

## Список литературы

- [Abbas(2010)] Abbas, H.M. (2010) ‘Mixed-coded evolutionary algorithm for gaussian mixture maximum likelihood clustering with model selection’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 825–826. doi:doi:10.1145/1830483.1830631.
- [Addicoat and Brain(2010)] Addicoat, M.A. and Brain, Z.E. (2010) ‘Using a meta-ga for parametric optimization of simple gas in the computational chemistry domain’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 823–824. doi:doi:10.1145/1830483.1830630.
- [Afridi et al.(2010)] Afridi, Manzoor, Rasheed, Ahmed and Faraz] Afridi, M.J., Manzoor, S., Rasheed, U., Ahmed, M. and Faraz, K. (2010) ‘Performance evaluation of evolutionary algorithms for road detection’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1331–1332. doi:doi:10.1145/1830483.1830728.
- [Ahalpara(2010)] Ahalpara, D.P. (2010) ‘Improved forecasting of time series data of real system using genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 977–978. doi:doi:10.1145/1830483.1830658.
- [Akimoto et al.(2010)] Akimoto, Nagata, Ono and Kobayashi] Akimoto, Y., Nagata, Y., Ono, I. and Kobayashi, S. (2010) ‘Theoretical analysis of evolutionary computation on continuously differentiable functions’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1401–1408. doi:doi:10.1145/1830483.1830742.
- [Al-Betar et al.(2010)] Al-Betar, Khader and Nadi] Al-Betar, M.A., Khader, A.T. and Nadi, F. (2010) ‘Selection mechanisms in memory consideration for examination timetabling with harmony search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1203–1210. doi:doi:10.1145/1830483.1830702.
- [Alonso et al.(2010)] Alonso, Martínez, Santamaría, Pérez and Valente] Alonso, F., Martínez, L., Santamaría, A., Pérez, A. and Valente, J.P. (2010) ‘Ggpp-based method for modeling time series: operator selection, parameter optimization and expert evaluation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 989–990. doi:doi:10.1145/1830483.1830664.
- [Arnold and Hansen(2010)] Arnold, D.V. and Hansen, N. (2010) ‘Active covariance matrix adaptation for the (1+1)-cma-es’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon,

- J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 385–392. doi:doi:10.1145/1830483.1830556.
- [Atilgan and Hu(2010)] Atilgan, E. and Hu, J. (2010) 'Efficient protein-ligand docking using sustainable evolutionary algorithm'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 211–212. doi:doi:10.1145/1830483.1830521.
- [Auerbach and Bongard(2010)] Auerbach, J.E. and Bongard, J.C. (2010) 'Evolving cppns to grow three-dimensional physical structures'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 627–634. doi:doi:10.1145/1830483.1830597.
- [Augusto *et al.*(2010)Augusto, Barbosa and Ebecken] Augusto, D.A., Barbosa, H.J.C. and Ebecken, N.F.F. (2010) 'Coevolutionary multi-population genetic programming for data classification'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 933–940. doi:doi:10.1145/1830483.1830650.
- [Avery and Louis(2010)] Avery, P. and Louis, S. (2010) 'Coevolving influence maps for spatial team tactics in a rts game'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 783–790. doi:doi:10.1145/1830483.1830621.
- [Azad and Ryan(2010)] Azad, R.M.A. and Ryan, C. (2010) 'Abstract functions and lifetime learning in genetic programming for symbolic regression'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 893–900. doi:doi:10.1145/1830483.1830645.
- [Barrero *et al.*(2010)Barrero, Camacho and R-Moreno] Barrero, D.F., Camacho, D. and R-Moreno, M.D. (2010) 'Confidence intervals of success rates in evolutionary computation'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 975–976. doi:doi:10.1145/1830483.1830657.
- [Barreto *et al.*(2010)Barreto, Bernardino and Barbosa] Barreto, A.M., Bernardino, H.S. and Barbosa, H.J. (2010) 'Probabilistic performance profiles for the experimental evaluation of stochastic algorithms'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 751–758. doi:doi:10.1145/1830483.1830617.

- [Behdad *et al.*(2010)Behdad, French, Barone and Bennamoun] Behdad, M., French, T., Barone, L. and Bennamoun, M. (2010) ‘On the problems of using learning classifier systems for fraud detection’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1067–1068. doi:doi:10.1145/1830483.1830678.
- [Benjamin and Julstrom(2010)] Benjamin, J. and Julstrom, B.A. (2010) ‘Breaking ties with secondary fitness in a genetic algorithm for the bin packing problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 657–664. doi:doi:10.1145/1830483.1830605.
- [Berghammer *et al.*(2010)Berghammer, Friedrich and Neumann] Berghammer, R., Friedrich, T. and Neumann, F. (2010) ‘Set-based multi-objective optimization, indicators, and deteriorative cycles’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 495–502. doi:doi:10.1145/1830483.1830574.
- [Bhowan *et al.*(2010)Bhowan, Zhang and Johnston] Bhowan, U., Zhang, M. and Johnston, M. (2010) ‘Auc analysis of the pareto-front using multi-objective gp for classification with unbalanced data’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 845–852. doi:doi:10.1145/1830483.1830639.
- [Bibai *et al.*(2010)Bibai, Saveant, Schoenauer and Vidal] Bibai, J., Saveant, P., Schoenauer, M. and Vidal, V. (2010) ‘On the generality of parameter tuning in evolutionary planning’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 241–248. doi:doi:10.1145/1830483.1830528.
- [Bongard and Hornby(2010)] Bongard, J.C. and Hornby, G.S. (2010) ‘Guarding against premature convergence while accelerating evolutionary search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 111–118. doi:doi:10.1145/1830483.1830504.
- [Borges *et al.*(2010)Borges, Alonso and Montana] Borges, C.E., Alonso, C.L. and Montana, J.L. (2010) ‘Model selection in genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 985–986. doi:doi:10.1145/1830483.1830662.
- [Bosman(2010)] Bosman, P.A. (2010) ‘The anticipated mean shift and cluster registration in mixture-based edas for multi-objective optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht,

- N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 351–358. doi:doi:10.1145/1830483.1830549.
- [Bringmann and Friedrich(2010)] Bringmann, K. and Friedrich, T. (2010) ‘The maximum hypervolume set yields near-optimal approximation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 511–518. doi:doi:10.1145/1830483.1830576.
- [Brown and Huber(2010)] Brown, J.B. and Huber, M. (2010) ‘Pseudo-hierarchical ant-based clustering using a heterogeneous agent hierarchy and automatic boundary formation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 85–86. doi:doi:10.1145/1830483.1830499.
- [Buryan and Kubalik(2010)] Buryan, P. and Kubalik, J. (2010) ‘Context-sensitive refinements for stochastic optimization algorithms in inductive logic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1071–1072. doi:doi:10.1145/1830483.1830680.
- [Carlson and Hougen(2010)] Carlson, B.P. and Hougen, D.F. (2010) ‘Phenotype feedback genetic algorithm operators for heuristic encoding of snakes within hypercubes’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 791–798. doi:doi:10.1145/1830483.1830622.
- [Ceriani *et al.*(2010)] Ceriani, M., Ferrandi, F., Lanzi, P.L., Sciuto, D. and Tumeo, A. (2010) ‘Multiprocessor systems-on-chip synthesis using multi-objective evolutionary computation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1267–1274. doi:doi:10.1145/1830483.1830710.
- [Chen *et al.*(2010)] Chen, He and Zhang] Chen, Z., He, Z. and Zhang, C. (2010) ‘Particle swarm optimizer with self-adjusting neighborhoods’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 9–14. doi:doi:10.1145/1830483.1830486.
- [Chicano *et al.*(2010)] Chicano, F., Luque, G. and Alba, E. (2010) ‘Elementary landscape decomposition of the quadratic assignment problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1425–1432. doi:doi:10.1145/1830483.1830745.

