Список литературы

- [:20(2011)] (2011) Paper not in the database. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Abegaz et al.(2011)Abegaz, Dozier, Bryant, Adams, Shelton, Karl & Woodard] Abegaz, T., Dozier, G., Bryant, K., Adams, J., Shelton, J., Karl, R. & Woodard, D. (2011) Ssga and eda based feature selection and weighting for face recognition. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1374–1380, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Abello et al.(2011) Abello, Bui & Michalewicz] Abello, M., Bui, L.T. & Michalewicz, Z. (2011) An adaptive approach for solving dynamic scheduling with time-varying number of tasks part i. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1702–1709, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Abramson et al.(2011)Abramson, Will & Mittu] Abramson, M., Will, I. & Mittu, R. (2011) Hybrid tuning of an evolutionary algorithm for sensor allocation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1671–1677, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Adam & Zbigniew (2011)] Adam, G. & Zbigniew, M. (2011) Using cellular evolution for diversification of the balance between accurate and interpretable fuzzy knowledge bases for classification. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1480–1487, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Adra et al.(2011)Adra, Kiran, McMinn & Walkinshaw] Adra, S., Kiran, M., McMinn, P. & Walkinshaw, N. (2011) A multiobjective optimisation approach for the dynamic inference and refinement of agent-based model specifications. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2230–2237, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ahmadi-Javid(2011)] Ahmadi-Javid, A. (2011) Anarchic society optimization: A human-inspired method. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2566–2572, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ahn et al.(2011a)Ahn, Mullen & Yen] Ahn, E.Y., Mullen, T. & Yen, J. (2011a) Evolutionary based feature extraction with dynamic mutation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 409–416, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ahn et al.(2011b)Ahn, Mullen & Yen] Ahn, E.Y., Mullen, T. & Yen, J. (2011b) A two-population evolutionary algorithm for feature extraction: Combining filter and wrapper. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 723–730, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Akay & Karaboga (2011)] Akay, B. & Karaboga, D. (2011) Wavelet packets optimization using artificial bee colony algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 89–94, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Al-Khateeb & Kendall(2011)] Al-Khateeb, B. & Kendall, G. (2011) The importance of look-ahead depth in evolutionary checkers. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2245–2251, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Aldridge et al.(2011)Aldridge, Babb, Moore & Peterson] Aldridge, S., Babb, B., Moore, F. & Peterson, M. (2011) Improved reconstruction of deep space images via genetic algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 102–109, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Aleshunas & Janikow(2011)] Aleshunas, J. & Janikow, C. (2011) Cost-benefit analysis of using heuristics in acgp. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1177–1183, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Alford et al.(2011a)Alford, Hansen, Dozier, Bryant, Kelly, Abegaz, Ricanek & Woodard] Alford, A., Hansen, C., Dozier, G., Bryant, K., Kelly, J., Abegaz, T., Ricanek, K. & Woodard, D. (2011a) Gec-based multi-biometric fusion. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2056–2059, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Alford et al.(2011b)Alford, Popplewell, Dozier, Bryant, Kelly, Adams, Abegaz, Shelton, Ricanek & Woodard] Alford, A., Popplewell, K., Dozier, G., Bryant, K., Kelly, J., Adams, J., Abegaz, T., Shelton, J., Ricanek, K. & Woodard, D. (2011b) A comparison of gec-based feature selection and weighting for multimodal biometric recognition. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2712–2715, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ali et al.(2011)Ali, Salhieh, Snaineh & Reynolds] Ali, M., Salhieh, A., Snaineh, R.A. & Reynolds, R. (2011) Boosting cultural algorithms with an incongruous layered social fabric influence function. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1230–1237, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Alimadad et al.(2011)Alimadad, Dabbaghian, Singh & Tsang] Alimadad, A., Dabbaghian, V., Singh, S. & Tsang, H.H. (2011) Modeling hiv spread through sexual contact using a cellular automaton. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2338–2343, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Allen & Fritzsche(2011)] Allen, M. & Fritzsche, P. (2011) Reinforcement learning with adaptive kanerva coding for xpilot game ai. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1520–1527, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Alshammari & Zincir-Heywood(2011)] Alshammari, R. & Zincir-Heywood, A.N. (2011) Is machine learning losing the battle to produce transportable signatures against voip traffic? *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1542–1549, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Amaral & Hruschka(2011)] Amaral, L. & Hruschka, E. (2011) Transgenic, an operator for evolutionary algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1307–1313, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Amiri et al.(2011)Amiri, Hossain & Crawford] Amiri, B., Hossain, L. & Crawford, J.W. (2011) An efficient multiobjective evolutionary algorithm for community detection in social networks. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2186–2192, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Andres et al.(2011)Andres, Llana & Nunez] Andres, C., Llana, L. & Nunez, M. (2011) Self-adaptive fuzzy-timed systems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 115–122, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ankush et al. (2011) Ankush, Das, Mukherjee, Das & Suganthan] Ankush, M., Das, A.K., Mukherjee, P., Das, S. & Suganthan, P.N. (2011) Modified differential evolution with local search algorithm for real world optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1564–1571, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Antonakopoulos & Tufte(2011)] Antonakopoulos, K. & Tufte, G. (2011) A common genetic representation capable of developing distinct computational architectures. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1263–1270, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Asafuddoula et al.(2011)Asafuddoula, Ray & Sarker] Asafuddoula, M., Ray, T. & Sarker, R. (2011) An adaptive differential evolution algorithm and its performance on real world optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1056–1061, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Asconavieta et al.(2011)Asconavieta, Goldbarg & Goldbarg] Asconavieta, P., Goldbarg, M. & Goldbarg, E. (2011) Evolutionary algorithm for the car renter salesman. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 586–593, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock & Brown(2011)] Ashlock, D. & Brown, J. (2011) Fitness functions for searching the mandelbrot set. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1107–1114, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock et al.(2011a)Ashlock, Kuusela & Cojocaru] Ashlock, D., Kuusela, C. & Cojocaru, M. (2011a) Shopkeeper strategies in the iterated prisoner's dilemma. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1062–1069, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock & McGuinness (2011)] Ashlock, D. & McGuinness, C. (2011) Decomposing the level generation problem with tiles. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 848–855, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock & Nguyen(2011)] Ashlock, D. & Nguyen, S. (2011) Financial control of the evolution of autonomous npcs. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 827–834, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock et al.(2011b) Ashlock, Schonfeld & McNicholas] Ashlock, D., Schonfeld, J. & McNicholas, P. (2011b) Translation tables: A genetic code in an evolutionary algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2672–2679, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ashlock et al.(2011c)Ashlock, Shiller & Lee] Ashlock, D., Shiller, E. & Lee, C. (2011c) Comparison of evolved epidemic networks with diffusion characters. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 780–787, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Atkins et al.(2011) Atkins, Neshatian & Zhang] Atkins, D., Neshatian, K. & Zhang, M. (2011) A domain independent genetic programming approach to automatic feature extraction for image classification. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 238–245, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Avery et al.(2011) Avery, Togelius, Elvis & van Leeuwen] Avery, P., Togelius, J., Elvis, A. & van Leeuwen, R.P. (2011) Computational intelligence and tower defence games. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1083–1090, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Awad & De Jong(2011)] Awad, M. & De Jong, K. (2011) Optimization of spectral signature selection using multi-objective genetic algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1619–1626, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Ayob et al.(2011)Ayob, Ray & Smith] Ayob, A.F.M., Ray, T. & Smith, W. (2011) Scenario-based hydrodynamic design optimization of high speed planing craft for coastal surveillance. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 354–361, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Azevedo & Araujo (2011a)] Azevedo, C. & Araujo, A. (2011a) Correlation between diversity and hypervolume in evolutionary multiobjective optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2730–2737, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Azevedo & Araujo(2011b)] Azevedo, C. & Araujo, A. (2011b) Generalized immigration schemes for dynamic evolutionary multiobjective optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2032–2039, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Azuma et al.(2011)Azuma, Coelho & Von Zuben] Azuma, R.M., Coelho, G. & Von Zuben, F.J. (2011) Evolutionary multi-objective optimization for the vendor-managed inventory routing problem. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1456–1463, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Bandaru et al.(2011a)Bandaru, Tulshyan & Deb] Bandaru, S., Tulshyan, R. & Deb, K. (2011a) Modified sbx and adaptive mutation for real world single objective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1334–1341, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Bandaru et al.