## Список литературы

- [Acan(2004)] Acan, A. (2004) 'Clonal selection algorithm with operator multiplicity'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1909–1915.
- [Aguirre and Tanaka(2004a)] Aguirre, H. and Tanaka, K. (2004a) 'Effects of elitism and population climbing on multiobjective mnk-landscapes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 449–456.
- [Aguirre and Tanaka(2004b)] Aguirre, H. and Tanaka, K. (2004b) 'Insights on properties of multiobjective mnk-landscapes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 196–203.
- [Aldasht et al.(2004)Aldasht, Ortega, Puntonet and Diaz] Aldasht, M., Ortega, J., Puntonet, C.G. and Diaz, A.F. (2004) 'A genetic exploration of dynamic load balancing algorithms'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1158–1163.
- [Aleti and de Garis(2004)] Aleti, S.H. and de Garis, H. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1172–1177.
- [Alkhalifah and Wainwright(2004)] Alkhalifah, Y. and Wainwright, R. (2004) 'A genetic algorithm applied to graph problems involving subsets of vertices'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 303–308.
- [Anderson et al.(2004) Anderson, Bonabeau and Scott] Anderson, C., Bonabeau, E. and Scott, J. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1089–1097.
- [Ando and Iba(2004)] Ando, S. and Iba, H. (2004) 'Estimation of gene network using real-coded ga and robustness analysis'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 827–834.
- [Annaluru et al.(2004)Annaluru, Das and Pahwa] Annaluru, R., Das, S. and Pahwa, A. (2004) 'Multi-level ant colony algorithm for optimal placement of capacitors in distribution systems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1932–1937.
- [Arnold(2004)] Arnold, D. (2004) 'An analysis of evolutionary gradient search'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 47–54.
- [Ashburn and Bonabeau(2004)] Ashburn, T. and Bonabeau, E. (2004) 'Interactive inversion of financial markets agent-based models'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 522–529.
- [Ashlock and Bryden(2004)] Ashlock, D. and Bryden, K. (2004) 'Evolutionary control of lsystem interpretation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2273–2279.
- [Ashlock et al.(2004a)Ashlock, Bryden and Corns] Ashlock, D., Bryden, K. and Corns, S. (2004a) 'On taxonomy of evolutionary computation problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1713–1719.
- [Ashlock et al.(2004b)Ashlock, youn Kim and von Roeschlaub] Ashlock, D., youn Kim, E. and von Roeschlaub, W. (2004b) 'Fingerprints: Enabling visualization and automatic analysis of strategies for two player games'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 381–387.

- [Ashlock and Lathrop(2004)] Ashlock, D. and Lathrop, J. (2004) 'Program induction: Building a wall'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1844–1850.
- [Ashlock and Oftelie(2004)] Ashlock, D. and Oftelie, J. (2004) 'Simulation of floral specialization in bees'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1859–1864.
- [Ashlock and Powers(2004)] Ashlock, D. and Powers, B. (2004) 'The effect of tag recognition on non-local adaptation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2045–2051.
- [Ashlock et al.(2004c)Ashlock, Willson and Leahy] Ashlock, D., Willson, S. and Leahy, N. (2004c) 'Coevolution and tartarus'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1618–1624.
- [Augugliaro et al. (2004) Augugliaro, Dusonchet, Favuzza and Sanseverino] Augugliaro, A., Dusonchet, L., Favuzza, S. and Sanseverino, E.R. (2004) 'A fuzzy-logic based evolutionary multiobjective approach for automated distribution networks management'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 847–854.
- [Bain et al.(2004)Bain, Thornton and Sattar] Bain, S., Thornton, J. and Sattar, A. (2004) 'Evolving algorithms for constraint satisfaction'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 265–272.
- [Bajurnow and Ciesielski(2004)] Bajurnow, A. and Ciesielski, V. (2004) 'Layered learning for evolving goal scoring behavior in soccer players'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1828–1835.
- [Bandte(2004)] Bandte, O. (2004) 'Visualizing information in an interactive evolutionary design process'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 691–698.
- [Bartz-Beielstein and Markon(2004)] Bartz-Beielstein, T. and Markon, S. (2004) 'Tuning search algorithms for real-world applications: A regression tree based approach'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1111–1118.
- [Bernstein et al.(2004)Bernstein, Li, Ciesielski and Song] Bernstein, Y., Li, X., Ciesielski, V. and Song, A. (2004) 'Multiobjective parsimony enforcement for superior generalisation performance'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 83–89.
- [Bleuler et al.(2004)Bleuler, Prelic and Zitzler] Bleuler, S., Prelic, A. and Zitzler, E. (2004) 'An ea framework for biclustering of gene expression data'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 166–173.
- [Blumenthal and Parker(2004)] Blumenthal, J. and Parker, G. (2004) 'Punctuated anytime learning for evolving multi-agent capture strategies'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1820–1827.
- [Bonino et al.(2004)Bonino, Corno and Squillero] Bonino, D., Corno, F. and Squillero, G. (2004) 'Dynamic optimization of semantic annotation relevance'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1301–1308.
- [Brabazon et al.(2004)Brabazon, Silva, de Sousa, O'Neill, Matthews and Costa] Brabazon, A., Silva, A., de Sousa, T.F., O'Neill, M., Matthews, R. and Costa, E. (2004) 'Investigating organizational strategic inertia using a particle swarm model'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 652–659.

- [Branke et al.(2004)Branke, Schmeck, Deb and Maheshwar] Branke, J., Schmeck, H., Deb, K. and Maheshwar, R. (2004) 'Parallelizing multi-objective evolutionary algorithms: Cone separation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1952–1957.
- [Brewster and Reynolds(2004)] Brewster, J. and Reynolds, R.G. (2004) 'Alternative fuel adoption'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2364–2371.
- [Bryden et al.(2004)Bryden, Ashlock and McCorkle] Bryden, K., Ashlock, D. and McCorkle, D. (2004) 'An application of graph based evolutionary algorithms for diversity preservation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 419–426.
- [Burian and Takala(2004)] Burian, A. and Takala, J. (2004) 'Evolved gate arrays for image restoration'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1185–1192.
- [Buzing et al.(2004)Buzing, Eiben, Schut and Toma] Buzing, P., Eiben, A., Schut, M. and Toma, T. (2004) 'Cooperation and communication in evolving artificial societies'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2030–2037.
- [Cagnina et al.(2004)Cagnina, Esquivel and Gallard] Cagnina, L., Esquivel, S. and Gallard, R. (2004) 'Particle swarm optimization for sequencing problems: A case study'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 536–541.
- [Castillo et al.(2004)Castillo, Sweeney and Zirk] Castillo, F., Sweeney, J. and Zirk, W. (2004) 'Using evolutionary algorithms to suggest variable transformations in linear model lack-of-fit situations'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 556–560.
- [Chakraborty(2004)] Chakraborty, U. (2004) 'Analysis of encoding in 1+1-ea'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 911–917.
- [Chan et al.(2004a)Chan, Aydin and Fogarty] Chan, K.Y., Aydin, E. and Fogarty, T. (2004a) 'An empirical study on the performance of factorial design based crossover on parametrical problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 620–627.
- [Chan et al.(2004b)Chan, Aydin and Fogarty] Chan, K.Y., Aydin, E. and Fogarty, T. (2004b) 'Parameterisation of mutation in evolutionary algorithms using the estimated main effect of genes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1972–1979.
- [Chang et al.(2004)Chang, Ohkura, Ueda and Sugiyama] Chang, M., Ohkura, K., Ueda, K. and Sugiyama, M. (2004) 'Modeling coevolutionary genetic algorithms on two-bit landscapes: Partnering strategies'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2349–2356.
- [Chen et al.(2004)Chen, Chootinan and Pravinvongvuth] Chen, A., Chootinan, P. and Pravinvongvuth, S. (2004) 'An evolutionary approach for finding optimal automatic vehicle identification reader locations in transportation networks'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 181–187.
- [Chen and guo Feng(2004)] Chen, H. and guo Feng, D. (2004) 'An effective evolutionary strategy for bijective s-boxes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2120–2123.
- [Chen and Wineberg (2004)] Chen, J. and Wineberg, M. (2004) 'Enhancement of the shifting balance genetic algorithm for highly multimodal problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 744–751.

