Список литературы

[1] Y. Jin, T. Okabe, and B. Sendhoff, Neural network regularization and ensembling using multi-objective evolutionary algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1–8, Portland, Oregon, 2004, IEEE Press.

[2] M. Farina and M. Gobbi, A fuzzy-optima definition based Multiobjective optimization of a racing car tyre-suspension system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 9–16, Portland, Oregon, 2004, IEEE Press.

[3] R. F. Coelho and P. Bouillard, PAMUC II for Multicriteria Optimization of Mechanical Designs with Expert Rules, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 17–22, Portland, Oregon, 2004, IEEE Press.

[4] K. Smith, R. Everson, and J. Fieldsend, Dominance Measures for Multi-Objective Simulated Annealing, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 23–30, Portland, Oregon, 2004, IEEE Press.

[5] D. Deugo and D. Ferguson, Evolution to the Xtreme: Evolving Evolutionary Strategies Using A Meta-Level Approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 31–38, Portland, Oregon, 2004, IEEE Press.

[6] Y. ping Chen and D. Goldberg, Convergence Time for the Linkage Learning Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 39–46, Portland, Oregon, 2004, IEEE Press.

[7] D. Arnold, An Analysis of Evolutionary Gradient Search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 47–54, Portland, Oregon, 2004, IEEE Press.

[8] A. Dukkipati, N. M. Musti, and S. Bhatnagar, Cauchy Annealing Schedule: An Annealing Schedule for Boltzmann Selection Scheme in Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 55–62, Portland, Oregon, 2004, IEEE Press.

[9] Y. Kobayashi and E. Aiyoshi, Optimization Algorithm Using Multi-Agents and Reinforcement Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 63–68, Portland, Oregon, 2004, IEEE Press.

[10] J. Tavares, F. Pereira, and E. Costa, Understanding the Role of Insertion and Correction in the Evolution of Golomb Rulers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 69–76, Portland, Oregon, 2004, IEEE Press.

[11] W. Sheng and X. Liu, A Hybrid Algorithm for K-medoid Clustering of Large Data Sets, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 77–82, Portland, Oregon, 2004, IEEE Press.

[12] Y. Bernstein, X. Li, V. Ciesielski, and A. Song, Multiobjective Parsimony Enforcement for Superior Generalisation Performance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 83–89, Portland, Oregon, 2004, IEEE Press.

[13] X. Hu, Y. Shi, and R. Eberhart, Recent Advances in Particle Swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 90–97, Portland, Oregon, 2004, IEEE Press.

[14] D. Parrott and X. Li, A Particle Swarm Model for Tracking Multiple Peaks in a Dynamic Environment using Speciation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 98–103, Portland, Oregon, 2004, IEEE Press.

[15] M. O'Neill, A. Brabazon, and C. Adley, The Automatic Generation of Programs for Classification Problems with Grammatical Swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 104–110, Portland, Oregon, 2004, IEEE Press.

[16] G. V. Dozier, D. Brown, J. Hurley, and K. Cain, Vulnerability Analysis of AIS-Based Intrusion Detection Systems via Genetic and Particle Swarm Red Teams, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 111–116, Portland, Oregon, 2004, IEEE Press.

[17] G. Kendall and K. Spoerer, Scripting the Game of Lemmings with a Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 117–124, Portland, Oregon, 2004, IEEE Press.

[18] J. Denzinger, B. Chan, D. Gates, K. Loose, and J. Buchanan, Evolutionary behavior testing of commercial computer games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 125–132, Portland, Oregon, 2004, IEEE Press.

[19] F. Corno, E. Sanchez, and G. Squillero, On The Evolution of Corewar Warriors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 133–138, Portland, Oregon, 2004, IEEE Press.

[20] N. Cole, S. Louis, and C. Miles, Using a Genetic Algorithm to Tune First-Person Shooter Bots, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 139–145, Portland, Oregon, 2004, IEEE Press.

[21] C. Spieth, F. Streichert, N. Speer, and A. Zell, Utilizing an Island Model for EA to Preserve Solution Diversity for Inferring Gene Regulatory Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 146–151, Portland, Oregon, 2004, IEEE Press.

[22] C. Spieth, F. Streichert, N. Speer, and A. Zell, A Memetic Inference Method for Gene Regulatory Networks Based on S-Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 152–157, Portland, Oregon, 2004, IEEE Press.

[23] J. Rowland, On Genetic Programming and Knowledge Discovery in Transcriptome Data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 158–165, Portland, Oregon, 2004, IEEE Press.

[24] S. Bleuler, A. Prelic, and E. Zitzler, An EA Framework for Biclustering of Gene Expression Data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 166–173, Portland, Oregon, 2004, IEEE Press.

[25] Z. Ji, A. Chen, and K. Subprasom, Finding Multi-Objective Paths in Stochastic Networks: A Simulation-based Genetic Algorithm Approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 174–180, Portland, Oregon, 2004, IEEE Press.

[26] A. Chen, P. Chootinan, and S. Pravinvongvuth, An Evolutionary Approach for Finding Optimal Automatic Vehicle Identification Reader Locations in Transportation Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 181–187, Portland, Oregon, 2004, IEEE Press.

[27] H. Sato, H. Aguirre, and K. Tanaka, Local Dominance Using Polar Coordinates to Enhance Multiobjective Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 188–195, Portland, Oregon, 2004, IEEE Press.

[28] H. Aguirre and K. Tanaka, Insights on Properties of Multiobjective MNK-Landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 196–203, Portland, Oregon, 2004, IEEE Press.

[29] K. Parsopoulos, D. Tasoulis, N. Pavlidis, V. Plagianakos, and M. Vrahatis, Vector Evaluated Differential Evolution for Multiobjective Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 204–211, Portland, Oregon, 2004, IEEE Press.

[30] S. Mostaghim, M. Hoffmann, P. H. Koenig, T. Frauenheim, and J. Teich, Molecular Force Field Parametrization using Multi-Objective Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 212–219, Portland, Oregon, 2004, IEEE Press.

[31] B. Weinberg and E.-G. Talbi, NFL theorem is unusable on structured classes of problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 220–226, Portland, Oregon, 2004, IEEE Press.

[32] T. English, No More Lunch: Analysis of Sequential Search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 227–234, Portland, Oregon, 2004, IEEE Press.

[33] M. Koeppen, No-Free-Lunch Theorems and the Diversity of Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 235–241, Portland, Oregon, 2004, IEEE Press.

[34] R. Chow, Effects of Phenotypic Feedback and the Coupling of Genotypic and Phenotypic Spaces in Genetic Searches, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 242–249, Portland, Oregon, 2004, IEEE Press.

[35] J. Schonfeld and D. Ashlock, Comparison of Robustness of Solutions Located by Evolutionary Computation and Other Search Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 250–257, Portland, Oregon, 2004, IEEE Press.

[36] G. Greenwood, Differing Mathematical Perspectives of Genotype Space in Combinatorial Problems: Metric Spaces vs Pretopological Spaces, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 258–264, Portland, Oregon, 2004, IEEE Press.

[37] S. Bain, J. Thornton, and A. Sattar, Evolving Algorithms for Constraint Satisfaction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 265–272, Portland, Oregon, 2004, IEEE Press.

[38] G. V. Dozier, Recurrent Distributed Constraint Satisfaction via Genetic and Evolutionary Societies of Hill-Climbers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 273–279, Portland, Oregon, 2004, IEEE Press.

[39] M. Yuchi and J.-H. Kim, Grouping-based Evolutionary Algorithm: Seeking Balance Between Feasible and Infeasible Individuals of Constrained Optimization Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 280–287, Portland, Oregon, 2004, IEEE Press.

[40] S. Venkatraman and G. Yen, A Simple Elitist Genetic Algorithm for Constrained Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 288–295, Portland, Oregon, 2004, IEEE Press.

[41] P. A. Simionescu, D. G. Beale, and G. V. Dozier, Constrained Optimization Problem Solving Using Estimation of Distribution Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 296–302, Portland, Oregon, 2004, IEEE Press.