- [Choi *et al.*(2010)Choi, Koo and Moon] Choi, Y.S., Koo, B.K. and Moon, B.R. (2010) ‘Optimization of an image set by genetic feature selection for real-time photomosaics’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1309–1310. doi:doi:10.1145/1830483.1830717.
- [Chuang and Hsu(2010)] Chuang, C.Y. and Hsu, W.L. (2010) ‘Multivariate multi-model approach for globally multimodal problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 311–318. doi:doi:10.1145/1830483.1830544.
- [Chwatal *et al.*(2010)Chwatal, Raidl and Zöch] Chwatal, A.M., Raidl, G.R. and Zöch, M. (2010) ‘Fitting multi-planet transit models to photometric time-data series by evolution strategies’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 377–384. doi:doi:10.1145/1830483.1830555.
- [Clune *et al.*(2010)Clune, Beckmann, McKinley and Ofria] Clune, J., Beckmann, B.E., McKinley, P.K. and Ofria, C. (2010) ‘Investigating whether hyperneat produces modular neural networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 635–642. doi:doi:10.1145/1830483.1830598.
- [Collier and Wineberg(2010)] Collier, R. and Wineberg, M. (2010) ‘Approaches to multidimensional scaling for adaptive landscape visualization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 649–656. doi:doi:10.1145/1830483.1830604.
- [Colmenar *et al.*(2010)Colmenar, Risco-Martín, Atienza, Garnica, Hidalgo and Lanchares] Colmenar, J.M., Risco-Martín, J.L., Atienza, D., Garnica, O., Hidalgo, J.I. and Lanchares, J. (2010) ‘Improving reliability of embedded systems through dynamic memory manager optimization using grammatical evolution’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1227–1234. doi:doi:10.1145/1830483.1830705.
- [Connelly *et al.*(2010)Connelly, Beckmann and McKinley] Connelly, B.D., Beckmann, B.E. and McKinley, P.K. (2010) ‘Resource abundance promotes the evolution of public goods cooperation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 143–150. doi:doi:10.1145/1830483.1830508.
- [Conrad *et al.*(2010)Conrad, Roos and Kapfhammer] Conrad, A.P., Roos, R.S. and Kapfhammer, G.M. (2010) ‘Empirically studying the role of selection operators during search-based test suite prioritization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon,

- J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1373–1380. doi:doi:10.1145/1830483.1830735.
- [Cook and Tauritz(2010)] Cook, J.E. and Tauritz, D.R. (2010) 'An exploration into dynamic population sizing'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 807–814. doi:doi:10.1145/1830483.1830624.
- [Crofford *et al.*(2010)Crofford, Eskridge and Hougen] Crofford, J., Eskridge, B.E. and Hougen, D.F. (2010) 'Applying the triple parameter hypothesis to maintenance scheduling'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 799–806. doi:doi:10.1145/1830483.1830623.
- [Curran *et al.*(2010)Curran, Freuder and Jansen] Curran, D., Freuder, E. and Jansen, T. (2010) 'Incremental evolution of local search heuristics'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 981–982. doi:doi:10.1145/1830483.1830660.
- [de A. Araújo *et al.*(2010)de A. Araújo, de Oliveira and Soares] de A. Araújo, R., de Oliveira, A.L. and Soares, S.C. (2010) 'A covariance matrix adaptation based evolutionary methodology for phase adjustment in financial time series forecasting'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1315–1316. doi:doi:10.1145/1830483.1830720.
- [de Mattos Neto *et al.*(2010)de Mattos Neto, Lima Junior and Ferreira] de Mattos Neto, P.S., Lima Junior, A.R. and Ferreira, T.A. (2010) 'Time series forecasting using a perturbative intelligent system'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1477–1478. doi:doi:10.1145/1830483.1830755.
- [de Mendonca Neta *et al.*(2010)de Mendonca Neta, Araujo, Guimaraes and Mesquita] de Mendonca Neta, B.M., Araujo, G.H.D., Guimaraes, F.G. and Mesquita, R.C. (2010) 'A hybrid genetic algorithm for automatic graph drawing based on the topology-shape-metric approach'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 743–750. doi:doi:10.1145/1830483.1830616.
- [De Prisco *et al.*(2010)De Prisco, Zaccagnino and Zaccagnino] De Prisco, R., Zaccagnino, G. and Zaccagnino, R. (2010) 'Evobasscomposer: a multi-objective genetic algorithm for 4-voice compositions'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10:*

*Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 817–818. doi:doi:10.1145/1830483.1830627.

- [Deb and Padhye(2010)] Deb, K. and Padhye, N. (2010) ‘Development of efficient particle swarm optimizers by using concepts from evolutionary algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 55–62. doi:doi:10.1145/1830483.1830492.
- [Di Carlo *et al.*(2010)Di Carlo, Sanchez, Scionti, Squillero, Tonda and Falasconi] Di Carlo, S., Sanchez, E., Scionti, A., Squillero, G., Tonda, A.P. and Falasconi, M. (2010) ‘Towards drift correction in chemical sensors using an evolutionary strategy’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1329–1330. doi:doi:10.1145/1830483.1830727.
- [Doerr and Johannsen(2010)] Doerr, B. and Johannsen, D. (2010) ‘Edge-based representation beats vertex-based representation in shortest path problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 759–766. doi:doi:10.1145/1830483.1830618.
- [Doğan *et al.*(2010)Doğan, Erdal and Saka] Doğan, E., Erdal, F. and Saka, M.P. (2010) ‘Optimum design of grillage systems under code provisions using particle swarm optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 289–290. doi:doi:10.1145/1830483.1830535.
- [Downey *et al.*(2010)Downey, Zhang and Browne] Downey, C., Zhang, M. and Browne, W.N. (2010) ‘New crossover operators in linear genetic programming for multiclass object classification’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 885–892. doi:doi:10.1145/1830483.1830644.
- [Downing(2010)] Downing, K.L. (2010) ‘The baldwin effect in developing neural networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 555–562. doi:doi:10.1145/1830483.1830588.
- [Ducatelle *et al.*(2010)Ducatelle, Di Caro and Gambardella] Ducatelle, F., Di Caro, G.A. and Gambardella, L.M. (2010) ‘Cooperative self-organization in a heterogeneous swarm robotic system’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 87–94. doi:doi:10.1145/1830483.1830501.

