niche clustering with application to network intrusion detection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 502–508.

[186] Peter Lichodzijewski, Nur Zincir-Heywood, and Malcolm Heywood, *Cascaded gp models for data mining*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2258–2264.

[187] Hongwei Liu and Hitoshi Iba, *A hierarchical approach for adaptive humanoid robot control*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1546–1553.

[188] Yu Liu, Zheng Qin, and Xingshi He, *Supervisor-student model in particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 542–547.

[189] Simon Lucas, *Cellz: A simple dynamic game for testing evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1007–1014.

[190] Philippe Lucidarme, *An evolutionary algorithm for multi-robot unsupervised learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2210–2215.

[191] Sergey Malinchik, Belinda Orme, Joseph Rothermich, and Eric Bonabeau, *Interactive exploratory data analysis*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1098–1104.

[192] Alexandra Mark, Bernhard Sendhoff, and Heiko Wersing, *A decision making framework for game playing using evolutionary optimization and learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 373–380.

[193] Shivanajay Marwaha, Dipti Srinivasan, Chen Khong Tham, and Athanasios Vasilakos, *Evolutionary fuzzy multi-objective routing for wireless mobile ad hoc networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1964–1971.

[194] Emilio Miguelanez, Ali Zalzala, and Paul Tabor, *Evolving neural networks using swarm intelligence for binmap classification*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 978–985.

[195] Chris Miles, Sushil Louis, Nicholas Cole, and John McDonnell, *Learning to play like a human: Case injected genetic algorithms for strategic computer gaming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1441–1448.

[196] Damon Miller, Rodrigo Arguello, and Garrison Greenwood, *Evolving artificial neural network structures: Experimental results for biologically-inspired adaptive mutations*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2114–2119.

[197] Arvind Mohais, Christopher Ward, and Christian Posthoff, *Randomized directed neighborhoods with edge migration in particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 548–555.

[198] Sanaz Mostaghim, Michael Hoffmann, Peter H. Koenig, Thomas Frauenheim, and Juergen Teich, *Molecular force field parametrization using multi-objective evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 212–219.

[199] Sanaz Mostaghim and Juergen Teich, *Covering pareto-optimal fronts by subswarms in multi-objective particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1404–1411.

[200] Christine Mumford, *A hierarchical evolutionary approach to multi-objective optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1944–1951.

[201] Yuichi Nagata, *Criteria for designing crossovers for tsp*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1465–1472.

[202] Hiroshi Nakagoe, Kotaro Hirasawa, and Jinglu Hu, *Genetic network programming with automatically generated variable size macro nodes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 713–719.

[203] Morikazu Nakamura, Naruhiko Yamashiro, and Yiyuan Gong, *Iterative parallel and distributed genetic algorithms with biased initial population*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2296–2301.

[204] Mark Neal and Frederic Labrosse, *Rotation-invariant appearance based maps for robot navigation using an artificial immune network algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 863–870.

[205] Nadia Nedjah and Luiza Mourelle, *Secure evolutionary hardware for public-key cryptosystems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2130–2137.

[206] Andrew Neel, Max Garzon, and Phani Penumetsa, *Soundness and quality of semantic retrieval in dna-based memories with abiotic data*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1889–1895.

[207] Frank Neumann, *Expected runtimes of evolutionary algorithms for the eulerian cycle problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 904–910.

[208] Xuan Hoai Nguyen and McKay Robert Ian, *An investigation on the roles of insertion and deletion operators in tree adjoining grammar guided genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 472–477.

[209] Giuseppe Nicosia, Vincenzo Cutello, and Mario Pavone, *An immune algorithm with hyper-macromutations for the 2d hydrophilic-hydrophobic model*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1074–1080.

[210] Yusuke Nojima, Naoyuki Kubota, and Fumio Kojima, *Trajectory generation and accumulation for partner robots based on structured learning*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2224–2229.

[211] Nasimul Noman, Kouichi Okada, Naoki Hosoyama, and Hitoshi Iba, *Use of clustering to improve the layout of gene network for visualization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2068–2075.

[212] Maryam Nuser and Russell Deaton, *A probabilistic analysis of in vitro selection of independent dna words for computation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1882–1888.

[213] Choong Oh and Gregory Barlow, *Autonomous controller design for unmanned aerial vehicles using multi-objective genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1538–1545.

[214] Jae Oh and Dimitri Volper, *Design of rationality-based computing middleware: A preliminary study*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 839–846.