- [ping Chen and Goldberg(2004)] ping Chen, Y. and Goldberg, D. (2004) 'Convergence time for the linkage learning genetic algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 39–46.
- [Chiang and Chen(2004)] Chiang, C.H. and Chen, L.H. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1901–1908.
- [Cho and Park(2004)] Cho, S.B. and Park, C. (2004) 'Speciated ga for optimal ensemble classifiers in dna microarray classification'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 590–597.
- [Chong and Yao(2004)] Chong, S.Y. and Yao, X. (2004) 'The impact of noise on iterated prisoner's dilemma with multiple levels of cooperation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 348–355.
- [kin Chow and tat Tsui(2004)] kin Chow, C. and tat Tsui, H. (2004) 'Autonomous agent response learning by a multi-species particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 778–785.
- [Chow(2004)] Chow, R. (2004) '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*. Portland, Oregon: IEEE Press, pp. 242–249.
- [Chung-Yuan and Chuen-Tsai(2004)] Chung-Yuan, H. and Chuen-Tsai, S. (2004) 'Self-adaptive routing based on learning classifier systems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 678–682.
- [Ciesielski and Li(2004)] Ciesielski, V. and Li, X. (2004) 'Experiments with explicit for-loops in genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 494–501.
- [Clark et al.(2004a)Clark, Jacob and Stepney] Clark, J.A., Jacob, J.L. and Stepney, S. (2004a) 'The design of s-boxes by simulated annealing'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1533–1537.
- [Clark et al.(2004b)Clark, Jacob and Stepney] Clark, J.A., Jacob, J.L. and Stepney, S. (2004b) 'Searching for cost functions'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1517–1524.
- [Coelho and Bouillard(2004)] Coelho, R.F. and Bouillard, P. (2004) 'Pamuc ii for multicriteria optimization of mechanical designs with expert rules'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 17–22.
- [Cohen(2004a)] Cohen, D. (2004a) 'Ea-lect: An evolutionary algorithm for constructing logical rules to predict election into cooperstown'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1354–1361.
- [Cohen(2004b)] Cohen, D. (2004b) 'Using sat scores as predictors for future academic success'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 671–677.
- [Cole et al.(2004)Cole, Louis and Miles] Cole, N., Louis, S. and Miles, C. (2004) 'Using a genetic algorithm to tune first-person shooter bots'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 139–145.
- [Corne and Pridgeon(2004)] Corne, D. and Pridgeon, C. (2004) 'Investigating issues in the reconstructability of genetic regulatory networks'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 582–589.

- [Corno et al.(2004)Corno, Sanchez and Squillero] Corno, F., Sanchez, E. and Squillero, G. (2004) 'On the evolution of corewar warriors'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 133–138.
- [Cruz(2004)] Cruz, A. (2004) 'A hybrid deterministic/genetic test generator to improve fault'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1325–1330.
- [Cui et al.(2004)Cui, Zeng and Cai] Cui, Z., Zeng, J. and Cai, X. (2004) 'A new stochastic particle swarm optimizer'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 316–319.
- [Curran and O'Riordan(2004)] Curran, D. and O'Riordan, C. (2004) 'The effect of noise on the performance of cultural evolution in multi-agent systems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1767–1773.
- [Czarn et al. (2004) Czarn, MacNish, Vijayan and Turlach] Czarn, A., MacNish, C., Vijayan, K. and Turlach, B. (2004) 'Statistical exploratory analysis of genetic algorithms: The importance of interaction'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2288–2295.
- [Dahal et al. (2004) Dahal, Siewierski, Galloway, Burt and McDonald] Dahal, K.P., Siewierski, T.A., Galloway, S.J., Burt, G.M. and McDonald, J.R. (2004) 'An evolutionary generation scheduling in an open electricity market'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1135–1142.
- [Daida et al. (2004a) Daida, Samples, Hart, Halim and Kumar] Daida, J., Samples, M., Hart, B., Halim, J. and Kumar, A. (2004a) 'Demonstrating constraints to diversity with a tunably difficulty problem for genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1217–1224.
- [Daida et al.(2004b)Daida, Ward, Hilss, Long and Hodges] Daida, J., Ward, D., Hilss, A., Long, S. and Hodges, M. (2004b) 'Visualizing the loss of diversity in genetic programming'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1225–1232.
- [Dandass(2004)] Dandass, Y. (2004) 'Genetic list scheduling for soft real-time parallel applications'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1164–1171.
- [Daneshyari and Yen(2004)] Daneshyari, M. and Yen, G. (2004) 'Talent based social algorithm for optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 786–791.
- [Daoud et al.(2004)Daoud, Kharma, Haidar and Popoola] Daoud, M., Kharma, N., Haidar, A. and Popoola, J. (2004) 'Ayo, the awari player, or how better representation trumps deeper search'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1001–1006.
- [Day et al.(2004)Day, Kleeman and Lamont] Day, R., Kleeman, M. and Lamont, G. (2004) 'Multi-objective fast messy genetic algorithm solving deception problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1502–1509.
- [Day and Lamont(2004)] Day, R. and Lamont, G. (2004) 'Force field approximations using artificial neural networks'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1020–1027.
- [de Garis and Batty(2004a)] de Garis, H. and Batty, T. (2004a) "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*. Portland, Oregon: IEEE Press, pp. 816–819.

- [de Garis and Batty(2004b)] de Garis, H. and Batty, T. (2004b) 'Robust, reversible, nano-scale, femto-second-switching circuits and their evolution'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 639–645.
- [De Jong(2004)] De Jong, E. (2004) 'Towards a bounded pareto-coevolution archive'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2341–2348.
- [de la Cruz-Garcia et al.(2004)de la Cruz-Garcia, Risco-Martin, Herran-Gonzalez and Fernandez-Blanco] de la Cruz-Garcia, J.M., Risco-Martin, J.L., Herran-Gonzalez, A. and Fernandez-Blanco, P. (2004) 'Hybrid heuristic and mathematical programming in oil pipelines networks'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1479–1486.
- [de Paula et al. (2004) de Paula, de Castro and de Geus] de Paula, F., de Castro, L. and de Geus, P. (2004) 'An intrusion detection system using ideas from the immune system'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1059–1066.
- [De San Pedro et al.(2004)De San Pedro, Pandolfi, Villagra, Lasso and Gallard] De San Pedro, M., Pandolfi, D., Villagra, A., Lasso, M. and Gallard, R. (2004) 'Effect of crossover operators under multirecombination: Weighted tardiness, a test case'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 699-705.
- [Dengiz et al.(2004)Dengiz, Dozier and Smith] Dengiz, O., Dozier, G.V. and Smith, A.E. (2004) 'Non-deterministic decoding with memory to enhance precision in binary-coded genetic algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2166–2172.
- [Denzinger et al.(2004)Denzinger, Chan, Gates, Loose and Buchanan] Denzinger, J., Chan, B., Gates, D., Loose, K. and Buchanan, J. (2004) 'Evolutionary behavior testing of commercial computer games'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 125–132.
- [Deschenes and Wiese(2004)] Deschenes, A. and Wiese, K.C. (2004) '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*. Portland, Oregon: IEEE Press, pp. 598–606.
- [Deugo and Ferguson(2004)] Deugo, D. and Ferguson, D. (2004) 'Evolution to the xtreme: Evolving evolutionary strategies using a meta-level approach'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 31–38.
- [Devicharan and Mohan(2004)] Devicharan, D. and Mohan, C. (2004) 'Particle swarm optimization with adaptive linkage learning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 530–535.
- [Di Pietro et al.(2004)Di Pietro, While and Barone] Di Pietro, A., While, L. and Barone, L. (2004) 'Applying evolutionary algorithms to problems with noisy, time-consuming fitness functions'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1254–1261.
- [Dimopoulos(2004)] Dimopoulos, C. (2004) 'A review of evolutionary multiobjective optimization applications in the area of production research'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1487–1494.
- [Ding et al.(2004)Ding, Liu, Wu and Yang] Ding, S., Liu, J., Wu, C. and Yang, Q. (2004) 'A genetic algorithm applied to optimal gene subset selection'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1654–1660.