[42] Y. Alkhalifah and R. Wainwright, A Genetic Algorithm Applied to Graph Problems Involving Subsets of Vertices, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 303–308, Portland, Oregon, 2004, IEEE Press.

[43] S. Katare, A. Kalos, and D. West, A Hybrid Swarm Optimizer for Efficient Parameter Estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 309–315, Portland, Oregon, 2004, IEEE Press.

[44] Z. Cui, J. Zeng, and X. Cai, A New Stochastic Particle Swarm Optimizer, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 316–319, Portland, Oregon, 2004, IEEE Press.

[45] Y. Shuyuan, W. Min, and J. Licheng, A Quantum Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 320–324, Portland, Oregon, 2004, IEEE Press.

[46] J. Sun, B. Feng, W. Xu, J. Liu, and L. Bao, Particle Swarm Optimization with Particles Having Quantum Behavior, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 325–331, Portland, Oregon, 2004, IEEE Press.

[47] T. Krink, B. Filipic, G. B. Fogel, and R. Thomsen, Noisy Optimization Problems - A Particular Challenge for Differential Evolution?, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 332–339, Portland, Oregon, 2004, IEEE Press.

[48] J. Kennedy, Probability and Dynamics in the Particle Swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 340–347, Portland, Oregon, 2004, IEEE Press.

[49] S. Y. Chong and X. Yao, The Impact of Noise on Iterated Prisoner's Dilemma with Multiple Levels of Cooperation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 348–355, Portland, Oregon, 2004, IEEE Press.

[50] N. Franken and A. Engelbrecht, PSO approaches to co-evolve IPD strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 356–363, Portland, Oregon, 2004, IEEE Press.

[51] P. Hingston and G. Kendall, Learning versus Evolution in Iterated Prisoner's Dilemma, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 364–372, Portland, Oregon, 2004, IEEE Press.

[52] A. Mark, B. Sendhoff, and H. Wersing, A Decision Making Framework for Game Playing Using Evolutionary Optimization and Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 373–380, Portland, Oregon, 2004, IEEE Press.

[53] D. Ashlock, E. youn Kim, and W. von Roeschlaub, Fingerprints: Enabling Visualization and Automatic Analysis of Strategies for Two Player Games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 381–387, Portland, Oregon, 2004, IEEE Press.

[54] X. Sun and W. Just, Evolution of Strategies in Modified Sequential Assessment Games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 388–394, Portland, Oregon, 2004, IEEE Press.

[55] I. Parmee and J. Abraham, Supporting Implicit Learning via the Visualisation of COGA Multi-objective Data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 395–402, Portland, Oregon, 2004, IEEE Press.

[56] A. Hernandez-Aguirre, S. Botello-Rionda, and C. Coello-Coello, PASSSS: An Implementation of a Novel Diversity Strategy for Handling Constraints, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 403–410, Portland, Oregon, 2004, IEEE Press.

[57] R. Kicinger, T. Arciszewski, and K. De Jong, Morphogenesis and Structural Design: Cellular Automata Representations of Steel Structures in Tall Buildings, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 411–418, Portland, Oregon, 2004, IEEE Press.

[58] K. Bryden, D. Ashlock, and D. McCorkle, An Application of Graph Based Evolutionary Algorithms for Diversity Preservation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 419–426, Portland, Oregon, 2004, IEEE Press.

[59] S. Suram, K. Bryden, and D. Ashlock, Quantitative Trait Loci based Solution of an Inverse Radiation Heat Transfer Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 427–432, Portland, Oregon, 2004, IEEE Press.

[60] N. Dorris, B. Carnahan, L. Orsini, and L.-A. Kuntz, Interactive Evolutionary Design of Anthropomorphic Symbols, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 433–440, Portland, Oregon, 2004, IEEE Press.

[61] H. Ishibuchi and K. Narukawa, Performance Evaluation of Simple Multiobjective Genetic Local Search Algorithms on Multiobjective 0/1 Knapsack Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 441–448, Portland, Oregon, 2004, IEEE Press.

[62] H. Aguirre and K. Tanaka, Effects of Elitism and Population Climbing on Multiobjective MNK-Landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 449–456, Portland, Oregon, 2004, IEEE Press.

[63] E. Dunn, G. Olague, E. Lutton, and M. Schoenauer, Pareto Optimal Sensing Strategies for an Active Vision System, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 457–463, Portland, Oregon, 2004, IEEE Press.

[64] Y. Yun, H. Nakayama, and M. Arakawa, Fitness Evaluation using Generalized Data Envelopment Analysis in MOGA, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 464–471, Portland, Oregon, 2004, IEEE Press.

[65] X. H. Nguyen and M. R. Ian, An Investigation on the Roles of Insertion and Deletion Operators in Tree Adjoining Grammar Guided Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 472–477, Portland, Oregon, 2004, IEEE Press.

[66] Y. Shan, R. I. McKay, R. Baxter, H. Abbass, D. Essam, and H. Nguyen, Grammar Model-based Program Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 478–485, Portland, Oregon, 2004, IEEE Press.

[67] M. Tomassini, L. Vanneschi, J. Cuendet, and F. Fernandez, A New Technique for Dynamic Size Populations in Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 486–493, Portland, Oregon, 2004, IEEE Press.

[68] V. Ciesielski and X. Li, Experiments with Explicit For-loops in Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 494–501, Portland, Oregon, 2004, IEEE Press.

[69] E. Leon, O. Nasraoui, and J. Gomez, Anomaly Detection Based on Unsupervised Niche Clustering with Application to Network Intrusion Detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 502–508, Portland, Oregon, 2004, IEEE Press.

[70] A. Teredesai and V. Govindaraju, Issues in Evolving GP based Classifiers for a Pattern Recognition Task, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 509–515, Portland, Oregon, 2004, IEEE Press.

[71] R. Ouellette, M. Browne, and K. Hirasawa, Genetic Algorithm Optimization of a Convolutional Neural Network for Autonomous Crack Detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 516–521, Portland, Oregon, 2004, IEEE Press.

[72] T. Ashburn and E. Bonabeau, Interactive Inversion of Financial Markets Agent-Based Models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 522–529, Portland, Oregon, 2004, IEEE Press.

[73] D. Devicharan and C. Mohan, Particle Swarm Optimization with Adaptive Linkage Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 530–535, Portland, Oregon, 2004, IEEE Press.

[74] L. Cagnina, S. Esquivel, and R. Gallard, Particle Swarm Optimization for Sequencing Problems: A Case Study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 536–541, Portland, Oregon, 2004, IEEE Press.

[75] Y. Liu, Z. Qin, and X. He, Supervisor-Student Model in Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 542–547, Portland, Oregon, 2004, IEEE Press.

[76] A. Mohais, C. Ward, and C. Posthoff, Randomized Directed Neighborhoods with Edge Migration in Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 548–555, Portland, Oregon, 2004, IEEE Press.

[77] F. Castillo, J. Sweeney, and W. Zirk, Using Evolutionary Algorithms to Suggest Variable Transformations in Linear Model Lack-of-Fit Situations, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 556–560, Portland, Oregon, 2004, IEEE Press.

[78] A. Kordon and C.-T. Lue, Symbolic Regression Modeling of Blown Film Process Effects, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 561–568, Portland, Oregon, 2004, IEEE Press.

[79] B. Filipic and T. Robic, A Comparative Study of Coolant Flow Optimization on a Steel Casting Machine, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 569–573, Portland, Oregon, 2004, IEEE Press.

[80] P. Jones, A. Tiwari, R. Roy, and J. Corbett, Optimisation of the High Efficiency Deep Grinding Process with Fuzzy Fitness Function and Constraints, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 574–581, Portland, Oregon, 2004, IEEE Press.

[81] D. Corne and C. Pridgeon, Investigating Issues in the Reconstructability of Genetic Regulatory Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 582–589, Portland, Oregon, 2004, IEEE Press.

[82] S.-B. Cho and C. Park, Speciated GA for Optimal Ensemble Classifiers in DNA Microarray Classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 590–597, Portland, Oregon, 2004, IEEE Press.