[215] Tatsuya Okabe, Yaochu Jin, Bernhard Sendhoff, and Markus Olhofer, *Voronoi-based estimation of distribution algorithm for multi-objective optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1594–1601.

[216] Mihai Oltean, *Solving even-parity problems using traceless genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1813–1819.

[217] Michael O'Neill, Anthony Brabazon, and Catherine Adley, *The automatic generation of programs for classification problems with grammatical swarm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 104–110.

[218] Isao Ono, Yoshiaki Seike, Ryohei Morishita, Norihiko Ono, and Masahiko Matsui, *An evolutionary algorithm taking account of mutual interactions among substances for inference of genetic networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2060–2067.

[219] Colm O'Riordan, Josephine Griffith, John Newell, and Humphrey Sorensen, *Co-evolution of strategies for an n-player dilemma*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1625–1630.

[220] Pavel Osmera, *Evolvable controllers with hierarchical structure*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 758–765.

[221] David Ostrowski and Robert G. Reynolds, *Using cultural algorithms to evolve strategies for recessionary markets*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1780–1785.

[222] Robert Ouellette, Matthew Browne, and Kotaro Hirasawa, *Genetic algorithm optimization of a convolutional neural network for autonomous crack detection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 516–521.

[223] Ender Ozcan and Esin Onbasioglu, *Genetic algorithms for parallel code optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1375–1381.

[224] Gary Parker, *Partial recombination for the co-evolution of model parameters*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2216–2223.

[225] Gary Parker and Joseph Blumenthal, *Varying sample sizes for the co-evolution of heterogeneous agents*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 766–771.

[226] Ian Parmee and Johnson Abraham, *Supporting implicit learning via the visualisation of coga multi-objective data*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 395–402.

[227] Daniel Parrott and Xiaodong Li, *A particle swarm model for tracking multiple peaks in a dynamic environment using speciation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 98–103.

[228] Konstantinos Parsopoulos, Dimitris Tasoulis, Nicos Pavlidis, Vassilis Plagianakos, and Michael Vrahatis, *Vector evaluated differential evolution for multiobjective optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 204–211.

[229] Sandra Paterlini and Thiemo Krink, *High performance clustering with differential evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2004–2011.

[230] Topon Paul and Hitoshi Iba, *Selection of the most useful subset of genes for gene expression-based classification*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2076–2083.

[231] Bin Peng and Robert G. Reynolds, *Cultural algorithms: Knowledge learning in dynamic environments*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1751–1758.

[232] Jeffrey Pfaffmann, Konstantinos Bousmalis, and Silvano Colombano, *A scouting-inspired evolutionary algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1706–1712.

[233] Wojciech Piaseczny, Hideaki Suzuki, and Hidefumi Sawai, *Chemical genetic programming - evolution of amino acid rewriting rules used for genotype-phenotype translation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1639–1646.

[234] Ying ping Chen and David Goldberg, *Convergence time for the linkage learning genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 39–46.

[235] Asad Pirzada, Amitava Datta, and Chris McDonald, *Trusted routing in ad-hoc networks using pheromone trails*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1938–1943.

[236] Gregorio Toscano Pulido and Carlos Coello-Coello, *A constraint-handling mechanism for particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1396–1403.

[237] Marcus Randall, *Heuristics for ant colony optimisation using the generalised assignment problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1916–1923.

[238] Tapabrata Ray, Neelakantam Venkatarayalu, Kok Sung Won, and Kian Ping Chan, *Study on the behaviour and implementation of parent centric crossover within the generalized generation gap model*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1996–2003.

[239] Peter Ross, Javier G. Marin-Blazquez, and Emma Hart, *Hyper-heuristics applied to class and exam timetabling problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1691–1698.

[240] Jem Rowland, *On genetic programming and knowledge discovery in transcriptome data*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 158–165.

[241] Baskar S., A. Alphones, and Ponnuthurai Nagaratnam Suganthan, *Concurrent pso and fdr-pso based reconfigurable phase-differentiated antenna array design*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2173–2179.

[242] Baskar S. and Ponnuthurai Nagaratnam Suganthan, *A novel concurrent particle swarm optimization (cpso)*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 792–796.

[243] Sadiq M. Sait and Muhammad Al-Ismail, *Enhanced simulated evolution algorithm for digital circuit design yielding faster execution in a larger solution space*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1794–1799.