- [Doctor et al.(2004)Doctor, Venayagamoorthy and Gudise] Doctor, S., Venayagamoorthy, G. and Gudise, V. (2004) 'Optimal pso for collective robotic search applications'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1390–1395.
- [Dorris et al.(2004)Dorris, Carnahan, Orsini and Kuntz] Dorris, N., Carnahan, B., Orsini, L. and Kuntz, L.A. (2004) 'Interactive evolutionary design of anthropomorphic symbols'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 433–440.
- [Dorronsoro et al.(2004)Dorronsoro, Alba, Giacobini and Tomassini] Dorronsoro, B., Alba, E., Giacobini, M. and Tomassini, M. (2004) 'The influence of grid shape and asynchronicity on cellular evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2152–2158.
- [Doty(2004)] Doty, D. (2004) 'Non-local evolutionary adaptation in gridplants'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1602–1609.
- [Dozier(2004)] Dozier, G.V. (2004) 'Recurrent distributed constraint satisfaction via genetic and evolutionary societies of hill-climbers'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 273–279.
- [Dozier et al.(2004)Dozier, Brown, Hurley and Cain] Dozier, G.V., Brown, D., Hurley, J. and Cain, K. (2004) '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*. Portland, Oregon: IEEE Press, pp. 111–116.
- [Dukkipati et al.(2004)Dukkipati, Musti and Bhatnagar] Dukkipati, A., Musti, N.M. and Bhatnagar, S. (2004) 'Cauchy annealing schedule: An annealing schedule for boltzmann selection scheme in evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 55–62.
- [Dunn et al.(2004)Dunn, Olague, Lutton and Schoenauer] Dunn, E., Olague, G., Lutton, E. and Schoenauer, M. (2004) 'Pareto optimal sensing strategies for an active vision system'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 457–463.
- [Eberbach and Eberbach(2004)] Eberbach, E. and Eberbach, A. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1836–1843.
- [Eguchi et al.(2004)Eguchi, Hirasawa, Hu and Markon] Eguchi, T., Hirasawa, K., Hu, J. and Markon, S. (2004) 'Elevator group supervisory control systems using genetic network programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1661–1667.
- [Enee and Escazut(2004)] Enee, G. and Escazut, C. (2004) 'Evolution of communication in a genetic based multi-agent system: Use wise resources'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2038–2044.
- [English(2004)] English, T. (2004) 'No more lunch: Analysis of sequential search'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 227–234.
- [Eriksson and Olsson(2004)] Eriksson, R. and Olsson, B. (2004) 'On the performance of evolutionary algorithms with life-time adaptation in dynamic fitness landscapes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1293–1300.
- [Eskridge and Hougen(2004)] Eskridge, B. and Hougen, D. (2004) 'Imitating success: A memetic crossover operator for genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 809–815.

- [Esquivel et al.(2004)Esquivel, Garcia, Leguizamon and Ribba] Esquivel, S., Garcia, M., Leguizamon, G. and Ribba, M. (2004) 'A comparison of two mutation operators for the path planning problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 879–883.
- [Eto et al.(2004)Eto, Hirasawa and Hu] Eto, S., Hirasawa, K. and Hu, J. (2004) 'Functional localization of genetic network programming and its application to a pursuit problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 683–690.
- [Fan et al.(2004)Fan, Goodman, Jiachuan, Ronald, Kisung and Jianjun] Fan, Z., Goodman, E., Jiachuan, W., Ronald, R., Kisung, S. and Jianjun, H. (2004) 'Hierarchical evolutionary synthesis of mems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2320–2327.
- [Farina and Gobbi(2004)] Farina, M. and Gobbi, M. (2004) 'A fuzzy-optima definition based multiobjective optimization of a racing car tyre-suspension system'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 9–16.
- [Fernandez et al.(2004)Fernandez, Grana and Ruiz-Cabello] Fernandez, E., Grana, M. and Ruiz-Cabello, J. (2004) 'An instantaneous memetic algorithm for illumination correction'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1105–1110.
- [Ferreira et al.(2004)Ferreira, Vasconcelos and Adeodato] Ferreira, T., Vasconcelos, G. and Adeodato, P. (2004) 'A hybrid intelligent system approach for improving the prediction of real world time series'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 736–743.
- [Filipic and Robic(2004)] Filipic, B. and Robic, T. (2004) 'A comparative study of coolant flow optimization on a steel casting machine'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 569–573.
- [Fletcher and Zwick(2004)] Fletcher, J. and Zwick, M. (2004) 'Hamilton's rule applied to reciprocal altruism'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 994–1000.
- [Fogel(2004)] Fogel, D.B. (2004) 'Evolving strategies in blackjack'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1427–1434.
- [Fogel et al.(2004a)Fogel, Hays and Johnson] Fogel, D.B., Hays, T. and Johnson, D. (2004a) 'A platform for evolving characters in competitive games'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1420–1426.
- [Fogel et al.(2004b)Fogel, Weekes, Sampath and Ecker] Fogel, G.B., Weekes, D.G., Sampath, R. and Ecker, D.J. (2004b) 'Parameter optimization of an evolutionary algorithm for rna structure discovery'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 607–613.
- [Franken and Engelbrecht(2004)] Franken, N. and Engelbrecht, A. (2004) 'Pso approaches to coevolve ipd strategies'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 356–363.
- [Fuller et al.(2004)Fuller, Millan and Dawson] Fuller, J., Millan, W. and Dawson, E. (2004) 'Multi-objective optimisation of bijective s-boxes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1525–1532.
- [Funes et al.(2004)Funes, Bonabeau, Herve and Morieux] Funes, P., Bonabeau, E., Herve, J. and Morieux, Y. (2004) 'Interactive multi-participant task allocation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1699–1705.

- [Gao(2004)] Gao, W. (2004) 'Fast immunized evolutionary programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 666–670.
- [Garrett(2004)] Garrett, S. (2004) 'Parameter-free, adaptive clonal selection'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1052–1058.
- [Goldstein and Yen(2004)] Goldstein, M. and Yen, G. (2004) 'An evolutionary algorithm method for sampling n-partite graphs'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2250–2257.
- [Gomez(2004a)] Gomez, J. (2004a) 'Evolution of fuzzy rule based classifiers'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1727–1734.
- [Gomez(2004b)] Gomez, J. (2004b) 'Self adaptation of operator rates in evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1720–1726.
- [Gonzalez and Cannady (2004)] Gonzalez, L. and Cannady, J. (2004) 'A self-adaptive negative selection approach for anomaly detection'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1561–1568.
- [Gordon and Matley(2004)] Gordon, S. and Matley, Z. (2004) 'Evolving sparse direction maps for maze pathfinding'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 835–838.
- [Gordon and Slocum(2004)] Gordon, S. and Slocum, T. (2004) 'The knight's tour evolutionary vs. depth-first search'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1435–1440.
- [Greenwood(2004)] Greenwood, G. (2004) 'Differing mathematical perspectives of genotype space in combinatorial problems: Metric spaces vs pretopological spaces'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 258–264.
- [Grosan(2004)] Grosan, C. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1958–1963.
- [Guo and Mak(2004)] Guo, Z. and Mak, K. (2004) 'A heuristic ga for the stochastic vehicle routing problems with soft time windows'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1449–1456.
- [Gutierrez(2004)] Gutierrez, C. (2004) 'Heuristics in a general scheduling problem'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 660–665.
- [Habib and Parker(2004)] Habib, S. and Parker, A. (2004) 'Synthesizing complex multimedia network topologies using an evolutionary approach'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1193–1200.
- [Hamaker and Boggess (2004)] Hamaker, J. and Boggess, L. (2004) 'Non-euclidean distance measures in airs, an artificial immune classification system'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1067–1073.
- [Harding and Miller(2004)] Harding, S. and Miller, J. (2004) 'Evolution in materio : A tone discriminator in liquid crystal'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1800–1807.
- [Hartono et al.(2004)Hartono, Hashimoto and Wahde] Hartono, P., Hashimoto, S. and Wahde, M. (2004) 'Labeled-ga with adaptive mutation rate'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1851–1858.