(2011b)Bandaru, Tutum, Deb & Hattel] Bandaru, S., Tutum, C.C., Deb, K. & Hattel, J.H. (2011b) Higher-level innovization: A case study from friction stir welding process optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2769–2776, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Banerjee & Abu-Mahfouz (2011)] Banerjee, A. & Abu-Mahfouz, I. (2011) Evolutionary algorithm-based parameter identification for nonlinear dynamical systems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1–5, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Barrero et al.(2011)Barrero, R-Moreno, Castano & Camacho] Barrero, D.F., R-Moreno, M., Castano, B. & Camacho, D. (2011) An empirical study on the accuracy of computational effort in genetic programming. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1169–1176, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Batista et al.(2011)Batista, Campelo, Guimaraes & Ramirez] Batista, L., Campelo, F., Guimaraes, F. & Ramirez, J. (2011) A comparison of dominance criteria in many-objective optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2352–2359, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Becker (2011)] Becker, M. (2011) Design of fault tolerant networks with agent-based simulation of physarum polycephalum. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 285–291, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Benkhelifa et al.(2011)Benkhelifa, Tiwari, De Rueda & Moniri] Benkhelifa, E., Tiwari, A., De Rueda, A.G. & Moniri, M. (2011) Evolutionary multi-objective design optimisation of energy harvesting mems: The case of a piezoelectric. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1855–1862, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Braun et al.(2011)Braun, Krettek, Hoffmann & Bertram] Braun, J., Krettek, J., Hoffmann, F. & Bertram, T. (2011) Structure and parameter identification of nonlinear systems with an evolution strategy. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2437–2444, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Bremner et al.(2011)Bremner, Samie, Pipe & Tyrrell] Bremner, P., Samie, M., Pipe, A. & Tyrrell, A. (2011) Multi-objective optimisation of cell-array circuit evolution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 440–446, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Brown et al.(2011)Brown, Ashlock, Houghten & Orth] Brown, J.A., Ashlock, D., Houghten, S. & Orth, J. (2011) Autogeneration of fractal photographic mosaic images. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1115–1122, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Bui et al.(2011)Bui, Abbass, Baker, Barlow & Bender] Bui, L.T., Abbass, H., Baker, S., Barlow, M. & Bender, A. (2011) A grid-based heuristic for two-dimensional packing problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2322–2329, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Cardamone et al.(2011) Cardamone, Mocci & Ghezzi] Cardamone, L., Mocci, A. & Ghezzi, C. (2011) Dynamic synthesis of program invariants using genetic programming. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 617–624, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Carina et al.(2011)Carina, Geoff & van Heerden] Carina, V., Geoff, N. & van Heerden, W. (2011) Evolution of a fictional dialogue. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1099–1106, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Carpentieri (2011)] Carpentieri, M. (2011) On robustness of permutations sequencing operators: Solving satisfiability of random 3-cnfs by simple crossover. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 693–700, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Carvalho et al. (2011) Carvalho, Brunoro & Pappa] Carvalho, R., Brunoro, G. & Pappa, G.L. (2011) Hcga: A genetic algorithm for hierarchical classification. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 932–939, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Castro & Von Zuben (2011)] Castro, P. & Von Zuben, F.J. (2011) Training multilayer perceptrons with a gaussian artificial immune system. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1255–1262, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Celebi & Kilic(2011)] Celebi, R. & Kilic, H. (2011) Mobile prisoner's dilemma game played on diverse habitats. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2593–2597, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chakraborty et al.(2011)Chakraborty, Das & Abbott] Chakraborty, U., Das, S. & Abbott, T. (2011) Clustering in mobile ad hoc networks with differential evolution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2216–2221, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chen et al.(2011)Chen, Yang & Sun] Chen, P.L., Yang, M.C. & Sun, T.Y. (2011) Pso-based on-line tuning pid controller for setpoint changes and load disturbance. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1886–1893, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Chen & Chen(2011)] Chen, S.H. & Chen, M.C. (2011) Bi-variate artificial chromosomes with genetic algorithm for single machine scheduling problems with sequence-dependent setup times. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 45–53, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chen & Luo(2011)] Chen, Z. & Luo, P. (2011) Qisa: Incorporating quantum computation into simulated annealing for optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2580–2587, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chiang & Lai(2011)] Chiang, T.C. & Lai, Y.P. (2011) Moea/d-ams: Improving moea/d by an adaptive mating selection mechanism. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1472–1479, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chiang et al.(2011)Chiang, Cai, Xu, Mudunuri & Zhu] Chiang, W.C., Cai, G., Xu, X., Mudunuri, G. & Zhu, W. (2011) Two-stage tabu particle swarm algorithms for the facility layout problem with size constraints. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1678–1685, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chica et al.(2011)Chica, Cordon & Damas] Chica, M., Cordon, O. & Damas, S. (2011) Tackling the 1/3 variant of the time and space assembly line balancing problem by means of a multiobjective genetic algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1366–1373, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chira(2011)] Chira, C. (2011) A hybrid evolutionary approach to protein structure prediction with lattice models. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2293–2299, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chira & Gog(2011)] Chira, C. & Gog, A. (2011) Fitness evaluation for overlapping community detection in complex networks. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2193–2199, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chowdhury & Chetty(2011)] Chowdhury, A.R. & Chetty, M. (2011) An improved method to infer gene regulatory network using s-system. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1011–1018, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chu et al.(2011)Chu, Gao & Sorooshian] Chu, W., Gao, X. & Sorooshian, S. (2011) Fortify particle swam optimizer (pso) with principal components analysis—an example in improving bound-handling for optimizing high-dimensional and complex problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1643–1647, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chuan et al.(2011)Chuan, Zhenyu, Xin, Yanan & Bin] Chuan, S., Zhenyu, Y., Xin, P., Yanan, C. & Bin, W. (2011) Multi-objective decisionmaking in the detection of comprehensive community structures. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1488–1494, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Chuang & Chen(2011)] Chuang, Y.C. & Chen, C.T. (2011) A study on real-coded genetic algorithm for process optimization using ranking selection, direction-based crossover and dynamic mutation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2468–2475, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Clancey & Witten(2011)] Clancey, O. & Witten, M. (2011) A memetic algorithm for dosimetric optimization in cyberknife robotic radiosurgical treatment planning. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 879–884, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Cobos et al.(2011)Cobos, Mendoza & Leon] Cobos, C., Mendoza, M. & Leon, E. (2011) A hyperheuristic approach to design and tuning heuristic methods for web document clustering. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1349–1357, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Coelho et al.(2011a)Coelho, de Franca & Von Zuben] Coelho, G., de Franca, F. & Von Zuben, F.J. (2011a) A concentration-based artificial immune network for combinatorial optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1247–1254, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Coelho et al.(2011b)Coelho, Bernert & Mariani] Coelho, L., Bernert, D. & Mariani, V. (2011b) A chaotic firefly algorithm applied to reliability-redundancy optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 517–521, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Coia & Ross(2011)] Coia, C. & Ross, B. (2011) Automatic evolution of conceptual building architectures. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1145–1152, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Corns(2011)] Corns, S. (2011) On the effects of graph based evolutionary algorithms for training finite state classifiers. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1019–1025, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Costa et al.(2011)Costa, Almeida & Caldeira] Costa, B.C., Almeida, P.E.M. & Caldeira, E. (2011) Traffic lights timing inside microregion simulator using multiobjective optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1381–1386, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Coulter & Ehlers(2011)] Coulter, D. & Ehlers, E. (2011) Biologically inspired obsolescence management in mobile agent systems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2048–2055, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Cruz et al.(2011)Cruz, Cardoso, Wanner & Takahashi] Cruz, A., Cardoso, R., Wanner, E. & Takahashi, R. (2011) Using convex quadratic approximation as a local search operator in evolutionary multiobjective algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1222–1229, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Cuccu et al.(2011)Cuccu, Gomez & Glasmachers] Cuccu, G., Gomez, F. & Glasmachers, T. (2011) Novelty-based restarts for evolution strategies. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 158–163, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Daneshyari & Yen(2011)] Daneshyari, M. & Yen, G. (2011) Dynamic optimization using cultural based pso. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 509–516, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Davarynejad et al.(2011)Davarynejad, Rezaei, Vrancken, van den Berg & Coello Coello]

 Davarynejad, M., Rezaei, J., Vrancken, J., van den Berg, J. & Coello Coello, C.A. (2011)

 Accelerating convergence towards the optimal pareto front. Proceedings of the 2011 IEEE

 Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2100–2107, IEEE Computational
 Intelligence Society, IEEE Press, New Orleans, USA.