- [Dumitrescu *et al.*(2010)Dumitrescu, Lung, Nagy, Zaharie and Bartha] Dumitrescu, D., Lung, R.I., Nagy, R., Zaharie, D. and Bartha, A. (2010) ‘Exploring evolutionary detected fuzzy equilibria: a link between normative theory and real life’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 539–540. doi:doi:10.1145/1830483.1830582.
- [Esparcia-Alcazár *et al.*(2010)Esparcia-Alcazár, Martínez-García, Mora, Merelo and García-Sánchez] Esparcia-Alcazár, A.I., Martínez-García, A., Mora, A.M., Merelo, J.J. and García-Sánchez, P. (2010) ‘Genetic evolution of fuzzy finite state machines to control bots in a first-person shooter game’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 829–830. doi:doi:10.1145/1830483.1830633.
- [Evins *et al.*(2010)Evins, Pointer and Vaidyanathan] Evins, R., Pointer, P. and Vaidyanathan, R. (2010) ‘Configuration of a genetic algorithm for multi-objective optimisation of solar gain to buildings’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1327–1328. doi:doi:10.1145/1830483.1830726.
- [Farinaccio *et al.*(2010)Farinaccio, Vanneschi, Giacobini, Mauri and Provero] Farinaccio, A., Vanneschi, L., Giacobini, M., Mauri, G. and Provero, P. (2010) ‘On the use of genetic programming for the prediction of survival in cancer’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 163–170. doi:doi:10.1145/1830483.1830514.
- [Fast *et al.*(2010)Fast, Le Gouse, Forrest and Weimer] Fast, E., Le Gouse, C., Forrest, S. and Weimer, W. (2010) ‘Designing better fitness functions for automated program repair’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 965–972. doi:doi:10.1145/1830483.1830654.
- [Fernando(2010)] Fernando, C. (2010) ‘Neuronal replicators solve the stability-plasticity dilemma’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 153–154. doi:doi:10.1145/1830483.1830511.
- [Álvaro Fialho *et al.*(2010)Álvaro Fialho, Schoenauer and Sebag] Álvaro Fialho, Schoenauer, M. and Sebag, M. (2010) ‘Toward comparison-based adaptive operator selection’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 767–774. doi:doi:10.1145/1830483.1830619.
- [Folino and Pizzuti(2010)] Folino, F. and Pizzuti, C. (2010) ‘Multiobjective evolutionary community detection for dynamic networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard,



- A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 535–536. doi:doi:10.1145/1830483.1830580.
- [Foster and Somayaji(2010)] Foster, B. and Somayaji, A. (2010) ‘Object-level recombination of commodity applications’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 957–964. doi:doi:10.1145/1830483.1830653.
- [Franco *et al.*(2010)Franco, Krasnogor and Bacardit] Franco, M.A., Krasnogor, N. and Bacardit, J. (2010) ‘Speeding up the evaluation of evolutionary learning systems using gpgpus’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1039–1046. doi:doi:10.1145/1830483.1830672.
- [Gajda and Sekanina(2010)] Gajda, Z. and Sekanina, L. (2010) ‘When does cartesian genetic programming minimize the phenotype size implicitly?’ In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 983–984. doi:doi:10.1145/1830483.1830661.
- [Galan and Mengshoel(2010)] Galan, S.F. and Mengshoel, O.J. (2010) ‘Generalized crowding for genetic algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 775–782. doi:doi:10.1145/1830483.1830620.
- [Galván-López *et al.*(2010)Galván-López, McDermott, O'Neill and Brabazon] Galván-López, E., McDermott, J., O'Neill, M. and Brabazon, A. (2010) ‘Towards an understanding of locality in genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 901–908. doi:doi:10.1145/1830483.1830646.
- [García-Martínez *et al.*(2010)García-Martínez, Lima, Twycross, Krasnogor and Lozano] García-Martínez, C., Lima, C., Twycross, J., Krasnogor, N. and Lozano, M. (2010) ‘P system model optimisation by means of evolutionary based search algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 187–194. doi:doi:10.1145/1830483.1830517.
- [Garrett *et al.*(2010)Garrett, Chen and Smith] Garrett, A., Chen, Z. and Smith, D.E. (2010) ‘Constructing numerically stable real number codes using evolutionary computation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1163–1170. doi:doi:10.1145/1830483.1830697.

- [Glasmachers *et al.*(2010)Glasmachers, Schaul, Yi, Wierstra and Schmidhuber] Glasmachers, T., Schaul, T., Yi, S., Wierstra, D. and Schmidhuber, J. (2010) ‘Exponential natural evolution strategies’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 393–400. doi:doi:10.1145/1830483.1830557.
- [Goldsby *et al.*(2010)Goldsby, Knoester and Ofria] Goldsby, H.J., Knoester, D.B. and Ofria, C. (2010) ‘Evolution of division of labor in genetically homogenous groups’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 135–142. doi:doi:10.1145/1830483.1830507.
- [Gong *et al.*(2010)Gong, Álvaro Fialho and Cai] Gong, W., Álvaro Fialho and Cai, Z. (2010) ‘Adaptive strategy selection in differential evolution’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 409–416. doi:doi:10.1145/1830483.1830559.
- [Gonzales *et al.*(2010)Gonzales, Mabu, Taboada, Hirasawa and Shimada] Gonzales, E., Mabu, S., Taboada, K., Hirasawa, K. and Shimada, K. (2010) ‘Pruning association rules using statistics and genetic relation algorithm’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 419–420. doi:doi:10.1145/1830483.1830562.
- [Hall *et al.*(2010)Hall, McMinn and Walkinshaw] Hall, M., McMinn, P. and Walkinshaw, N. (2010) ‘Superstate identification for state machines using search-based clustering’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1381–1388. doi:doi:10.1145/1830483.1830736.
- [Harding *et al.*(2010)Harding, Miller and Banzhaf] Harding, S., Miller, J.F. and Banzhaf, W. (2010) ‘Self modifying cartesian genetic programming: finding algorithms that calculate pi and e to arbitrary precision’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 579–586. doi:doi:10.1145/1830483.1830591.
- [Hauschild and Pelikan(2010)] Hauschild, M.W. and Pelikan, M. (2010) ‘Network crossover performance on nk landscapes and deceptive problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 713–720. doi:doi:10.1145/1830483.1830612.
- [Herrera-Ortiz *et al.*(2010)Herrera-Ortiz, Oliver-Morales and Rodríguez-Vázquez] Herrera-Ortiz, J.A., Oliver-Morales, C. and Rodríguez-Vázquez, K. (2010) ‘Amount and type of information: a ga-hardness taxonomy’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard,

- A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 835–836. doi:doi:10.1145/1830483.1830636.
- [Hildebrandt *et al.*(2010)Hildebrandt, Heger and Scholz-Reiter] Hildebrandt, T., Heger, J. and Scholz-Reiter, B. (2010) 'Towards improved dispatching rules for complex shop floor scenarios: a genetic programming approach'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 257–264. doi:doi:10.1145/1830483.1830530.
- [Hiller and Lipson(2010)] Hiller, J.D. and Lipson, H. (2010) 'Morphological evolution of freeform robots'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 151–152. doi:doi:10.1145/1830483.1830510.
- [Holzinger *et al.*(2010)Holzinger, Buchanan, Dudek, Torstenson, Turner and Ritchie] Holzinger, E.R., Buchanan, C.C., Dudek, S.M., Torstenson, E.C., Turner, S.D. and Ritchie, M.D. (2010) 'Initialization parameter sweep in athena: optimizing neural networks for detecting gene-gene interactions in the presence of small main effects'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 203–210. doi:doi:10.1145/1830483.1830519.
- [Horoba and Sudholt(2010)] Horoba, C. and Sudholt, D. (2010) 'Ant colony optimization for stochastic shortest path problems'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1465–1472. doi:doi:10.1145/1830483.1830750.
- [Hutzschenreuter *et al.*(2010)Hutzschenreuter, Bosman and La Poutré] Hutzschenreuter, A.K., Bosman, P.A. and La Poutré, H. (2010) 'Enhanced hospital resource management using anticipatory policies in online dynamic multi-objective optimization'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 541–542. doi:doi:10.1145/1830483.1830583.
- [II and Tumer(2010)] II, J.F.S. and Tumer, K. (2010) 'Robust neuro-control for a micro quadrotor'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1131–1138. doi:doi:10.1145/1830483.1830693.
- [Inden *et al.*(2010)Inden, Jin, Haschke and Ritter] Inden, B., Jin, Y., Haschke, R. and Ritter, H. (2010) 'Neatfields: evolution of neural fields'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 645–646. doi:doi:10.1145/1830483.1830601.