- [Hatanaka et al.(2004)Hatanaka, Kawaguchi and Uosaki] Hatanaka, T., Kawaguchi, Y. and Uosaki, K. (2004) 'Nonlinear system identification based on evolutionary fuzzy modeling'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 646–651.
- [Hati and Sengupta(2004)] Hati, S. and Sengupta, S. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1346–1353.
- [Hayward(2004)] Hayward, S. (2004) '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*. Portland, Oregon: IEEE Press, pp. 948–954.
- [He et al.(2004)He, Yao and Zhang] He, J., Yao, X. and Zhang, Q. (2004) 'To understand one-dimensional continuous fitness landscapes by drift analysis'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1248–1253.
- [Hernandez et al. (2004a) Hernandez, Dasgupta, Nino and Garcia] Hernandez, G., Dasgupta, D., Nino, F. and Garcia, J. (2004a) 'On geometric and statistical properties of the attractors of a generic evolutionary algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1240–1247.
- [Hernandez and Isasi(2004)] Hernandez, J.C. and Isasi, P. (2004) 'New results on the genetic cryptanalysis of tea and reduced-round versions of xtea'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2124–2129.
- [Hernandez et al. (2004b) Hernandez, Isasi and Seznec] Hernandez, J.C., Isasi, P. and Seznec, A. (2004b) '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*. Portland, Oregon: IEEE Press, pp. 1510–1516.
- [Hernandez-Aguirre et al.(2004)Hernandez-Aguirre, Botello-Rionda and Coello-Coello] Hernandez-Aguirre, A., Botello-Rionda, S. and Coello-Coello, C. (2004) 'Passss: An implementation of a novel diversity strategy for handling constraints'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 403–410.
- [Hernandez-Aguirre and Coello-Coello (2004)] Hernandez-Aguirre, A. and Coello-Coello, C. (2004) 'Mutual information-based fitness functions for evolutionary circuit synthesis'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1309–1316.
- [Hingston and Kendall(2004)] Hingston, P. and Kendall, G. (2004) 'Learning versus evolution in iterated prisoner's dilemma'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 364–372.
- [Ho and Tay(2004)] Ho, N.B. and Tay, J.C. (2004) 'Genace: An efficient cultural algorithm to solve the flexible job-shop problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1759–1766.
- [Hong and Cho(2004)] Hong, J.H. and Cho, S.B. (2004) 'Evolution of emergent behaviors for shooting game characters in robocode'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 634–638.
- [Hotz(2004a)] Hotz, P.E. (2004a) 'Asymmetric cell division in artificial evolution'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2180–2186.
- [Hotz(2004b)] Hotz, P.E. (2004b) '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*. Portland, Oregon: IEEE Press, pp. 752–757.

- [Hou and Dozier(2004)] Hou, H. and Dozier, G.V. (2004) 'Comparing performance of binary-coded and constraint-based detectors'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 772–777.
- [Hu and Goodman(2004)] Hu, J. and Goodman, E. (2004) 'Wireless access point configuration by genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1178–1184.
- [Hu et al.(2004)Hu, Shi and Eberhart] Hu, X., Shi, Y. and Eberhart, R. (2004) 'Recent advances in particle swarm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 90–97.
- [Hughes(2004)] Hughes, E. (2004) 'Swarm guidance using a multi-objective co-evolutionary online evolutionary algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2357–2363.
- [Hunter(2004)] Hunter, D. (2004) 'Some lessons learned on constructing an automated testbench for evolvable hardware experiments'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1808–1812.
- [Inoue et al.(2004)Inoue, Tohge and Iba] Inoue, Y., Tohge, T. and Iba, H. (2004) 'Object transportation by two humanoid robots using cooperative learning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1201–1208.
- [Ippolito et al.(2004)Ippolito, Sanseverino and Vuinovich] Ippolito, M., Sanseverino, E.R. and Vuinovich, F. (2004) 'Multiobjective ant colony search algorithm for optimal electrical distribution system strategical planning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1924–1931.
- [Isaacs and Foo(2004)] Isaacs, J. and Foo, S. (2004) 'Optimized wavelet hand pose estimation for american sign language recognition'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 797–802.
- [Ishibuchi and Narukawa(2004)] Ishibuchi, H. and Narukawa, K. (2004) '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*. Portland, Oregon: IEEE Press, pp. 441–448.
- [Jang et al.(2004)Jang, Han and Kim] Jang, J.S., Han, K.H. and Kim, J.H. (2004) 'Face detection using quantum-inspired evolutionary algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2100–2106.
- [Ji et al.(2004)Ji, Chen and Subprasom] Ji, Z., Chen, A. and Subprasom, K. (2004) 'Finding multiobjective paths in stochastic networks: A simulation-based genetic algorithm approach'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 174–180.
- [Ji and Dasgupta(2004)] Ji, Z. and Dasgupta, D. (2004) 'Augmented negative selection algorithm with variable-coverage detectors'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1081–1088.
- [Jin et al.(2004)Jin, Okabe and Sendhoff] Jin, Y., Okabe, T. and Sendhoff, B. (2004) 'Neural network regularization and ensembling using multi-objective evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1–8.
- [Johnson et al. (2004) Johnson, Melich, Michalewicz and Schmidt] Johnson, R., Melich, M., Michalewicz, Z. and Schmidt, M. (2004) 'Coevolutionary tempo game'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1610–1617.

- [Jones et al.(2004)Jones, Tiwari, Roy and Corbett] Jones, P., Tiwari, A., Roy, R. and Corbett, J. (2004) 'Optimisation of the high efficiency deep grinding process with fuzzy fitness function and constraints'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 574–581.
- [Kamio and Iba(2004)] Kamio, S. and Iba, H. (2004) 'Evolutionary construction of a simulator for real robots'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2202–2209.
- [Kang et al. (2004) Kang, Zhou, McKay, Li and Kang] Kang, L., Zhou, A., McKay, R.I., Li, Y. and Kang, Z. (2004) 'Benchmarking algorithms for dynamic travelling salesman problems'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1286–1292.
- [Katada et al.(2004)Katada, Ohkura and Ueda] Katada, Y., Ohkura, K. and Ueda, K. (2004) 'The nei's standard genetic distance in artificial evolution'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1233–1239.
- [Katare et al.(2004)Katare, Kalos and West] Katare, S., Kalos, A. and West, D. (2004) 'A hybrid swarm optimizer for efficient parameter estimation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 309–315.
- [Katsumata and Terano (2004)] Katsumata, Y. and Terano, T. (2004) 'Cabling and scheduling for electric power plant operation via tabu-boa algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1675–1682.
- [Kendall and Spoerer (2004)] Kendall, G. and Spoerer, K. (2004) 'Scripting the game of lemmings with a genetic algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 117–124.
- [Kendall et al.(2004)Kendall, Yaakob and Hingston] Kendall, G., Yaakob, R. and Hingston, P. (2004) 'An investigation of an evolutionary approach to the opening of go'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2052–2059.
- [Kennedy(2004)] Kennedy, J. (2004) 'Probability and dynamics in the particle swarm'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 340–347.
- [Kephart and Lefevre(2004)] Kephart, D. and Lefevre, J. (2004) 'Codegen: The generation and testing of dna code words'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1865–1873.
- [Khabzaoui et al. (2004) Khabzaoui, Dhaenens and Talbi] Khabzaoui, M., Dhaenens, C. and Talbi, E.G. (2004) 'A multicriteria genetic algorithm to analyze dna microarray data'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1874–1881.
- [Khan and Perkowski(2004)] Khan, M.H. and Perkowski, M.A. (2004) '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. Portland, Oregon: IEEE Press, pp. 2194–2201.
- [Kicinger et al.(2004)Kicinger, Arciszewski and De Jong] Kicinger, R., Arciszewski, T. and De Jong, K. (2004) 'Morphogenesis and structural design: Cellular automata representations of steel structures in tall buildings'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 411–418.
- [Kimbrough et al.(2004)Kimbrough, Lu and Safavi] Kimbrough, S., Lu, M. and Safavi, S. (2004) 'Exploring a financial product model with a two-population genetic algorithm'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 855–862.

