

## Список литературы

- [1] D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, editors, *GECCO 2007: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, London, UK, 7-11 July 2007, ACM Press.
- [2] A. Abraham, S. Das, and A. Konar, Kernel based automatic clustering using modified particle swarm optimization algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 2–9, London, 7-11 July 2007, ACM Press.
- [3] E. Alba and F. Chicano, ACOhg: dealing with huge graphs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 10–17, London, 7-11 July 2007, ACM Press.
- [4] S. Bird and X. Li, Informative performance metrics for dynamic optimisation problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 18–25, London, 7-11 July 2007, ACM Press.
- [5] S. Cayzer and J. Sullivan, Modelling danger and anergy in artificial immune systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 26–32, London, 7-11 July 2007, ACM Press.
- [6] B. Doerr, F. Neumann, D. Sudholt, and C. Witt, On the runtime analysis of the 1-ANT ACO algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 33–40, London, 7-11 July 2007, ACM Press.
- [7] C. M. Fernandes, A. C. Rosa, and V. Ramos, Binary ant algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 41–48, London, 7-11 July 2007, ACM Press.
- [8] J. Greensmith and U. Aickelin, Dendritic cells for SYN scan detection, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 49–56, London, 7-11 July 2007, ACM Press.
- [9] R. Halavati, S. B. Shouraki, M. J. Heravi, and B. J. Jashmi, An artificial immune system with partially specified antibodies, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard,

- J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 57–62, London, 7-11 July 2007, ACM Press.
- [10] A. A. Khan, M. Naeem, and S. I. Shah, A particle swarm algorithm for symbols detection in wideband spatial multiplexing systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 63–69, London, 7-11 July 2007, ACM Press.
- [11] P. Koduru, S. M. Welch, and S. Das, A particle swarm optimization approach for estimating parameter confidence regions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 70–77, London, 7-11 July 2007, ACM Press.
- [12] X. Li, A multimodal particle swarm optimizer based on fitness Euclidean-distance ratio, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 78–85, London, 7-11 July 2007, ACM Press.
- [13] S. Luke, D. Sharma, and G. C. Balan, Finding interesting things, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 86–93, London, 7-11 July 2007, ACM Press.
- [14] F. Luna, C. Blum, E. Alba, and A. J. Nebro, ACO vs EAs for solving a real-world frequency assignment problem in GSM networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 94–101, London, 7-11 July 2007, ACM Press.
- [15] N. Mazhar and M. Farooq, Vulnerability analysis and security framework (BeeSec) for nature inspired MANET routing protocols, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 102–109, London, 7-11 July 2007, ACM Press.
- [16] A. S. Mohais, R. Mohais, C. Ward, and C. Posthoff, Earthquake classifying neural networks trained with random dynamic neighborhood PSOs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 110–117, London, 7-11 July 2007, ACM Press.
- [17] A. Moraglio and J. Togelius, Geometric particle swarm optimization for the sudoku puzzle, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 118–125, London, 7-11 July 2007, ACM Press.

- [18] Q.-Q. Pan, M. F. Tasgetiren, and Y.-C. Liang, A discrete differential evolution algorithm for the permutation flowshop scheduling problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 126–133, London, 7-11 July 2007, ACM Press.
- [19] R. Poli and D. Broomhead, Exact analysis of the sampling distribution for the canonical particle swarm optimiser and its convergence during stagnation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 134–141, London, 7-11 July 2007, ACM Press.
- [20] R. Poli and W. B. Langdon, Markov chain models of bare-bones particle swarm optimizers, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 142–149, London, 7-11 July 2007, ACM Press.
- [21] E. Ridge and D. Kudenko, Analyzing heuristic performance with response surface models: prediction, optimization and robustness, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 150–157, London, 7-11 July 2007, ACM Press.
- [22] M. F. Tasgetiren, P. N. Suganthan, and Q.-Q. Pan, A discrete particle swarm optimization algorithm for the generalized traveling salesman problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 158–167, London, 7-11 July 2007, ACM Press.
- [23] A. D. Anastasiadis, G. Georgoulas, G. Magoulas, and A. Tzes, Adaptive particle swarm optimizer with nonextensive schedule, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 168–168, London, 7-11 July 2007, ACM Press.
- [24] A. R. Baig and M. Rashid, Honey bee foraging algorithm for multimodal & dynamic optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 169–169, London, 7-11 July 2007, ACM Press.
- [25] A. A. de Freitas and C. B. Mayer, The effectiveness of dynamic ant colony tuning, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 170–170, London, 7-11 July 2007, ACM Press.

- [26] G. P. Figueredo, N. F. Ebecken, and H. C. Barbosa, Suppression based immune mechanism to find arepresentative training set in data classification tasks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 171–171, London, 7-11 July 2007, ACM Press.
- [27] T. Gong and A. L. Tuson, Binary particle swarm optimization: a forma analysis approach, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 172–172, London, 7-11 July 2007, ACM Press.
- [28] X. H. Nguyen, Q. U. Nguyen, and R. I. McKay, PSO with randomized low-discrepancy sequences, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 173–173, London, 7-11 July 2007, ACM Press.
- [29] H. T. Lam, P. N. Nicolaevna, and N. T. M. Quan, A heuristic particle swarm optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 174–174, London, 7-11 July 2007, ACM Press.
- [30] M. R. Lavagna, Multi-objective pso for interplanetary trajectory design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 175–175, London, 7-11 July 2007, ACM Press.
- [31] n. Manuel López-Ibá T. D. Prasad, and B. Paechter, Solving optimal pump control problem using max-min ant system, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 176–176, London, 7-11 July 2007, ACM Press.
- [32] A. W. McNabb, C. K. Monson, and K. D. Seppi, MRPSO: MapReduce particle swarm optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 177–177, London, 7-11 July 2007, ACM Press.
- [33] P. Pellegrini and E. Moretti, Quick-and-dirty ant colony optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 178–178, London, 7-11 July 2007, ACM Press.
- [34] S. Piccand, M. O'Neill, and J. Walker, Scalability of particle swarm algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by

- D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 179–179, London, 7-11 July 2007, ACM Press.
- [35] E. Ridge and D. Kudenko, Screening the parameters affecting heuristic performance, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 180–180, London, 7-11 July 2007, ACM Press.
- [36] A. Romero and F. Nino, Keyword extraction using an artificial immune system, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 181–181, London, 7-11 July 2007, ACM Press.
- [37] M. Z. Shafiq, M. Kiani, B. Hashmi, and M. Farooq, Extended thymus action for reducing false positives in ais based network intrusion detection systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 182–182, London, 7-11 July 2007, ACM Press.
- [38] J. A. Snyman and S. Kok, A strongly interacting dynamic particle swarm optimizational method, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 183–183, London, 7-11 July 2007, ACM Press.
- [39] R. L. Stewart and M. Kirley, Swarming with logic, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 184–184, London, 7-11 July 2007, ACM Press.
- [40] J. Wang and Y. Zhou, Hybrid quantum particle swarm optimization algorithm for combinatorial optimization problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 185–185, London, 7-11 July 2007, ACM Press.
- [41] Y. Zeng, J. C. H, and D. P. Buus, SwarmArchitect: a swarm framework for collaborative construction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 186–186, London, 7-11 July 2007, ACM Press.
- [42] X. Zuo, Robust scheduling method based on workflow simulation model and biological immune principle, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann,

M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 187–187, London, 7–11 July 2007, ACM Press.

- [43] J. Becker, S. Trendelenburg, F. Henrici, and Y. Manoli, Synthesis of analog filters on an evolvable hardware platform using a genetic algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 190–197, London, 7–11 July 2007, ACM Press.
- [44] J. Bongard, Action-selection and crossover strategies for self-modeling machines, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 198–205, London, 7–11 July 2007, ACM Press.
- [45] E. B. Contreras, A biologically inspired solution for an evolved simulated agent, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 206–213, London, 7–11 July 2007, ACM Press.
- [46] J. Bongard, Exploiting multiple robots to accelerate self-modeling, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 214–221, London, 7–11 July 2007, ACM Press.
- [47] J. A. Bullinaria, The effect of learning on life history evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 222–229, London, 7–11 July 2007, ACM Press.
- [48] C. Di Chio, R. Poli, and P. Di Chio, EcoPS: a particle swarm algorithm to model group-foraging, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 230–237, London, 7–11 July 2007, ACM Press.
- [49] N. S. Estévez and H. Lipson, Dynamical blueprints: exploiting levels of system-environment interaction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 238–244, London, 7–11 July 2007, ACM Press.
- [50] Z. Gajda and L. Sekanina, Reducing the number of transistors in digital circuits using gate-level evolutionary design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 245–252, London, 7–11 July 2007, ACM Press.

- [51] S. P. Gotshall and T. Soule, Stochastic training of a biologically plausible spino-neuromuscular system model, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 253–260, London, 7-11 July 2007, ACM Press.
- [52] M. Gui, S. Das, and A. Pahwa, Procreating V-detectors for nonself recognition: an application to anomaly detection in power systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 261–268, London, 7-11 July 2007, ACM Press.
- [53] G. M. Khan, J. F. Miller, and D. M. Halliday, Coevolution of intelligent agents using cartesian genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 269–276, London, 7-11 July 2007, ACM Press.
- [54] S. Khor, Hill climbing on discrete HIFF: exploring the role of DNA transposition in long-term artificial evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 277–284, London, 7-11 July 2007, ACM Press.
- [55] D. Kim, A quantitative analysis of memory requirement and generalization performance for robotic tasks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 285–292, London, 7-11 July 2007, ACM Press.
- [56] D. B. Knoester, P. K. McKinley, and C. A. Ofria, Using group selection to evolve leadership in populations of self-replicating digital organisms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 293–300, London, 7-11 July 2007, ACM Press.
- [57] J. McCormack, Artificial ecosystems for creative discovery, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 301–307, London, 7-11 July 2007, ACM Press.
- [58] J. L. Payne and M. J. Eppstein, Takeover times on scale-free topologies, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 308–315, London, 7-11 July 2007, ACM Press.
- [59] L. Spector, J. Klein, and M. Feinstein, Division blocks and the open-ended evolution of development, form, and behavior, in *GECCO '07: Proceedings of the 9th annual conference*

on *Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 316–323, London, 7-11 July 2007, ACM Press.