- [Iordache(2010)] Iordache, S. (2010) ‘Consultant-guided search: a new metaheuristic for combinatorial optimization problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 225–232. doi:doi:10.1145/1830483.1830526.
- [Ishibuchi *et al.*(2010)] Ishibuchi, H., Sakane, Y., Tsukamoto, N. and Nojima, Y. (2010) ‘Simultaneous use of different scalarizing functions in moea/d’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 519–526. doi:doi:10.1145/1830483.1830577.
- [Jansen and Zarges(2010)] Jansen, T. and Zarges, C. (2010) ‘Aging beyond restarts’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 705–712. doi:doi:10.1145/1830483.1830611.
- [Jaros and Dvorak(2010)] Jaros, J. and Dvorak, V. (2010) ‘Evolutionary-based conflict-free scheduling of collective communications on spidergon nocs’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1171–1178. doi:doi:10.1145/1830483.1830698.
- [Jensen and Cheng(2010)] Jensen, A.C. and Cheng, B.H. (2010) ‘On the use of genetic programming for automated refactoring and the introduction of design patterns’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1341–1348. doi:doi:10.1145/1830483.1830731.
- [Jiang and Chen(2010)] Jiang, H. and Chen, Y. (2010) ‘An efficient algorithm for generalized minimum spanning tree problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 217–224. doi:doi:10.1145/1830483.1830525.
- [Johannsen *et al.*(2010)] Johannsen, D., Kurur, P.P. and Lengler, J. (2010) ‘Can quantum search accelerate evolutionary algorithms?’ In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1433–1440. doi:doi:10.1145/1830483.1830746.
- [Johansson *et al.*(2010)] Johansson, U., König, R. and Niklasson, L. (2010) ‘Genetic rule extraction optimizing brier score’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1007–1014. doi:doi:10.1145/1830483.1830668.

- [Kamath *et al.*(2010)Kamath, De Jong and Shehu] Kamath, U., De Jong, K.A. and Shehu, A. (2010) ‘Selecting predictive features for recognition of hypersensitive sites of regulatory genomic sequences with an evolutionary algorithm’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 179–186. doi:doi:10.1145/1830483.1830516.
- [Kim *et al.*(2010)Kim, McKay and Moon] Kim, K., McKay, R.B. and Moon, B.R. (2010) ‘Multiobjective evolutionary algorithms for dynamic social network clustering’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1179–1186. doi:doi:10.1145/1830483.1830699.
- [Kimbrough *et al.*(2010)Kimbrough, Kuo and Lau] Kimbrough, S.O., Kuo, A. and Lau, H.C. (2010) ‘Effective heuristic methods for finding non-optimal solutions of interest in constrained optimization models’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 295–296. doi:doi:10.1145/1830483.1830538.
- [Knoester *et al.*(2010)Knoester, Goldsby and McKinley] Knoester, D.B., Goldsby, H.J. and McKinley, P.K. (2010) ‘Neuroevolution of mobile ad hoc networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 603–610. doi:doi:10.1145/1830483.1830594.
- [Knudson and Tumer(2010)] Knudson, M. and Tumer, K. (2010) ‘Coevolution of heterogeneous multi-robot teams’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 127–134. doi:doi:10.1145/1830483.1830506.
- [Koos *et al.*(2010)Koos, Mouret and Doncieux] Koos, S., Mouret, J.B. and Doncieux, S. (2010) ‘Crossing the reality gap in evolutionary robotics by promoting transferable controllers’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 119–126. doi:doi:10.1145/1830483.1830505.
- [Kötzing *et al.*(2010)Kötzing, Lehre, Neumann and Oliveto] Kötzing, T., Lehre, P.K., Neumann, F. and Oliveto, P.S. (2010) ‘Ant colony optimization and the minimum cut problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1393–1400. doi:doi:10.1145/1830483.1830741.
- [Koutnik *et al.*(2010)Koutnik, Gomez and Schmidhuber] Koutnik, J., Gomez, F. and Schmidhuber, J. (2010) ‘Evolving neural networks in compressed weight space’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P.

- Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 619–626. doi:doi:10.1145/1830483.1830596.
- [Kramer and Danielsiek(2010)] Kramer, O. and Danielsiek, H. (2010) 'Dbscan-based multi-objective niching to approximate equivalent pareto-subsets'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 503–510. doi:doi:10.1145/1830483.1830575.
- [Kremmel *et al.*(2010)Kremmel, Kubalik and Biff] Kremmel, T., Kubalik, J. and Biff, S. (2010) 'Multiobjective evolutionary algorithm for software project portfolio optimization'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1389–1390. doi:doi:10.1145/1830483.1830738.
- [Kubalik *et al.*(2010)Kubalik, Buryan and Wagner] Kubalik, J., Buryan, P. and Wagner, L. (2010) 'Solving the dna fragment assembly problem efficiently using iterative optimization with evolved hypermutations'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 213–214. doi:doi:10.1145/1830483.1830522.
- [Kureichik *et al.*(2010)Kureichik, Lebedev and Lebedev] Kureichik, V.M., Lebedev, B.K. and Lebedev, O.B. (2010) 'Hybrid evolutionary algorithm of planning vlsi'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 821–822. doi:doi:10.1145/1830483.1830629.
- [Lässig and Sudholt(2010)] Lässig, J. and Sudholt, D. (2010) 'The benefit of migration in parallel evolutionary algorithms'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1105–1112. doi:doi:10.1145/1830483.1830687.
- [Lee and Moon(2010)] Lee, S.K. and Moon, B.R. (2010) 'A new modular genetic programming for finding attractive technical patterns in stock markets'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1219–1226. doi:doi:10.1145/1830483.1830704.
- [Lehman and Stanley(2010)] Lehman, J. and Stanley, K.O. (2010) 'Revising the evolutionary computation abstraction: minimal criteria novelty search'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 103–110. doi:doi:10.1145/1830483.1830503.