- [Kleeman et al.(2004)Kleeman, Day and Lamont] Kleeman, M., Day, R. and Lamont, G. (2004) 'Multi-objective evolutionary search performance with explicit building-block sizes for npc problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 728–735.
- [Kobayashi and Aiyoshi(2004)] Kobayashi, Y. and Aiyoshi, E. (2004) 'Optimization algorithm using multi-agents and reinforcement learning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 63–68.
- [Kobti et al.(2004)Kobti, Reynolds and Kohler] Kobti, Z., Reynolds, R.G. and Kohler, T. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1743–1750.
- [Koduru et al.(2004)Koduru, Das, Welch and Roe] Koduru, P., Das, S., Welch, S. and Roe, J.L. (2004) 'A multi-objective ga-simplex hybrid approach for gene regulatory network models'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2084–2091.
- [Koeppen(2004)] Koeppen, M. (2004) 'No-free-lunch theorems and the diversity of algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 235–241.
- [Korczak and Lipinski(2004)] Korczak, J.J. and Lipinski, P. (2004) 'Evolutionary building of stock trading experts in a real-time system'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 940–947.
- [Kordon and Lue(2004)] Kordon, A. and Lue, C.T. (2004) 'Symbolic regression modeling of blown film process effects'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 561–568.
- [Kotani and Kato(2004)] Kotani, M. and Kato, D. (2004) 'Feature extraction using coevolutionary genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 614–619.
- [Krink et al.(2004)Krink, Filipic, Fogel and Thomsen] Krink, T., Filipic, B., Fogel, G.B. and Thomsen, R. (2004) 'Noisy optimization problems a particular challenge for differential evolution?' In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 332–339.
- [Krohling et al.(2004)Krohling, Hoffmann and dos Santos Coelho] Krohling, R.A., Hoffmann, F. and dos Santos Coelho, L. (2004) 'Co-evolutionary particle swarm optimization for min-max problems using gaussian distribution'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 959–964.
- [Krusienski and Jenkins(2004)] Krusienski, D. and Jenkins, W.K. (2004) 'Particle swarm optimization for adaptive iir filter structures'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 965–970.
- [Lamont et al.(2004)Lamont, Esslinger, Ewing and Abdel-Aty-Zohdy] Lamont, G., Esslinger, M., Ewing, R. and Abdel-Aty-Zohdy, H. (2004) 'An artificial immune system strategy for robust chemical spectra classification via distributed heterogeneous sensors'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1036–1043.
- [Lasso et al.(2004)Lasso, Pandolfi, De San Pedro, Villagra and Gallard] Lasso, M., Pandolfi, D., De San Pedro, M., Villagra, A. and Gallard, R. (2004) 'Solving dynamic tardiness problems in single machine environments'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1143–1149.
- [Lee et al.(2004)Lee, Bulitko and Levner] Lee, G., Bulitko, V. and Levner, I. (2004) 'Automated selection of vision operator libraries with evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1127–1134.

- [Legg et al.(2004)Legg, Hutter and Kumar] Legg, S., Hutter, M. and Kumar, A. (2004) 'Tournament versus fitness uniform selection'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2144–2151.
- [Leon et al.(2004)Leon, Nasraoui and Gomez] Leon, E., Nasraoui, O. and Gomez, J. (2004) 'Anomaly detection based on unsupervised niche clustering with application to network intrusion detection'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 502–508.
- [Lichodzijewski et al.(2004)Lichodzijewski, Zincir-Heywood and Heywood] Lichodzijewski, P., Zincir-Heywood, N. and Heywood, M. (2004) 'Cascaded gp models for data mining'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2258–2264.
- [Liu and Iba(2004)] Liu, H. and Iba, H. (2004) 'A hierarchical approach for adaptive humanoid robot control'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1546–1553.
- [Liu et al.(2004)Liu, Qin and He] Liu, Y., Qin, Z. and He, X. (2004) 'Supervisor-student model in particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 542–547.
- [Lucas(2004)] Lucas, S. (2004) 'Cellz: A simple dynamic game for testing evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1007–1014.
- [Lucidarme(2004)] Lucidarme, P. (2004) 'An evolutionary algorithm for multi-robot unsupervised learning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2210–2215.
- [Malinchik et al.(2004)Malinchik, Orme, Rothermich and Bonabeau] Malinchik, S., Orme, B., Rothermich, J. and Bonabeau, E. (2004) 'Interactive exploratory data analysis'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1098–1104.
- [Mark et al.(2004)Mark, Sendhoff and Wersing] Mark, A., Sendhoff, B. and Wersing, H. (2004) 'A decision making framework for game playing using evolutionary optimization and learning'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 373–380.
- [Marwaha et al.(2004)Marwaha, Srinivasan, Tham and Vasilakos] Marwaha, S., Srinivasan, D., Tham, C.K. and Vasilakos, A. (2004) 'Evolutionary fuzzy multi-objective routing for wireless mobile ad hoc networks'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1964–1971.
- [Miguelanez et al. (2004) Miguelanez, Zalzala and Tabor] Miguelanez, E., Zalzala, A. and Tabor, P. (2004) 'Evolving neural networks using swarm intelligence for binmap classification'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 978–985.
- [Miles et al.(2004)Miles, Louis, Cole and McDonnell] Miles, C., Louis, S., Cole, N. and McDonnell, J. (2004) 'Learning to play like a human: Case injected genetic algorithms for strategic computer gaming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1441–1448.
- [Miller et al. (2004) Miller, Arguello and Greenwood] Miller, D., Arguello, R. and Greenwood, G. (2004) 'Evolving artificial neural network structures: Experimental results for biologically-inspired adaptive mutations'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2114–2119.

- [Mohais et al.(2004)Mohais, Ward and Posthoff] Mohais, A., Ward, C. and Posthoff, C. (2004) 'Randomized directed neighborhoods with edge migration in particle swarm optimization'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 548–555.
- [Mostaghim et al.(2004)Mostaghim, Hoffmann, Koenig, Frauenheim and Teich] Mostaghim, S., Hoffmann, M., Koenig, P.H., Frauenheim, T. and Teich, J. (2004) 'Molecular force field parametrization using multi-objective evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 212–219.
- [Mostaghim and Teich(2004)] Mostaghim, S. and Teich, J. (2004) 'Covering pareto-optimal fronts by subswarms in multi-objective particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1404–1411.
- [Mumford(2004)] Mumford, C. (2004) 'A hierarchical evolutionary approach to multi-objective optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1944–1951.
- [Nagata(2004)] Nagata, Y. (2004) 'Criteria for designing crossovers for tsp'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1465–1472.
- [Nakagoe et al.(2004)Nakagoe, Hirasawa and Hu] Nakagoe, H., Hirasawa, K. and Hu, J. (2004) 'Genetic network programming with automatically generated variable size macro nodes'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 713–719.
- [Nakamura et al.(2004)Nakamura, Yamashiro and Gong] Nakamura, M., Yamashiro, N. and Gong, Y. (2004) 'Iterative parallel and distributed genetic algorithms with biased initial population'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2296–2301.
- [Neal and Labrosse(2004)] Neal, M. and Labrosse, F. (2004) 'Rotation-invariant appearance based maps for robot navigation using an artificial immune network algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 863–870.
- [Nedjah and Mourelle(2004)] Nedjah, N. and Mourelle, L. (2004) 'Secure evolutionary hardware for public-key cryptosystems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2130–2137.
- [Neel et al.(2004)Neel, Garzon and Penumetsa] Neel, A., Garzon, M. and Penumetsa, P. (2004) 'Soundness and quality of semantic retrieval in dna-based memories with abiotic data'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1889–1895.
- [Neumann(2004)] Neumann, F. (2004) 'Expected runtimes of evolutionary algorithms for the eulerian cycle problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 904–910.
- [Nguyen and Ian(2004)] Nguyen, X.H. and Ian, M.R. (2004) '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. Portland, Oregon: IEEE Press, pp. 472–477.
- [Nicosia et al.(2004)Nicosia, Cutello and Pavone] Nicosia, G., Cutello, V. and Pavone, M. (2004) 'An immune algorithm with hyper-macromutations for the 2d hydrophilic-hydrophobic model'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1074–1080.
- [Nojima et al.(2004)Nojima, Kubota and Kojima] Nojima, Y., Kubota, N. and Kojima, F. (2004) 'Trajectory generation and accumulation for partner robots based on structured learning'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2224–2229.