[244] Ralf Salomon, *The curse of high-dimensional search spaces: Observing premature convergence in unimodal functions*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 918–923.

[245] _____, *The force model: Concept, behavior, interpretation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1119–1126.

[246] Ernesto Sanchez, Giovanni Squillero, and Massimo Violante, *A local analysis of the genotype-fitness mapping in hardware optimization problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 871–878.

[247] Javier J. Sanchez, Manuel Galan, and Enrique Rubio, *Genetic algorithms and cellular automata: A new architecture for traffic light cycles optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1668–1674.

[248] Erinaldo Santos and Takaaki Ohishi, *A hydro unit commitment model using genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1368–1374.

[249] Bambang Sarif, Mostafa Abd-El-Barr, Sadiq M. Sait, and Uthman Al-Saiari, *Fuzzified ant colony optimization algorithm for efficient combinational circuits*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1317–1324.

[250] Kumara Sastry, Martin Pelikan, and David Goldberg, *Efficiency enhancement of genetic algorithms via building-block-wise fitness estimation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 720–727.

[251] Hiroyuki Sato, Hernan Aguirre, and Kiyoshi Tanaka, *Local dominance using polar coordinates to enhance multiobjective evolutionary algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 188–195.

[252] Lutz Schoenemann, *The impact of population sizes and diversity on the adaptability of evolution strategies in dynamic environments*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1270–1277.

[253] Justin Schonfeld and Daniel Ashlock, *Comparison of robustness of solutions located by evolutionary computation and other search algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 250–257.

[254] Kamran Sedighi, Kaveh Ashenayi, Theodore Manikas, Heng-Ming Tai, and Roger Wainwright, *Autonomous local path-planning for a mobile robot using a genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1338–1345.

[255] Daekwan Seo, Moritoshi Yasunaga, and Jung Hwan Kim, *A computatioal approach to detect transcritpion regulatory elements in dictyostelium discoideum*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1647–1653.

[256] Marcin Seredynski and Pascal Bouvry, *Block cipher based on reversible cellular automata*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2138–2143.

[257] Yin Shan, Robert I. McKay, Rohan Baxter, Hussein Abbass, Daryl Essam, and Hoai Nguyen, *Grammar model-based program evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 478–485.

[258] Weiguo Sheng and Xiaohui Liu, *A hybrid algorithm for k-medoid clustering of large data sets*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 77–82.

[259] Yang Shuyuan, Wang Min, and Jiao Licheng, *A novel quantum evolutionary algorithm and its application*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 820–826.

[260] ———, *A quantum particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 320–324.

[261] P. A. Simionescu, D. G. Beale, and Gerry V. Dozier, *Constrained optimization problem solving using estimation of distribution algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 296–302.

[262] Burak Simsek, Sahin Albayrak, and Alexander Korth, *Reinforcement learning for procurement agents of the factory of the future*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1331–1337.

[263] Mark Sinka and David Corne, *Evolving document features for web document clustering: A feasability study*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 891–897.

[264] Wayne Slade, Habtom Ressom, Mohamad Musavi, and Richard Miller, *Ocean color inversion by particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 971–977.

[265] Kevin Smith, Richard Everson, and Jonathan Fieldsend, *Dominance measures for multi-objective simulated annealing*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 23–30.

[266] Andy Song and Vic Ciesielski, *Texture analysis by genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2092–2099.

[267] Nora Speer, Christian Spieth, and Andreas Zell, *A memetic co-clustering algorithm for gene expression profiles and biological annotation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1631–1638.

[268] Christian Spieth, Felix Streichert, Nora Speer, and Andreas Zell, *A memetic inference method for gene regulatory networks based on s-systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 152–157.

[269] _____, *Utilizing an island model for ea to preserve solution diversity for inferring gene regulatory networks*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 146–151.

[270] Stephen Stanhope, *Evolution strategies for multivariate-to-anything partially specified random vector generation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2235–2240.

[271] Craig Stephan and John Sullivan, *An agent-based hydrogen vehicle/infrastructure model*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1774–1779.

[272] Adrian Stoica, Tughrul Arslan, Didier Keymeulen, Vu Duong, Ricardo Zebulum, Xin Guo, Ian Ferguson, and Taher Daud, *Evolutionary recovery of electronic circuits from radiation induced faults*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1786–1793.

[273] Felix Streichert, Holger Ulmer, and Andreas Zell, *Evaluating a hybrid encoding and three crossover operators on the constrained portfolio selection problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 932–939.