[83] A. Deschenes and K. 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, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 598–606, Portland, Oregon, 2004, IEEE Press.

[84] G. B. Fogel, D. G. Weekes, R. Sampath, and D. J. Ecker, Parameter Optimization of an Evolutionary Algorithm for RNA Structure Discovery, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 607–613, Portland, Oregon, 2004, IEEE Press.

[85] M. Kotani and D. Kato, Feature Extraction Using Coevolutionary Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 614–619, Portland, Oregon, 2004, IEEE Press.

[86] K. Y. Chan, E. Aydin, and T. Fogarty, An Empirical Study on the Performance of Factorial Design Based Crossover on Parametrical Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 620–627, Portland, Oregon, 2004, IEEE Press.

[87] Y. Zou, Z. Zhuang, and H. Chen, HW-SW Partitioning Based on Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 628–633, Portland, Oregon, 2004, IEEE Press.

[88] J.-H. Hong and S.-B. Cho, Evolution of Emergent Behaviors for Shooting Game Characters in Robocode, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 634–638, Portland, Oregon, 2004, IEEE Press.

[89] H. de Garis and T. Batty, Robust, Reversible, Nano-Scale, Femto-Second-Switching Circuits and their Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 639–645, Portland, Oregon, 2004, IEEE Press.

[90] T. Hatanaka, Y. Kawaguchi, and K. Uosaki, Nonlinear System Identification Based on Evolutionary Fuzzy Modeling, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 646–651, Portland, Oregon, 2004, IEEE Press.

[91] A. Brabazon, A. Silva, T. F. de Sousa, M. O'Neill, R. Matthews, and E. Costa, Investigating Organizational Strategic Inertia Using a Particle Swarm Model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 652–659, Portland, Oregon, 2004, IEEE Press.

[92] C. Gutierrez, Heuristics in a General Scheduling Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 660–665, Portland, Oregon, 2004, IEEE Press.

[93] W. Gao, Fast Immunized Evolutionary Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 666–670, Portland, Oregon, 2004, IEEE Press.

[94] D. Cohen, Using SAT Scores as Predictors for Future Academic Success, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 671–677, Portland, Oregon, 2004, IEEE Press.

[95] H. Chung-Yuan and S. Chuen-Tsai, Self-Adaptive Routing Based on Learning Classifier Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 678–682, Portland, Oregon, 2004, IEEE Press.

[96] S. Eto, K. Hirasawa, and J. Hu, Functional Localization of Genetic Network Programming and its Application to a Pursuit Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 683–690, Portland, Oregon, 2004, IEEE Press.

[97] O. Bandte, Visualizing Information in an Interactive Evolutionary Design Process, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 691–698, Portland, Oregon, 2004, IEEE Press.

[98] M. De San Pedro, D. Pandolfi, A. Villagra, M. Lasso, and R. Gallard, Effect of Crossover Operators under Multirecombination: Weighted Tardiness, a Test Case, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 699–705, Portland, Oregon, 2004, IEEE Press.

[99] J. Zheng, C. X. Ling, Z. Shi, and Y. Xie, Some Discussions about MOGAs: Individual Relations, Non-dominated Set, and Application on Automatic Negotiation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 706–712, Portland, Oregon, 2004, IEEE Press.

[100] H. Nakagoe, K. Hirasawa, and J. Hu, Genetic Network Programming with Automatically Generated Variable Size Macro Nodes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 713–719, Portland, Oregon, 2004, IEEE Press.

[101] K. Sastry, M. Pelikan, and D. Goldberg, Efficiency Enhancement of Genetic Algorithms via Building-Block-Wise Fitness Estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 720–727, Portland, Oregon, 2004, IEEE Press.

[102] M. Kleeman, R. Day, and G. Lamont, Multi-Objective Evolutionary Search Performance with Explicit Building-Block Sizes for NPC Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 728–735, Portland, Oregon, 2004, IEEE Press.

[103] T. Ferreira, G. Vasconcelos, and P. Adeodato, A Hybrid Intelligent System Approach for Improving the Prediction of Real World Time Series, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 736–743, Portland, Oregon, 2004, IEEE Press.

[104] J. Chen and M. Wineberg, Enhancement of the Shifting Balance Genetic Algorithm for Highly Multimodal Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 744–751, Portland, Oregon, 2004, IEEE Press.

[105] P. E. Hotz, Comparing direct and developmental encoding schemes in artificial evolution: A case study in evolving lens shapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 752–757, Portland, Oregon, 2004, IEEE Press.

[106] P. Osmera, Evolvable Controllers with Hierarchical Structure, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 758–765, Portland, Oregon, 2004, IEEE Press.

[107] G. Parker and J. Blumenthal, Varying Sample Sizes for the Co-Evolution of Heterogeneous Agents, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 766–771, Portland, Oregon, 2004, IEEE Press.

[108] H. Hou and G. V. Dozier, Comparing Performance of Binary-Coded and Constraint-Based Detectors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 772–777, Portland, Oregon, 2004, IEEE Press.

[109] C. kin Chow and H. tat Tsui, Autonomous Agent Response Learning by a Multi-Species Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 778–785, Portland, Oregon, 2004, IEEE Press.

[110] M. Daneshyari and G. Yen, Talent Based Social Algorithm for Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 786–791, Portland, Oregon, 2004, IEEE Press.

[111] B. S. and P. N. Suganthan, A Novel Concurrent Particle Swarm Optimization (CPSO), in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 792–796, Portland, Oregon, 2004, IEEE Press.

[112] J. Isaacs and S. Foo, Optimized Wavelet Hand Pose Estimation for American Sign Language Recognition, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 797–802, Portland, Oregon, 2004, IEEE Press.

[113] Z. Wu, Z. Tang, J. Zou, L. Kang, and M. Li, An Evolutionary Algorithm for Solving Parameter Identification Problems in Elliptic Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 803–808, Portland, Oregon, 2004, IEEE Press.

[114] B. Eskridge and D. Hougen, Imitating Success: A Memetic Crossover Operator for Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 809–815, Portland, Oregon, 2004, IEEE Press.

[115] H. de Garis and T. 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, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 816–819, Portland, Oregon, 2004, IEEE Press.

[116] Y. Shuyuan, W. Min, and J. Licheng, A Novel Quantum Evolutionary Algorithm And Its Application, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 820–826, Portland, Oregon, 2004, IEEE Press.

[117] S. Ando and H. Iba, Estimation of Gene Network using Real-coded GA and Robustness Analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 827–834, Portland, Oregon, 2004, IEEE Press.

[118] S. Gordon and Z. Matley, Evolving Sparse Direction Maps for Maze Pathfinding, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 835–838, Portland, Oregon, 2004, IEEE Press.

[119] J. Oh and D. Volper, Design of Rationality-based Computing Middleware: A Preliminary Study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 839–846, Portland, Oregon, 2004, IEEE Press.

[120] A. Augugliaro, L. Dusonchet, S. Favuzza, and E. R. Sanseverino, A Fuzzy-Logic based Evolutionary Multiobjective Approach for Automated Distribution Networks Management, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 847–854, Portland, Oregon, 2004, IEEE Press.

[121] S. Kimbrough, M. Lu, and S. Safavi, Exploring a Financial Product Model with a Two-Population Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 855–862, Portland, Oregon, 2004, IEEE Press.

[122] M. Neal and F. Labrosse, Rotation-invariant appearance based maps for robot navigation using an artificial immune network algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 863–870, Portland, Oregon, 2004, IEEE Press.

[123] E. Sanchez, G. Squillero, and M. Violante, A Local Analysis of the Genotype-Fitness Mapping in Hardware Optimization Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 871–878, Portland, Oregon, 2004, IEEE Press.

[124] S. Esquivel, M. Garcia, G. Leguizamon, and M. Ribba, A Comparison of Two Mutation Operators for the Path Planning Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 879–883, Portland, Oregon, 2004, IEEE Press.

[125] K. Uosaki, Y. Kimura, and T. Hatanaka, Evolution Strategies Based Particle Filters for State and Parameter Estimation of Nonlinear Models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 884–890, Portland, Oregon, 2004, IEEE Press.