- [Noman et al.(2004)Noman, Okada, Hosoyama and Iba] Noman, N., Okada, K., Hosoyama, N. and Iba, H. (2004) 'Use of clustering to improve the layout of gene network for visualization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2068–2075.
- [Nuser and Deaton(2004)] Nuser, M. and Deaton, R. (2004) 'A probabilistic analysis of in vitro selection of independent dna words for computation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1882–1888.
- [Oh and Barlow(2004)] Oh, C. and Barlow, G. (2004) 'Autonomous controller design for unmanned aerial vehicles using multi-objective genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1538–1545.
- [Oh and Volper(2004)] Oh, J. and Volper, D. (2004) 'Design of rationality-based computing middleware: A preliminary study'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 839–846.
- [Okabe et al.(2004)Okabe, Jin, Sendhoff and Olhofer] Okabe, T., Jin, Y., Sendhoff, B. and Olhofer, M. (2004) 'Voronoi-based estimation of distribution algorithm for multi-objective optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1594–1601.
- [Oltean(2004)] Oltean, M. (2004) 'Solving even-parity problems using traceless genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1813–1819.
- [O'Neill et al.(2004)O'Neill, Brabazon and Adley] O'Neill, M., Brabazon, A. and Adley, C. (2004) 'The automatic generation of programs for classification problems with grammatical swarm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 104–110.
- [Ono et al.(2004)Ono, Seike, Morishita, Ono and Matsui] Ono, I., Seike, Y., Morishita, R., Ono, N. and Matsui, M. (2004) '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*. Portland, Oregon: IEEE Press, pp. 2060–2067.
- [O'Riordan et al.(2004)O'Riordan, Griffith, Newell and Sorensen] O'Riordan, C., Griffith, J., Newell, J. and Sorensen, H. (2004) 'Co-evolution of strategies for an n-player dilemma'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1625–1630.
- [Osmera(2004)] Osmera, P. (2004) 'Evolvable controllers with hierarchical structure'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 758–765.
- [Ostrowski and Reynolds(2004)] Ostrowski, D. and Reynolds, R.G. (2004) 'Using cultural algorithms to evolve strategies for recessionary markets'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1780–1785.
- [Ouellette et al.(2004)Ouellette, Browne and Hirasawa] Ouellette, R., Browne, M. and Hirasawa, K. (2004) 'Genetic algorithm optimization of a convolutional neural network for autonomous crack detection'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 516–521.
- [Ozcan and Onbasioglu(2004)] Ozcan, E. and Onbasioglu, E. (2004) 'Genetic algorithms for parallel code optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1375–1381.
- [Parker(2004)] Parker, G. (2004) 'Partial recombination for the co-evolution of model parameters'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2216–2223.

- [Parker and Blumenthal(2004)] Parker, G. and Blumenthal, J. (2004) 'Varying sample sizes for the coevolution of heterogeneous agents'. In *Proceedings of the 2004 IEEE Congress on Evolutionary* Computation. Portland, Oregon: IEEE Press, pp. 766–771.
- [Parmee and Abraham(2004)] Parmee, I. and Abraham, J. (2004) 'Supporting implicit learning via the visualisation of coga multi-objective data'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 395–402.
- [Parrott and Li(2004)] Parrott, D. and Li, X. (2004) 'A particle swarm model for tracking multiple peaks in a dynamic environment using speciation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 98–103.
- [Parsopoulos et al.(2004)Parsopoulos, Tasoulis, Pavlidis, Plagianakos and Vrahatis] Parsopoulos, K., Tasoulis, D., Pavlidis, N., Plagianakos, V. and Vrahatis, M. (2004) 'Vector evaluated differential evolution for multiobjective optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 204–211.
- [Paterlini and Krink(2004)] Paterlini, S. and Krink, T. (2004) 'High performance clustering with differential evolution'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2004–2011.
- [Paul and Iba(2004)] Paul, T. and Iba, H. (2004) 'Selection of the most useful subset of genes for gene expression-based classification'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2076–2083.
- [Peng and Reynolds(2004)] Peng, B. and Reynolds, R.G. (2004) 'Cultural algorithms: Knowledge learning in dynamic environments'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1751–1758.
- [Pfaffmann et al.(2004)Pfaffmann, Bousmalis and Colombano] Pfaffmann, J., Bousmalis, K. and Colombano, S. (2004) 'A scouting-inspired evolutionary algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1706–1712.
- [Piaseczny et al.(2004)Piaseczny, Suzuki and Sawai] Piaseczny, W., Suzuki, H. and Sawai, H. (2004) 'Chemical genetic programming - evolution of amino acid rewriting rules used for genotypephenotype translation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1639–1646.
- [Pirzada et al.(2004)Pirzada, Datta and McDonald] Pirzada, A., Datta, A. and McDonald, C. (2004) 'Trusted routing in ad-hoc networks using pheromone trails'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1938–1943.
- [Pulido and Coello-Coello(2004)] Pulido, G.T. and Coello-Coello, C. (2004) 'A constraint-handling mechanism for particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1396–1403.
- [Randall(2004)] Randall, M. (2004) 'Heuristics for ant colony optimisation using the generalised assignment problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1916–1923.
- [Ray et al.(2004)Ray, Venkatarayalu, Won and Chan] Ray, T., Venkatarayalu, N., Won, K.S. and Chan, K.P. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1996–2003.
- [Ross et al.(2004)Ross, Marin-Blazquez and Hart] Ross, P., Marin-Blazquez, J.G. and Hart, E. (2004) 'Hyper-heuristics applied to class and exam timetabling problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1691–1698.
- [Rowland(2004)] Rowland, J. (2004) 'On genetic programming and knowledge discovery in transcriptome data'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 158–165.

- [S. et al.(2004)S., Alphones and Suganthan] S., B., Alphones, A. and Suganthan, P.N. (2004) 'Concurrent pso and fdr-pso based reconfigurable phase-differentiated antenna array design'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2173–2179.
- [S. and Suganthan(2004)] S., B. and Suganthan, P.N. (2004) 'A novel concurrent particle swarm optimization (cpso)'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 792–796.
- [Sait and Al-Ismail(2004)] Sait, S.M. and Al-Ismail, M. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1794–1799.
- [Salomon(2004a)] Salomon, R. (2004a) 'The curse of high-dimensional search spaces: Observing premature convergence in unimodal functions'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 918–923.
- [Salomon(2004b)] Salomon, R. (2004b) 'The force model: Concept, behavior, interpretation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1119–1126.
- [Sanchez et al.(2004a)Sanchez, Squillero and Violante] Sanchez, E., Squillero, G. and Violante, M. (2004a) 'A local analysis of the genotype-fitness mapping in hardware optimization problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 871–878.
- [Sanchez et al.(2004b)Sanchez, Galan and Rubio] Sanchez, J.J., Galan, M. and Rubio, E. (2004b) 'Genetic algorithms and cellular automata: A new architecture for traffic light cycles optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1668–1674.
- [Santos and Ohishi(2004)] Santos, E. and Ohishi, T. (2004) 'A hydro unit commitment model using genetic algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1368–1374.
- [Sarif et al.(2004)Sarif, Abd-El-Barr, Sait and Al-Saiari] Sarif, B., Abd-El-Barr, M., Sait, S.M. and Al-Saiari, U. (2004) 'Fuzzified ant colony optimization algorithm for efficient combinational circuits'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1317–1324.
- [Sastry et al.(2004)Sastry, Pelikan and Goldberg] Sastry, K., Pelikan, M. and Goldberg, D. (2004) 'Efficiency enhancement of genetic algorithms via building-block-wise fitness estimation'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 720–727.
- [Sato et al.(2004)Sato, Aguirre and Tanaka] Sato, H., Aguirre, H. and Tanaka, K. (2004) 'Local dominance using polar coordinates to enhance multiobjective evolutionary algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 188–195.
- [Schoenemann(2004)] Schoenemann, L. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1270–1277.
- [Schonfeld and Ashlock(2004)] Schonfeld, J. and Ashlock, D. (2004) 'Comparison of robustness of solutions located by evolutionary computation and other search algorithms'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 250–257.