- [Lehre and Witt(2010)] Lehre, P.K. and Witt, C. (2010) ‘Black-box search by unbiased variation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1441–1448. doi:doi:10.1145/1830483.1830747.
- [Lemmens and Tuyls(2010)] Lemmens, N. and Tuyls, K. (2010) ‘Stigmergic landmark routing: a routing algorithm for wireless mobile ad-hoc networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 47–54. doi:doi:10.1145/1830483.1830491.
- [Leung and Zhang(2010)] Leung, K.M. and Zhang, X. (2010) ‘Discrete versus continuous parametrization of bank credit rating systems optimization using differential evolution’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 265–272. doi:doi:10.1145/1830483.1830531.
- [Li et al.(2010)Li, Zheng, Shen, Li and Yuan] Li, M., Zheng, J., Shen, R., Li, K. and Yuan, Q. (2010) ‘A grid-based fitness strategy for evolutionary many-objective optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 463–470. doi:doi:10.1145/1830483.1830570.
- [Lichodziejewski and Heywood(2010)] Lichodziejewski, P. and Heywood, M.I. (2010) ‘Symbiosis, complexification and simplicity under gp’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 853–860. doi:doi:10.1145/1830483.1830640.
- [Lien et al.(2010)Lien, Yu and You] Lien, T.C., Yu, T.L. and You, Y.S. (2010) ‘Co-evolution of cooperative strategies under egoism’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 697–704. doi:doi:10.1145/1830483.1830610.
- [Lin et al.(2010)Lin, min Hu and Zhang] Lin, Y., min Hu, X. and Zhang, J. (2010) ‘An ant-colony-system-based activity scheduling method for the lifetime maximization of heterogeneous wireless sensor networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 23–30. doi:doi:10.1145/1830483.1830488.
- [Liśkiewicz and Textor(2010)] Liśkiewicz, M. and Textor, J. (2010) ‘Negative selection algorithms without generating detectors’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1047–1054. doi:doi:10.1145/1830483.1830673.

- [Liu *et al.*(2010)Liu, Zhang, Jiao, Liu and Ma] Liu, R., Zhang, W., Jiao, L., Liu, F. and Ma, J. (2010) ‘A sphere-dominance based preference immune-inspired algorithm for dynamic multi-objective optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 423–430. doi:doi:10.1145/1830483.1830565.
- [Lo *et al.*(2010)Lo, Chan, Lee and Leung] Lo, L.Y., Chan, T.M., Lee, K.H. and Leung, K.S. (2010) ‘Challenges rising from learning motif evaluation functions using genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 171–178. doi:doi:10.1145/1830483.1830515.
- [Lichtefeld and Ciarallo(2010)] Lichtefeld, D.F. and Ciarallo, F.W. (2010) ‘Deterministic helper-objective sequences applied to job-shop scheduling’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 431–438. doi:doi:10.1145/1830483.1830566.
- [Lode *et al.*(2010)Lode, Richter and Schmeck] Lode, C., Richter, U. and Schmeck, H. (2010) ‘Adaption of xcs to multi-learner predator/prey scenarios’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1015–1022. doi:doi:10.1145/1830483.1830669.
- [López-Camacho *et al.*(2010)López-Camacho, Terashima-Marín, Ross and Valenzuela-Rendón] López-Camacho, E., Terashima-Marín, H., Ross, P. and Valenzuela-Rendón, M. (2010) ‘Problem-state representations in a hyper-heuristic approach for the 2d irregular bpp’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 297–298. doi:doi:10.1145/1830483.1830539.
- [Lopez-Ibanez and Stuetzle(2010)] Lopez-Ibanez, M. and Stuetzle, T. (2010) ‘The impact of design choices of multiobjective antcolony optimization algorithms on performance: an experimental study on the biobjective tsp’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 71–78. doi:doi:10.1145/1830483.1830494.
- [Loshchilov *et al.*(2010)Loshchilov, Schoenauer and Sebag] Loshchilov, I., Schoenauer, M. and Sebag, M. (2010) ‘A mono surrogate for multiobjective optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 471–478. doi:doi:10.1145/1830483.1830571.
- [Luong *et al.*(2010)Luong, Nguyen and Ahn] Luong, H.N., Nguyen, H.T. and Ahn, C.W. (2010) ‘Entropy-based substructural local search for the bayesian optimization algorithm’. In J. Branke,



- M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 335–342. doi:doi:10.1145/1830483.1830547.
- [Luque and Alba(2010)] Luque, G. and Alba, E. (2010) ‘Selection pressure and takeover time of distributed evolutionary algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1083–1088. doi:doi:10.1145/1830483.1830684.
- [Ma and Simon(2010)] Ma, H. and Simon, D. (2010) ‘Biogeography-based optimization with blended migration for constrained optimization problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 417–418. doi:doi:10.1145/1830483.1830561.
- [Macià *et al.*(2010)Macià, Orriols-Puig and Bernadó-Mansilla] Macià, N., Orriols-Puig, A. and Bernadó-Mansilla, E. (2010) ‘In search of targeted-complexity problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1055–1062. doi:doi:10.1145/1830483.1830674.
- [Manning(2010)] Manning, E.P. (2010) ‘Coevolution in a large search space using resource-limited nash memory’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 999–1006. doi:doi:10.1145/1830483.1830667.
- [Manzoni *et al.*(2010)Manzoni, Vanneschi and Mauri] Manzoni, L., Vanneschi, L. and Mauri, G. (2010) ‘Definition of a crossover based distance for genetic algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1473–1474. doi:doi:10.1145/1830483.1830752.
- [Martí *et al.*(2010)Martí, García, Berlanga and Molina] Martí, L., García, J., Berlanga, A. and Molina, J.M. (2010) ‘Moving away from error-based learning in multi-objective estimation of distribution algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 545–546. doi:doi:10.1145/1830483.1830585.
- [Mayfield and Penstein-Rosé(2010)] Mayfield, E. and Penstein-Rosé, C. (2010) ‘Using feature construction to avoid large feature spaces in text classification’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1299–1306. doi:doi:10.1145/1830483.1830714.

- [McMullin and Soule(2010)] McMullin, M. and Soule, T. (2010) ‘Constant versus variable arity operators in genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 987–988. doi:doi:10.1145/1830483.1830663.
- [Meekhof and Soule(2010)] Meekhof, T. and Soule, T. (2010) ‘Noise pressure: systematic overestimation of population fitness in genetic algorithms with noisy fitness functions’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 833–834. doi:doi:10.1145/1830483.1830635.
- [Meiguins *et al.*(2010)Meiguins, Freitas, Lima, Junior and Meiguins] Meiguins, A.S., Freitas, A.A., Lima, R.C., Junior, S.F. and Meiguins, B.S. (2010) ‘An estimation of distribution algorithm for the automatic generation of clustering algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1069–1070. doi:doi:10.1145/1830483.1830679.
- [Melkozerov and Beyer(2010)] Melkozerov, A. and Beyer, H.G. (2010) ‘On the analysis of self-adaptive evolution strategies on elliptic model: first results’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 369–376. doi:doi:10.1145/1830483.1830554.
- [Merelo *et al.*(2010)Merelo, Mora and Runarsson] Merelo, J.J., Mora, A.M. and Runarsson, T.P. (2010) ‘Beating exhaustive search at its own game: revisiting evolutionary mastermind’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 291–292. doi:doi:10.1145/1830483.1830536.
- [Mohammed *et al.*(2010)Mohammed, Zhang and Browne] Mohammed, A.W., Zhang, M. and Browne, W.N. (2010) ‘Particle swarm optimisation for outlier detection’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 83–84. doi:doi:10.1145/1830483.1830498.
- [Momm and Easson(2010)] Momm, H.G. and Easson, G. (2010) ‘Population restarting: a study case of feature extraction from remotely sensed imagery using textural information’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 973–974. doi:doi:10.1145/1830483.1830656.
- [Montero *et al.*(2010)Montero, Riff and Neveu] Montero, E., Riff, M.C. and Neveu, B. (2010) ‘An evaluation of off-line calibration techniques for evolutionary algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen,