[126] M. Sinka and D. Corne, Evolving Document Features for Web Document Clustering: A Feasability Study, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 891–897, Portland, Oregon, 2004, IEEE Press.

[127] K. Yong-Duk, K. Jong-Hwan, and K. Yong-Jae, Behavior Selection and Learning for Synthetic Character, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 898–903, Portland, Oregon, 2004, IEEE Press.

[128] F. Neumann, Expected Runtimes of Evolutionary Algorithms for the Eulerian Cycle Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 904–910, Portland, Oregon, 2004, IEEE Press.

[129] U. Chakraborty, Analysis of Encoding in 1+1-EA, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 911–917, Portland, Oregon, 2004, IEEE Press.

[130] R. Salomon, The Curse of High-Dimensional Search Spaces: Observing Premature Convergence in Unimodal Functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 918–923, Portland, Oregon, 2004, IEEE Press.

[131] S. Verel, P. Collard, and M. Clergue, Scuba Search: when selection meets innovation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 924–931, Portland, Oregon, 2004, IEEE Press.

[132] F. Streichert, H. Ulmer, and A. Zell, Evaluating a Hybrid Encoding and Three Crossover Operators on the Constrained Portfolio Selection Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 932–939, Portland, Oregon, 2004, IEEE Press.

[133] J. J. Korczak and P. Lipinski, Evolutionary building of stock trading experts in a real-time system, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 940–947, Portland, Oregon, 2004, IEEE Press.

[134] S. 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, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 948–954, Portland, Oregon, 2004, IEEE Press.

[135] M. Tanaka-Yamawaki and T. Motoyama, Predicting the Tick-wise Price Fluctuations by Means of Evolutional Computation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 955–958, Portland, Oregon, 2004, IEEE Press.

[136] R. A. Krohling, F. Hoffmann, and L. dos Santos Coelho, Co-evolutionary Particle Swarm Optimization for Min-Max Problems using Gaussian Distribution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 959–964, Portland, Oregon, 2004, IEEE Press.

[137] D. Krusienski and W. K. Jenkins, Particle Swarm Optimization for Adaptive IIR Filter Structures, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 965–970, Portland, Oregon, 2004, IEEE Press.

[138] W. Slade, H. Ressom, M. Musavi, and R. Miller, Ocean Color Inversion by Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 971–977, Portland, Oregon, 2004, IEEE Press.

[139] E. Miguelanez, A. Zalzala, and P. Tabor, Evolving Neural Networks using Swarm Intelligence for Binmap Classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 978–985, Portland, Oregon, 2004, IEEE Press.

[140] G. Yannakakis, J. Levine, and J. Hallam, An Evolutionary Approach for Interactive Computer Games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 986–993, Portland, Oregon, 2004, IEEE Press.

[141] J. Fletcher and M. Zwick, Hamilton's Rule Applied to Reciprocal Altruism, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 994–1000, Portland, Oregon, 2004, IEEE Press.

[142] M. Daoud, N. Kharma, A. Haidar, and J. Popoola, Ayo, the Awari Player, or How Better Representation Trumps Deeper Search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1001–1006, Portland, Oregon, 2004, IEEE Press.

[143] S. Lucas, Cellz: A Simple Dynamic Game for Testing Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1007–1014, Portland, Oregon, 2004, IEEE Press.

[144] G.-Z. Zhang and D.-S. Huang, Radial Basis Function Neural Network Optimized by GA for Soybean Protein Sequence Residue Spatial Distance Prediction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1015–1019, Portland, Oregon, 2004, IEEE Press.

[145] R. Day and G. Lamont, Force Field Approximations Using Artificial Neural Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1020–1027, Portland, Oregon, 2004, IEEE Press.

[146] J.-M. Yang and T.-W. Shen, A Pharmacophore-Based Evolutionary Approach for Screening Estrogen Receptor Antagonists, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1028–1035, Portland, Oregon, 2004, IEEE Press.

[147] G. Lamont, M. Esslinger, R. Ewing, and H. Abdel-Aty-Zohdy, An Artificial Immune System Strategy for Robust Chemical Spectra Classification via Distributed Heterogeneous Sensors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1036–1043, Portland, Oregon, 2004, IEEE Press.

[148] J. Timmis, C. Edmonds, and J. Kelsey, Assessing the Performance of Two Immune Inspired Algorithms and a Hybrid Genetic Algorithm for Function Optimisation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1044–1051, Portland, Oregon, 2004, IEEE Press.

[149] S. Garrett, Parameter-Free, Adaptive Clonal Selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1052–1058, Portland, Oregon, 2004, IEEE Press.

[150] F. de Paula, L. de Castro, and P. de Geus, An Intrusion Detection System Using Ideas from the Immune System, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1059–1066, Portland, Oregon, 2004, IEEE Press.

[151] J. Hamaker and L. Boggess, Non-Euclidean Distance Measures in AIRS, an Artificial Immune Classification System, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1067–1073, Portland, Oregon, 2004, IEEE Press.

[152] G. Nicosia, V. Cutello, and M. Pavone, An Immune Algorithm with Hyper-Macromutations for the 2D Hydrophilic-Hydrophobic Model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1074–1080, Portland, Oregon, 2004, IEEE Press.

[153] Z. Ji and D. Dasgupta, Augmented Negative Selection Algorithm with Variable-Coverage Detectors, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1081–1088, Portland, Oregon, 2004, IEEE Press.

[154] C. Anderson, E. Bonabeau, and J. Scott, Evolutionary testing as both a testing and redesign tool: a study of a shipboard firemain's valve and pump controls, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1089–1097, Portland, Oregon, 2004, IEEE Press.

[155] S. Malinchik, B. Orme, J. Rothermich, and E. Bonabeau, Interactive Exploratory Data Analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1098–1104, Portland, Oregon, 2004, IEEE Press.

[156] E. Fernandez, M. Grana, and J. Ruiz-Cabello, An Instantaneous Memetic Algorithm for Illumination Correction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1105–1110, Portland, Oregon, 2004, IEEE Press.

[157] T. Bartz-Beielstein and S. Markon, Tuning Search Algorithms for Real-World Applications: A Regression Tree Based Approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1111–1118, Portland, Oregon, 2004, IEEE Press.

[158] R. Salomon, The Force Model: Concept, Behavior, Interpretation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1119–1126, Portland, Oregon, 2004, IEEE Press.

[159] G. Lee, V. Bulitko, and I. Levner, Automated Selection of Vision Operator Libraries with Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1127–1134, Portland, Oregon, 2004, IEEE Press.

[160] K. P. Dahal, T. A. Siewierski, S. J. Galloway, G. M. Burt, and J. R. McDonald, An Evolutionary Generation Scheduling in an Open Electricity Market, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1135–1142, Portland, Oregon, 2004, IEEE Press.

[161] M. Lasso, D. Pandolfi, M. De San Pedro, A. Villagra, and R. Gallard, Solving Dynamic Tardiness Problems in Single Machine Environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1143–1149, Portland, Oregon, 2004, IEEE Press.

[162] S. Tsutsui and G. Wilson, Solving Capacitated Vehicle Routing Problems Using Edge Histogram Based Sampling Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1150–1157, Portland, Oregon, 2004, IEEE Press.

[163] M. Aldasht, J. Ortega, C. G. Puntonet, and A. F. Diaz, A Genetic Exploration of Dynamic Load Balancing Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1158–1163, Portland, Oregon, 2004, IEEE Press.

[164] Y. Dandass, Genetic List Scheduling for Soft Real-Time Parallel Applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1164–1171, Portland, Oregon, 2004, IEEE Press.

[165] S. H. Aleti and H. de Garis, Evolutionary Algorithms Based on Machine Learning Accelerate Mathematical Function Optimization but not Neural Net Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1172–1177, Portland, Oregon, 2004, IEEE Press.

[166] J. Hu and E. Goodman, Wireless Access Point Configuration by Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1178–1184, Portland, Oregon, 2004, IEEE Press.

[167] A. Burian and J. Takala, Evolved Gate Arrays for Image Restoration, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1185–1192, Portland, Oregon, 2004, IEEE Press.