- [Sedighi et al.(2004)Sedighi, Ashenayi, Manikas, Tai and Wainwright] Sedighi, K., Ashenayi, K., Manikas, T., Tai, H.M. and Wainwright, R. (2004) 'Autonomous local path-planning for a mobile robot using a genetic algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1338–1345.
- [Seo et al.(2004)Seo, Yasunaga and Kim] Seo, D., Yasunaga, M. and Kim, J.H. (2004) 'A computatioal approach to detect transcritpion regulatory elements in dictyostelium discoideum'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1647–1653.
- [Seredynski and Bouvry(2004)] Seredynski, M. and Bouvry, P. (2004) 'Block cipher based on reversible cellular automata'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2138–2143.
- [Shan et al.(2004)Shan, McKay, Baxter, Abbass, Essam and Nguyen] Shan, Y., McKay, R.I., Baxter, R., Abbass, H., Essam, D. and Nguyen, H. (2004) 'Grammar model-based program evolution'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 478–485.
- [Sheng and Liu(2004)] Sheng, W. and Liu, X. (2004) 'A hybrid algorithm for k-medoid clustering of large data sets'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 77–82.
- [Shuyuan et al. (2004a) Shuyuan, Min and Licheng] Shuyuan, Y., Min, W. and Licheng, J. (2004a) 'A novel quantum evolutionary algorithm and its application'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 820–826.
- [Shuyuan et al.(2004b)Shuyuan, Min and Licheng] Shuyuan, Y., Min, W. and Licheng, J. (2004b) 'A quantum particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 320–324.
- [Simionescu et al. (2004) Simionescu, Beale and Dozier] Simionescu, P.A., Beale, D.G. and Dozier, G.V. (2004) 'Constrained optimization problem solving using estimation of distribution algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 296–302.
- [Simsek et al.(2004)Simsek, Albayrak and Korth] Simsek, B., Albayrak, S. and Korth, A. (2004) 'Reinforcement learning for procurement agents of the factory of the future'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1331–1337.
- [Sinka and Corne(2004)] Sinka, M. and Corne, D. (2004) 'Evolving document features for web document clustering: A feasability study'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 891–897.
- [Slade et al.(2004)Slade, Ressom, Musavi and Miller] Slade, W., Ressom, H., Musavi, M. and Miller, R. (2004) 'Ocean color inversion by particle swarm optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 971–977.
- [Smith et al.(2004)Smith, Everson and Fieldsend] Smith, K., Everson, R. and Fieldsend, J. (2004) 'Dominance measures for multi-objective simulated annealing'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 23–30.
- [Song and Ciesielski(2004)] Song, A. and Ciesielski, V. (2004) 'Texture analysis by genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2092–2099.
- [Speer et al.(2004)Speer, Spieth and Zell] Speer, N., Spieth, C. and Zell, A. (2004) 'A memetic coclustering algorithm for gene expression profiles and biological annotation'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1631– 1638.

- [Spieth et al.(2004a)Spieth, Streichert, Speer and Zell] Spieth, C., Streichert, F., Speer, N. and Zell, A. (2004a) 'A memetic inference method for gene regulatory networks based on s-systems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 152–157.
- [Spieth et al.(2004b)Spieth, Streichert, Speer and Zell] Spieth, C., Streichert, F., Speer, N. and Zell, A. (2004b) '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*. Portland, Oregon: IEEE Press, pp. 146–151.
- [Stanhope(2004)] Stanhope, S. (2004) 'Evolution strategies for multivariate-to-anything partially specified random vector generation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2235–2240.
- [Stephan and Sullivan(2004)] Stephan, C. and Sullivan, J. (2004) 'An agent-based hydrogen vehicle/infrastructure model'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1774–1779.
- [Stoica et al.(2004)Stoica, Arslan, Keymeulen, Duong, Zebulum, Guo, Ferguson and Daud] Stoica, A., Arslan, T., Keymeulen, D., Duong, V., Zebulum, R., Guo, X., Ferguson, I. and Daud, T. (2004) 'Evolutionary recovery of electronic circuits from radiation induced faults'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 1786–1793.
- [Streichert et al.(2004)Streichert, Ulmer and Zell] Streichert, F., Ulmer, H. and Zell, A. (2004) 'Evaluating a hybrid encoding and three crossover operators on the constrained portfolio selection problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 932–939.
- [Sun et al.(2004)Sun, Feng, Xu, Liu and Bao] Sun, J., Feng, B., Xu, W., Liu, J. and Bao, L. (2004) 'Particle swarm optimization with particles having quantum behavior'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 325–331.
- [Sun and Just(2004)] Sun, X. and Just, W. (2004) 'Evolution of strategies in modified sequential assessment games'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 388–394.
- [Suram et al.(2004)Suram, Bryden and Ashlock] Suram, S., Bryden, K. and Ashlock, D. (2004) 'Quantitative trait loci based solution of an inverse radiation heat transfer problem'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 427–432.
- [Takahashi and Kobayashi(2004)] Takahashi, O. and Kobayashi, S. (2004) 'An angular distance dependent alternation model for real-coded genetic algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2159–2165.
- [Tanaka-Yamawaki and Motoyama(2004)] Tanaka-Yamawaki, M. and Motoyama, T. (2004) 'Predicting the tick-wise price fluctuations by means of evolutional computation'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 955–958.
- [Tanev et al.(2004)Tanev, Ray and Buller] Tanev, I., Ray, T. and Buller, A. (2004) 'Evolutionary design, robustness and adaptation of sidewinding locomotion of simulated libraless wheelless robot'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2312–2319.
- [Tang et al.(2004)Tang, Suganthan and Yao] Tang, K., Suganthan, P.N. and Yao, X. (2004) 'Generalized lda using relevance weighting and evolution strategy'. In *Proceedings of the 2004* IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2230–2234.

- [Tasgetiren et al.(2004)Tasgetiren, Sevkli, Liang and Gencyilmaz] Tasgetiren, M.F., Sevkli, M., Liang, Y.C. and Gencyilmaz, G. (2004) 'Particle swarm optimization algorithm for single machine total weighted tardiness problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1412–1419.
- [Tasoulis et al. (2004) Tasoulis, Pavlidis, Plagianakos and Vrahatis] Tasoulis, D., Pavlidis, N., Plagianakos, V. and Vrahatis, M. (2004) 'Parallel differential evolution'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 2023–2029.
- [Tavares et al.(2004)Tavares, Pereira and Costa] Tavares, J., Pereira, F. and Costa, E. (2004) 'Understanding the role of insertion and correction in the evolution of golomb rulers'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 69–76.
- [Teredesai and Govindaraju(2004)] Teredesai, A. and Govindaraju, V. (2004) 'Issues in evolving gp based classifiers for a pattern recognition task'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 509–515.
- [Thomsen(2004)] Thomsen, R. (2004) 'Multimodal optimization using crowding-based differential evolution'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1382–1389.
- [Timmis et al.(2004)Timmis, Edmonds and Kelsey] Timmis, J., Edmonds, C. and Kelsey, J. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1044–1051.
- [Tinos and Carvalho(2004)] Tinos, R. and Carvalho, A. (2004) 'A genetic algorithm with gene dependent mutation probability for non-stationary optimization problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1278–1285.
- [Tomassini et al.(2004)Tomassini, Vanneschi, Cuendet and Fernandez] Tomassini, M., Vanneschi, L., Cuendet, J. and Fernandez, F. (2004) 'A new technique for dynamic size populations in genetic programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 486–493.
- [Tongchim and Yao(2004)] Tongchim, S. and Yao, X. (2004) 'Parallel evolutionary programming'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1362–1367.
- [Treptow and Zell(2004)] Treptow, A. and Zell, A. (2004) 'Combining adaboost learning and evolutionary search to select features for real-time object detection'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2107–2113.
- [Tsutsui and Wilson(2004)] Tsutsui, S. and Wilson, G. (2004) 'Solving capacitated vehicle routing problems using edge histogram based sampling algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1150–1157.
- [Tulai and Oppacher(2004)] Tulai, A. and Oppacher, F. (2004) 'Maintaining diversity and increasing the accuracy of classification rules through automatic speciation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2241–2249.
- [Ulmer et al.(2004)Ulmer, Streichert and Zell] Ulmer, H., Streichert, F. and Zell, A. (2004) 'Evolution strategies with controlled model assistance'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1569–1576.
- [Uosaki et al.(2004)Uosaki, Kimura and Hatanaka] Uosaki, K., Kimura, Y. and Hatanaka, T. (2004) 'Evolution strategies based particle filters for state and parameter estimation of nonlinear models'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 884–890.