[274] Jun Sun, Bin Feng, Wenbo Xu, Jing Liu, and Ling Bao, *Particle swarm optimization with particles having quantum behavior*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 325–331.

[275] Xiaolu Sun and Winfried Just, *Evolution of strategies in modified sequential assessment games*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 388–394.

[276] Sunil Suram, Kenneth Bryden, and Daniel Ashlock, *Quantitative trait loci based solution of an inverse radiation heat transfer problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 427–432.

[277] Osamu Takahashi and Shigenobu Kobayashi, *An angular distance dependent alternation model for real-coded genetic algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2159–2165.

[278] Mieko Tanaka-Yamawaki and Tomohiro Motoyama, *Predicting the tick-wise price fluctuations by means of evolutional computation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 955–958.

[279] Ivan Tanev, Thomas Ray, and Andrzej Buller, *Evolutionary design, robustness and adaptation of sidewinding locomotion of simulated libmless wheelless robot*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2312–2319.

[280] Ke Tang, Ponnuthurai Nagaratnam Suganthan, and Xin Yao, *Generalized lda using relevance weighting and evolution strategy*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2230–2234.

[281] M. Fatih Tasgetiren, Mehmet Sevkli, Yun-Chia Liang, and Gunes Gencyilmaz, *Particle swarm optimization algorithm for single machine total weighted tardiness problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1412–1419.

[282] Dimitris Tasoulis, Nicos Pavlidis, Vassilis Plagianakos, and Michael Vrahatis, *Parallel differential evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2023–2029.

[283] Jorge Tavares, Francisco Pereira, and Ernesto Costa, *Understanding the role of insertion and correction in the evolution of golomb rulers*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 69–76.

[284] Ankur Teredesai and Venu Govindaraju, *Issues in evolving gp based classifiers for a pattern recognition task*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 509–515.

[285] Rene Thomsen, *Multimodal optimization using crowding-based differential evolution*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1382–1389.

[286] Jonathan Timmis, Camilla Edmonds, and Johnny Kelsey, *Assessing the performance of two immune inspired algorithms and a hybrid genetic algorithm for function optimisation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1044–1051.

[287] Renato Tinos and Andre Carvalho, *A genetic algorithm with gene dependent mutation probability for non-stationary optimization problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1278–1285.

[288] Marco Tomassini, Leonardo Vanneschi, Jerome Cuendet, and Francisco Fernandez, *A new technique for dynamic size populations in genetic programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 486–493.

[289] Shisanu Tongchim and Xin Yao, *Parallel evolutionary programming*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1362–1367.

[290] Andre Treptow and Andreas Zell, *Combining adaboost learning and evolutionary search to select features for real-time object detection*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2107–2113.

[291] Shigeyoshi Tsutsui and Gordon Wilson, *Solving capacitated vehicle routing problems using edge histogram based sampling algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1150–1157.

[292] Alexander Tulai and Franz Oppacher, *Maintaining diversity and increasing the accuracy of classification rules through automatic speciation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2241–2249.

[293] Holger Ulmer, Felix Streichert, and Andreas Zell, *Evolution strategies with controlled model assistance*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1569–1576.

[294] Katsuji Uosaki, Yuuya Kimura, and Toshiharu Hatanaka, *Evolution strategies based particle filters for state and parameter estimation of nonlinear models*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 884–890.

[295] A. Sima Uyar and H. Turgut Uyar, *An event-driven test framework for evolutionary algorithms in dynamic environments*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2265–2272.

[296] Sangameswar Venkatraman and Gary Yen, *A simple elitist genetic algorithm for constrained optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 288–295.

[297] Sebastien Verel, Philippe Collard, and Manuel Clergue, *Scuba search: when selection meets innovation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 924–931.

[298] Jakob Vesterstroem and Rene Thomsen, *A comparative study of differential evolution, particle swarm optimization, and evolutionary algorithms on numerical benchmark problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1980–1987.

[299] Saranyan Vigraham and John Gallagher, *On the relative efficacies of space saving *cgas for evolvable hardware applications*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2187–2193.

[300] Reginald L. Walker, *Honeybee search strategies: Adaptive exploration of an information ecosystem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1209–1216.

[301] Paul Walsh and Pio Fenton, *A high-throughput computing environment for job shop scheduling genetic algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1554–1560.

[302] Isamu Watanabe and Makoto Nodu, *A genetic algorithm for optimizing switching sequence of service restoration in distribution systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1683–1690.