[168] S. Habib and A. Parker, Synthesizing Complex Multimedia Network Topologies Using An Evolutionary Approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1193–1200, Portland, Oregon, 2004, IEEE Press.

[169] Y. Inoue, T. Tohge, and H. Iba, Object Transportation by Two Humanoid Robots using Cooperative Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1201–1208, Portland, Oregon, 2004, IEEE Press.

[170] R. L. Walker, Honeybee Search Strategies: Adaptive Exploration of an Information Ecosystem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1209–1216, Portland, Oregon, 2004, IEEE Press.

[171] J. Daida, M. Samples, B. Hart, J. Halim, and A. Kumar, Demonstrating Constraints to Diversity with a Tunably Difficulty Problem for Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1217–1224, Portland, Oregon, 2004, IEEE Press.

[172] J. Daida, D. Ward, A. Hilss, S. Long, and M. Hodges, Visualizing the Loss of Diversity in Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1225–1232, Portland, Oregon, 2004, IEEE Press.

[173] Y. Katada, K. Ohkura, and K. Ueda, The Nei's Standard Genetic Distance in Artificial Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1233–1239, Portland, Oregon, 2004, IEEE Press.

[174] G. Hernandez, D. Dasgupta, F. Nino, and J. Garcia, On Geometric and Statistical Properties of the Attractors of a Generic Evolutionary Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1240–1247, Portland, Oregon, 2004, IEEE Press.

[175] J. He, X. Yao, and Q. Zhang, To Understand One-Dimensional Continuous Fitness Landscapes by Drift Analysis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1248–1253, Portland, Oregon, 2004, IEEE Press.

[176] A. Di Pietro, L. While, and L. Barone, Applying Evolutionary Algorithms to Problems with Noisy, Time-consuming Fitness Functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1254–1261, Portland, Oregon, 2004, IEEE Press.

[177] S. Yang, Constructing Dynamic Test Environments for Genetic Algorithms Based on Problem Difficulty, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1262–1269, Portland, Oregon, 2004, IEEE Press.

[178] L. Schoenemann, The Impact of Population Sizes and Diversity on the Adaptability of Evolution Strategies in Dynamic Environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1270–1277, Portland, Oregon, 2004, IEEE Press.

[179] R. Tinos and A. Carvalho, A Genetic Algorithm with Gene Dependent Mutation Probability for Non-Stationary Optimization Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1278–1285, Portland, Oregon, 2004, IEEE Press.

[180] L. Kang, A. Zhou, R. I. McKay, Y. Li, and Z. Kang, Benchmarking Algorithms for Dynamic Travelling Salesman Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1286–1292, Portland, Oregon, 2004, IEEE Press.

[181] R. Eriksson and B. Olsson, On the Performance of Evolutionary Algorithms with Life-time Adaptation in Dynamic Fitness Landscapes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1293–1300, Portland, Oregon, 2004, IEEE Press.

[182] D. Bonino, F. Corno, and G. Squillero, Dynamic Optimization of Semantic Annotation Relevance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1301–1308, Portland, Oregon, 2004, IEEE Press.

[183] A. Hernandez-Aguirre and C. Coello-Coello, Mutual Information-based Fitness Functions for Evolutionary Circuit Synthesis, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1309–1316, Portland, Oregon, 2004, IEEE Press.

[184] B. Sarif, M. Abd-El-Barr, S. M. Sait, and U. Al-Saiari, Fuzzified Ant Colony Optimization Algorithm for Efficient Combinational Circuits, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1317–1324, Portland, Oregon, 2004, IEEE Press.

[185] A. Cruz, A Hybrid Deterministic/Genetic Test Generator to Improve Fault, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1325–1330, Portland, Oregon, 2004, IEEE Press.

[186] B. Simsek, S. Albayrak, and A. Korth, Reinforcement Learning for Procurement Agents of the Factory of the Future, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1331–1337, Portland, Oregon, 2004, IEEE Press.

[187] K. Sedighi, K. Ashenayi, T. Manikas, H.-M. Tai, and R. Wainwright, Autonomous Local Path-Planning for a Mobile Robot Using a Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1338–1345, Portland, Oregon, 2004, IEEE Press.

[188] S. Hati and S. Sengupta, A GA-Based Integrated Approach to Model-Assisted Matching and Pose Estimation for Automated Visual Inspection Applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1346–1353, Portland, Oregon, 2004, IEEE Press.

[189] D. Cohen, EA-lect: An Evolutionary Algorithm for Constructing Logical Rules to Predict Election into Cooperstown, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1354–1361, Portland, Oregon, 2004, IEEE Press.

[190] S. Tongchim and X. Yao, Parallel Evolutionary Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1362–1367, Portland, Oregon, 2004, IEEE Press.

[191] E. Santos and T. Ohishi, A Hydro Unit Commitment Model Using Genetic Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1368–1374, Portland, Oregon, 2004, IEEE Press.

[192] E. Ozcan and E. Onbasioglu, Genetic Algorithms for Parallel Code Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1375–1381, Portland, Oregon, 2004, IEEE Press.

[193] R. Thomsen, Multimodal Optimization Using Crowding-Based Differential Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1382–1389, Portland, Oregon, 2004, IEEE Press.

[194] S. Doctor, G. Venayagamoorthy, and V. Gudise, Optimal PSO for Collective Robotic Search Applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1390–1395, Portland, Oregon, 2004, IEEE Press.

[195] G. T. Pulido and C. Coello-Coello, A Constraint-Handling Mechanism for Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1396–1403, Portland, Oregon, 2004, IEEE Press.

[196] S. Mostaghim and J. Teich, Covering Pareto-optimal Fronts by Subswarms in Multi-objective Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1404–1411, Portland, Oregon, 2004, IEEE Press.

[197] M. F. Tasgetiren, M. Sevkli, Y.-C. Liang, and G. Gencyilmaz, Particle Swarm Optimization Algorithm For Single Machine Total Weighted Tardiness Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1412–1419, Portland, Oregon, 2004, IEEE Press.

[198] D. B. Fogel, T. Hays, and D. Johnson, A Platform for Evolving Characters in Competitive Games, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1420–1426, Portland, Oregon, 2004, IEEE Press.

[199] D. B. Fogel, Evolving Strategies in Blackjack, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1427–1434, Portland, Oregon, 2004, IEEE Press.

[200] S. Gordon and T. Slocum, The Knight's Tour - Evolutionary vs. Depth-First Search, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1435–1440, Portland, Oregon, 2004, IEEE Press.

[201] C. Miles, S. Louis, N. Cole, and J. McDonnell, Learning to Play Like a Human: Case Injected Genetic Algorithms for Strategic Computer Gaming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1441–1448, Portland, Oregon, 2004, IEEE Press.

[202] Z. Guo and K. Mak, A Heuristic GA for The Stochastic Vehicle Routing Problems with Soft Time Windows, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1449–1456, Portland, Oregon, 2004, IEEE Press.

[203] J.-D. Wei and D.-T. Lee, A New Approach to the Traveling Salesman Problem Using Genetic Algorithms with Priority Encoding, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1457–1464, Portland, Oregon, 2004, IEEE Press.

[204] Y. Nagata, Criteria for designing crossovers for TSP, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1465–1472, Portland, Oregon, 2004, IEEE Press.

[205] C. White and G. Yen, A Hybrid Evolutionary Algorithm for Traveling Salesman Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1473–1478, Portland, Oregon, 2004, IEEE Press.

[206] J. M. de la Cruz-Garcia, J. L. Risco-Martin, A. Herran-Gonzalez, and P. Fernandez-Blanco, Hybrid Heuristic and Mathematical Programming in Oil Pipelines Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1479–1486, Portland, Oregon, 2004, IEEE Press.

[207] C. Dimopoulos, A Review of Evolutionary Multiobjective Optimization Applications in the Area of Production Research, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1487–1494, Portland, Oregon, 2004, IEEE Press.

[208] T. Wong, P. Cote, and R. Sabourin, A Hybrid MOEA for the Capacitated Exam Proximity Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1495–1501, Portland, Oregon, 2004, IEEE Press.