- [de Armas et al.(2011)] de Armas, Miranda & Leon] de Armas, J., Miranda, G. & Leon, C. (2011) Two encoding schemes for a multi-objective cutting stock problem. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 529–536, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [de Bruyn et al.(2011) de Bruyn, Nitschke & van Heerden] de Bruyn, K., Nitschke, G. & van Heerden, W. (2011) Evolutionary algorithms and particle swarm optimization for artificial language evolution. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2688–2695, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [de Franca & Von Zuben(2011)] de Franca, F. & Von Zuben, F.J. (2011) Extracting additive and multiplicative coherent biclusters with swarm intelligence. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 625–631, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [De la Fraga & Dominguez(2011)] De la Fraga, L.G. & Dominguez, G.M.L. (2011) Robust detection of several circles or ellipses with heuristics. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 484–490, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dias et al.(2011)Dias, Singulani, Pacheco, Souza, Pires & Neto] Dias, D., Singulani, A., Pacheco, M.A., Souza, P., Pires, M. & Neto, O.V. (2011) Self-assembly quantum dots growth prediction by quantum-inspired linear genetic programming. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2060–2067, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Diaz-Manriquez et al.(2011)Diaz-Manriquez, Toscano-Pulido & Gomez-Flores] Diaz-Manriquez, A., Toscano-Pulido, G. & Gomez-Flores, W. (2011) On the selection of surrogate models in evolutionary optimization algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2148–2155, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dobslaw(2011)] Dobslaw, F. (2011) Iteration-wise parameter learning. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 455–462, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dohare & Devi(2011)] Dohare, D. & Devi, V.S. (2011) Combination of similarity measures for time series classification using genetic algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 401–408, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dorn et al.(2011)Dorn, Buriol & Lamb] Dorn, M., Buriol, L.S. & Lamb, L.C. (2011) A hybrid genetic algorithm for the 3-d protein structure prediction problem using a path-relinking strategy. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2696–2703, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dos Santos & Sabourin(2011)] Dos Santos, E.M. & Sabourin, R. (2011) Classifier ensembles optimization guided by population oracle. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 679–684, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Doucette & Heywood(2011)] Doucette, J. & Heywood, M. (2011) Revisiting the acrobot 'height' task: An example of efficient evolutionary policy search under an episodic goal seeking task. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 468–475, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Downey & Zhang(2011)] Downey, C. & Zhang, M. (2011) Execution trace caching for linear genetic programming. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1191–1198, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Dumas et al.(2011)Dumas, Rhabi & Rochefort] Dumas, L., Rhabi, M.E. & Rochefort, G. (2011) An evolutionary approach for blind deconvolution of barcode images with nonuniform illumination. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2416–2421, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dymond et al.(2011)Dymond, Engelbrecht & Heyns] Dymond, A., Engelbrecht, A.P. & Heyns, S. (2011) The sensitivity of single objective optimization algorithm control parameter values under different computational constraints. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1411–1418, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Dziuk & Miikkulainen(2011)] Dziuk, A. & Miikkulainen, R. (2011) Creating intelligent agents through shaping of coevolution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1076–1082, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Echegoyen et al.(2011)Echegoyen, Zhang, Mendiburu, Santana & Lozano] Echegoyen, C., Zhang, Q., Mendiburu, A., Santana, R. & Lozano, J.A. (2011) On the limits of effectiveness in estimation of distribution algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1572–1579, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ellefsen(2011)] Ellefsen, K.O. (2011) Dynamic robot scheduling using a genetic algorithm. *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2024–2031, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Elsayed et al.(2011a)Elsayed, Sarker & Essam] Elsayed, S., Sarker, R. & Essam, D. (2011a) Differential evolution with multiple strategies for solving cec2011 real-world numerical optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1040–1047, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Elsayed et al.(2011b)Elsayed, Sarker & Essam] Elsayed, S., Sarker, R. & Essam, D. (2011b) Ga with a new multi-parent crossover for constrained optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 856–863, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Elsayed et al.(2011c)Elsayed, Sarker & Essam] Elsayed, S., Sarker, R. & Essam, D. (2011c) Ga with a new multi-parent crossover for solving ieee-cec2011 competition problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1033–1039, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Elsayed et al.(2011d)Elsayed, Sarker & Essam] Elsayed, S., Sarker, R. & Essam, D. (2011d) Integrated strategies differential evolution algorithm with a local search for constrained optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2611–2618, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Emmerich et al.(2011)Emmerich, Deutz & Klinkenberg] Emmerich, M., Deutz, A. & Klinkenberg, J.W. (2011) Hypervolume-based expected improvement: Monotonicity properties and exact computation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2140–2147, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Eppe et al.(2011)Eppe, Lopez-Ibanez, Stuetzle & De Smet] Eppe, S., Lopez-Ibanez, M., Stuetzle, T. & De Smet, Y. (2011) An experimental study of preference model integration into multi-objective optimization heuristics. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2738–2745, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Ergezer & Simon(2011)] Ergezer, M. & Simon, D. (2011) Oppositional biogeography-based optimization for combinatorial problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1495–1502, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Eskridge(2011)] Eskridge, B. (2011) Extrapolation of regularity using indirect encodings. *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1279–1286, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Esmailzadeh & Rahnamayan(2011)] Esmailzadeh, A. & Rahnamayan, S. (2011) Enhanced differential evolution using center-based sampling. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2634–2641, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Espitia & Sofrony(2011)] Espitia, H. & Sofrony, J. (2011) Path planning of mobile robots using potential fields and swarms of brownian particles. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 123–129, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Estevez et al.(2011)Estevez, Toledo & Alayon] Estevez, J., Toledo, P. & Alayon, S. (2011) Using an induced relational decision tree for rule injection in a learning classifier system. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 640–647, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Falcon et al.(2011)Falcon, Almeida & Nayak] Falcon, R., Almeida, M. & Nayak, A. (2011) Fault identification with binary adaptive fireflies in parallel and distributed systems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1358–1365, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [fang Ji et al.(2011)fang Ji, wei Gong & ping Ma] fang Ji, X., wei Gong, D. & ping Ma, X. (2011) Solving optimization problems with intervals and hybrid indices using evolutionary algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2522–2529, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Fernandes et al.(2011)Fernandes, Isidoro, Barata, Rosa & Merelo] Fernandes, C.M., Isidoro, C., Barata, F., Rosa, A.C. & Merelo, J.J. (2011) From pherographia to color pherographia color sketching with artificial ants. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1123–1130, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Fernandez-Ares et al.(2011)Fernandez-Ares, Mora, Merelo, Garcia-Sanchez & Fernandes]
 Fernandez-Ares, A., Mora, A.M., Merelo, J.J., Garcia-Sanchez, P. & Fernandes, C. (2011)
 Optimizing player behavior in a real-time strategy game using evolutionary algorithms.

 Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2016–2023, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Fernandez de Vega et al.(2011)Fernandez de Vega, Chavez de la O, Fernandez & Triguero]
 Fernandez de Vega, F., Chavez de la O, F., Fernandez, R.A. & Triguero, F.H. (2011)
 Musical genre classification by means of fuzzy rules based systems: A preliminary approach.

 Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2551–2557, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Friedlander et al.(2011)Friedlander, Neshatian & Zhang] Friedlander, A., Neshatian, K. & Zhang, M. (2011) Meta-learning and feature ranking using genetic programming for classification: Variable terminal weighting. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 940–947, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Fu et al.(2011)Fu, Johnston & Zhang] Fu, W., Johnston, M. & Zhang, M. (2011) Genetic programming for edge detection: A global approach. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 254–261, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Fukushima et al.(2011)Fukushima, Nagata, Kobayashi & Ono] Fukushima, N., Nagata, Y., Kobayashi, S. & Ono, I. (2011) Proposal of distance-weighted exponential natural evolution strategies. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 164–171, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Gallagher & Oppenheimer (2011)] Gallagher, J. & Oppenheimer, M. (2011) An improved evolvable oscillator for all flight mode control of an insect-scale flapping-wing micro air vehicle. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 417–425, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Garcia-Arenas et al.(2011)Garcia-Arenas, Merelo, Mora, Castillo & Romero] Garcia-Arenas, M., Merelo, J.J., Mora, A.M., Castillo, P. & Romero, G. (2011) Assessing speed-ups in commodity cloud storage services for distributed evolutionary algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 304–311, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Garro et al.(2011)Garro, Sossa & Vazquez] Garro, B.A., Sossa, H. & Vazquez, R.A. (2011) Artificial neural network synthesis by means of artificial bee colony (abc) algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 331–338, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Garza-Fabre et al.(2011a)Garza-Fabre, Rodriguez-Tello & Toscano-Pulido] Garza-Fabre, M., Rodriguez-Tello, E. & Toscano-Pulido, G. (2011a) Comparing alternative energy functions for the hp model of protein structure prediction. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2300–2307, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Garza-Fabre et al.(2011b)Garza-Fabre, Toscano-Pulido, Coello Coello & Rodriguez-Tello] Garza-Fabre, M., Toscano-Pulido, G., Coello Coello, C.A. & Rodriguez-Tello, E. (2011b) Effective ranking + speciation = many-objective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2108–2115, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Geng & Liu(2011)] Geng, J. & Liu, J. (2011) Image texture classification using a multiagent genetic clustering algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 504–508, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ghaffarizadeh et al.(2011)Ghaffarizadeh, Ahmadi & Flann] Ghaffarizadeh, A., Ahmadi, K. & Flann, N.S. (2011) Sorting unsigned permutations by reversals using multi-objective evolutionary algorithms with variable size individuals. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 292–295, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ghosh et al.(2011)Ghosh, Roy, Swagatam, Ajith & Minhazul] Ghosh, S., Roy, S., Swagatam, D., Ajith, A. & Minhazul, I. (2011) Peak-to-average power ratio reduction in ofdm systems using an adaptive differential evolution algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1940–1948, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Goh et al.(2011)Goh, Lim, Ma, Ong & Dutta] Goh, C.K., Lim, D., Ma, L., Ong, Y.S. & Dutta, P. (2011) A surrogate-assisted memetic co-evolutionary algorithm for expensive constrained optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 731–736, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Goncalves & Von Zuben(2011)] Goncalves, A.R. & Von Zuben, F.J. (2011) Online learning in estimation of distribution algorithms for dynamic environments. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 62–69, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Gong & Fukunaga(2011)] Gong, Y. & Fukunaga, A. (2011) Distributed island-model genetic algorithms using heterogeneous parameter settings. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 819–826, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Gonzalez-Pardo & Camacho (2011)] Gonzalez-Pardo, A. & Camacho, D. (2011) Analysis of grammatical evolution approaches to regular expression induction. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 632–639, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Goulart et al.(2011)Goulart, Dias, Souza & Noronha] Goulart, N., Dias, L., Souza, S. & Noronha, T. (2011) Biased random-key genetic algorithm for fiber installation in optical network optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2260–2264, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Graham et al.(2011)Graham, Borbone & Parker] Graham, L., Borbone, J. & Parker, G. (2011) Comparison of a greedy selection operator to tournament selection and a hill climber. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1503–1507, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Green, II et al.(2011)Green, II, Wang, Alam & Formato] Green, II, R., Wang, L., Alam, M. & Formato, R. (2011) Central force optimization on a gpu: A case study in high performance metaheuristics using multiple topologies. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 550–557, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Greenwood(2011)] Greenwood, G. (2011) On the value of operator-induced neighborhoods in fitness landscapes. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 463–467, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Greenwood & Chopra(2011)] Greenwood, G. & Chopra, S. (2011) A numerical analysis of the evolutionary iterated snowdrift game. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2009–2015, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Grobler et al.(2011)Grobler, Engelbrecht, Kendall & Yadavalli] Grobler, J., Engelbrecht, A.P., Kendall, G. & Yadavalli, V. (2011) Investigating the impact of alternative evolutionary selection strategies on multi-method global optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2330–2337, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Haidar et al.(2011)Haidar, Noman, Al-Jawfi & Aziz] Haidar, A., Noman, K., Al-Jawfi, R. & Aziz, H.A. (2011) An intelligent placement of distributed capacitance based on loss minimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 767–771, IEEE Computational Intelligence Society, New Orleans, USA.