- K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 299–300. doi:doi:10.1145/1830483.1830540.
- [Moriguchi and Honiden(2010)] Moriguchi, H. and Honiden, S. (2010) ‘Sustaining behavioral diversity in neat’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 611–618. doi:doi:10.1145/1830483.1830595.
- [Mosnier *et al.*(2010)] Mosnier, Gillot, Ducloux and Ichchou] Mosnier, D., Gillot, F., Ducloux, A. and Ichchou, M. (2010) ‘Integrated pre-design step methodology based on multi-objective evolutionary optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1317–1318. doi:doi:10.1145/1830483.1830721.
- [Mouret *et al.*(2010)] Mouret, Doncieux and Girard] Mouret, J.B., Doncieux, S. and Girard, B. (2010) ‘Importing the computational neuroscience toolbox into neuro-evolution-application to basal ganglia’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 587–594. doi:doi:10.1145/1830483.1830592.
- [Myburgh and Deb(2010)] Myburgh, C. and Deb, K. (2010) ‘Evolutionary algorithms in large-scale open pit mine scheduling’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1155–1162. doi:doi:10.1145/1830483.1830696.
- [Nadi *et al.*(2010)] Nadi, Khader and Al-Betar] Nadi, F., Khader, A.T. and Al-Betar, M.A. (2010) ‘Adaptive genetic algorithm using harmony search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 819–820. doi:doi:10.1145/1830483.1830628.
- [Neumann *et al.*(2010)] Neumann, Sudholt and Witt] Neumann, F., Sudholt, D. and Witt, C. (2010) ‘A few ants are enough: Aco with iteration-best update’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 63–70. doi:doi:10.1145/1830483.1830493.
- [Nguyen *et al.*(2010)] Nguyen, Luong and Ahn] Nguyen, H.T., Luong, H.N. and Ahn, C.W. (2010) ‘Entropy measurement-based estimation model for bayesian optimization algorithm’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 343–350. doi:doi:10.1145/1830483.1830548.

- [Nikanjam *et al.*(2010)] Nikanjam, Sharifi, Helmi and Rahmani] Nikanjam, A., Sharifi, H., Helmi, B.H. and Rahmani, A. (2010) ‘A new dsm clustering algorithm for linkage groups identification’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 367–368. doi:doi:10.1145/1830483.1830552.
- [Orriols-Puig *et al.*(2010)] Orriols-Puig, Llorà and Goldberg] Orriols-Puig, A., Llorà, X. and Goldberg, D.E. (2010) ‘How xcs deals with rarities in domains with continuous attributes’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1023–1030. doi:doi:10.1145/1830483.1830670.
- [Ortegon-Cano *et al.*(2010)] Ortegon-Cano, Hartasanchez and Stephens] Ortegon-Cano, P., Hartasanchez, D.A. and Stephens, C.R. (2010) ‘Why recombination should be adaptive’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 831–832. doi:doi:10.1145/1830483.1830634.
- [Ovreiou and Simon(2010)] Ovreiou, M. and Simon, D. (2010) ‘Biogeography-based optimization of neuro-fuzzy system parameters for diagnosis of cardiac disease’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1235–1242. doi:doi:10.1145/1830483.1830706.
- [Padhye and Deb(2010)] Padhye, N. and Deb, K. (2010) ‘Evolutionary multi-objective optimization and decision making for selective laser sintering’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1259–1266. doi:doi:10.1145/1830483.1830709.
- [Pedersen and Butz(2010)] Pedersen, G.K. and Butz, M.V. (2010) ‘Evolving robust controller parameters using covariance matrix adaptation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1251–1258. doi:doi:10.1145/1830483.1830708.
- [Pelikan(2010)] Pelikan, M. (2010) ‘Nk landscapes, problem difficulty, and hybrid evolutionary algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 665–672. doi:doi:10.1145/1830483.1830606.
- [Pennachin *et al.*(2010)] Pennachin, Looks and de Vasconcelos] Pennachin, C.L., Looks, M. and de Vasconcelos, J.A. (2010) ‘Robust symbolic regression with affine arithmetic’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry,

- D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 917–924. doi:doi:10.1145/1830483.1830648.
- [Pilat and Jacob(2010)] Pilat, M.L. and Jacob, C. (2010) ‘Evolution of vision capabilities in embodied virtual creatures’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 95–102. doi:doi:10.1145/1830483.1830502.
- [Preuss *et al.*(2010)Preuss, Rudolph and Wessing] Preuss, M., Rudolph, G. and Wessing, S. (2010) ‘Tuning optimization algorithms for real-world problems by means of surrogate modeling’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 401–408. doi:doi:10.1145/1830483.1830558.
- [Radetic and Pelikan(2010)] Radetic, E. and Pelikan, M. (2010) ‘Spurious dependencies and eda scalability’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 303–310. doi:doi:10.1145/1830483.1830543.
- [Rajagopalan *et al.*(2010)Rajagopalan, Rawal and Miikkulainen] Rajagopalan, P., Rawal, A. and Miikkulainen, R. (2010) ‘Emergence of competitive and cooperative behavior using coevolution’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1073–1074. doi:doi:10.1145/1830483.1830681.
- [Reehuis and Bäck(2010)] Reehuis, E. and Bäck, T. (2010) ‘Mixed-integer evolution strategy using multiobjective selection applied to warehouse design optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1187–1194. doi:doi:10.1145/1830483.1830700.
- [Ren and Feng(2010)] Ren, Z. and Feng, Z. (2010) ‘An ant colony optimization approach to the multiple-choice multidimensional knapsack problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 281–288. doi:doi:10.1145/1830483.1830533.
- [Risi *et al.*(2010)Risi, Lehman and Stanley] Risi, S., Lehman, J. and Stanley, K.O. (2010) ‘Evolving the placement and density of neurons in the hyperneat substrate’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 563–570. doi:doi:10.1145/1830483.1830589.
- [Roychoudhury *et al.*(2010)Roychoudhury, Das, Scoglio, Das, Panigrahi and Pattnaik] Roychoudhury, S., Das, S., Scoglio, C., Das, S., Panigrahi, B.K. and Pattnaik, S.S. (2010)

- ‘Mitigation strategies in epidemics: evolutionary optimization using a hierarchy of objective functions’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1325–1326. doi:doi:10.1145/1830483.1830725.
- [Salichon and Tumer(2010)] Salichon, M. and Tumer, K. (2010) ‘A neuro-evolutionary approach to micro aerial vehicle control’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1123–1130. doi:doi:10.1145/1830483.1830692.
- [Salim *et al.*(2010)Salim, Javed and Akbar] Salim, S., Javed, M. and Akbar, A.H. (2010) ‘Honey-bee dancing-inspired architecture for fault tolerance in wireless sensor networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 79–80. doi:doi:10.1145/1830483.1830496.
- [Salinas-Gutiérrez *et al.*(2010)Salinas-Gutiérrez, Hernández-Aguirre and Villa-Diharce] Salinas-Gutiérrez, R., Hernández-Aguirre, A. and Villa-Diharce, E.R. (2010) ‘D-vine eda: a new estimation of distribution algorithm based on regular vines’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 359–366. doi:doi:10.1145/1830483.1830550.
- [Sanyal *et al.*(2010)Sanyal, S and Biswas] Sanyal, S., S. R. and Biswas, S. (2010) ‘Necessary and sufficient conditions for success of the metropolis algorithm for optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1417–1424. doi:doi:10.1145/1830483.1830744.
- [Sato *et al.*(2010)Sato, Sato and Namiki] Sato, M., Sato, Y. and Namiki, M. (2010) ‘Proposal of a multi-core processor architecture for effective evolutionary computation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1321–1322. doi:doi:10.1145/1830483.1830723.
- [Schmidt and Lipson(2010)] Schmidt, M.D. and Lipson, H. (2010) ‘Age-fitness pareto optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 543–544. doi:doi:10.1145/1830483.1830584.
- [Schrum and Miikkulainen(2010)] Schrum, J. and Miikkulainen, R. (2010) ‘Evolving agent behavior in multiobjective domains using fitness-based shaping’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on*

*Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 439–446. doi:doi:10.1145/1830483.1830567.