[209] R. Day, M. Kleeman, and G. Lamont, Multi-Objective fast messy Genetic Algorithm Solving Deception Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1502–1509, Portland, Oregon, 2004, IEEE Press.

[210] J. C. Hernandez, P. Isasi, and A. Seznec, On the design of state-of-the-art pseudorandom number generators by means of genetic programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1510–1516, Portland, Oregon, 2004, IEEE Press.

[211] J. A. Clark, J. L. Jacob, and S. Stepney, Searching for Cost Functions, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1517–1524, Portland, Oregon, 2004, IEEE Press.

[212] J. Fuller, W. Millan, and E. Dawson, Multi-objective Optimisation of Bijective S-boxes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1525–1532, Portland, Oregon, 2004, IEEE Press.

[213] J. A. Clark, J. L. Jacob, and S. Stepney, The Design of S-Boxes by Simulated annealing, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1533–1537, Portland, Oregon, 2004, IEEE Press.

[214] C. Oh and G. Barlow, Autonomous Controller Design for Unmanned Aerial Vehicles using Multi-objective Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1538–1545, Portland, Oregon, 2004, IEEE Press.

[215] H. Liu and H. Iba, A Hierarchical Approach for Adaptive Humanoid Robot Control, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1546–1553, Portland, Oregon, 2004, IEEE Press.

[216] P. Walsh and P. Fenton, A High-Throughput Computing Environment for Job Shop Scheduling Genetic Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1554–1560, Portland, Oregon, 2004, IEEE Press.

[217] L. Gonzalez and J. Cannady, A self-adaptive negative selection approach for anomaly detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1561–1568, Portland, Oregon, 2004, IEEE Press.

[218] H. Ulmer, F. Streichert, and A. Zell, Evolution Strategies with Controlled Model Assistance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1569–1576, Portland, Oregon, 2004, IEEE Press.

[219] K. S. Won and T. Ray, Performance of Kriging and Cokriging based Surrogate Models within the Unified Framework for Surrogate Assisted Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1577–1585, Portland, Oregon, 2004, IEEE Press.

[220] Z. Zhou, Y. S. Ong, and P. B. Nair, Hierarchical Surrogate-Assisted Evolutionary Optimization Framework, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1586–1593, Portland, Oregon, 2004, IEEE Press.

[221] T. Okabe, Y. Jin, B. Sendhoff, and M. Olhofer, Voronoi-based Estimation of Distribution Algorithm for Multi-objective Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1594–1601, Portland, Oregon, 2004, IEEE Press.

[222] D. Doty, Non-local Evolutionary Adaptation in Gridplants, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1602–1609, Portland, Oregon, 2004, IEEE Press.

[223] R. Johnson, M. Melich, Z. Michalewicz, and M. Schmidt, Coevolutionary TEMPO Game, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1610–1617, Portland, Oregon, 2004, IEEE Press.

[224] D. Ashlock, S. Willson, and N. Leahy, Coevolution and Tartarus, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1618–1624, Portland, Oregon, 2004, IEEE Press.

[225] C. O'Riordan, J. Griffith, J. Newell, and H. Sorensen, Co-evolution of Strategies for an N-player Dilemma, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1625–1630, Portland, Oregon, 2004, IEEE Press.

[226] N. Speer, C. Spieth, and A. Zell, A Memetic Co-Clustering Algorithm for Gene Expression Profiles and Biological Annotation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1631–1638, Portland, Oregon, 2004, IEEE Press.

[227] W. Piaseczny, H. Suzuki, and H. Sawai, Chemical Genetic Programming - Evolution of Amino Acid Rewriting Rules Used for Genotype-Phenotype Translation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1639–1646, Portland, Oregon, 2004, IEEE Press.

[228] D. Seo, M. Yasunaga, and J. H. Kim, A Computatioal Approach to Detect Transcritpion Regulatory Elements in Dictyostelium Discoideum, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1647–1653, Portland, Oregon, 2004, IEEE Press.

[229] S. Ding, J. Liu, C. Wu, and Q. Yang, A genetic algorithm applied to optimal gene subset selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1654–1660, Portland, Oregon, 2004, IEEE Press.

[230] T. Eguchi, K. Hirasawa, J. Hu, and S. Markon, Elevator Group Supervisory Control Systems Using Genetic Network Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1661–1667, Portland, Oregon, 2004, IEEE Press.

[231] J. J. Sanchez, M. Galan, and E. Rubio, Genetic Algorithms and Cellular Automata: A New Architecture for Traffic Light Cycles Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1668–1674, Portland, Oregon, 2004, IEEE Press.

[232] Y. Katsumata and T. Terano, Cabling and Scheduling for Electric Power Plant Operation via TABU-BOA Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1675–1682, Portland, Oregon, 2004, IEEE Press.

[233] I. Watanabe and M. Nodu, A Genetic Algorithm for Optimizing Switching Sequence of Service Restoration in Distribution Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1683–1690, Portland, Oregon, 2004, IEEE Press.

[234] P. Ross, J. G. Marin-Blazquez, and E. Hart, Hyper-heuristics applied to Class and Exam Timetabling problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1691–1698, Portland, Oregon, 2004, IEEE Press.

[235] P. Funes, E. Bonabeau, J. Herve, and Y. Morieux, Interactive Multi-Participant Task Allocation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1699–1705, Portland, Oregon, 2004, IEEE Press.

[236] J. Pfaffmann, K. Bousmalis, and S. Colombano, A Scouting-Inspired Evolutionary Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1706–1712, Portland, Oregon, 2004, IEEE Press.

[237] D. Ashlock, K. Bryden, and S. Corns, On Taxonomy of Evolutionary Computation Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1713–1719, Portland, Oregon, 2004, IEEE Press.

[238] J. Gomez, Self Adaptation of Operator Rates in Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1720–1726, Portland, Oregon, 2004, IEEE Press.

[239] J. Gomez, Evolution of Fuzzy Rule Based Classifiers, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1727–1734, Portland, Oregon, 2004, IEEE Press.

[240] J. Zhang, X. Yuan, and B. Buckles, Subspace FDC for Sharing Distance Estimation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1735–1742, Portland, Oregon, 2004, IEEE Press.

[241] Z. Kobti, R. G. Reynolds, and T. Kohler, The Effect of Kinship Cooperation Learning Strategy and Culture on the Resilience of Social Systems in the Village Multi-Agent Simulation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1743–1750, Portland, Oregon, 2004, IEEE Press.

[242] B. Peng and R. G. Reynolds, Cultural Algorithms: Knowledge Learning in Dynamic Environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1751–1758, Portland, Oregon, 2004, IEEE Press.

[243] N. B. Ho and J. C. Tay, GENACE: An Efficient Cultural Algorithm to Solve the Flexible Job-Shop Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1759–1766, Portland, Oregon, 2004, IEEE Press.

[244] D. Curran and C. O'Riordan, The Effect of Noise on the Performance of Cultural Evolution in Multi-Agent Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1767–1773, Portland, Oregon, 2004, IEEE Press.

[245] C. Stephan and J. Sullivan, An Agent-Based Hydrogen Vehicle/Infrastructure Model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1774–1779, Portland, Oregon, 2004, IEEE Press.

[246] D. Ostrowski and R. G. Reynolds, Using Cultural Algorithms to Evolve Strategies for Recessionary Markets, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1780–1785, Portland, Oregon, 2004, IEEE Press.

[247] A. Stoica, T. Arslan, D. Keymeulen, V. Duong, R. Zebulum, X. Guo, I. Ferguson, and T. Daud, Evolutionary Recovery of Electronic Circuits from Radiation Induced Faults, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1786–1793, Portland, Oregon, 2004, IEEE Press.

[248] S. M. Sait and M. Al-Ismail, Enhanced Simulated Evolution Algorithm For Digital Circuit Design Yielding Faster Execution in a Larger Solution Space, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1794–1799, Portland, Oregon, 2004, IEEE Press.