- [60] J. Togelius, R. De Nardi, H. Marques, R. Newcombe, S. M. Lucas, and O. Holland, Nonlinear dynamics modelling for controller evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 324–333, London, 7-11 July 2007, ACM Press.
- [61] B. Baddeley and A. Philippides, Bee SLAM: a probabilistic framework for studying orientation flights in bees and wasps, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 334–334, London, 7-11 July 2007, ACM Press.
- [62] G. Eiben, J. Bekker, R. Griffioen, and E. Haasdijk, Balancing quality and quantity in evolving agent systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 335–335, London, 7-11 July 2007, ACM Press.
- [63] N. Brodu, A framework for the emergence of intra-species mutual recognition patterns, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 336–336, London, 7-11 July 2007, ACM Press.
- [64] D. Curran, C. O’Riordan, and H. Sorensen, The effects of lifetime learning on the diversity and fitness of populations, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 337–337, London, 7-11 July 2007, ACM Press.
- [65] D. Curran, C. O’Riordan, and H. Sorensen, Self-adaptation of cultural learning parameters, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 338–338, London, 7-11 July 2007, ACM Press.
- [66] S. Hengjie, M. Chunyan, and S. Zhiqi, Fuzzy cognitive map learning based on multi-objective particle swarm optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 339–339, London, 7-11 July 2007, ACM Press.
- [67] C. A. Kowall and B. J. Krent, A simulation of evolved autotrophic reproduction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry,



- K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 340–340, London, 7-11 July 2007, ACM Press.
- [68] G. S. Nitschke, M. C. Schut, and A. E. Eiben, Collective specialization in multi-rover systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 342–342, London, 7-11 July 2007, ACM Press.
  - [69] S. T. Powers and R. A. Watson, Preliminary investigations into the evolution of cooperative strategies in a minimally spatial model, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 343–343, London, 7-11 July 2007, ACM Press.
  - [70] S. Priesterjahn and A. Weimer, An evolutionary online adaptation method for modern computer games based on imitation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 344–345, London, 7-11 July 2007, ACM Press.
  - [71] J. Bacardit, M. Stout, J. D. Hirst, K. Sastry, X. Llorà, and N. Krasnogor, Automated alphabet reduction method with evolutionary algorithms for protein structure prediction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 346–353, London, 7-11 July 2007, ACM Press.
  - [72] S. Bleuler and E. Zitzler, Discrimination of metabolic flux profiles using a hybrid evolutionary algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 354–360, London, 7-11 July 2007, ACM Press.
  - [73] E. H. Brookes and B. Demeler, Parsimonious regularization using genetic algorithms applied to the analysis of analytical ultracentrifugation experiments, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 361–368, London, 7-11 July 2007, ACM Press.
  - [74] L. Bull and I. S. Uroukov, Initial results from the use of learning classifier systems to control in vitro neuronal networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 369–376, London, 7-11 July 2007, ACM Press.
  - [75] T.-M. Chan, K.-S. Leung, and K.-H. Lee, TFBS identification by position- and consensus-led genetic algorithm with local filtering, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 377–384, London, 7-11 July 2007, ACM Press.

- [76] F. Divina and J. S. Aguilar-Ruiz, A multi-objective approach to discover biclusters in microarray data, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 385–392, London, 7-11 July 2007, ACM Press.
- [77] S. R. D. Torres, D. C. B. Romero, L. F. N. Vasquez, and Y. J. P. Ardila, A novel ab-initio genetic-based approach for protein folding prediction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 393–400, London, 7-11 July 2007, ACM Press.
- [78] A. Küçükkural, R. Yeniterzi, S. Yeniterzi, and O. U. Sezerman, Evolutionary selection of minimum number of features for classification of gene expression data using genetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 401–406, London, 7-11 July 2007, ACM Press.
- [79] M. Looks, B. Goertzel, L. de Souza Coelho, M. Mudado, and C. Pennachin, Clustering gene expression data via mining ensembles of classification rules evolved using mooses, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 407–414, London, 7-11 July 2007, ACM Press.
- [80] M. Rocha, R. Mendes, P. Maia, n. Daniel Glez-Pe and F. Fdez-Riverola, A platform for the selection of genes in DNA microarraydata using evolutionary algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 415–423, London, 7-11 July 2007, ACM Press.
- [81] A. Bazzoli, G. Colombo, and A. G. B. Tettamanzi, Ab initio protein structure prediction with a dipeptide-assembly evolutionary algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 424–424, London, 7-11 July 2007, ACM Press.
- [82] T. W. de Lima, R. A. Faccioli, P. H. R. Gabriel, A. C. B. Delbem, and I. Nunes da Silva, Evolutionary approach to protein structure prediction with hydrophobic interactions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 425–425, London, 7-11 July 2007, ACM Press.
- [83] C. T. Fernando and J. Rowe, Hebbian learning in a simple gene circuit, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry,

- K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 426–426, London, 7-11 July 2007, ACM Press.
- [84] J. García-Nieto, E. Alba, L. Jourdan, and E.-G. Talbi, A comparison of PSO and GA approaches for gene selection and classification of microarray data, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 427–427, London, 7-11 July 2007, ACM Press.
  - [85] E. Keedwell and A. Narayanan, Gene finding and rule discovery with a multi-objective neural-genetic hybrid, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 428–428, London, 7-11 July 2007, ACM Press.
  - [86] W. Latham, M. Shaw, S. Todd, and F. F. Leymarie, Using DNA to generate 3D organic art forms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 429–429, London, 7-11 July 2007, ACM Press.
  - [87] M. Looks, B. Goertzel, L. de Souza Coelho, M. Mudado, and C. Pennachin, Understanding microarray data through applying competent program evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 430–430, London, 7-11 July 2007, ACM Press.
  - [88] F. Menolascina, R. T. Alves, S. Tommasi, P. Chiarappa, M. Delgado, G. Mastronardi, A. Paradiso, A. Freitas, and V. Bevilacqua, Induction of fuzzy rules with artificial immune systems in acgh based er status breast cancer characterization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 431–431, London, 7-11 July 2007, ACM Press.
  - [89] J. H. Moore, N. Barney, and B. C. White, Towards human-human-computer interaction for biologically-inspired problem-solving in human genetics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 432–433, London, 7-11 July 2007, ACM Press.
  - [90] A. Bucci and J. B. Pollack, Thoughts on solution concepts, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 434–439, London, 7-11 July 2007, ACM Press.
  - [91] E. D. De Jong, Objective fitness correlation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer,

- J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 440–447, London, 7-11 July 2007, ACM Press.
- [92] J. Horn, Optimal nesting of species for exact cover of resources: two against many, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 448–455, London, 7-11 July 2007, ACM Press.
- [93] R. Li, B. Bhanu, and K. Krawiec, Hybrid coevolutionary algorithms vs. SVM algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 456–463, London, 7-11 July 2007, ACM Press.
- [94] P. Lichodziejewski and M. I. Heywood, Pareto-coevolutionary genetic programming for problem decomposition in multi-class classification, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 464–471, London, 7-11 July 2007, ACM Press.
- [95] C. Stone, R. Toth, A. Adamatzky, B. de Lacy Costello, and L. Bull, Towards the coevolution of cellular automata controllers for chemical computing with the B-Z reaction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 472–478, London, 7-11 July 2007, ACM Press.
- [96] T.-S. Yo and E. D. de Jong, A comparison of evaluation methods in coevolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 479–487, London, 7-11 July 2007, ACM Press.
- [97] C.-K. Au and H.-F. Leung, Guided mutations in cooperative coevolutionary algorithms for function optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 488–488, London, 7-11 July 2007, ACM Press.
- [98] R. Li, B. Bhanu, and K. Krawiec, On the number of subpopulations in coevolutionary computation: a database application, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 489–489, London, 7-11 July 2007, ACM Press.
- [99] J. Ottino-Löffler, W. Rand, and U. Wilensky, A spatial model of the red queen effect, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb,

- B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 490–491, London, 7-11 July 2007, ACM Press.
- [100] P. A. N. Bosman, J. Grahl, and F. Rothlauf, SDR: a better trigger for adaptive variance scaling in normal EDAs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 492–499, London, 7-11 July 2007, ACM Press.
  - [101] P. A. N. Bosman and D. Thierens, Adaptive variance scaling in continuous multi-objective estimation-of-distribution algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 500–507, London, 7-11 July 2007, ACM Press.
  - [102] J. Branke, C. Lode, and J. L. Shapiro, Addressing sampling errors and diversity loss in UMDA, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 508–515, London, 7-11 July 2007, ACM Press.
  - [103] J. Grahl, P. A. N. Bosman, and S. Minner, Convergence phases, variance trajectories, and runtime analysis of continuous EDAs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 516–522, London, 7-11 July 2007, ACM Press.
  - [104] M. Hauschild, M. Pelikan, C. F. Lima, and K. Sastry, Analyzing probabilistic models in hierarchical BOA on traps and spin glasses, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 523–530, London, 7-11 July 2007, ACM Press.
  - [105] P. Lipinski, ECGA vs. BOA in discovering stock market trading experts, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 531–538, London, 7-11 July 2007, ACM Press.
  - [106] M. Looks, Scalable estimation-of-distribution program evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 539–546, London, 7-11 July 2007, ACM Press.
  - [107] M. Pelikan, R. Kalapala, and A. K. Hartmann, Hybrid evolutionary algorithms on minimum vertex cover for random graphs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 547–554, London, 7-11 July 2007, ACM Press.