- [Halder et al.(2011)Halder, Das, Maity, Abraham & Preetam] Halder, U., Das, S., Maity, D., Abraham, A. & Preetam, D. (2011) Self adaptive cluster based and weed inspired differential evolution algorithm for real world optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 737–743, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hamada et al. (2011a) Hamada, Nagata, Kobayashi & Ono] Hamada, N., Nagata, Y., Kobayashi, S. & Ono, I. (2011a) Adaptive weighted aggregation 2: More scalable awa for multiobjective function optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2368–2375, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hamada et al.(2011b)Hamada, Nagata, Kobayashi & Ono] Hamada, N., Nagata, Y., Kobayashi, S. & Ono, I. (2011b) On scalability of adaptive weighted aggregation for multiobjective function optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 655–664, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Hamza et al.(2011)Hamza, Elsayed, Sarker & Essam] Hamza, N., Elsayed, S., Sarker, R. & Essam, D. (2011) Differential evolution combined with constraint consensus for constrained optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 864–871, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hancock & Lamont(2011)] Hancock, D. & Lamont, G. (2011) Multi agent system for network attack classification using flow-based intrusion detection. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1534–1541, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Handa(2011)] Handa, H. (2011) Dimensionality reduction of scene and enemy information in mario. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1514–1519, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Handoko et al.(2011)Handoko, Kwoh, Ong & Chan] Handoko, S.D., Kwoh, C.K., Ong, Y.S. & Chan, J. (2011) Classification-assisted memetic algorithms for solving optimization problems with restricted equality constraint function mapping. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1214–1221, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hassanein et al.(2011)Hassanein, Anavatti & Ray] Hassanein, O., Anavatti, S. & Ray, T. (2011) Genetic fuzzy controller for robot manipulator position control based upon inverse dynamics. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 707–714, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [He & Yen(2011)] He, Z. & Yen, G. (2011) An ensemble method for performance metrics in multiobjective evolutionary algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1723–1728, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Heinrich et al.(2011)Heinrich, Joost & Salomon] Heinrich, E., Joost, R. & Salomon, R. (2011) Learning from the barn owl auditory system: A bio-inspired localization hardware architecture. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 216–221, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Helbig & Engelbrecht(2011)] Helbig, M. & Engelbrecht, A.P. (2011) Archive management for dynamic multi-objective optimisation problems using vector evaluated particle swarm optimisation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2040–2047, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Herbawi & Weber (2011)] Herbawi, W. & Weber, M. (2011) Comparison of multiobjective evolutionary algorithms for solving the multiobjective route planning in dynamic multi-hop ridesharing. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2092–2099, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hernandez & Toscano-Pulido(2011)] Hernandez, J. & Toscano-Pulido, G. (2011) A comparison on the search of particle swarm optimization and differential evolution on multi-objective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1977–1984, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hijaze & Corne(2011)] Hijaze, M. & Corne, D. (2011) Distributed evolutionary algorithm topologies with adaptive migration schemes. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 601–608, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hill & O'Riordan(2011)] Hill, S. & O'Riordan, C. (2011) Examining the use of a non-trivial fixed genotype-phenotype mapping in genetic algorithms to induce phenotypic variability over deceptive uncertain landscapes. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1403–1410, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Hingston & Preuss (2011)] Hingston, P. & Preuss, M. (2011) Red teaming with coevolution. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1160–1168, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hiruma et al.(2011)Hiruma, Fukunaga, Komiya & Iba] Hiruma, H., Fukunaga, A., Komiya, K. & Iba, H. (2011) Evolving an effective robot tour guide. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 137–144, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hsieh et al.(2011a)Hsieh, Chiang & Fu] Hsieh, M.N., Chiang, T.C. & Fu, L.C. (2011a) A hybrid constraint handling mechanism with differential evolution for constrained multiobjective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1784–1791, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hsieh et al.(2011b)Hsieh, Chiu & Yen] Hsieh, S.T., Chiu, S.Y. & Yen, S.J. (2011b) Sharing mutation genetic algorithm for solving multi-objective optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1832–1838, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Huang & Ting(2011)] Huang, Y.H. & Ting, C.K. (2011) Genetic algorithm with path relinking for the multi-vehicle selective pickup and delivery problem. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1817–1824, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [hui Zhong & Zhang(2011)] hui Zhong, J. & Zhang, J. (2011) Energy-efficient local wake-up scheduling in wireless sensor networks. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2273–2277, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Huo et al.(2011)Huo, Lai & Sun] Huo, C.L., Lai, T.Y. & Sun, T.Y. (2011) The preliminary study on multi-swarm sharing particle swarm optimization: Applied to uav path planning problem. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1769–1775, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Hwang et al.(2011)Hwang, Lee & Cho] Hwang, J.W., Lee, Y.S. & Cho, S.B. (2011) Structure evolution of dynamic bayesian network for traffic accident detection. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1664–1670, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ibrahimov et al.(2011) Ibrahimov, Mohais, Schellenberg & Michalewicz] Ibrahimov, M., Mohais, A., Schellenberg, S. & Michalewicz, Z. (2011) Comparison of different evolutionary algorithms for global supply chain optimisation and parameter analysis. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2400–2407, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ioannides et al.(2011) Ioannides, Eder & Barrett] Ioannides, C., Eder, K. & Barrett, G. (2011) Improving xcs performance on overlapping binary problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1419–1426, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ishibuchi et al.(2011) Ishibuchi, Akedo, Ohyanagi & Nojima] Ishibuchi, H., Akedo, N., Ohyanagi, H. & Nojima, Y. (2011) Behavior of emo algorithms on many-objective optimization problems with correlated objectives. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1464–1471, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Islam et al.(2011a)Islam, Ghosh, Das, Abraham & Roy] Islam, M., Ghosh, S., Das, S., Abraham, A. & Roy, S. (2011a) A modified discrete differential evolution based tdma scheduling scheme for many to one communications in wireless sensor networks. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1949–1956, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Islam et al.(2011b)Islam, Chetty & Murshed] Islam, M.K., Chetty, M. & Murshed, M. (2011b) Novel local improvement techniques in clustered memetic algorithm for protein structure prediction. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1002–1010, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Jennings & Ordonez(2011)] Jennings, A. & Ordonez, R. (2011) Population based optimization for variable operating points. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 145–151, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Jeong et al. (2011) Jeong, Park, Na, Han & Kim] Jeong, I.B., Park, C.S., Na, K.I., Han, S. & Kim, J.H. (2011) Particle swarm optimization-based central patter generator for robotic fish locomotion. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 152–157, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Johansson et al.(2011)]Johansson, Sonstrod & Lofstrom Johansson, U., Sonstrod, C. & Lofstrom, T. (2011) One tree to explain them all. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1443–1450, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Junior & Pappa (2011)] Junior, Z.C. & Pappa, G.L. (2011) A pso algorithm for improving multi-view classification. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 924–931, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Junqing et al.(2011)Junqing, Quanke & Shengxian] Junqing, L., Quanke, P. & Shengxian, X. (2011) Flexible job shop scheduling problems by a hybrid artificial bee colony algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 78–83, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kamath et al.(2011)Kamath, De Jong & Shehu] Kamath, U., De Jong, K. & Shehu, A. (2011) An evolutionary-based approach for feature generation: Eukaryotic promoter recognition. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 277–284, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kameya & Prayoonsri(2011)] Kameya, Y. & Prayoonsri, C. (2011) Pattern-based preservation of building blocks in genetic algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2558–2565, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kessentini et al.(2011)Kessentini, Barchiesi, Grosges & de la Chapelle] Kessentini, S., Barchiesi, D., Grosges, T. & de la Chapelle, M.L. (2011) Particle swarm optimization and evolutionary methods for plasmonic biomedical applications. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2308–2313, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Khairy et al.(2011)Khairy, Fayek & Hemayed] Khairy, M., Fayek, M.B. & Hemayed, E.E. (2011) Pso2: Particle swarm optimization with pso-based local search. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1825–1831, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Khan et al.(2011)Khan, Ayob, Isaacs & Ray] Khan, M., Ayob, A., Isaacs, A. & Ray, T. (2011) A novel evolutionary approach for 2d shape matching based on b-spline modeling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 648–654, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ki-Baek & Jong-Hwan(2011)] Ki-Baek, L. & Jong-Hwan, K. (2011) Multi-objective particle swarm optimization with preference-based sorting. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2486–2493, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Kia & Cristinel(2011)] Kia, H.S. & Cristinel, A. (2011) A new fault-tolerant and congestion-aware adaptive routing algorithm for regular networks-on-chip. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2453–2460, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kijowski et al.(2011)Kijowski, Gallagher & Merkle] Kijowski, M., Gallagher, J. & Merkle, L. (2011) Improved learning in an evolvable hardware hover controller for an insect scale flapping-wing micro air vehicle. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 426–431, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kim et al.(2011)Kim, Ha, Jung, Jang, Kwon & Byoung-Tak] Kim, E.S., Ha, J.W., Jung, W.H., Jang, J.H., Kwon, J.S. & Byoung-Tak, Z. (2011) Mutual information-based evolution of hypernetworks for brain data analysis. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2604–2610, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kimura & Matsumura(2011)] Kimura, S. & Matsumura, K. (2011) Constrained multimodal function optimization using a simple evolutionary algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 447–454, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Knittel & Bossomaier(2011)] Knittel, A. & Bossomaier, T. (2011) Formation and activation of feature hierarchies under reinforcement. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2664–2671, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Korosec & Silc(2011)] Korosec, P. & Silc, J. (2011) The continuous differential ant-stigmergy algorithm applied to real-world optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1326–1333, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Krause(2011)] Krause, A. (2011) Performance of evolving trading strategies with different discount factors. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 186–191, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kromer et al.(2011)Kromer, Platos & Snasel] Kromer, P., Platos, J. & Snasel, V. (2011) Differential evolution for the linear ordering problem implemented on cuda. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 795–801, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kudo et al.(2011)Kudo, Tomohiro & Takeshi] Kudo, F., Tomohiro, Y. & Takeshi, F. (2011) A study on analysis of design variables in pareto solutions for conceptual design optimization problem of hybrid rocket engine. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2538–2542, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Kumar et al.(2011)Kumar, Skinner & Sahar] Kumar, P., Skinner, S. & Sahar, D. (2011) Nearest-neighbor architecture to overcome the effects of qubit precessions on gate operations. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2716–2721, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Landassuri-Moreno & Bullinaria(2011)] Landassuri-Moreno, V.M. & Bullinaria, J.A. (2011) Biasing the evolution of modular neural networks. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1957–1964, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [LaTorre et al.(2011a)LaTorre, Muelas & Pena] LaTorre, A., Muelas, S. & Pena, J.M. (2011a) Benchmarking a hybrid de-rhc algorithm on real world problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1026–1032, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [LaTorre et al.(2011b)LaTorre, Muelas, Pena, Santana & Merchan-Perez] LaTorre, A., Muelas, S., Pena, J.M., Santana, R. & Merchan-Perez, A. (2011b) A differential evolution algorithm for the detection of synaptic vesicles. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1686–1693, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Leal et al.(2011)Leal, Lemos, Holanda, Rabelo & Borges] Leal, L., Lemos, M., Holanda, R., Rabelo, R. & Borges, F. (2011) A hybrid approach based on genetic fuzzy systems for wireless sensor networks. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 964–971, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lee et al.(2011a)Lee, Seok & Zhang] Lee, B., Seok, H.S. & Zhang, B.T. (2011a) Evolving a population code for multimodal concept learning. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 685–692, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lee et al.(2011b)Lee, Lee, Kim, Deaton & Zhang] Lee, J.H., Lee, B., Kim, J.S., Deaton, R. & Zhang, B.T. (2011b) A molecular evolutionary algorithm for learning hypernetworks on simulated dna computers. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2722–2729, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Legriel et al.(2011)Legriel, Cotton & Maler] Legriel, J., Cotton, S. & Maler, O. (2011) On universal search strategies for multi-criteria optimization using weighted sums. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2344–2351, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Leguizamon & Coello Coello (2011)] Leguizamon, G. & Coello Coello, C.A. (2011) A multi-region differential evolution algorithm for continuos optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1933–1939, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lehman & Stanley(2011)] Lehman, J. & Stanley, K. (2011) Improving evolvability through novelty search and self-adaptation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2680–2687, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lemonge et al.(2011)Lemonge, Silva & Barbosa] Lemonge, A., Silva, M. & Barbosa, H. (2011) Design optimization of geometrically nonlinear truss structures considering cardinality constraints. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 29–36, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lepagnot et al.(2011)Lepagnot, Nakib, Oulhadj & Siarry] Lepagnot, J., Nakib, A., Oulhadj, H. & Siarry, P. (2011) Brain cine mri segmentation based on a multiagent algorithm for dynamic continuous optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1694–1701, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Li et al.(2011a)Li, Li, Mabu & Hirasawa] Li, B., Li, X., Mabu, S. & Hirasawa, K. (2011a) Variable size genetic network programming with binomial distribution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 972–979, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Li & Wang(2011)] Li, H. & Wang, Y. (2011) A real-binary coded genetic algorithm for solving nonlinear bilevel programming with nonconvex objective functions. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2476–2480, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Li et al.(2011b)Li, Zheng & Hu] Li, J., Zheng, C. & Hu, X. (2011b) A hypervolume based approach for minimal visual coverage shortest path. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1776–1783, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Li et al.(2011c)Li, Etemaadi, Emmerich & Chaudron] Li, R., Etemaadi, R., Emmerich, M. & Chaudron, M. (2011c) An evolutionary multiobjective optimization approach to component-based software architecture design. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 432–439, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Li & Yuan(2011)] Li, S. & Yuan, J. (2011) The modularity in freeform evolving neural networks. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2598–2603, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Li et al.(2011d)Li, Li, Mabu & Hirasawa] Li, X., Li, B., Mabu, S. & Hirasawa, K. (2011d) A novel estimation of distribution algorithm using graph-based chromosome representation and reinforcement learning. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 37–44, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA
- [Liang et al.(2011)Liang, Yew-Soon, Ah-Hwee & Xian-Shun] Liang, F., Yew-Soon, O., Ah-Hwee, T. & Xian-Shun, C. (2011) Towards human-like social multi-agents with memetic automaton. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1091–1098, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lima & Ludermir(2011)] Lima, N. & Ludermir, T. (2011) Frankenstein pso applied to neural network weights and architectures. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2588–2592, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [lin Liu & Gu(2011)] lin Liu, H. & Gu, F. (2011) A improved nsga-ii algorithm based on sub-regional search. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1905–1910, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Liping & Yuping(2011)] Liping, J. & Yuping, W. (2011) Genetic algorithm based on primal and dual theory for solving multiobjective bilevel linear programming. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 558–565, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Liu & Qiu(2011)] Liu, H. & Qiu, A. (2011) Space active noise control system design with multi-objective genetic algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2179–2185, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lockett & Miikkulainen(2011)] Lockett, A. & Miikkulainen, R. (2011) Measure-theoretic evolutionary annealing. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2132–2139, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lohpetch & Corne (2011)] Lohpetch, D. & Corne, D. (2011) Multiobjective algorithms for financial trading multiobjective out-trades single-objective. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 192–199, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lopez-Jaimes et al.(2011)Lopez-Jaimes, Arias-Montano & Coello Coello] Lopez-Jaimes, A., Arias-Montano, A. & Coello Coello, C.A. (2011) Preference incorporation to solve many-objective airfoil design problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1604–1611, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lotif & Coelho(2011)] Lotif, M. & Coelho, A. (2011) Visually inspecting the search behavior of harmony search and its variants with viz3d. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 609–616, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Lu et al.(2011)Lu, Tang & Yao] Lu, X., Tang, K. & Yao, X. (2011) Classification-assisted differential evolution for computationally expensive problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1985–1992, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lugo-Cordero et al.(2011)Lugo-Cordero, Fuentes-Rivera, Guha & Ortiz-Rivera] Lugo-Cordero, H., Fuentes-Rivera, A., Guha, R. & Ortiz-Rivera, E. (2011) Particle swarm optimization for load balancing in green smart homes. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 701–706, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Lung & Dumitrescu(2011)] Lung, R.I. & Dumitrescu, D. (2011) A new evolutionary approach to minimax problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1901–1904, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA
- [Ly & Lipson(2011)] Ly, D. & Lipson, H. (2011) Trainer selection strategies for coevolving rank predictors. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2392–2399, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Madeiro et al.(2011)Madeiro, Galvao, Cavellucci, Lyra & Von Zuben] Madeiro, S., Galvao, E., Cavellucci, C., Lyra, C. & Von Zuben, F.J. (2011) Simultaneous capacitor placement and reconfiguration for loss reduction in distribution networks by a hybrid genetic algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2171–2178, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mahdi et al.(2011)Mahdi, Mengjie & Mark] Mahdi, S., Mengjie, Z. & Mark, J. (2011) Edge detection using constrained discrete particle swarm optimisation in noisy images. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 246–253, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Malago' et al.(2011a)Malago', Matteucci & Pistone] Malago', L., Matteucci, M. & Pistone, G. (2011a) Stochastic natural gradient descent by estimation of empirical covariances. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 948–955, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Malago' et al.(2011b)Malago', Matteucci & Valentini] Malago', L., Matteucci, M. & Valentini, G. (2011b) Introducing l1-regularized logistic regression in markov networks based edas. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1580–1587, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mallipeddi et al.(2011)Mallipeddi, Iacca, Ponnuthurai, Neri & Mininno] Mallipeddi, R., Iacca, G., Ponnuthurai, N.S., Neri, F. & Mininno, E. (2011) Ensemble strategies in compact differential evolution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1971–1976, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mallipeddi & Ponnuthurai(2011)] Mallipeddi, R. & Ponnuthurai, N.S. (2011) Ensemble differential evolution algorithm for cec2011 problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1556–1563, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Marco et al.(2011)Marco, Cairns & Shankland] Marco, D., Cairns, D. & Shankland, C. (2011) Optimisation of process algebra models using evolutionary computation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1295–1300, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mariani et al.(2011)Mariani, Luvizotto, Klein & Coelho] Mariani, V., Luvizotto, L.G., Klein, C. & Coelho, L. (2011) A normative differential evolution approach for estimation of heat transfer