- [Uyar and Uyar(2004)] Uyar, A.S. and Uyar, H.T. (2004) 'An event-driven test framework for evolutionary algorithms in dynamic environments'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2265–2272.
- [Venkatraman and Yen(2004)] Venkatraman, S. and Yen, G. (2004) 'A simple elitist genetic algorithm for constrained optimization'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 288–295.
- [Verel et al.(2004) Verel, Collard and Clergue] Verel, S., Collard, P. and Clergue, M. (2004) 'Scuba search: when selection meets innovation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 924–931.
- [Vesterstroem and Thomsen(2004)] Vesterstroem, J. and Thomsen, R. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1980–1987.
- [Vigraham and Gallagher(2004)] Vigraham, S. and Gallagher, J. (2004) 'On the relative efficacies of space saving \*cgas for evolvable hardware applications'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2187–2193.
- [Walker(2004)] Walker, R.L. (2004) 'Honeybee search strategies: Adaptive exploration of an information ecosystem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1209–1216.
- [Walsh and Fenton(2004)] Walsh, P. and Fenton, P. (2004) 'A high-throughput computing environment for job shop scheduling genetic algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1554–1560.
- [Watanabe and Nodu(2004)] Watanabe, I. and Nodu, M. (2004) 'A genetic algorithm for optimizing switching sequence of service restoration in distribution systems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1683–1690.
- [Wei and Lee(2004)] Wei, J.D. and Lee, D.T. (2004) 'A new approach to the traveling salesman problem using genetic algorithms with priority encoding'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1457–1464.
- [Weinberg and Talbi(2004)] Weinberg, B. and Talbi, E.G. (2004) 'Nfl theorem is unusable on structured classes of problems'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 220–226.
- [White and Yen(2004)] White, C. and Yen, G. (2004) 'A hybrid evolutionary algorithm for traveling salesman problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1473–1478.
- [Won and Ray(2004)] Won, K.S. and Ray, T. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1577–1585.
- [Wong et al.(2004)Wong, Cote and Sabourin] Wong, T., Cote, P. and Sabourin, R. (2004) 'A hybrid moea for the capacitated exam proximity problem'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1495–1501.
- [Wood and Chen(2004)] Wood, D. and Chen, J. (2004) 'Fredkin gate circuits via recombination enzymes'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1896–1900.
- [Wu et al.(2004)Wu, Tang, Zou, Kang and Li] Wu, Z., Tang, Z., Zou, J., Kang, L. and Li, M. (2004) 'An evolutionary algorithm for solving parameter identification problems in elliptic systems'. In Proceedings of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 803–808.

- [Xie et al.(2004a)Xie, Zhang and Bi] Xie, X.F., Zhang, W.J. and Bi, D.C. (2004a) 'Handling equality constraints by adaptive relaxing rule for swarm algorithms'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2012–2016.
- [Xie et al.(2004b)Xie, Zhang and Bi] Xie, X.F., Zhang, W.J. and Bi, D.C. (2004b) 'Optimizing semiconductor devices by self-organizing particle swarm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2017–2022.
- [Xu et al.(2004)Xu, Salcedo-Sanz and Yao] Xu, Y., Salcedo-Sanz, S. and Yao, X. (2004) 'Non-standard cost terminal assignment problems using tabu search approach'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2302–2306.
- [Yang and Shen(2004)] Yang, J.M. and Shen, T.W. (2004) 'A pharmacophore-based evolutionary approach for screening estrogen receptor antagonists'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1028–1035.
- [Yang(2004)] Yang, S. (2004) 'Constructing dynamic test environments for genetic algorithms based on problem difficulty'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1262–1269.
- [Yannakakis et al.(2004) Yannakakis, Levine and Hallam] Yannakakis, G., Levine, J. and Hallam, J. (2004) 'An evolutionary approach for interactive computer games'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 986–993.
- [Yapicioglu et al.(2004)Yapicioglu, Dozier and Smith] Yapicioglu, H., Dozier, G.V. and Smith, A.E. (2004) '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*. Portland, Oregon: IEEE Press, pp. 2328–2334.
- [Yong-Duk et al.(2004)Yong-Duk, Jong-Hwan and Yong-Jae] Yong-Duk, K., Jong-Hwan, K. and Yong-Jae, K. (2004) 'Behavior selection and learning for synthetic character'. In *Proceedings* of the 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 898–903.
- [Yuchi and Kim(2004)] Yuchi, M. and Kim, J.H. (2004) '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*. Portland, Oregon: IEEE Press, pp. 280–287.
- [Yun et al.(2004)Yun, Nakayama and Arakawa] Yun, Y., Nakayama, H. and Arakawa, M. (2004) 'Fitness evaluation using generalized data envelopment analysis in moga'. In *Proceedings of the* 2004 IEEE Congress on Evolutionary Computation. Portland, Oregon: IEEE Press, pp. 464–471.
- [Zhang and Dozier(2004)] Zhang, F. and Dozier, G.V. (2004) '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*. Portland, Oregon: IEEE Press, pp. 1988–1995.
- [Zhang and Huang(2004)] Zhang, G.Z. and Huang, D.S. (2004) '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. Portland, Oregon: IEEE Press, pp. 1015–1019.
- [Zhang et al.(2004a)Zhang, Chung and Hu] Zhang, J., Chung, H. and Hu, B. (2004a) 'Adaptive probabilities of crossover and mutation in genetic algorithms based on clustering technique'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2280–2287.
- [Zhang et al.(2004b)Zhang, Yuan and Buckles] Zhang, J., Yuan, X. and Buckles, B. (2004b) 'Subspace fdc for sharing distance estimation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1735–1742.

- [Zhang et al.(2004c)Zhang, Xie and Bi] Zhang, W.J., Xie, X.F. and Bi, D.C. (2004c) 'Handling boundary constraints for numrical optimization by particle swarm flying in periodic search space'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2307–2311.
- [Zheng et al.(2004)Zheng, Ling, Shi and Xie] Zheng, J., Ling, C.X., Shi, Z. and Xie, Y. (2004) 'Some discussions about mogas: Individual relations, non-dominated set, and application on automatic negotiation'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 706–712.
- [Zhou et al.(2004)Zhou, Ong and Nair] Zhou, Z., Ong, Y.S. and Nair, P.B. (2004) 'Hierarchical surrogate-assisted evolutionary optimization framework'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 1586–1593.
- [Zou et al.(2004a)Zou, Zhou, Chen and Yao] Zou, P., Zhou, Z., Chen, G. and Yao, X. (2004a) 'A novel memetic algorithm with random multi-local-search: A case study of tsp'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 2335–2340.
- [Zou et al.(2004b)Zou, Zhuang and Chen] Zou, Y., Zhuang, Z. and Chen, H. (2004b) 'Hw-sw partitioning based on genetic algorithm'. In *Proceedings of the 2004 IEEE Congress on Evolutionary Computation*. Portland, Oregon: IEEE Press, pp. 628–633.