- [108] M. Pelikan and J. D. Laury, Jr., Order or not: does parallelization of model building in hBOA affect its scalability?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 555–561, London, 7-11 July 2007, ACM Press.
- [109] P. Pošík and V. Franc, Estimation of fitness landscape contours in EAs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 562–569, London, 7-11 July 2007, ACM Press.
- [110] A. Salhi, J. A. V. Rodríguez, and Q. Zhang, An estimation of distribution algorithm with guided mutation for a complex flow shop scheduling problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 570–576, London, 7-11 July 2007, ACM Press.
- [111] K. Sastry, D. E. Goldberg, and X. Llorca, Towards billion-bit optimization via a parallel estimation of distribution algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 577–584, London, 7-11 July 2007, ACM Press.
- [112] S. Shakya, F. Oliveira, and G. Owusu, An application of EDA and GA to dynamic pricing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 585–592, London, 7-11 July 2007, ACM Press.
- [113] C. W. Ahn and R. S. Ramakrishna, Multiobjective real-coded bayesian optimization algorithm revisited: diversity preservation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 593–600, London, 7-11 July 2007, ACM Press.
- [114] T.-L. Yu, K. Sastry, D. E. Goldberg, and M. Pelikan, Population sizing for entropy-based model building in discrete estimation of distribution algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 601–608, London, 7-11 July 2007, ACM Press.
- [115] Y. Cai, X. Sun, H. Xu, and P. Jia, Cross entropy and adaptive variance scaling in continuous EDA, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 609–616, London, 7-11 July 2007, ACM Press.

- [116] A. Zhou, Q. Zhang, Y. Jin, B. Sendhoff, and E. Tsang, Global multiobjective optimization via estimation of distribution algorithm with biased initialization and crossover, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 617–623, London, 7-11 July 2007, ACM Press.
- [117] D. J. Coffin and R. E. Smith, Why is parity hard for estimation of distribution algorithms?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 624–624, London, 7-11 July 2007, ACM Press.
- [118] E. M. Heien, T. Hiroyasu, and N. Fujimoto, Investigation of mutation operators for the bayesian optimization algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 625–625, London, 7-11 July 2007, ACM Press.
- [119] M. Looks, Meta-optimizing semantic evolutionary search, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 626–626, London, 7-11 July 2007, ACM Press.
- [120] V. Nannen and A. E. Eiben, Variance reduction in meta-EDA, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 627–627, London, 7-11 July 2007, ACM Press.
- [121] M. Pelikan and A. K. Hartmann, Obtaining ground states of ising spin glasses via optimizing bonds instead of spins, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 628–628, London, 7-11 July 2007, ACM Press.
- [122] M. Pelikan, S. Tsutsui, and R. Kalapala, Dependency trees, permutations, and quadratic assignment problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 629–629, London, 7-11 July 2007, ACM Press.
- [123] S. Rimcharoen, D. Sutivong, and P. Chongstitvatana, A synthesis of optimal stopping time in compact genetic algorithm based on real options approach, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 630–630, London, 7-11 July 2007, ACM Press.
- [124] J. Schwarz, J. Jaros, and J. Ocenasek, Migration of probabilistic models for island-based bivariate EDA algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and*

- evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 631–631, London, 7-11 July 2007, ACM Press.
- [125] H. Wu and J. L. Shapiro, Parameter cross-validation and early-stopping in univariate marginal distribution algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 632–633, London, 7-11 July 2007, ACM Press.
  - [126] D. V. Arnold, On the use of evolution strategies for optimising certain positive definite quadratic forms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 634–641, London, 7-11 July 2007, ACM Press.
  - [127] M. Ebner, Estimating the spectral sensitivity of a digital sensor using calibration targets, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 642–649, London, 7-11 July 2007, ACM Press.
  - [128] C.-T. Hsieh, C.-M. Chen, and Y. ping Chen, Particle swarm guided evolution strategy, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 650–657, London, 7-11 July 2007, ACM Press.
  - [129] J. N. Knight and M. Lunacek, Reducing the space-time complexity of the CMA-ES, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 658–665, London, 7-11 July 2007, ACM Press.
  - [130] O. Kramer, S. Brügger, and D. Lazovic, Sex and death: towards biologically inspired heuristics for constraint handling, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 666–673, London, 7-11 July 2007, ACM Press.
  - [131] O. Kramer, B. Gloger, and A. Goebels, An experimental analysis of evolution strategies and particle swarm optimisers using design of experiments, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 674–681, London, 7-11 July 2007, ACM Press.
  - [132] A. M. Perez-Bellido, S. Salcedo-Sanz, E. G. Ortiz-Garcia, and A. Portilla-Figueras, A hybrid evolutionary programming algorithm for spread spectrum radar polyphase codes design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon,



- K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 682–688, London, 7-11 July 2007, ACM Press.
- [133] J. I. Rönkkönen and J. Lampinen, An extended mutation concept for the local selection based differential evolution algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 689–696, London, 7-11 July 2007, ACM Press.
  - [134] C. Rossi, A. Barrientos, and J. del Cerro, Two adaptive mutation operators for optima tracking in dynamic optimization problems with evolution strategies, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 697–704, London, 7-11 July 2007, ACM Press.
  - [135] O. M. Shir and T. Bäck, Performance analysis of niching algorithms based on derandomized-ES variants, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 705–712, London, 7-11 July 2007, ACM Press.
  - [136] O. M. Shir and T. Bäck, The second harmonic generation case-study as a gateway for es to quantum control problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 713–721, London, 7-11 July 2007, ACM Press.
  - [137] J. C. Gomez and O. Fuentes, Using evolution strategies for automatic extraction of parameters for stellar population synthesis of galaxy spectra from sdss, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 722–722, London, 7-11 July 2007, ACM Press.
  - [138] P. Petrovic, Strengths and weaknesses of FSA representation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 723–725, London, 7-11 July 2007, ACM Press.
  - [139] M. A. Abido, Two-level of nondominated solutions approach to multiobjective particle swarm optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 726–733, London, 7-11 July 2007, ACM Press.
  - [140] S. F. Adra, I. Griffin, and P. J. Fleming, An informed convergence accelerator for evolutionary multiobjective optimiser, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore,

- F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 734–740, London, 7-11 July 2007, ACM Press.
- [141] V. Aggarwal and U.-M. O'Reilly, COSMO: a correlation sensitive mutation operator for multi-objective optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 741–748, London, 7-11 July 2007, ACM Press.
  - [142] H. Aguirre, H. Okazaki, and Y. Fuwa, An evolutionary multiobjective approach to design highly non-linear Boolean functions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 749–756, London, 7-11 July 2007, ACM Press.
  - [143] R. L. Bécerra, C. A. Coello Coello, A. G. Hernández-Díaz, R. Caballero, and J. Molina, Alternative techniques to solve hard multi-objective optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 757–754, London, 7-11 July 2007, ACM Press.
  - [144] D. Brockhoff, T. Friedrich, N. Hebbinghaus, C. Klein, F. Neumann, and E. Zitzler, Do additional objectives make a problem harder?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 765–772, London, 7-11 July 2007, ACM Press.
  - [145] D. W. Corne and J. D. Knowles, Techniques for highly multiobjective optimisation: some nondominated points are better than others, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 773–780, London, 7-11 July 2007, ACM Press.
  - [146] K. Deb and A. Kumar, Interactive evolutionary multi-objective optimization and decision-making using reference direction method, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 781–788, London, 7-11 July 2007, ACM Press.
  - [147] J. C. Ferreira, C. M. Fonseca, and A. Gaspar-Cunha, Methodology to select solutions from the pareto-optimal set: a comparative study, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 789–796, London, 7-11 July 2007, ACM Press.
  - [148] T. Friedrich, N. Hebbinghaus, F. Neumann, J. He, and C. Witt, Approximating covering problems by randomized search heuristics using multi-objective models, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley,

- T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 797–804, London, 7-11 July 2007, ACM Press.
- [149] C. Grimme, J. Lepping, and A. Papaspyrou, Exploring the behavior of building blocks for multi-objective variation operator design using predator-prey dynamics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 805–812, London, 7-11 July 2007, ACM Press.
  - [150] K. Harada, J. Sakuma, S. Kobayashi, and I. Ono, Uniform sampling of local pareto-optimal solution curves by pareto path following and its applications in multi-objective GA, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 813–820, London, 7-11 July 2007, ACM Press.
  - [151] N. B. Ho and J. C. Tay, Using evolutionary computation and local search to solve multi-objective flexible job shop problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 821–828, London, 7-11 July 2007, ACM Press.
  - [152] H. Ishibuchi, Y. Nojima, N. Tsukamoto, and K. Ohara, Effects of the use of non-geometric binary crossover on evolutionary multiobjective optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 829–836, London, 7-11 July 2007, ACM Press.
  - [153] M. D. Johnson, D. R. Tauritz, and R. W. Wilkerson, SNDL-MOEA: stored non-domination level MOEA, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 837–844, London, 7-11 July 2007, ACM Press.
  - [154] M. Kirley and R. Stewart, An analysis of the effects of population structure on scalable multiobjective optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 845–852, London, 7-11 July 2007, ACM Press.
  - [155] P. Koduru, S. Das, and S. M. Welch, Multi-objective hybrid PSO using  $\epsilon$ -fuzzy dominance, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 853–860, London, 7-11 July 2007, ACM Press.
  - [156] N. Matake, T. Hiroyasu, M. Miki, and T. Senda, Multiobjective clustering with automatic k-determination for large-scale data, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F.

- Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 861–868, London, 7-11 July 2007, ACM Press.
- [157] S. Mostaghim, J. Branke, and H. Schmeck, Multi-objective particle swarm optimization on computer grids, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 869–875, London, 7-11 July 2007, ACM Press.
- [158] A. J. Nebro, E. Alba, G. Molina, F. Chicano, F. Luna, and J. J. Durillo, Optimal antenna placement using a new multi-objective chc algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 876–883, London, 7-11 July 2007, ACM Press.
- [159] C. Rotar, D. Dumitrescu, and R. I. Lung, Guided hyperplane evolutionary algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 884–891, London, 7-11 July 2007, ACM Press.
- [160] O. Schütze, M. Laumanns, E. Tantar, C. A. Coello Coello, and E. ghazali Talbi, Convergence of stochastic search algorithms to gap-free pareto front approximations, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 892–901, London, 7-11 July 2007, ACM Press.
- [161] B. W. Bailey and A. M. Raich, Interactive multi-objective design of long-span trusses, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 902–902, London, 7-11 July 2007, ACM Press.
- [162] I. Borgulya, An EC-memory based method for the multi-objective TSP, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 903–903, London, 7-11 July 2007, ACM Press.
- [163] T. Hiroyasu, K. Yoshii, and M. Miki, Discussion of parallel model of multi-objective genetic algorithms on heterogeneous computational resources, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 904–904, London, 7-11 July 2007, ACM Press.
- [164] M. P. Kleeman, G. B. Lamont, K. M. Hopkinson, and S. R. Graham, Multiobjective evolutionary algorithms for designing capacitated network centric communications, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb,

- B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 905–905, London, 7-11 July 2007, ACM Press.
- [165] C. León, G. Miranda, and C. Segura, Parallel skeleton for multi-objective optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 906–906, London, 7-11 July 2007, ACM Press.
- [166] X. Li, J. Branke, and M. Kirley, Performance measures and particle swarm methods for dynamic multi-objective optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 907–907, London, 7-11 July 2007, ACM Press.
- [167] Z. Li and G. Rudolph, A framework of quantum-inspired multi-objective evolutionary algorithms and its convergence condition, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 908–908, London, 7-11 July 2007, ACM Press.
- [168] S. A. Mansouri, S. H. Hendizadeh, and N. Salmasi, Bicriteria two-machine flowshop scheduling using metaheuristics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 909–909, London, 7-11 July 2007, ACM Press.
- [169] C. E. Mariano, V. H. Alcocer, and E. F. Morales, Incremental refinement of solutions for multiple objective optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 910–910, London, 7-11 July 2007, ACM Press.
- [170] L. Martí, J. García, A. Berlanga, and J. M. Molina, A cumulative evidential stopping criterion for multiobjective optimization evolutionary algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 911–911, London, 7-11 July 2007, ACM Press.
- [171] D. Vrajitoru, Hybrid multiobjective optimization genetic algorithms for graph drawing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 912–912, London, 7-11 July 2007, ACM Press.
- [172] P. Wozniak, Dimensionality reduction in evolutionary multiobjective design: case study, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 913–915, London, 7-11 July 2007, ACM Press.

- [173] A. Auger and O. Teytaud, Continuous lunches are free!, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 916–922, London, 7–11 July 2007, ACM Press.
- [174] T. Gong and A. L. Tuson, Enhanced forma analysis of permutation problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 923–930, London, 7–11 July 2007, ACM Press.
- [175] T. Jansen and M. Theile, Stability in the self-organized evolution of networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 931–938, London, 7–11 July 2007, ACM Press.
- [176] T. Jansen and D. Weyland, Analysis of evolutionary algorithms for the longest common subsequence problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 939–946, London, 7–11 July 2007, ACM Press.
- [177] J. Reichel and M. Skutella, Evolutionary algorithms and matroid optimization problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 947–954, London, 7–11 July 2007, ACM Press.
- [178] O. Teytaud and S. Gelly, DCMA: yet another derandomization in covariance-matrix-adaptation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 955–963, London, 7–11 July 2007, ACM Press.
- [179] C. J. C. H. Watkins, The channel capacity of evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 964–965, London, 7–11 July 2007, ACM Press.
- [180] K. Clegg, S. Stepney, and T. Clarke, Using feedback to regulate gene expression in a developmental control architecture, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 966–973, London, 7–11 July 2007, ACM Press.
- [181] D. B. D'Ambrosio and K. O. Stanley, A novel generative encoding for exploiting neural network sensor and output geometry, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A.

- Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 974–981, London, 7-11 July 2007, ACM Press.
- [182] A. Devert, N. Bredeche, and M. Schoenauer, Robust multi-cellular developmental design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 982–989, London, 7-11 July 2007, ACM Press.
- [183] K. L. Downing, Supplementing evolutionary developmental systems with abstract models of neurogenesis, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 990–996, London, 7-11 July 2007, ACM Press.
- [184] J. Gauci and K. Stanley, Generating large-scale neural networks through discovering geometric regularities, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 997–1004, London, 7-11 July 2007, ACM Press.
- [185] A. Grajdeanu, Methods for open-box analysis in artificial development, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1005–1012, London, 7-11 July 2007, ACM Press.
- [186] P. C. Haddow and J. Hoyer, Achieving a simple development model for 3D shapes: are chemicals necessary?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1013–1020, London, 7-11 July 2007, ACM Press.
- [187] S. L. Harding, J. F. Miller, and W. Banzhaf, Self-modifying cartesian genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1021–1028, London, 7-11 July 2007, ACM Press.
- [188] Y. Kassahun, M. Edgington, J. H. Metzen, G. Sommer, and F. Kirchner, A common genetic encoding for both direct and indirect encodings of networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1029–1036, London, 7-11 July 2007, ACM Press.
- [189] T. Kowaliw, P. Grogono, and N. Kharma, Environment as a spatial constraint on the growth of structural form, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1037–1044, London, 7-11 July 2007, ACM Press.

- [190] J. Reisinger and R. Miikkulainen, Acquiring evolvability through adaptive representations, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1045–1052, London, 7–11 July 2007, ACM Press.
- [191] G. Wilson and M. Heywood, Learning recursive programs with cooperative coevolution of genetic code mapping and genotype, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1053–1061, London, 7–11 July 2007, ACM Press.
- [192] A. Chavoya and Y. Duthen, Use of a genetic algorithm to evolve an extended artificial regulatory network for cell pattern generation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1062–1062, London, 7–11 July 2007, ACM Press.
- [193] J. Rieffel, H. Lipson, and F. J. Valero-Cuevas, Growing form-filling tensegrity structures using map L-systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1063–1063, London, 7–11 July 2007, ACM Press.
- [194] O. Yogev and E. K. Antonsson, Growth and development of continuous structures, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1064–1065, London, 7–11 July 2007, ACM Press.
- [195] E. Alba and F. Chicano, Finding safety errors with ACO, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1066–1073, London, 7–11 July 2007, ACM Press.
- [196] K. Ayari, S. Bouktif, and G. Antoniol, Automatic mutation test input data generation via ant colony, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1074–1081, London, 7–11 July 2007, ACM Press.
- [197] R. C. Bryce and C. J. Colbourn, One-test-at-a-time heuristic search for interaction test suites, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1082–1089, London, 7–11 July 2007, ACM Press.
- [198] M. Di Penta, G. Canfora, G. Esposito, V. Mazza, and M. Bruno, Search-based testing of service level agreements, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A.



- Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1090–1097, London, 7-11 July 2007, ACM Press.
- [199] K. Lakhotia, M. Harman, and P. McMinn, A multi-objective approach to search-based test data generation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1098–1105, London, 7-11 July 2007, ACM Press.
- [200] M. Harman and L. Tratt, Pareto optimal search based refactoring at the design level, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1106–1113, London, 7-11 July 2007, ACM Press.
- [201] M. K. O’Keeffe and M. O. Cinneide, Getting the most from search-based refactoring, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1114–1120, London, 7-11 July 2007, ACM Press.
- [202] A. Windisch, S. Wappler, and J. Wegener, Applying particle swarm optimization to software testing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1121–1128, London, 7-11 July 2007, ACM Press.
- [203] Y. Zhang, M. Harman, and S. A. Mansouri, The multi-objective next release problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1129–1137, London, 7-11 July 2007, ACM Press.
- [204] B. T. de Abreu, E. Martins, and F. L. de Sousa, Generalized extremal optimization: an attractive alternative for test data generation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1138–1138, London, 7-11 July 2007, ACM Press.
- [205] J. D. Kiper, M. S. Feather, and J. Richardson, Optimizing the V&V process for critical systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1139–1139, London, 7-11 July 2007, ACM Press.
- [206] K. Liaskos, M. Roper, and M. Wood, Investigating data-flow coverage of classes using evolutionary algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1140–1140, London, 7-11 July 2007, ACM Press.

- [207] X. Liu, L. Wang, X. Zhu, Z. Bai, M. Zhang, and H. Liu, Fitness calculation approach for nested if-else construct in evolutionary testing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 1, pages 1141–1141, London, 7-11 July 2007, ACM Press.
- [208] A. Alharbi, W. Rand, and R. Riolo, The defined cliffs variant in dynamic environments: a case study using the shaky ladder hyperplane-defined functions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1158–1164, London, 7-11 July 2007, ACM Press.
- [209] P. A. N. Bosman and H. L. Poutré, Learning and anticipation in online dynamic optimization with evolutionary algorithms: the stochastic case, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1165–1172, London, 7-11 July 2007, ACM Press.
- [210] Y. Chen, J. Hu, K. Hirasawa, and S. Yu, GARS: an improved genetic algorithm with reserve selection for global optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1173–1178, London, 7-11 July 2007, ACM Press.
- [211] T. Chiotis and C. D. Clack, Nonlinearity linkage detection for financial time series analysis, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1179–1186, London, 7-11 July 2007, ACM Press.
- [212] K. Deb, K. Sindhya, and T. Okabe, Self-adaptive simulated binary crossover for real-parameter optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1187–1194, London, 7-11 July 2007, ACM Press.
- [213] V. V. de Melo, A. C. B. Delbem, J. Dorival Leao Pinto, and F. M. Federson, Improving global numerical optimization using a search-space reduction algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1195–1202, London, 7-11 July 2007, ACM Press.
- [214] B. Doerr and D. Johannsen, Adjacency list matchings: an ideal genotype for cycle covers, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1203–1210, London, 7-11 July 2007, ACM Press.