- coefficient during freezing treatment by inverse analysis. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 522–528, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Marti et al.(2011)Marti, Garcia, Berlanga & Molina] Marti, L., Garcia, J., Berlanga, A. & Molina, J.M. (2011) Indicator-based moneda: A comparative study of scalability with respect to decision space dimensions. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 956–963, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Martinez et al.(2011)Martinez, Arias-Montano & Coello Coello] Martinez, S.Z., Arias-Montano, A. & Coello Coello, C.A. (2011) A nonlinear simplex search approach for multi-objective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2360–2367, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Masuda et al.(2011)Masuda, Yokota & Kurihara] Masuda, K., Yokota, H. & Kurihara, K. (2011) An empirical study on the search directions of differential evolution. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2530–2537, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [McClymont & Keedwell(2011)] McClymont, K. & Keedwell, E. (2011) Benchmark multi-objective optimisation test problems with mixed encodings. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2124–2131, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Menezes & Coelho(2011)] Menezes, L. & Coelho, A. (2011) On ensembles of biclusters generated by nichepso. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 594–600, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Menezes(2011)] Menezes, T. (2011) Evolutionary modeling of a blog network. *Proceedings of the* 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 908–915, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Menzel(2011)] Menzel, S. (2011) Evolvable free-form deformation control volumes for evolutionary design optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1387–1394, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Merelo et al.(2011)Merelo, Mora & Cotta] Merelo, J.J., Mora, A.M. & Cotta, C. (2011) Optimizing worst-case scenario in evolutionary solutions to the mastermind puzzle. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2656–2663, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Miller et al.(2011)Miller, Moore, Babb & Peterson] Miller, C., Moore, F., Babb, B. & Peterson, M. (2011) Improved reconstruction of quantized ct scans via genetic algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2286–2292, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mirmomeni & Punch(2011)] Mirmomeni, M. & Punch, W. (2011) Co-evolving data driven models and test data sets with the application to forecast chaotic time series. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 14–20, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mojica-Nava & Quijano(2011)] Mojica-Nava, E. & Quijano, N. (2011) A replicator dynamics weighted control technique for a dc-dc converter. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1871–1877, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mokom & Kobti(2011)] Mokom, F. & Kobti, Z. (2011) Evolution of artifact capabilities. *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 476–483, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Monson(2011)] Monson, C. (2011) Simple adaptive cognition for pso. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1656–1663, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Moritz et al.(2011)Moritz, Ulrich, Thiele & Buerklen] Moritz, R., Ulrich, T., Thiele, L. & Buerklen, S. (2011) Mutation operator characterization: Exhaustiveness, locality, and bias. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1395–1402, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Morshed & Chetty (2011)] Morshed, N. & Chetty, M. (2011) Reconstructing genetic networks with concurrent representation of instantaneous and time-delayed interactions. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1839–1846, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Mousavi et al.(2011)Mousavi, Hoque, Rahnamayan, Dincer & Naterer] Mousavi, M., Hoque, S., Rahnamayan, S., Dincer, I. & Naterer, G.F. (2011) Optimal design of an air-cooling system for a li-ion battery pack in an electric vehicle with a genetic algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1847–1854, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Muehleisen et al.(2011)Muehleisen, Walther & Tolksdorf] Muehleisen, H., Walther, T. & Tolksdorf, R. (2011) Multi-level indexing in a distributed self-organized storage system. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 988–993, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Munawar et al.(2011)Munawar, Wahib, Munetomo & Akama] Munawar, A., Wahib, M., Munetomo, M. & Akama, K. (2011) Advanced genetic algorithm to solve minlp problems over gpu. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 318–325, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Munetomo(2011)] Munetomo, M. (2011) Realizing robust and scalable evolutionary algorithms toward exascale era. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 312–317, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Munoz et al.(2011)Munoz, Llanos, Coelho & Ayala] Munoz, D., Llanos, C., Coelho, L. & Ayala, M. (2011) Opposition-based shuffled pso with passive congregation applied to fm matching synthesis. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2762–2768, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [N. & Kobti(2011)] N., M.R.R. & Kobti, Z. (2011) A machine operation lists based memetic algorithm for job shop scheduling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2429–2436, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Nagy et al.(2011)Nagy, Dumitrescu & Lung] Nagy, R., Dumitrescu, D. & Lung, R.I. (2011) Fuzzy equilibria for games involving n>2 players. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2642–2648, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Nairat et al.(2011)Nairat, Dahlstedt & Nordahl] Nairat, M., Dahlstedt, P. & Nordahl, M. (2011) Character evolution approach to generative storytelling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1131–1136, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Namura et al.(2011)Namura, Shimoyama, Jeong & Obayashi] Namura, N., Shimoyama, K., Jeong, S. & Obayashi, S. (2011) Kriging/rbf-hybrid response surface method for highly nonlinear functions. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2514–2521, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Naruchitparames et al.(2011)Naruchitparames, Gunes & Louis] Naruchitparames, J., Gunes, M. & Louis, S. (2011) Friend recommendations in social networks using genetic algorithms and network topology. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2200–2207, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Nasir et al.(2011)Nasir, Mondal, Sengupta, Das & Abraham] Nasir, M., Mondal, A., Sengupta, S., Das, S. & Abraham, A. (2011) An improved multiobjective evolutionary algorithm based on decomposition with fuzzy dominance. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 752–759, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Neto et al.(2011a)Neto, Canuto, Goldbarg & Goldbarg] Neto, A.F., Canuto, A., Goldbarg, E. & Goldbarg, M. (2011a) Optimization techniques for the selection of members and attributes in ensemble systems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1911–1918, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Neto et al.(2011b)Neto, Bezerra, Pacheco & Pimentel] Neto, O.V., Bezerra, I., Pacheco, M.A. & Pimentel, A. (2011b) Evolutionary optimization of sets of basis functions for first-row atoms by using discretization process. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 544–549, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Neto et al.(2011c)Neto, Pacheco, Pimentel & Silveira] Neto, O.V., Pacheco, M.A., Pimentel, A. & Silveira, E. (2011c) A parallel evolutionary algorithm to search for global minima geometries of heterogeneous ab initio atomic clusters. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 537–543, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Nguyen & Bhanu(2011)] Nguyen, H.T. & Bhanu, B. (2011) Tracking pedestrians with bacterial foraging optimization swarms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 491–495, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Nguyen et al.(2011)Nguyen, Nguyen & McKay] Nguyen, T.H., Nguyen, X.H. & McKay, R.I. (2011) A study on genetic programming with layered learning and incremental sampling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1184–1190, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [nien Lin et al.(2011)nien Lin, Huo, Lin, Yu & Sun] nien Lin, C., Huo, C.L., Lin, S.Y., Yu, Y.H. & Sun, T.Y. (2011) Taguchi-based disturbance with tournament selection to improve on mopso. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1804–1809, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Noman et al.(2011)Noman, Bollegala & Iba] Noman, N., Bollegala, D. & Iba, H. (2011) An adaptive differential evolution algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2222–2229, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Noman & Iba(2011)] Noman, N. & Iba, H. (2011) Solving dynamic economic dispatch problems using cellular differential evolution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2626–2633, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Oh et al.(2011)Oh, Lee & McKay] Oh, I.S., Lee, Y.G. & McKay, R.I. (2011) Simulating chemical evolution. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2704–2711, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Oiso et al.(2011)Oiso, Matsumura, Yasuda & Ohkura] Oiso, M., Matsumura, Y., Yasuda, T. & Ohkura, K. (2011) Accelerating steady-state genetic algorithms based on cuda architecture. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 673–678, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Okdem et al.(2011)Okdem, Karaboga & Ozturk] Okdem, S., Karaboga, D. & Ozturk, C. (2011) An application of wireless sensor network routing based on artificial bee colony algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 326–330, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Oliveira & Interciso(2011)] Oliveira, P. & Interciso, M. (2011) Ternary representation improves the search for binary, one-dimensional density classifier cellular automata. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1919–1925, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Oner et al.(2011)Oner, Ozcan & Dengi] Oner, A., Ozcan, S. & Dengi, D. (2011) Optimization of university course scheduling problem with a hybrid artificial bee colony algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 339–346, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ozcan & Esnaf(2011)] Ozcan, T. & Esnaf, S. (2011) A heuristic approach based on artificial bee colony algorithm for retail shelf space optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 95–101, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ozturk & Karaboga(2011)] Ozturk, C. & Karaboga, D. (2011) Hybrid artificial bee colony algorithm for neural network training. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 84–88, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Palotti et al.(2011)Palotti, Salles, Pappa, Goncalves & Meira, Jr.] Palotti, J., Salles, T., Pappa, G.L., Goncalves, M.A. & Meira, Jr., W. (2011) Assessing documents' credibility with genetic programming. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 200–207, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Papa & Garbolino(2011)] Papa, G. & Garbolino, T. (2011) Optimal on-line built-in self-test structure for system-reliability improvement. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 222–229, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Parker & Fritzsche(2011)] Parker, G. & Fritzsche, P. (2011) Fitness biasing for evolving an xpilot combat agent. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1070–1075, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Parker & Tarimo(2011)] Parker, G. & Tarimo, W. (2011) The effects of using a greedy factor in hexapod gait learning. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1508–1513, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Parker et al.(2011)Parker, Tarimo & Cantor] Parker, G., Tarimo, W. & Cantor, M. (2011) Quadruped gait learning using cyclic genetic algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1528–1533, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Parkinson et al.(2011)Parkinson, Ghandar, Michalewicz & Tuson] Parkinson, E., Ghandar, A., Michalewicz, Z. & Tuson, A. (2011) Estimating the reproductive potential of offspring in evolutionary heuristics for combinatorial optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 172–178, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Parracho et al.(2011)Parracho, Neves & Horta] Parracho, P., Neves, R. & Horta, N. (2011) Trading with optimized uptrend pattern template using a genetic algorithm kernel. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1894–1900, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Pasti et al.(2011)Pasti, Maia, Von Zuben & de Castro] Pasti, R., Maia, R.D., Von Zuben, F.J. & de Castro, L.N. (2011) Heuristics to avoid redundant solutions on population-based multimodal continuous optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2314–2321, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Perez & Riff(2011)] Perez, L. & Riff, M.C. (2011) New bounds for the relaxed traveling tournament problems using an artificial immune algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 872–878, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Peterson et al.(2011)Peterson, Mayer & Cousin] Peterson, G., Mayer, C. & Cousin, K. (2011) Wolf ant. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 994–1001, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Piccolo & Squillero (2011)] Piccolo, E. & Squillero, G. (2011) Adaptive opponent modelling for the iterated prisoner's dilemma. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 835–840, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Pilat & Neruda(2011)] Pilat, M. & Neruda, R. (2011) Asm-moma: Multiobjective memetic algorithm with aggregate surrogate model. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1207–1213, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Pitangui & Zaverucha(2011)] Pitangui, C. & Zaverucha, G. (2011) Inductive logic programming through estimation of distribution algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 54–61, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Poladian(2011)] Poladian, L. (2011) A genotype-to-phenotype mapping for microstructured polymer optical fibres. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 378–385, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Polushina & Sofronov(2011)] Polushina, T. & Sofronov, G. (2011) Change-point detection in biological sequences via genetic algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1965–1970, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Pradipta et al.(2011)Pradipta, Hamim, Das & Abraham] Pradipta, G., Hamim, Z., Das, S. & Abraham, A. (2011) Hierarchical dynamic neighborhood based particle swarm optimization for global optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 744–751, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Prampero & Attux(2011)] Prampero, P.S. & Attux, R. (2011) Magnetic particle swarm optimization with estimation of distribution. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1993–2000, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Preen & Bull(2011)] Preen, R.J. & Bull, L. (2011) Arithmetic dynamical genetic programming in the xcsf learning classifier system. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1427–1434, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Qadir et al.(2011)Qadir, Liu, Tempesti, Timmis & Tyrrell] Qadir, O., Liu, J., Tempesti, G., Timmis, J. & Tyrrell, A. (2011) Hardware architecture for a bidirectional hetero-associative protein processing associative memory. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 208–215, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Raich & Fritz(2011)] Raich, A. & Fritz, K. (2011) Benefits of implicit redundant representation genetic algorithms for conceptual design and damage identification. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 6–13, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Reynolds et al.(2011)Reynolds, Abdollahzadeh, Corne, Christie, Davies & Williams] Reynolds, A., Abdollahzadeh, A., Corne, D., Christie, M., Davies, B. & Williams, G. (2011) A parallel boa-pso hybrid algorithm for history matching. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 893–900, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Reynolds & Liu(2011)] Reynolds, R. & Liu, D. (2011) Multi-objective cultural algorithms. *Proceedings* of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1238–1246, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Reynoso-Meza et al.(2011)Reynoso-Meza, Sanchis, Blasco & Herrero] Reynoso-Meza, G., Sanchis, J., Blasco, X. & Herrero, J.M. (2011) Hybrid de algorithm with adaptive crossover operator for solving real-world numerical optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1550–1555, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rivero et al. (2011a) Rivero, Fernandez-Blanco, Dorado & Pazos] Rivero, D., Fernandez-Blanco, E., Dorado, J. & Pazos, A. (2011a) A new signal classification technique by means of genetic algorithms and knn. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 574–579, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rivero et al. (2011b) Rivero, Fernandez-Blanco, Dorado & Pazos] Rivero, D., Fernandez-Blanco, E., Dorado, J. & Pazos, A. (2011b) Using recurrent anns for the detection of epileptic seizures in eeg signals. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 580–585, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rocha et al.(2011)Rocha, Sa, Sousa, Cortez & Rio] Rocha, M., Sa, T., Sousa, P., Cortez, P. & Rio, M. (2011) Multiobjective evolutionary algorithms for intradomain routing optimization. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2265–2272, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Roedland(2011)] Roedland, T.A.L. (2011) Classifying glyphs by combining evolution and learning. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2068–2075, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rohlfshagen & Lucas(2011)] Rohlfshagen, P. & Lucas, S. (2011) Ms pac-man versus ghost team cec 2011 competition. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 70–77, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rosberg et al.(2011)Rosberg, Goldbarg & Goldbarg] Rosberg, I., Goldbarg, E. & Goldbarg, M. (2011) Solving the light up with ant colony optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 566–573, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ross(2011)] Ross, B. (2011) Evolution of stochastic bio-networks using summed rank strategies. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 772–779, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Rothman et al.(2011)Rothman, Luke & Sullivan] Rothman, D., Luke, S. & Sullivan, K. (2011) Do multiple trials help univariate methods? Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2384–2391, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Rudolph(2011)] Rudolph, G. (2011) On geometrically fast convergence to optimal dominated hypervolume of set-based multiobjective evolutionary algorithms. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1718–1722, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Saha & Ray(2011)] Saha, A. & Ray, T. (2011) How does the good old genetic algorithm fare at real world optimization? *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1048–1055, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Saha et al.(2011)Saha, Ray & Smith] Saha, A., Ray, T. & Smith, W. (2011) Towards practical evolutionary robust multi-objective optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2116–2123, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Sakurai et al.(2011)Sakurai, Takada, Tsukamoto, Onoyama, Knauf & Tsuruta] Sakurai, Y., Takada, K., Tsukamoto, N., Onoyama, T., Knauf, R. & Tsuruta, S. (2011) A simple optimization method based on backtrack and ga for delivery schedule. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2777–2784, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Salekdeh & Wiese (2011)] Salekdeh, A.Y. & Wiese, K.C. (2011) Improving splice-junctions classification employing a novel encoding schema and decision-tree. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1301–1306, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Salmani-Jelodar et al.(2011)Salmani-Jelodar, Steiger, Paul & Klimeck] Salmani-Jelodar, M., Steiger, S., Paul, A. & Klimeck, G. (2011) Model development for lattice properties of gallium arsenide using parallel genetic algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2422–2428, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Sanchez et al.(2011)Sanchez, Squillero & Tonda] Sanchez, E., Squillero, G. & Tonda, A. (2011) Group evolution: Emerging synergy through a coordinated effort. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2649–2655, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Sato et al.(2011)Sato, Hasegawa & Sato] Sato, Y., Hasegawa, N. & Sato, M. (2011) Gpu acceleration for sudoku solution with genetic operations. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 296–303, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Schaul et al. (2011) Schaul, Sun, Wierstra, Gomez & Schmidhuber] Schaul, T., Sun, Y., Wierstra, D., Gomez, F. & Schmidhuber, J. (2011) Curiosity-driven optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1342–1348, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Schroeder et al.(2011)Schroeder, Wrzodek, Wollnik, Draeger, Wanke, Berendzen & Zell] Schroeder, A., Wrzodek, C., Wollnik, J., Draeger, A., Wanke, D., Berendzen, K.W. & Zell, A. (2011) Inferring transcriptional regulators for sets of co-expressed genes by multi-objective evolutionary optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2278–2285, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Scola et al.(2011)Scola, Neto, Takahashi & Cerqueira] Scola, L., Neto, O., Takahashi, R. & Cerqueira, S. (2011) Multi-objective optimal multiple reservoir operation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1926–1932, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Segredo et al.(2011)Segredo, Segura & Leon] Segredo, E., Segura, C. & Leon, C. (2011) A multiobjectivised memetic algorithm for the frequency assignment problem. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1137–1144, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Seren(2011)] Seren, C. (2011) A hybrid jumping particle swarm optimization method for high dimensional unconstrained discrete problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1648–1655, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Seridi et al.(2011)Seridi, Jourdan & Talbi] Seridi, K., Jourdan, L. & Talbi, E.G. (2011) Multiobjective evolutionary algorithm for biclustering in microarrays data. *Proceedings of the* 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2573–2579, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shaban-Nejad & Haarslev(2011)] Shaban-Nejad, A. & Haarslev, V. (2011) An abstract representation model for evolutionary analysis of multi-agent interactions. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2001–2008, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Sharma et al.(2011)Sharma, Srinivasan & Trivedi] Sharma, D., Srinivasan, D. & Trivedi, A. (2011) Multi-agent approach for profit based unit commitment. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2507–2513, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shelokar et al.(2011)Shelokar, Arnaud & Oscar] Shelokar, P., Arnaud, Q. & Oscar, C. (2011) Subgraph mining in graph-based data using multiobjective evolutionary programming. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1729–1736, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shi et al.(2011)Shi, Leung & Lai] Shi, E.C., Leung, F.H. & Lai, J.C. (2011) An adaptive differential evolution with unsymmetrical mutation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1878–1885, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shi & Song(2011)] Shi, Q. & Song, A. (2011) Selective motion detection by genetic programming. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 496–503, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shindo et al.(2011)Shindo, Kurihara, Taguchi & Jin'no] Shindo, T., Kurihara, T., Taguchi, H. & Jin'no, K. (2011) Particle swarm optimization for sigle phase pwm inverters. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2481–2485, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shirasaki et al.(2011)Shirasaki, Shimomura, Sugimoto, Uwate & Nishio] Shirasaki, Y., Shimomura, S., Sugimoto, M., Uwate, Y. & Nishio, Y. (2011) Effectiveness of guidepost pheromone for honeybee colony optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1792–1797, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Shirazi et al.(2011)Shirazi, von Mammen & Jacob] Shirazi, A.S., von Mammen, S. & Jacob, C. (2011) Hierarchical self-organized learning in agent-based modeling of the mapk signaling pathway. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2238–2244, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Silva et al.(2011)Silva, Pacifico & Ludermir] Silva, D., Pacifico, L. & Ludermir, T. (2011) An evolutionary extreme learning machine based on group search optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 760–766, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Singh & Ray(2011)] Singh, H.K. & Ray, T. (2011) Performance of a hybrid ea-de-memetic algorithm on cec 2011 real world optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1321–1325, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Sonstrod et al.(2011)Sonstrod, Johansson & Konig] Sonstrod, C., Johansson, U. & Konig, R. (2011) Evolving accurate and comprehensible classification rules. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1435–1442, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Spangenberg et al.(2011)Spangenberg, Tutum, Hattel, Roussel & Geiker] Spangenberg, J., Tutum, C.C., Hattel, J.H., Roussel, N. & Geiker, M.R. (2011) Optimization of casting process parameters for homogeneous aggregate distribution in self-compacting concrete: A feasibility study. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2156–2162, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Srinivasan & Ly(2011)] Srinivasan, D. & Ly, T.T. (2011) Co-evolutionary bidding strategies for buyers in electricity power markets. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2499–2506, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Steiner & Sendhoff(2011)] Steiner, T. & Sendhoff, B. (2011) Evolvability of graph- and vector field embryogeny representations. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1271–1278, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Takahama & Sakai(2011)] Takahama, T. & Sakai, S. (2011) Efficient nonlinear optimization by differential evolution with a rotation-invariant local sampling operation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2208–2215, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tantar et al.(2011)Tantar, Tantar & Pascal] Tantar, E., Tantar, A.A. & Pascal, B. (2011) On dynamic multi-objective optimization, classification and performance measures. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2746–2753, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tasgetiren et al.