[249] S. Harding and J. Miller, Evolution in materio : A Tone Discriminator In Liquid Crystal, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1800–1807, Portland, Oregon, 2004, IEEE Press.

[250] D. Hunter, Some Lessons Learned on Constructing an Automated Testbench for Evolvable Hardware Experiments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1808–1812, Portland, Oregon, 2004, IEEE Press.

[251] M. Oltean, Solving Even-Parity Problems using Traceless Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1813–1819, Portland, Oregon, 2004, IEEE Press.

[252] J. Blumenthal and G. Parker, Punctuated Anytime Learning for Evolving Multi-Agent Capture Strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1820–1827, Portland, Oregon, 2004, IEEE Press.

[253] A. Bajurnow and V. Ciesielski, Layered Learning for Evolving Goal Scoring Behavior in Soccer Players, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1828–1835, Portland, Oregon, 2004, IEEE Press.

[254] E. Eberbach and A. Eberbach, On Designing CO$T: A New Approach and Programming Environment for Distributed Problem Solving Based on Evolutionary Computation and Anytime Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1836–1843, Portland, Oregon, 2004, IEEE Press.

[255] D. Ashlock and J. Lathrop, Program Induction: Building a Wall, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1844–1850, Portland, Oregon, 2004, IEEE Press.

[256] P. Hartono, S. Hashimoto, and M. Wahde, Labeled-GA with Adaptive Mutation Rate, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1851–1858, Portland, Oregon, 2004, IEEE Press.

[257] D. Ashlock and J. Oftelie, Simulation of Floral Specialization in Bees, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1859–1864, Portland, Oregon, 2004, IEEE Press.

[258] D. Kephart and J. Lefevre, CodeGen: The Generation and Testing of DNA Code Words, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1865–1873, Portland, Oregon, 2004, IEEE Press.

[259] M. Khabzaoui, C. Dhaenens, and E.-G. Talbi, A Multicriteria Genetic Algorithm to analyze DNA microarray data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1874–1881, Portland, Oregon, 2004, IEEE Press.

[260] M. Nuser and R. Deaton, A Probabilistic Analysis of in Vitro Selection of Independent DNA Words for Computation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1882–1888, Portland, Oregon, 2004, IEEE Press.

[261] A. Neel, M. Garzon, and P. Penumetsa, Soundness and Quality of Semantic Retrieval in DNA-based Memories with Abiotic Data, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1889–1895, Portland, Oregon, 2004, IEEE Press.

[262] D. Wood and J. Chen, Fredkin Gate Circuits via Recombination Enzymes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1896–1900, Portland, Oregon, 2004, IEEE Press.

[263] C.-H. Chiang and L.-H. Chen, A New Cellular Automaton: Five Elements Balance Chart and Its Application to Forest Industry Ecosystem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1901–1908, Portland, Oregon, 2004, IEEE Press.

[264] A. Acan, Clonal Selection Algorithm with Operator Multiplicity, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1909–1915, Portland, Oregon, 2004, IEEE Press.

[265] M. Randall, Heuristics for Ant Colony Optimisation using the Generalised Assignment Problem, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1916–1923, Portland, Oregon, 2004, IEEE Press.

[266] M. Ippolito, E. R. Sanseverino, and F. Vuinovich, Multiobjective Ant Colony Search Algorithm For Optimal Electrical Distribution System Strategical Planning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1924–1931, Portland, Oregon, 2004, IEEE Press.

[267] R. Annaluru, S. Das, and A. Pahwa, Multi-Level Ant Colony Algorithm for Optimal Placement of Capacitors in Distribution Systems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1932–1937, Portland, Oregon, 2004, IEEE Press.

[268] A. Pirzada, A. Datta, and C. McDonald, Trusted Routing in Ad-hoc Networks using Pheromone Trails, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1938–1943, Portland, Oregon, 2004, IEEE Press.

[269] C. Mumford, A Hierarchical Evolutionary Approach to Multi-Objective Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1944–1951, Portland, Oregon, 2004, IEEE Press.

[270] J. Branke, H. Schmeck, K. Deb, and R. Maheshwar, Parallelizing Multi-Objective Evolutionary Algorithms: Cone Separation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1952–1957, Portland, Oregon, 2004, IEEE Press.

[271] C. Grosan, Improving the performance of evolutionary algorithms for the multiobjective 0/1 knapsack problem using epsilon -dominance, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1958–1963, Portland, Oregon, 2004, IEEE Press.

[272] S. Marwaha, D. Srinivasan, C. K. Tham, and A. Vasilakos, Evolutionary Fuzzy Multi-Objective Routing For Wireless Mobile Ad Hoc Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1964–1971, Portland, Oregon, 2004, IEEE Press.

[273] K. Y. Chan, E. Aydin, and T. Fogarty, Parameterisation of Mutation in Evolutionary Algorithms Using the Estimated Main Effect of Genes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1972–1979, Portland, Oregon, 2004, IEEE Press.

[274] J. Vesterstroem and R. Thomsen, A Comparative Study of Differential Evolution, Particle Swarm Optimization, and Evolutionary Algorithms on Numerical Benchmark Problems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1980–1987, Portland, Oregon, 2004, IEEE Press.

[275] F. Zhang and G. V. Dozier, A Comparison of Distributed Restricted Recombination Operators for Genetic and Evolutionary Societies of Hill-Climbers: A DisACSP Perspective, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1988–1995, Portland, Oregon, 2004, IEEE Press.

[276] T. Ray, N. Venkatarayalu, K. S. Won, and K. P. Chan, Study on the Behaviour and Implementation of Parent Centric Crossover within the Generalized Generation Gap Model, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 1996–2003, Portland, Oregon, 2004, IEEE Press.

[277] S. Paterlini and T. Krink, High Performance Clustering with Differential Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2004–2011, Portland, Oregon, 2004, IEEE Press.

[278] X.-F. Xie, W.-J. Zhang, and D.-C. Bi, Handling Equality Constraints by Adaptive Relaxing Rule for Swarm Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2012–2016, Portland, Oregon, 2004, IEEE Press.

[279] X.-F. Xie, W.-J. Zhang, and D.-C. Bi, Optimizing Semiconductor Devices by Self-organizing Particle Swarm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2017–2022, Portland, Oregon, 2004, IEEE Press.

[280] D. Tasoulis, N. Pavlidis, V. Plagianakos, and M. Vrahatis, Parallel Differential Evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2023–2029, Portland, Oregon, 2004, IEEE Press.

[281] P. Buzing, A. Eiben, M. Schut, and T. Toma, Cooperation and Communication in Evolving Artificial Societies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2030–2037, Portland, Oregon, 2004, IEEE Press.

[282] G. Enee and C. Escazut, Evolution of Communication in a Genetic Based Multi-Agent System: Use Wise Resources, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2038–2044, Portland, Oregon, 2004, IEEE Press.

[283] D. Ashlock and B. Powers, The Effect of Tag Recognition on Non-Local Adaptation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2045–2051, Portland, Oregon, 2004, IEEE Press.

[284] G. Kendall, R. Yaakob, and P. Hingston, An Investigation of an Evolutionary Approach to the Opening of Go, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2052–2059, Portland, Oregon, 2004, IEEE Press.

[285] I. Ono, Y. Seike, R. Morishita, N. Ono, and M. Matsui, An Evolutionary Algorithm Taking Account of Mutual Interactions among Substances for Inference of Genetic Networks, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2060–2067, Portland, Oregon, 2004, IEEE Press.

[286] N. Noman, K. Okada, N. Hosoyama, and H. Iba, Use of Clustering to Improve the Layout of Gene Network for Visualization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2068–2075, Portland, Oregon, 2004, IEEE Press.

[287] T. Paul and H. Iba, Selection of the Most Useful Subset of Genes for Gene Expression-Based Classification, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2076–2083, Portland, Oregon, 2004, IEEE Press.

[288] P. Koduru, S. Das, S. Welch, and J. L. Roe, A Multi-objective GA-Simplex Hybrid Approach for Gene Regulatory Network Models, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2084–2091, Portland, Oregon, 2004, IEEE Press.