- [215] H. Dong and Y. Liang, Genetic algorithms for large join query optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1211–1218, London, 7-11 July 2007, ACM Press.
- [216] T. Friedrich, N. Hebbinghaus, and F. Neumann, Rigorous analyses of simple diversity mechanisms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1219–1225, London, 7-11 July 2007, ACM Press.
- [217] J. E. Gallardo, C. Cotta, and A. J. Fernandez, A memetic algorithm for the low autocorrelation binary sequence problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1226–1233, London, 7-11 July 2007, ACM Press.
- [218] O. O. Garibay and A. S. Wu, Analyzing the effects of module encapsulation on search space bias, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1234–1241, London, 7-11 July 2007, ACM Press.
- [219] Y. Hanada, T. Hiroyasu, and M. Miki, Genetic multi-step search in interpolation and extrapolation domain, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1242–1249, London, 7-11 July 2007, ACM Press.
- [220] J.-L. Hippolyte, C. Bloch, P. Chatonnay, C. Espanet, and D. Chamagne, A self-adaptive multiagent evolutionary algorithm for electrical machine design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1250–1255, London, 7-11 July 2007, ACM Press.
- [221] D. Iclanzan and D. Dumitrescu, Overcoming hierarchical difficulty by hill-climbing the building block structure, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1256–1263, London, 7-11 July 2007, ACM Press.
- [222] R. Kabli, F. Herrmann, and J. McCall, A chain-model genetic algorithm for Bayesian network structure learning, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1264–1271, London, 7-11 July 2007, ACM Press.
- [223] M. Kim, V. Aggarwal, U.-M. O'Reilly, and M. Medard, A doubly distributed genetic algorithm for network coding, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and*

- evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1272–1279, London, 7-11 July 2007, ACM Press.
- [224] Z. Li and E. D. Goodman, Learning building block structure from crossover failure, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1280–1287, London, 7-11 July 2007, ACM Press.
  - [225] D. Lim, Y.-S. Ong, Y. Jin, and B. Sendhoff, A study on metamodeling techniques, ensembles, and multi-surrogates in evolutionary computation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1288–1295, London, 7-11 July 2007, ACM Press.
  - [226] R. I. Lung and D. Dumitrescu, A new evolutionary model for detecting multiple optima, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1296–1303, London, 7-11 July 2007, ACM Press.
  - [227] C. Mattiussi, P. Dürr, and D. Floreano, Center of mass encoding: a self-adaptive representation with adjustable redundancy for real-valued parameters, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1304–1311, London, 7-11 July 2007, ACM Press.
  - [228] R. Mills and R. A. Watson, Variable discrimination of crossover versus mutation using parameterized modular structure, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1312–1319, London, 7-11 July 2007, ACM Press.
  - [229] T. Paulden and D. K. Smith, Some novel locality results for the blob code spanning tree representation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1320–1327, London, 7-11 July 2007, ACM Press.
  - [230] C. Philemotte and H. Bersini, A gestalt genetic algorithm: less details for better search, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1328–1334, London, 7-11 July 2007, ACM Press.
  - [231] R. Poli and L. Vanneschi, Fitness-proportional negative slope coefficient as a hardness measure for genetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A.

- Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1335–1342, London, 7-11 July 2007, ACM Press.
- [232] A. Prugel-Bennett, Finding critical backbone structures with genetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1343–1348, London, 7-11 July 2007, ACM Press.
- [233] Q. Qiu, D. Burns, P. Mukre, and Q. Wu, Hardware acceleration of multi-deme genetic algorithm for the application of DNA codeword searching, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1349–1356, London, 7-11 July 2007, ACM Press.
- [234] P. Rohlfshagen and J. A. Bullinaria, ExGA II: an improved exonic genetic algorithm for the multiple knapsack problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1357–1364, London, 7-11 July 2007, ACM Press.
- [235] P. Rohlfshagen and J. A. Bullinaria, A genetic algorithm with exon shuffling crossover for hard bin packing problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1365–1371, London, 7-11 July 2007, ACM Press.
- [236] J. Sakuma and S. Kobayashi, A genetic algorithm for privacy preserving combinatorial optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1372–1379, London, 7-11 July 2007, ACM Press.
- [237] K. Sastry and D. E. Goldberg, Let's get ready to rumble redux: crossover versus mutation head to head on exponentially scaled problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1380–1387, London, 7-11 July 2007, ACM Press.
- [238] K. Sastry, M. Pelikan, and D. E. Goldberg, Empirical analysis of ideal recombination on random decomposable problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1388–1395, London, 7-11 July 2007, ACM Press.
- [239] Y. Sato, Y. Yasuda, and R. Goto, Analysis of noisy time-series signals with GA involving viral infection with tropism, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1396–1403, London, 7-11 July 2007, ACM Press.

- [240] J. Schonfeld, A study of mutational robustness as the product of evolutionary computation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1404–1411, London, 7–11 July 2007, ACM Press.
- [241] J. E. Smith, Credit assignment in adaptive memetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1412–1419, London, 7–11 July 2007, ACM Press.
- [242] C. L. Stoean, M. Preuss, R. Stoean, and D. Dumitrescu, Disburdening the species conservation evolutionary algorithm of arguing with radii, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1420–1427, London, 7–11 July 2007, ACM Press.
- [243] A. M. Sutton, M. Lunacek, and L. D. Whitley, Differential evolution and non-separability: using selective pressure to focus search, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1428–1435, London, 7–11 July 2007, ACM Press.
- [244] C. D. Toledo-Suárez, M. Valenzuela-Rendón, H. Terashima-Marín, and E. Uresti-Charre, On the relativity in the assessment of blind optimization algorithms and the problem-algorithm coevolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1436–1443, London, 7–11 July 2007, ACM Press.
- [245] H. Tripp and P. Palmer, Distribution replacement: how survival of the worst can out perform survival of the fittest, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1444–1451, London, 7–11 July 2007, ACM Press.
- [246] R. A. Watson and T. Jansen, A building-block royal road where crossover is provably essential, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1452–1459, London, 7–11 July 2007, ACM Press.
- [247] W. R. M. U. K. Wickramasinghe, M. van Steen, and A. E. Eiben, Peer-to-peer evolutionary algorithms with adaptive autonomous selection, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1460–1467, London, 7–11 July 2007, ACM Press.

- [248] H. Xie, M. Zhang, and P. Andreae, Another investigation on tournament selection: modelling and visualisation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1468–1475, London, 7-11 July 2007, ACM Press.
- [249] L. Yu, J. Zhou, S. Mabu, K. Hirasawa, J. Hu, and S. Markon, Effects of passenger’s arrival distribution to double-deck elevator group supervisory control systems using genetic network programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1476–1483, London, 7-11 July 2007, ACM Press.
- [250] S. Zhou, Z. Sun, and R. B. Heckendorn, Extended probe method for linkage discovery over high-cardinality alphabets, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1484–1491, London, 7-11 July 2007, ACM Press.
- [251] A. Zilinskas and J. Zilinskas, Parallel genetic algorithm: assessment of performance in multidimensional scaling, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1492–1501, London, 7-11 July 2007, ACM Press.
- [252] M. Boulif and K. Atif, A fuzzy genetic algorithm for the dynamic cell formation problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1502–1502, London, 7-11 July 2007, ACM Press.
- [253] Y. Chen, S. Mabu, K. Hirasawa, and J. Hu, Trading rules on stock markets using genetic network programming with sarsa learning, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1503–1503, London, 7-11 July 2007, ACM Press.
- [254] M. B. Correia and C. M. Fonseca, On the roles of redundancy and neutrality in evolutionary optimization: an experimental study, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1504–1504, London, 7-11 July 2007, ACM Press.
- [255] G. Drzadzewski and M. Wineberg, The effects of solution density in the search space on finding spatially robust solutions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1505–1505, London, 7-11 July 2007, ACM Press.
- [256] A. E. Eiben, M. Schoenauer, D. W. F. van Krevelen, M. C. Hobbelman, M. A. ten Hagen, and R. C. van het Schip, Autonomous selection in evolutionary algorithms, in *GECCO '07:*

- Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1506–1506, London, 7-11 July 2007, ACM Press.
- [257] M. B. E. Fayek, A. S. Talaat, and N. M. Darwish, Generating classification trees for small disjuncts using incremental gas, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1507–1507, London, 7-11 July 2007, ACM Press.
  - [258] E. Galvan-Lopez and R. Poli, How and why a bit-wise neutrality with and without locality affects evolutionary search, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1508–1508, London, 7-11 July 2007, ACM Press.
  - [259] E. Galvan-Lopez, J. Togelius, and S. Lucas, Towards understanding the effects of neutrality on the sudoku problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1509–1509, London, 7-11 July 2007, ACM Press.
  - [260] J. García-Nieto, E. Alba, and F. Chicano, Using metaheuristic algorithms remotely via ROS, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1510–1510, London, 7-11 July 2007, ACM Press.
  - [261] A. Gog, D. Dumitrescu, and B. Hirsbrunner, Collaborative evolutionary algorithms for combinatorial optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1511–1511, London, 7-11 July 2007, ACM Press.
  - [262] E. Gonzales, K. Shimada, S. Mabu, K. Hirasawa, and J. Hu, Genetic network programming with parallel processing for association rule mining in large and dense databases, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1512–1512, London, 7-11 July 2007, ACM Press.
  - [263] M. Graff, R. Poli, and A. Moraglio, Linear selection, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1513–1513, London, 7-11 July 2007, ACM Press.
  - [264] L. K. Graham, S. Christensen, and F. Oppacher, A simple genetic algorithm for reducible complexity, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff,



- C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1514–1514, London, 7–11 July 2007, ACM Press.
- [265] R. Halavati, S. B. Shouraki, B. J. Jashmi, and M. J. Heravi, Symbiotic tabu search, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1515–1515, London, 7–11 July 2007, ACM Press.
- [266] A. Halma and R. Turk, Adaptive markov recombination, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1516–1516, London, 7–11 July 2007, ACM Press.
- [267] A. Hamann and R. Ernst, Efficient priority optimization in complex distributed embedded systems through search space adaptation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1517–1517, London, 7–11 July 2007, ACM Press.
- [268] J. He and Y. Zhou, A comparison of GAs using penalizing infeasible solutions and repairing infeasible solutions on restrictive capacity knapsack problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1518–1518, London, 7–11 July 2007, ACM Press.
- [269] J. I. Hidalgo, F. F. de Vega, J. Lanchares, and D. Lombrana, Is the island model fault tolerant?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1519–1519, London, 7–11 July 2007, ACM Press.
- [270] I. Hwang, Y.-H. Kim, and B.-R. Moon, Overcoming barriers by a cluster-moving genetic algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1520–1520, London, 7–11 July 2007, ACM Press.
- [271] C. G. Johnson, A genetic algorithm for coverage problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1521–1521, London, 7–11 July 2007, ACM Press.
- [272] S. O. Kimbrough and D. H. Wood, On repair by binary interpolation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O.

- Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1522–1522, London, 7-11 July 2007, ACM Press.
- [273] O. Kramer and P. Koch, Self-adaptive partially mapped crossover, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1523–1523, London, 7-11 July 2007, ACM Press.
- [274] a. Tiago Leit F. B. Pereira, J. Tavares, and E. Costa, Niching techniques: a study on the cluster geometry optimization problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1524–1524, London, 7-11 July 2007, ACM Press.
- [275] A. J. W. Mbogho and L. L. Scarlatos, Genetic parameter tuning for reliable segmentation of colored visual tags, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1525–1525, London, 7-11 July 2007, ACM Press.
- [276] J. J. Merele and C. Cotta, Who is the best connected EC researcher?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1526–1526, London, 7-11 July 2007, ACM Press.
- [277] G. Mitchell, B. McMullin, J. Decraene, and C. Kelly, Quality time tradeoff operator for designing efficient multi level genetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1527–1527, London, 7-11 July 2007, ACM Press.
- [278] J. L. Payne and M. J. Eppstein, Why your mates shouldn't date, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1528–1528, London, 7-11 July 2007, ACM Press.
- [279] J. Pfeiffer and F. Rothlauf, Analysis of greedy heuristics and weight-coded eas for multidimensional knapsack problems and multi-unit combinatorial auctions, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1529–1529, London, 7-11 July 2007, ACM Press.
- [280] o. Anabela Sim and E. Costa, VMEA: studies on replacing strategies and diversity in dynamic environments, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1530–1530, London, 7-11 July 2007, ACM Press.

- [281] F. Sondahl and W. Rand, Evolution of non-uniform cellular automata using a genetic algorithm: diversity and computation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1531–1531, London, 7-11 July 2007, ACM Press.
- [282] A. Stanoyevitch, Homogeneous genetic algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1532–1532, London, 7-11 July 2007, ACM Press.
- [283] K. Tahera, R. N. Ibrahim, and P. B. Lochert, Adopting dynamic operators in a genetic algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1533–1533, London, 7-11 July 2007, ACM Press.
- [284] A. Teng, A. Klausner, and B. Rinner, An improved genetic algorithm for task allocation in distributed embedded systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1534–1534, London, 7-11 July 2007, ACM Press.
- [285] C.-K. Ting, Multi-parent extension of edge recombination, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1535–1535, London, 7-11 July 2007, ACM Press.
- [286] A. Tucker, S. Swift, and J. Crampton, Efficiency updates for the restricted growth function GA for grouping problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1536–1536, London, 7-11 July 2007, ACM Press.
- [287] C. C. Vieira and C. M. Fonseca, A unified model of optimisation problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1537–1537, London, 7-11 July 2007, ACM Press.
- [288] D. N. Wilke, S. Kok, and A. A. Groenwold, Reference frame and scale invariant real-parameter genetic and differential evolution algorithms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1538–1538, London, 7-11 July 2007, ACM Press.
- [289] Y. Yoon, Y.-H. Kim, A. Moraglio, and B.-R. Moon, Geometric crossovers for real-code representation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and*

- evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1539–1539, London, 7-11 July 2007, ACM Press.
- [290] S. Zhou and Z. Sun, Matrix interpretation of generalized embedded landscape, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1540–1542, London, 7-11 July 2007, ACM Press.
  - [291] A. Agapitos, J. Togelius, and S. M. Lucas, Evolving controllers for simulated car racing using object oriented genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1543–1550, London, 7-11 July 2007, ACM Press.
  - [292] K. M. S. Badran and P. I. Rockett, The roles of diversity preservation and mutation in preventing population collapse in multiobjective genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1551–1558, London, 7-11 July 2007, ACM Press.
  - [293] E. K. Burke, M. R. Hyde, G. Kendall, and J. Woodward, Automatic heuristic generation with genetic programming: evolving a jack-of-all-trades or a master of one, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1559–1565, London, 7-11 July 2007, ACM Press.
  - [294] D. M. Chitty, A data parallel approach to genetic programming using programmable graphics hardware, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1566–1573, London, 7-11 July 2007, ACM Press.
  - [295] S. Christensen and F. Oppacher, Solving the artificial ant on the Santa Fe trail problem in 20,696 fitness evaluations, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1574–1579, London, 7-11 July 2007, ACM Press.
  - [296] J. Clegg, J. A. Walker, and J. F. Miller, A new crossover technique for Cartesian genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1580–1587, London, 7-11 July 2007, ACM Press.
  - [297] S. Dignum and R. Poli, Generalisation of the limiting distribution of program sizes in tree-based genetic programming and analysis of its effects on bloat, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G.

- Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1588–1595, London, 7-11 July 2007, ACM Press.
- [298] J. Drugowitsch and A. M. Barry, Mixing independent classifiers, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1596–1603, London, 7-11 July 2007, ACM Press.
- [299] L. Hirsch, R. Hirsch, and M. Saeedi, Evolving Lucene search queries for text classification, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1604–1611, London, 7-11 July 2007, ACM Press.
- [300] D. Jackson, Hierarchical genetic programming based on test input subsets, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1612–1619, London, 7-11 July 2007, ACM Press.
- [301] W. Jaskowski, K. Krawiec, and B. Wieloch, Genetic programming for cross-task knowledge sharing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1620–1627, London, 7-11 July 2007, ACM Press.
- [302] J. Klein and L. Spector, Unwitting distributed genetic programming via asynchronous JavaScript and XML, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1628–1635, London, 7-11 July 2007, ACM Press.
- [303] M. Looks, On the behavioral diversity of random programs, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1636–1642, London, 7-11 July 2007, ACM Press.
- [304] L. Luthi, M. Tomassini, M. Giacobini, and W. B. Langdon, The genetic programming collaboration network and its communities, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1643–1650, London, 7-11 July 2007, ACM Press.
- [305] H. Majeed and C. Ryan, Context-aware mutation: a modular, context aware mutation operator for genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore,

- F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1651–1658, London, 7-11 July 2007, ACM Press.
- [306] H. Majeed and C. Ryan, On the constructiveness of context-aware crossover, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1659–1666, London, 7-11 July 2007, ACM Press.
  - [307] O. Muntean, L. Diosan, and M. Oltean, Best SubTree genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1667–1673, London, 7-11 July 2007, ACM Press.
  - [308] M. Schmidt and H. Lipson, Comparison of tree and graph encodings as function of problem complexity, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1674–1679, London, 7-11 July 2007, ACM Press.
  - [309] M. D. Schmidt and H. Lipson, Learning noise, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1680–1685, London, 7-11 July 2007, ACM Press.
  - [310] S. Shirakawa, S. Ogino, and T. Nagao, Graph structured program evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1686–1693, London, 7-11 July 2007, ACM Press.
  - [311] M. Smith and L. Bull, Improving the human readability of features constructed by genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1694–1701, London, 7-11 July 2007, ACM Press.
  - [312] K. M. Sullivan and S. Luke, Evolving kernels for support vector machine classification, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1702–1707, London, 7-11 July 2007, ACM Press.
  - [313] R. Thomason and T. Soule, Novel ways of improving cooperation and performance in ensemble classifiers, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1708–1715, London, 7-11 July 2007, ACM Press.