- [Sharma and Collet(2010)] Sharma, D. and Collet, P. (2010) ‘An archived-based stochastic ranking evolutionary algorithm (asrea) for multi-objective optimization’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 479–486. doi:doi:10.1145/1830483.1830572.
- [Shimada and Hirasawa(2010)] Shimada, K. and Hirasawa, K. (2010) ‘A method of association rule analysis for incomplete database using genetic network programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1115–1122. doi:doi:10.1145/1830483.1830691.
- [Shir *et al.*(2010)Shir, Roslund and Rabitz] Shir, O.M., Roslund, J. and Rabitz, H. (2010) ‘Forced optimal covariance adaptive learning: modified cma-es for efficient hessian determination’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 421–422. doi:doi:10.1145/1830483.1830563.
- [Sierra and Ponsoda(2010)] Sierra, A. and Ponsoda, V. (2010) ‘Shorter, more reliable and valid tests by means of a genetic algorithm’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1307–1308. doi:doi:10.1145/1830483.1830716.
- [Sinnott-Armstrong *et al.*(2010)Sinnott-Armstrong, Greene and Moore] Sinnott-Armstrong, N.A., Greene, C.S. and Moore, J.H. (2010) ‘Fast genome-wide epistasis analysis using ant colony optimization for multifactor dimensionality reduction analysis on graphics processing units’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 215–216. doi:doi:10.1145/1830483.1830523.
- [Snel and Whiteson(2010)] Snel, M. and Whiteson, S. (2010) ‘Multi-task evolutionary shaping without pre-specified representations’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1031–1038. doi:doi:10.1145/1830483.1830671.
- [Soule and Heckendorn(2010)] Soule, T. and Heckendorn, R.B. (2010) ‘A developmental algorithm for multi-agent swarms with scalable hierarchies’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 647–648. doi:doi:10.1145/1830483.1830602.
- [Steiner *et al.*(2010)Steiner, Jin and Sendhoff] Steiner, T., Jin, Y. and Sendhoff, B. (2010) ‘Evolving heterochrony for cellular differentiation using vector field embryogeny’. In J. Branke, M. Pelikan,

- E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 571–578. doi:doi:10.1145/1830483.1830590.
- [Steitz and Rothlauf(2010)] Steitz, W. and Rothlauf, F. (2010) ‘Solving oost problems with problem-specific guided local search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 301–302. doi:doi:10.1145/1830483.1830541.
- [Stonedahl and Stonedahl(2010)] Stonedahl, F. and Stonedahl, S.H. (2010) ‘Heuristics for sampling repetitions in noisy landscapes with fitness caching’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 273–280. doi:doi:10.1145/1830483.1830532.
- [Stracquadanio *et al.*(2010)Stracquadanio, Drago, Romano and Nicosia] Stracquadanio, G., Drago, C., Romano, V. and Nicosia, G. (2010) ‘Multi-objective optimization of doping profile in semiconductor design’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1243–1250. doi:doi:10.1145/1830483.1830707.
- [Su *et al.*(2010)Su, Gao and Cao] Su, C., Gao, Y. and Cao, C. (2010) ‘Learning classifier system using both labeled and unlabeled data’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1065–1066. doi:doi:10.1145/1830483.1830677.
- [Sugawara *et al.*(2010)Sugawara, Fukuda, Hirotsu and Kurihara] Sugawara, T., Fukuda, K., Hirotsu, T. and Kurihara, S. (2010) ‘Adaptive probabilistic task allocation in large-scale multi-agent systems and its evaluation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1311–1312. doi:doi:10.1145/1830483.1830718.
- [Tanji and Iba(2010)] Tanji, M. and Iba, H. (2010) ‘Conbreo: a music performance rendering system using hybrid approach of iec and automated evolution’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1275–1282. doi:doi:10.1145/1830483.1830711.
- [Ter-Sarkisov *et al.*(2010)Ter-Sarkisov, Marsland and Holland] Ter-Sarkisov, A., Marsland, S.R. and Holland, B.R. (2010) ‘The k-bit-swap: a new genetic algorithm operator’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 815–816. doi:doi:10.1145/1830483.1830626.



- [Toledo-Suárez(2010)] Toledo-Suárez, C.D. (2010) ‘A first assessment of the use of extended relational alphabets in accuracy classifier systems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 991–998. doi:doi:10.1145/1830483.1830666.
- [Trefzer *et al.*(2010)] Trefzer, M.A., Kuyucu, T., Miller, J.F. and Tyrrell, A.M. (2010) ‘Image compression of natural images using artificial gene regulatory networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 595–602. doi:doi:10.1145/1830483.1830593.
- [Trujillo *et al.*(2010)] Trujillo, L., Legrand, P. and Lévy-Véhel, J. (2010) ‘The estimation of hölderian regularity using genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 861–868. doi:doi:10.1145/1830483.1830641.
- [Tsai *et al.*(2010)] Tsai, C.W., Tseng, S.P., Chiang, M.C. and Yang, C.S. (2010) ‘A framework for accelerating metaheuristics via pattern reduction’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 293–294. doi:doi:10.1145/1830483.1830537.
- [Tulshyan *et al.*(2010)] Tulshyan, R., Arora, R., Deb, K. and Dutta, J. (2010) ‘Investigating ea solutions for approximate kkt conditions in smooth problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 689–696. doi:doi:10.1145/1830483.1830609.
- [Tutum and Hattel(2010)] Tutum, C.C. and Hattel, J.H. (2010) ‘Multi-objective optimization of process parameters in friction stir welding’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1323–1324. doi:doi:10.1145/1830483.1830724.
- [Ulrich *et al.*(2010)] Ulrich, T., Bader, J. and Zitzler, E. (2010) ‘Integrating decision space diversity into hypervolume-based multiobjective search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 455–462. doi:doi:10.1145/1830483.1830569.
- [Unachak and Goodman(2010)] Unachak, P. and Goodman, E. (2010) ‘Solving multiobjective flexible job-shop scheduling using an adaptive representation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P.

- Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 737–742. doi:doi:10.1145/1830483.1830615.
- [Urbanowicz and Moore(2010)] Urbanowicz, R.J. and Moore, J.H. (2010) ‘The application of michigan-style learning classifiersystems to address genetic heterogeneity and epistasisin association studies’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 195–202. doi:doi:10.1145/1830483.1830518.
- [Uy *et al.*(2010)Uy, Hoai, O'Neill and McKay] Uy, N.Q., Hoai, N.X., O'Neill, M. and McKay, B. (2010) ‘Semantics based crossover for boolean problems’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 869–876. doi:doi:10.1145/1830483.1830642.
- [Vafae *et al.*(2010)Vafae, Turán and Nelson] Vafae, F., Turán, G. and Nelson, P.C. (2010) ‘Optimizing genetic operator rates using a markov chain model of genetic algorithms’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 721–728. doi:doi:10.1145/1830483.1830613.
- [Valsecchi *et al.*(2010)Valsecchi, Vanneschi and Mauri] Valsecchi, A., Vanneschi, L. and Mauri, G. (2010) ‘Optimization speed and fair sets of functions’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1475–1476. doi:doi:10.1145/1830483.1830753.
- [Vanneschi *et al.*(2010)Vanneschi, Codecasa and Mauri] Vanneschi, L., Codecasa, D. and Mauri, G. (2010) ‘An empirical comparison of parallel and distributed particle swarm optimization methods’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 15–22. doi:doi:10.1145/1830483.1830487.
- [Veeramachaneni *et al.*(2010)Veeramachaneni, Vladislavleva, Burland, Parcon and O'Reilly] Veeramachaneni, K., Vladislavleva, K., Burland, M., Parcon, J. and O'Reilly, U.M. (2010) ‘Evolutionary optimization of flavors’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1291–1298. doi:doi:10.1145/1830483.1830713.
- [Verbancsics and Stanley(2010)] Verbancsics, P. and Stanley, K.O. (2010) ‘Transfer learning through indirect encoding’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 547–554. doi:doi:10.1145/1830483.1830587.

- [Vladislavleva *et al.*(2010)Vladislavleva, Veeramachaneni, Burland, Parcon and O'Reilly]  
 Vladislavleva, K., Veeramachaneni, K., Burland, M., Parcon, J. and O'Reilly, U.M. (2010) 'Knowledge mining with genetic programming methods for variable selection in flavor design'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 941–948. doi:doi:10.1145/1830483.1830651.
- [Voß *et al.*(2010)Voß, Hansen and Igel] Voß, T., Hansen, N. and Igel, C. (2010) 'Improved step size adaptation for the mo-cma-es'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 487–494. doi:doi:10.1145/1830483.1830573.
- [Vrajitoru(2010)] Vrajitoru, D. (2010) 'Shared memory genetic algorithms in a multi-agent context'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1097–1104. doi:doi:10.1145/1830483.1830686.
- [Walton *et al.*(2010)Walton, Grewal and Darlington] Walton, M., Grewal, G. and Darlington, G. (2010) 'Parallel fpga-based implementation of scatter search'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1075–1082. doi:doi:10.1145/1830483.1830683.
- [Wang and Tan(2010)] Wang, J. and Tan, Y. (2010) 'A novel genetic programming based morphological image analysis algorithm'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 979–980. doi:doi:10.1145/1830483.1830659.
- [Wen *et al.*(2010)Wen, Xu and Yang] Wen, Y., Xu, H. and Yang, J. (2010) 'A heuristic-based hybrid genetic algorithm for heterogeneous multiprocessor scheduling'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 729–736. doi:doi:10.1145/1830483.1830614.
- [Whitley *et al.*(2010)Whitley, Chicano, Alba and Luna] Whitley, L.D., Chicano, F., Alba, E. and Luna, F. (2010) 'Elementary landscapes of frequency assignment problems'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1409–1416. doi:doi:10.1145/1830483.1830743.
- [Wilkerson and Tauritz(2010)] Wilkerson, J.L. and Tauritz, D. (2010) 'Coevolutionary automated software correction'. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10:*

*Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1391–1392. doi:doi:10.1145/1830483.1830739.

- [Wilson and Banzhaf(2010)] Wilson, G. and Banzhaf, W. (2010) ‘Interday foreign exchange trading using linear genetic programming’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1139–1146. doi:doi:10.1145/1830483.1830694.
- [Windisch(2010)] Windisch, A. (2010) ‘Search-based test data generation from stateflow statecharts’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1349–1356. doi:doi:10.1145/1830483.1830732.
- [Wong *et al.*(2010)Wong, Leung and Wong] Wong, K.C., Leung, K.S. and Wong, M.H. (2010) ‘Protein structure prediction on a lattice model via multimodal optimization techniques’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 155–162. doi:doi:10.1145/1830483.1830513.
- [Wu and Banzhaf(2010)] Wu, S.X. and Banzhaf, W. (2010) ‘A hierarchical cooperative evolutionary algorithm’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 233–240. doi:doi:10.1145/1830483.1830527.
- [Xu *et al.*(2010)Xu, Cohen and Rothermel] Xu, Z., Cohen, M.B. and Rothermel, G. (2010) ‘Factors affecting the use of genetic algorithms in test suite augmentation’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1365–1372. doi:doi:10.1145/1830483.1830734.
- [Yang *et al.*(2010)Yang, Xu, Cai and Jia] Yang, J., Xu, H., Cai, Y. and Jia, P. (2010) ‘Effective structure learning for eda via l1-regularizedbayesian networks’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 327–334. doi:doi:10.1145/1830483.1830546.
- [Yehoshua *et al.*(2010)Yehoshua, Avigal and Unger] Yehoshua, R., Avigal, M. and Unger, R. (2010) ‘Analysis of the effects of lifetime learning on population fitness using vose model’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O’Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO ’10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 681–688. doi:doi:10.1145/1830483.1830608.
- [You *et al.*(2010)You, Yu and Lien] You, Y.S., Yu, T.L. and Lien, T.C. (2010) ‘Psychological preference-based optimization framework on the nurse scheduling problem’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune,

- M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1319–1320. doi:doi:10.1145/1830483.1830722.
- [jie Yu and Zhang(2010)] jie Yu, W. and Zhang, J. (2010) ‘Pheromone-distribution-based adaptive ant colony system’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 31–38. doi:doi:10.1145/1830483.1830489.
- [Zafra and Ventura(2010)] Zafra, A. and Ventura, S. (2010) ‘Grammar guided genetic programming for multiple instance learning: an experimental study’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 909–916. doi:doi:10.1145/1830483.1830647.
- [Zapotecas Martínez and Coello Coello(2010)] Zapotecas Martínez, S. and Coello Coello, C.A. (2010) ‘A multi-objective meta-model assisted memetic algorithm with non gradient-based local search’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 537–538. doi:doi:10.1145/1830483.1830581.
- [Zhan and Zhang(2010)] Zhan, Z.H. and Zhang, J. (2010) ‘Self-adaptive differential evolution based on pso learning strategy’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 39–46. doi:doi:10.1145/1830483.1830490.
- [Zhang *et al.*(2010)Zhang, Alba, Durillo, Eldh and Harman] Zhang, Y., Alba, E., Durillo, J.J., Eldh, S. and Harman, M. (2010) ‘Today/future importance analysis’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1357–1364. doi:doi:10.1145/1830483.1830733.
- [hui Zhong and Zhang(2010)] hui Zhong, J. and Zhang, J. (2010) ‘A robust estimation of distribution algorithm for power electronic circuits design’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 319–326. doi:doi:10.1145/1830483.1830545.
- [Zhou and Tan(2010)] Zhou, Y. and Tan, Y. (2010) ‘Particle swarm optimization with triggered mutation and its implementation based on gpu’. In J. Branke, M. Pelikan, E. Alba, D.V. Arnold, J. Bongard, A. Brabazon, J. Branke, M.V. Butz, J. Clune, M. Cohen, K. Deb, A.P. Engelbrecht, N. Krasnogor, J.F. Miller, M. O'Neill, K. Sastry, D. Thierens, J. van Hemert, L. Vanneschi and C. Witt, (eds.) *GECCO '10: Proceedings of the 12th annual conference on Genetic and evolutionary computation*. Portland, Oregon, USA: ACM, pp. 1–8. doi:doi:10.1145/1830483.1830485.