[289] A. Song and V. Ciesielski, Texture Analysis by Genetic Programming, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2092–2099, Portland, Oregon, 2004, IEEE Press.

[290] J.-S. Jang, K.-H. Han, and J.-H. Kim, Face Detection using Quantum-inspired Evolutionary Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2100–2106, Portland, Oregon, 2004, IEEE Press.

[291] A. Treptow and A. Zell, Combining Adaboost Learning and Evolutionary Search to select Features for Real-Time Object Detection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2107–2113, Portland, Oregon, 2004, IEEE Press.

[292] D. Miller, R. Arguello, and G. Greenwood, Evolving Artificial Neural Network Structures: Experimental Results for Biologically-Inspired Adaptive Mutations, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2114–2119, Portland, Oregon, 2004, IEEE Press.

[293] H. Chen and D. guo Feng, An Effective Evolutionary Strategy for Bijective S-boxes, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2120–2123, Portland, Oregon, 2004, IEEE Press.

[294] J. C. Hernandez and P. Isasi, New results on the genetic cryptanalysis of TEA and reduced-round versions of XTEA, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2124–2129, Portland, Oregon, 2004, IEEE Press.

[295] N. Nedjah and L. Mourelle, Secure Evolutionary Hardware for Public-Key Cryptosystems, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2130–2137, Portland, Oregon, 2004, IEEE Press.

[296] M. Seredynski and P. Bouvry, Block Cipher based on Reversible Cellular Automata, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2138–2143, Portland, Oregon, 2004, IEEE Press.

[297] S. Legg, M. Hutter, and A. Kumar, Tournament versus Fitness Uniform Selection, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2144–2151, Portland, Oregon, 2004, IEEE Press.

[298] B. Dorronsoro, E. Alba, M. Giacobini, and M. Tomassini, The Influence of Grid Shape and Asynchronicity on Cellular Evolutionary Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2152–2158, Portland, Oregon, 2004, IEEE Press.

[299] O. Takahashi and S. Kobayashi, An Angular Distance Dependent Alternation Model for Real-Coded Genetic Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2159–2165, Portland, Oregon, 2004, IEEE Press.

[300] O. Dengiz, G. V. Dozier, and A. E. Smith, Non-deterministic Decoding with Memory to Enhance Precision in Binary-Coded Genetic Algorithms, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2166–2172, Portland, Oregon, 2004, IEEE Press.

[301] B. S., A. Alphones, and P. N. Suganthan, Concurrent PSO and FDR-PSO based reconfigurable Phase-Differentiated Antenna Array Design, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2173–2179, Portland, Oregon, 2004, IEEE Press.

[302] P. E. Hotz, Asymmetric cell division in artificial evolution, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2180–2186, Portland, Oregon, 2004, IEEE Press.

[303] S. Vigraham and J. Gallagher, On the Relative Efficacies of Space Saving *CGAs for Evolvable Hardware Applications, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2187–2193, Portland, Oregon, 2004, IEEE Press.

[304] M. H. Khan and M. A. Perkowski, Genetic Algorithm Based Synthesis of Multi-Output Ternary Functions Using Quantum Cascade of Generalized Ternary Gates, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2194–2201, Portland, Oregon, 2004, IEEE Press.

[305] S. Kamio and H. Iba, Evolutionary Construction of a Simulator for Real Robots, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2202–2209, Portland, Oregon, 2004, IEEE Press.

[306] P. Lucidarme, An Evolutionary Algorithm for Multi-Robot Unsupervised Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2210–2215, Portland, Oregon, 2004, IEEE Press.

[307] G. Parker, Partial Recombination for the Co-Evolution of Model Parameters, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2216–2223, Portland, Oregon, 2004, IEEE Press.

[308] Y. Nojima, N. Kubota, and F. Kojima, Trajectory Generation and Accumulation for Partner Robots based on Structured Learning, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2224–2229, Portland, Oregon, 2004, IEEE Press.

[309] K. Tang, P. N. Suganthan, and X. Yao, Generalized Lda Using Relevance Weighting and Evolution Strategy, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2230–2234, Portland, Oregon, 2004, IEEE Press.

[310] S. Stanhope, Evolution Strategies for Multivariate-to-Anything Partially Specified Random Vector Generation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2235–2240, Portland, Oregon, 2004, IEEE Press.

[311] A. Tulai and F. Oppacher, Maintaining Diversity and Increasing the Accuracy of Classification Rules through Automatic Speciation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2241–2249, Portland, Oregon, 2004, IEEE Press.

[312] M. Goldstein and G. Yen, An Evolutionary Algorithm Method for Sampling N-Partite Graphs, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2250–2257, Portland, Oregon, 2004, IEEE Press.

[313] P. Lichodzijewski, N. Zincir-Heywood, and M. Heywood, Cascaded GP Models for Data Mining, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2258–2264, Portland, Oregon, 2004, IEEE Press.

[314] A. S. Uyar and H. T. Uyar, An Event-Driven Test Framework for Evolutionary Algorithms in Dynamic Environments, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2265–2272, Portland, Oregon, 2004, IEEE Press.

[315] D. Ashlock and K. Bryden, Evolutionary Control of Lsystem Interpretation, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2273–2279, Portland, Oregon, 2004, IEEE Press.

[316] J. Zhang, H. Chung, and B. Hu, Adaptive Probabilities of Crossover and Mutation in Genetic Algorithms Based on Clustering Technique, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2280–2287, Portland, Oregon, 2004, IEEE Press.

[317] A. Czarn, C. MacNish, K. Vijayan, and B. Turlach, Statistical Exploratory Analysis of Genetic Algorithms: The Importance of Interaction, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2288–2295, Portland, Oregon, 2004, IEEE Press.

[318] M. Nakamura, N. Yamashiro, and Y. Gong, Iterative Parallel and Distributed Genetic Algorithms with Biased Initial Population, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2296–2301, Portland, Oregon, 2004, IEEE Press.

[319] Y. Xu, S. Salcedo-Sanz, and X. Yao, Non-standard Cost Terminal Assignment Problems Using Tabu Search Approach, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2302–2306, Portland, Oregon, 2004, IEEE Press.

[320] W.-J. Zhang, X.-F. Xie, and D.-C. Bi, Handling Boundary Constraints for Numrical Optimization by Particle Swarm Flying in Periodic Search Space, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2307–2311, Portland, Oregon, 2004, IEEE Press.

[321] I. Tanev, T. Ray, and A. Buller, Evolutionary Design, Robustness and Adaptation of Sidewinding Locomotion of Simulated Libmless Wheelless Robot, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2312–2319, Portland, Oregon, 2004, IEEE Press.

[322] Z. Fan, E. Goodman, W. Jiachuan, R. Ronald, S. Kisung, and H. Jianjun, Hierarchical Evolutionary Synthesis of MEMS, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2320–2327, Portland, Oregon, 2004, IEEE Press.

[323] H. Yapicioglu, G. V. Dozier, and A. E. Smith, Bi-criteria model for Locating a Semi-desirable Facility on a Plane Using Particle Swarm Optimization, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2328–2334, Portland, Oregon, 2004, IEEE Press.

[324] P. Zou, Z. Zhou, G. Chen, and X. Yao, A Novel Memetic Algorithm with Random Multi-local-search: A case study of TSP, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2335–2340, Portland, Oregon, 2004, IEEE Press.

[325] E. De Jong, Towards a Bounded Pareto-Coevolution Archive, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2341–2348, Portland, Oregon, 2004, IEEE Press.

[326] M. Chang, K. Ohkura, K. Ueda, and M. Sugiyama, Modeling Coevolutionary Genetic Algorithms on Two-Bit Landscapes: Partnering Strategies, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2349–2356, Portland, Oregon, 2004, IEEE Press.

[327] E. Hughes, Swarm Guidance using a Multi-Objective Co-evolutionary On-Line Evolutionary Algorithm, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2357–2363, Portland, Oregon, 2004, IEEE Press.

[328] J. Brewster and R. G. Reynolds, Alternative Fuel Adoption, in *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*, pp. 2364–2371, Portland, Oregon, 2004, IEEE Press.