- [314] M. Walker, H. Edwards, and C. Messom, The reliability of confidence intervals for computational effort comparisons, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1716–1723, London, 7-11 July 2007, ACM Press.
- [315] J. A. Walker and J. F. Miller, Solving real-valued optimisation problems using cartesian genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1724–1730, London, 7-11 July 2007, ACM Press.
- [316] B. G. Woolley and G. L. Peterson, Genetic evolution of hierarchical behavior structures, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1731–1738, London, 7-11 July 2007, ACM Press.
- [317] H. Xie, M. Zhang, and P. Andreae, An analysis of constructive crossover and selection pressure in genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1739–1748, London, 7-11 July 2007, ACM Press.
- [318] M. B. Bader-El-Den and R. Poli, A GP-based hyper-heuristic framework for evolving 3-SAT heuristics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1749–1749, London, 7-11 July 2007, ACM Press.
- [319] X. Cai, S. M. Welch, P. Koduru, and S. Das, Discovering structures in gene regulatory networks using genetic programming and particle swarms, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1750–1750, London, 7-11 July 2007, ACM Press.
- [320] G. Folino, C. Pizzuti, and G. Spezzano, StreamGP: tracking evolving GP ensembles in distributed data streams using fractal dimension, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1751–1751, London, 7-11 July 2007, ACM Press.
- [321] D. L. Gonzalez and F. F. de Vega, Dynamic populations and length evolution: key factors for analyzing fault tolerance on parallel genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1752–1752, London, 7-11 July 2007, ACM Press.
- [322] R. E. Keller and R. Poli, Linear genetic programming of metaheuristics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by

- D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1753–1753, London, 7-11 July 2007, ACM Press.
- [323] M. Miki, M. Hashimoto, and Y. Fujita, Program search with simulated annealing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1754–1754, London, 7-11 July 2007, ACM Press.
- [324] G. Murphy and C. Ryan, Seeding methods for run transferable libraries, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1755–1755, London, 7-11 July 2007, ACM Press.
- [325] A. M. Radi and S. Y. El-Bakry, Genetic programming approach for positron collisions with alkali-metal atom, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1756–1756, London, 7-11 July 2007, ACM Press.
- [326] M. Solano and I. Jonyer, Towards an optimal restart strategy for genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1757–1757, London, 7-11 July 2007, ACM Press.
- [327] K. Taboada, K. Shimada, S. Mabu, K. Hirasawa, and J. Hu, Association rule mining for continuous attributes using genetic network programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1758–1758, London, 7-11 July 2007, ACM Press.
- [328] L. Vanneschi, D. Rochat, and M. Tomassini, Multi-optimization improves genetic programming generalization ability, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1759–1759, London, 7-11 July 2007, ACM Press.
- [329] M. Walker, H. Edwards, and C. Messom, "Success effort" for performance comparisons, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1760–1760, London, 7-11 July 2007, ACM Press.
- [330] P. L.-M. Wong and M. Zhang, Numerical-node building block analysis of genetic programming with simplification, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore,



- F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1761–1761, London, 7-11 July 2007, ACM Press.
- [331] B. Wyns and L. Boullart, Adaptive strategies for a semantically driven tree optimizer to control code growth, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1762–1762, London, 7-11 July 2007, ACM Press.
- [332] B. Wyns, L. Boullart, and P. J. De Smedt, Limiting code growth to improve robustness in tree-based genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1763–1763, London, 7-11 July 2007, ACM Press.
- [333] S. Ando, Heuristic speciation for evolving neural network ensemble, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1766–1773, London, 7-11 July 2007, ACM Press.
- [334] G. Brown, T. Kovacs, and J. A. R. Marshall, UCSpv: principled voting in UCS rule populations, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1774–1781, London, 7-11 July 2007, ACM Press.
- [335] C. Gagné, M. Sebag, M. Schoenauer, and M. Tomassini, Ensemble learning for free with evolutionary algorithms?, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1782–1789, London, 7-11 July 2007, ACM Press.
- [336] W. Jaskowski, K. Krawiec, and B. Wieloch, Knowledge reuse in genetic programming applied to visual learning, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1790–1797, London, 7-11 July 2007, ACM Press.
- [337] X. Llorà, K. Sastry, T.-L. Yu, and D. E. Goldberg, Do not match, inherit: fitness surrogates for genetics-based machine learning techniques, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1798–1805, London, 7-11 July 2007, ACM Press.
- [338] D. Loiacono, A. Marelli, and P. L. Lanzi, Support vector regression for classifier prediction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1806–1813, London, 7-11 July 2007, ACM Press.

- [339] P. L. Lanzi, M. V. Butz, and D. E. Goldberg, Empirical analysis of generalization and learning in XCS with gradient descent, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1814–1821, London, 7-11 July 2007, ACM Press.
- [340] P. L. Lanzi and D. Loiacono, Classifier systems that compute action mappings, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1822–1829, London, 7-11 July 2007, ACM Press.
- [341] I. Mierswa, Controlling overfitting with multi-objective support vector machines, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1830–1837, London, 7-11 July 2007, ACM Press.
- [342] A. Orriols-Puig, D. E. Goldberg, K. Sastry, and E. Bernadó-Mansilla, Modeling XCS in class imbalances: population size and parameter settings, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1838–1845, London, 7-11 July 2007, ACM Press.
- [343] A. Orriols-Puig, K. Sastry, P. L. Lanzi, D. E. Goldberg, and E. Bernadó-Mansilla, Modeling selection pressure in XCS for proportionate and tournament selection, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1846–1853, London, 7-11 July 2007, ACM Press.
- [344] K. Tamee, L. Bull, and O. Pinngern, Towards clustering with XCS, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1854–1860, London, 7-11 July 2007, ACM Press.
- [345] H. T. Tran, C. Sanza, Y. Duthen, and T. D. Nguyen, XCSF with computed continuous action, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1861–1869, London, 7-11 July 2007, ACM Press.
- [346] R. Cattral and F. Oppacher, Discovering rules in the poker hand dataset, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1870–1870, London, 7-11 July 2007, ACM Press.
- [347] H.-W. Chen and Y. ping Chen, Introducing fault tolerance to XCS, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens,

- H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1871–1871, London, 7-11 July 2007, ACM Press.
- [348] D. DeHaas, J. Craig, C. Rickert, M. J. Eppstein, P. Haake, and K. Stor, Feature selection and classification in noisy epistatic problems using a hybrid evolutionary approach, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1872–1872, London, 7-11 July 2007, ACM Press.
- [349] L. Diosan, M. Oltean, A. Rogozan, and J. P. Pecuchet, Genetically designed multiple-kernels for improving the SVM performance, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1873–1873, London, 7-11 July 2007, ACM Press.
- [350] A. Gandhe, S.-H. Yu, R. Mehra, and R. E. Smith, Fused, multi-spectral automatic target recognition with XCS, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1874–1874, London, 7-11 July 2007, ACM Press.
- [351] L. S. Shafti and E. Pérez, MDL-based fitness for feature construction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1875–1875, London, 7-11 July 2007, ACM Press.
- [352] A. Shankar, S. J. Louis, S. Dascalu, R. Houmanfar, and L. J. Hayes, XCS for adaptive user-interfaces, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1876–1876, London, 7-11 July 2007, ACM Press.
- [353] R. E. Smith and M. K. Jiang, MILCS: a mutual information learning classifier system, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1877–1877, London, 7-11 July 2007, ACM Press.
- [354] S. Achiche, W. Wang, Z. Fan, A. Ozkil, T. Sorensen, J. Wang, and E. Goodman, Genetically generated double-level fuzzy controller with a fuzzy adjustment strategy, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1880–1887, London, 7-11 July 2007, ACM Press.
- [355] A. Agogino and K. Tumer, Evolving distributed agents for managing air traffic, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb,

- B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1888–1895, London, 7-11 July 2007, ACM Press.
- [356] L. Araujo and J. J. Merelo, A genetic algorithm for dynamic modelling and prediction of activity in document streams, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1896–1903, London, 7-11 July 2007, ACM Press.
- [357] N. Banerjee and R. Kumar, Multiobjective network design for realistic traffic models, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1904–1911, London, 7-11 July 2007, ACM Press.
- [358] L. Bolzani, E. Sanchez, M. Schillaci, and G. Squillero, Coupling EA and high-level metrics for the automatic generation of test blocks for peripheral cores, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1912–1919, London, 7-11 July 2007, ACM Press.
- [359] C.-H. Chen and Y. ping Chen, Real-coded ECGA for economic dispatch, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1920–1927, London, 7-11 July 2007, ACM Press.
- [360] J.-H. Chen, Simultaneous optimization of production planning and inspection planning for flexible manufacturing systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1928–1935, London, 7-11 July 2007, ACM Press.
- [361] C. S. Choo, C. L. Chua, and S.-H. V. Tay, Automated red teaming: a proposed framework for military application, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1936–1942, London, 7-11 July 2007, ACM Press.
- [362] G. N. Demir, A. S. Uyar, and S. G. Ögüdücü, Graph-based sequence clustering through multiobjective evolutionary algorithms for web recommender systems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1943–1950, London, 7-11 July 2007, ACM Press.
- [363] D. Doherty and C. O’Riordan, A phenotypic analysis of GP-evolved team behaviours, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry,

- K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1951–1958, London, 7-11 July 2007, ACM Press.
- [364] G. Reis and F. Fernandez Vega, Electronic synthesis using genetic algorithms for automatic music transcription, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1959–1966, London, 7-11 July 2007, ACM Press.
  - [365] M. Dragoni and A. G. B. Tettamanzi, Evolutionary algorithms for reasoning in fuzzy description logics with fuzzy quantifiers, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1967–1974, London, 7-11 July 2007, ACM Press.
  - [366] A. I. Esparcia-Alcazar, L. Lluch-Revert, M. Cardos, K. Sharman, and J. J. Merelo, Configuring an evolutionary tool for the inventory and transportation problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1975–1982, London, 7-11 July 2007, ACM Press.
  - [367] K. Fan, A. Brabazon, C. O'Sullivan, and M. O'Neill, Option pricing model calibration using a real-valued quantum-inspired evolutionary algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1983–1990, London, 7-11 July 2007, ACM Press.
  - [368] M. Förster, B. Bickel, B. Hardung, and G. Kókai, Self-adaptive ant colony optimisation applied to function allocation in vehicle networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1991–1998, London, 7-11 July 2007, ACM Press.
  - [369] F. D. Francone, L. M. Deschaine, and J. J. Warren, Discrimination of munitions and explosives of concern at F.E. Warren AFB using linear genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 1999–2006, London, 7-11 July 2007, ACM Press.
  - [370] P. Geremia, M. Poian, and S. Poles, Genetic optimization for yacht design, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2007–2012, London, 7-11 July 2007, ACM Press.
  - [371] S. Hanna, Defining implicit objective functions for design problems, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O.

- Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2013–2020, London, 7-11 July 2007, ACM Press.
- [372] B. A. Hoverstad, Revisiting the personal satellite assistant: neuroevolution with a modified enforced sub-populations algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2021–2028, London, 7-11 July 2007, ACM Press.
  - [373] P.-C. Hung, Y. ping Chen, and H. W. Zan, Characteristic determination for solid state devices with evolutionary computation: a case study, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2029–2036, London, 7-11 July 2007, ACM Press.
  - [374] J. Jaros, M. Ohlidal, and V. Dvorak, An evolutionary approach to collective communication scheduling, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2037–2044, London, 7-11 July 2007, ACM Press.
  - [375] M. Jenabi, S. A. Torabi, and S. A. Mansouri, A hybrid GA for a supply chain production planning problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2045–2052, London, 7-11 July 2007, ACM Press.
  - [376] R. Joost and R. Salomon, High quality offset printing: an evolutionary approach, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2053–2058, London, 7-11 July 2007, ACM Press.
  - [377] R. Jursa, Variable selection for wind power prediction using particle swarm optimization, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2059–2065, London, 7-11 July 2007, ACM Press.
  - [378] F. Kharbat, L. Bull, and M. Odeh, Mining breast cancer data with XCS, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2066–2073, London, 7-11 July 2007, ACM Press.
  - [379] J. R. Koza, S. H. Al-Sakran, L. W. Jones, and G. Manassero, Automated synthesis of a fixed-length loaded symmetric dipole antenna whose gain exceeds that of a commercial antenna and matches the theoretical maximum, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2074–2081, London, 7-11 July 2007, ACM Press.

- [380] R. C. Lange and S. Mancoridis, Using code metric histograms and genetic algorithms to perform author identification for software forensics, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2082–2089, London, 7–11 July 2007, ACM Press.
- [381] J.-W. Lee, S.-S. Choi, and B.-R. Moon, An evolutionary keystroke authentication based on ellipsoidal hypothesis space, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2090–2097, London, 7–11 July 2007, ACM Press.
- [382] X. Llorà, R. Reddy, B. Matesic, and R. Bhargava, Towards better than human capability in diagnosing prostate cancer using infrared spectroscopic imaging, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2098–2105, London, 7–11 July 2007, ACM Press.
- [383] A. J. Lockett, C. L. Chen, and R. Miikkulainen, Evolving explicit opponent models in game playing, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2106–2113, London, 7–11 July 2007, ACM Press.
- [384] C. McCubbin, D. Scheidt, O. Bandte, S. Marshall, and I. Trifonov, Using genetic algorithms for naval subsystem damage assessment and design improvements, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2114–2121, London, 7–11 July 2007, ACM Press.
- [385] J. Mehnen, R. Roy, P. Kersting, and T. Wagner, ICSPEA: evolutionary five-axis milling path optimisation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2122–2128, London, 7–11 July 2007, ACM Press.
- [386] O. Odeh, P. Koduru, S. Das, A. M. Featherstone, and S. M. Welch, A multi-objective approach for the prediction of loan defaults, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2129–2136, London, 7–11 July 2007, ACM Press.
- [387] M. R. Peterson, G. B. Lamont, F. Moore, and P. Marshall, Targeted filter evolution for improved image reconstruction resolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2137–2144, London, 7–11 July 2007, ACM Press.

- [388] D. Powell and J. Hollingsworth, A NSGA-II, web-enabled, parallel optimization framework for NLP and MINLP, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2145–2150, London, 7-11 July 2007, ACM Press.
- [389] J. C. Quiroz, S. J. Louis, and S. M. Dascalu, Interactive evolution of XUL user interfaces, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2151–2158, London, 7-11 July 2007, ACM Press.
- [390] R. Ramirez and A. Hazan, Inducing a generative expressive performance model using a sequential-covering genetic algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2159–2166, London, 7-11 July 2007, ACM Press.
- [391] J. Sullivan and C. Ryan, A destructive evolutionary process: a pilot implementation, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2167–2173, London, 7-11 July 2007, ACM Press.
- [392] S. Swift, A. Tucker, J. Crampton, and D. Garway-Heath, An improved restricted growth function genetic algorithm for the consensus clustering of retinal nerve fibre data, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2174–2181, London, 7-11 July 2007, ACM Press.
- [393] H. Terashima-Marin, C. J. F. Zarate, P. Ross, and M. Valenzuela-Rendon, Comparing two models to generate hyper-heuristics for the 2d-regular bin-packing problem, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2182–2189, London, 7-11 July 2007, ACM Press.
- [394] R. Thangavelu and S. Pradeep, An online implementable differential evolution tuned optimal guidance law, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2190–2194, London, 7-11 July 2007, ACM Press.
- [395] T. Wagner, T. Michelitsch, and A. Sacharow, On the design of optimisers for surface reconstruction, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2195–2202, London, 7-11 July 2007, ACM Press.
- [396] C.-W. Wang, L.-M. Sun, M.-H. Jin, C.-J. Fu, L. Liu, C.-H. Chan, and C.-Y. Kao, A genetic algorithm for resident physician scheduling problem, in *GECCO '07: Proceedings of the 9th*



- annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2203–2210, London, 7–11 July 2007, ACM Press.
- [397] J. Wang, N. Jing, J. Li, and Z. H. Chen, A multi-objective imaging scheduling approach for earth observing satellites, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2211–2218, London, 7–11 July 2007, ACM Press.
  - [398] D. C. Wedge, S. J. Gaskell, S. J. Hubbard, D. B. Kell, K. W. Lau, and C. Eyers, Peptide detectability following ESI mass spectrometry: prediction using genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2219–2225, London, 7–11 July 2007, ACM Press.
  - [399] W. Yan and C. D. Clack, Diverse committees vote for dependable profits, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2226–2233, London, 7–11 July 2007, ACM Press.
  - [400] W. Yan and C. D. Clack, Evolving robust GP solutions for hedge fund stock selection in emerging markets, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2234–2241, London, 7–11 July 2007, ACM Press.
  - [401] L. Zinchenko, M. Radecker, and F. Bisogno, Multi-objective univariate marginal distribution optimisation of mixed analogue-digital signal circuits, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2242–2251, London, 7–11 July 2007, ACM Press.
  - [402] A. Azzini and A. G. B. Tettamanzi, Automated trading on financial instruments with evolved neural networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2252–2252, London, 7–11 July 2007, ACM Press.
  - [403] M. Cebrian, M. Alfonseca, and A. Ortega, Automatic generation of benchmarks for plagiarism detection tools using grammatical evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2253–2253, London, 7–11 July 2007, ACM Press.
  - [404] D. Costelloe and C. Ryan, Towards models of user preferences in interactive musical evolution, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*,

edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2254–2254, London, 7-11 July 2007, ACM Press.

- [405] R. Cummins and C. O’Riordan, Using genetic programming for information retrieval: local and global query expansion, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2255–2255, London, 7-11 July 2007, ACM Press.
- [406] G. Danoy, E. Alba, P. Bouvry, and M. Brust, Optimal design of ad hoc injection networks by using genetic algorithms, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2256–2256, London, 7-11 July 2007, ACM Press.
- [407] J. Duke and C. D. Clack, Using an evolutionary agent-based simulation to explore hedging pressure in futures markets, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2257–2257, London, 7-11 July 2007, ACM Press.
- [408] J. C. Isaacs, S. Foo, and A. Meyer-Baese, Evolutionary computation-based kernel optimal component analysis for pattern recognition, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2258–2258, London, 7-11 July 2007, ACM Press.
- [409] R. Kumar and P. K. Singh, On quality performance of heuristic and evolutionary algorithms for biobjective minimum spanning trees, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2259–2259, London, 7-11 July 2007, ACM Press.
- [410] C.-C. Lai, C.-K. Ting, and R.-S. Ko, An effective genetic algorithm for improving wireless sensor network lifetime, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2260–2260, London, 7-11 July 2007, ACM Press.
- [411] N. C. Lourenço and N. C. Horta, Automatic analog IC layout generation based on a evolutionary computation approach, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2261–2261, London, 7-11 July 2007, ACM Press.
- [412] I. Ma, T. Wong, and T. Sankar, Volatility forecasting using time series data mining and evolutionary computation techniques, in *GECCO ’07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F.

- Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2262–2262, London, 7-11 July 2007, ACM Press.
- [413] S. Mabu, Y. Chen, K. Hirasawa, and J. Hu, Genetic network programming with actor-critic and its application to stock trading model, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2263–2263, London, 7-11 July 2007, ACM Press.
- [414] D. Oranchak, Evolutionary synthesis of photographic artwork using human fitness function derived from web-based social networks, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2264–2264, London, 7-11 July 2007, ACM Press.
- [415] I. Sekaj, J. Perkacz, and T. Palenik, Controller design based on genetic programming, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2265–2265, London, 7-11 July 2007, ACM Press.
- [416] O. M. Shir, T. Bäck, and M. J. J. Vrakking, On the scalability of evolution strategies in the optimization of dynamic molecular alignment, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2266–2266, London, 7-11 July 2007, ACM Press.
- [417] M. Tufail and L. E. Ormsbee, Genetic algorithms for water quality management in an urban watershed, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2267–2267, London, 7-11 July 2007, ACM Press.
- [418] C. J. Turner and A. Tiwari, An experimental evaluation of genetic process mining, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2268–2268, London, 7-11 July 2007, ACM Press.
- [419] N. B. Urquhart, Carbon-friendly travel plan construction using an evolutionary algorithm, in *GECCO '07: Proceedings of the 9th annual conference on Genetic and evolutionary computation*, edited by D. Thierens, H.-G. Beyer, J. Bongard, J. Branke, J. A. Clark, D. Cliff, C. B. Congdon, K. Deb, B. Doerr, T. Kovacs, S. Kumar, J. F. Miller, J. Moore, F. Neumann, M. Pelikan, R. Poli, K. Sastry, K. O. Stanley, T. Stutzle, R. A. Watson, and I. Wegener, volume 2, pages 2269–2269, London, 7-11 July 2007, ACM Press.