[303] Jyh-Da Wei and Der-Tsai Lee, *A new approach to the traveling salesman problem using genetic algorithms with priority encoding*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1457–1464.

[304] Benjamin Weinberg and El-Ghazali Talbi, *Nfl theorem is unusable on structured classes of problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 220–226.

[305] Christopher White and Gary Yen, *A hybrid evolutionary algorithm for traveling salesman problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1473–1478.

[306] Kok Sung Won and Tapabrata Ray, *Performance of kriging and cokriging based surrogate models within the unified framework for surrogate assisted optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1577–1585.

[307] Tony Wong, Pascal Cote, and Robert Sabourin, *A hybrid moea for the capacitated exam proximity problem*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1495–1501.

[308] David Wood and Junghuei Chen, *Fredkin gate circuits via recombination enzymes*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1896–1900.

[309] Zhijian Wu, Zhilong Tang, Jun Zou, Lishan Kang, and Mingbiao Li, *An evolutionary algorithm for solving parameter identification problems in elliptic systems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 803–808.

[310] Xiao-Feng Xie, Wen-Jun Zhang, and De-Chun Bi, *Handling equality constraints by adaptive relaxing rule for swarm algorithms*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2012–2016.

[311] ———, *Optimizing semiconductor devices by self-organizing particle swarm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2017–2022.

[312] Yong Xu, Sancho Salcedo-Sanz, and Xin Yao, *Non-standard cost terminal assignment problems using tabu search approach*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2302–2306.

[313] Jinn-Moon Yang and Tsai-Wei Shen, *A pharmacophore-based evolutionary approach for screening estrogen receptor antagonists*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1028–1035.

[314] Shengxiang Yang, *Constructing dynamic test environments for genetic algorithms based on problem difficulty*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1262–1269.

[315] Georgios Yannakakis, John Levine, and John Hallam, *An evolutionary approach for interactive computer games*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 986–993.

[316] Haluk Yapicioglu, Gerry V. Dozier, and Alice E. Smith, *Bi-criteria model for locating a semi-desirable facility on a plane using particle swarm optimization*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2328–2334.

[317] Kim Yong-Duk, Kim Jong-Hwan, and Kim Yong-Jae, *Behavior selection and learning for synthetic character*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 898–903.

[318] Ming Yuchi and Jong-Hwan Kim, *Grouping-based evolutionary algorithm: Seeking balance between feasible and infeasible individuals of constrained optimization problems*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 280–287.

[319] Yeboon Yun, Hirotaka Nakayama, and Masao Arakawa, *Fitness evaluation using generalized data envelopment analysis in moga*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 464–471.

[320] Funing Zhang and Gerry V. Dozier, *A comparison of distributed restricted recombination operators for genetic and evolutionary societies of hill-climbers: A disacsp perspective*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1988–1995.

[321] Guang-Zheng Zhang and De-Shuang Huang, *Radial basis function neural network optimized by ga for soybean protein sequence residue spatial distance prediction*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1015–1019.

[322] Jian Zhang, Xiaohui Yuan, and Bill Buckles, *Subspace fdc for sharing distance estimation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1735–1742.

[323] Jun Zhang, H.s.h. Chung, and B.J. Hu, *Adaptive probabilities of crossover and mutation in genetic algorithms based on clustering technique*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2280–2287.

[324] Wen-Jun Zhang, Xiao-Feng Xie, and De-Chun Bi, *Handling boundary constraints for numrical optimization by particle swarm flying in periodic search space*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2307–2311.

[325] Jinhua Zheng, Charles X. Ling, Zhongzhi Shi, and Yong Xie, *Some discussions about mogas: Individual relations, non-dominated set, and application on automatic negotiation*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 706–712.

[326] Zongzhao Zhou, Yew Soon Ong, and Prasanth B. Nair, *Hierarchical surrogate-assisted evolutionary optimization framework*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 1586–1593.

[327] Peng Zou, Zhi Zhou, Guoliang Chen, and Xin Yao, *A novel memetic algorithm with random multi-local-search: A case study of tsp*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 2335–2340.

[328] Yi Zou, Zhenquan Zhuang, and Huanhuan Chen, *Hw-sw partitioning based on genetic algorithm*, Proceedings of the 2004 IEEE Congress on Evolutionary Computation (Portland, Oregon), IEEE Press, 20-23 June 2004, pp. 628–633.