(2011) Tasgetiren, Bulut & Fadiloglu] Tasgetiren, M.F., Bulut, O. & Fadiloglu, M.M. (2011) A discrete artificial bee colony algorithm for the economic lot scheduling problem. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 347–353, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Thillainathan & Srinivasan(2011)] Thillainathan, L. & Srinivasan, D. (2011) Lrga for solving profit based generation scheduling problem in competitive environment. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1153–1159, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tizzo et al.(2011)Tizzo, Coello & Cardozo] Tizzo, N.P., Coello, J.M.A. & Cardozo, E. (2011) Automatic composition of semantic web services using a-teams with genetic agents. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 370–377, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tjiong & Monteiro (2011)] Tjiong, A. & Monteiro, S. (2011) Feature selection with pso and kernel methods for hyperspectral classification. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1761–1768, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Toledo et al.(2011)Toledo, Oliveira & Franca] Toledo, C., Oliveira, R. & Franca, P. (2011) A hybrid heuristic approach to solve the multi level capacitated lot sizing problem. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1199–1206, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tomforde et al.(2011)Tomforde, Brameshuber, Haehner & Mueller-Schloer] Tomforde, S., Brameshuber, A., Haehner, J. & Mueller-Schloer, C. (2011) Restricted on-line learning in real-world systems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1627–1634, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Trivedi et al.(2011)Trivedi, M.Pindoriya, Srinivasan & Sharma] Trivedi, A., M.Pindoriya, N., Srinivasan, D. & Sharma, D. (2011) Improved multi-objective evolutionary algorithm for day-ahead thermal generation scheduling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2163–2170, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tsang & Jacob(2011)] Tsang, H.H. & Jacob, C. (2011) Rnadpcompare: An algorithm for comparing rna secondary structures based on image processing techniques. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1287–1294, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tsujimoto et al.(2011)Tsujimoto, Shindo & Jin'no] Tsujimoto, T., Shindo, T. & Jin'no, K. (2011) The neighborhood of canonical deterministic pso. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1810–1816, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tsutsui & Fujimoto(2011)] Tsutsui, S. & Fujimoto, N. (2011) Fast qap solving by aco with 2-opt local search on a gpu. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 811–818, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Tutum & Fan(2011)] Tutum, C.C. & Fan, Z. (2011) Multi-criteria layout synthesis of mems devices using memetic computing. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 901–907, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [U et al.(2011)U, Ho, Funk & Rasheed] U, M., Ho, C., Funk, S. & Rasheed, K. (2011) Gart: A genetic algorithm based real time system scheduler. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 885–892, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Uchitane & Hatanaka(2011)] Uchitane, T. & Hatanaka, T. (2011) Applying evolution strategies to biped locomotion learning in robocup 3d soccer simulation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 179–185, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Uemura et al.(2011)Uemura, ichi Kinoshita, Nagata, Kobayashi & Ono] Uemura, K., ichi Kinoshita, S., Nagata, Y., Kobayashi, S. & Ono, I. (2011) A new framework taking account of multifumnel functions for real-coded genetic algorithms. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2084–2091, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Valdes et al.(2011) Valdes, Cheung & Wang] Valdes, J.J., Cheung, C. & Wang, W. (2011) Evolutionary computation methods for helicopter loads estimation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1588–1595, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Vansant et al.(2011) Vansant, Pezzoli, Monforte & Fogel] Vansant, G., Pezzoli, P., Monforte, J. & Fogel, G. (2011) High-throughput toxicological classification of candidate drug compounds using gene expression, evolved neural networks, and a cell-based platform. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 788–794, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Vasicek & Bidlo(2011)] Vasicek, Z. & Bidlo, M. (2011) Evolutionary design of robust noise-specific image filters. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 269–276, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Vazquez et al.(2011) Vazquez, Coello Coello & Sagols] Vazquez, E., Coello Coello, C.A. & Sagols, F. (2011) An evolutionary algorithm for tuning a chess evaluation function. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 841–847, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Vazquez(2011)] Vazquez, R.A. (2011) Training spiking neural models using cuckoo search algorithm. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 665–672, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Veroneze et al.(2011) Veroneze, de Franca & Von Zuben] Veroneze, R., de Franca, F. & Von Zuben, F.J. (2011) Assessing the performance of a swarm-based biclustering technique for data imputation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 386–393, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wahib et al.(2011)Wahib, Munawar, Munetomo & Akama] Wahib, M., Munawar, A., Munetomo, M. & Akama, K. (2011) Optimization of parallel genetic algorithms for nvidia gpus. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 802–810, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Walsh & Gade(2011)] Walsh, P. & Gade, P. (2011) The use of an aesthetic measure for the evolution of fractal landscapes. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1612–1618, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011a)Wang, Rahnamayan & Wu] Wang, H., Rahnamayan, S. & Wu, Z. (2011a) Adaptive differential evolution with variable population size for solving high-dimensional problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2619–2625, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011b)Wang, Mabu & Hirasawa] Wang, L., Mabu, S. & Hirasawa, K. (2011b) Genetic network programming with updating rule accumulation. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2252–2259, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011c)Wang, Tang, Tsang & Yao] Wang, P., Tang, K., Tsang, E. & Yao, X. (2011c) A memetic genetic programming with decision tree-based local search for classification problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 916–923, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011d)Wang, Bin, Zhen & Kaibo] Wang, Y., Bin, L., Zhen, H. & Kaibo, Z. (2011d) Enhancing differential evolution with effective evolutionary local search in memetic framework. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2445–2452, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011e)Wang, Li & Zhang] Wang, Y., Li, B. & Zhang, K. (2011e) Estimation of distribution and differential evolution cooperation for real-world numerical optimization problems. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1314–1320, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wang et al.(2011f)Wang, Yang, Wang, Green, II & Dounis] Wang, Z., Yang, R., Wang, L., Green, II, R. & Dounis, A. (2011f) A fuzzy adaptive comfort temperature model with grey predictor for multi-agent control system of smart building. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 715–722, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Wei & Zhang(2011)] Wei, J. & Zhang, M. (2011) A memetic particle swarm optimization for constrained multi-objective optimization problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1635–1642, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [wei Gong et al.(2011)wei Gong, liang Qi, Zhang & Li] wei Gong, D., liang Qi, C., Zhang, Y. & Li, M. (2011) Modified particle swarm optimization for odor source localization of multi-robot. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 130–136, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wen & Xu(2011)] Wen, Y. & Xu, H. (2011) A cooperative coevolution-based pittsburgh learning classifier system embedded with memetic feature selection. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2408–2415, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wilcox et al.(2011)Wilcox, McNabb & Seppi] Wilcox, D., McNabb, A. & Seppi, K. (2011) Solving virtual machine packing with a reordering grouping genetic algorithm. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 362–369, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wong et al.(2011)Wong, He & chang Yeh] Wong, M., He, X. & chang Yeh, W. (2011) Image clustering using particle swarm optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 262–268, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Wu et al.(2011)Wu, McCall & Corne] Wu, Y., McCall, J. & Corne, D. (2011) Fitness landscape analysis of bayesian network structure learning. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 980–987, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Xing et al.(2011)Xing, Mabu & Hirasawa] Xing, Y., Mabu, S. & Hirasawa, K. (2011) Pruning generalized rules for stock markets accumulated by genetic network programming with rule accumulation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2461–2467, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Xiong et al.(2011)Xiong, Liu, Chen & Abbass] Xiong, J., Liu, J., Chen, Y. & Abbass, H. (2011) An evolutionary multi-objective scenario-based approach for stochastic resource investment project scheduling. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2754–2761, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Yagoubi et al.(2011)Yagoubi, Thobois & Schoenauer] Yagoubi, M., Thobois, L. & Schoenauer, M. (2011) Asynchronous evolutionary multi-objective algorithms with heterogenous evaluation costs. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 21–28, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Yapicioglu & Smith(2011)] Yapicioglu, H. & Smith, A.E. (2011) Disservice representation using the gini coefficient in semi-desirable facility location problems. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 110–114, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Ye & Mohamadian(2011)] Ye, Z. & Mohamadian, H. (2011) Strengthen accuracy of feature recognition via integration of ant colony detection and adaptive contour tracking. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1798–1803, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Yen et al.(2011)Yen, Sharma, Srinivasan & Manji] Yen, L.T.X., Sharma, D., Srinivasan, D. & Manji, P.N. (2011) A modified hybrid particle swarm optimization approach for unit commitment. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1737–1744, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.

- [Yoon & Cho(2011)] Yoon, J.W. & Cho, S.B. (2011) An efficient genetic algorithm with fuzzy c-means clustering for traveling salesman problem. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1451–1455, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Yu et al.(2011)Yu, Lam & Li] Yu, J.J., Lam, A.Y. & Li, V.O. (2011) Evolutionary artificial neural network based on chemical reaction optimization. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2076–2083, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zamorano et al.(2011)Zamorano, Timmis & Tyrrell] Zamorano, A.G., Timmis, J. & Tyrrell, A. (2011) A flexible decentralised communication architecture on a field programmable gate array for swarm system simulations. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 230–237, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zeng et al.(2011)Zeng, James, Low, Cai & Hingston] Zeng, F., James, D., Low, M.Y.H., Cai, W. & Hingston, P. (2011) Studies of pareto-based multi-objective competitive coevolutionary dynamics. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2376–2383, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhan & Zhang(2011)] Zhan, Z. & Zhang, J. (2011) Orthogonal learning particle swarm optimization for power electronic circuit optimization with free search range. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 2543–2550, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhang et al.(2011a)Zhang, Mabu, Wen & Hirasawa] Zhang, D., Mabu, S., Wen, F. & Hirasawa, K. (2011a) A sequential subspace face recognition framework using genetic-based clustering. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 394–400, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhang(2011a)] Zhang, H. (2011a) An analysis of multiple particle swarm optimizers with inertia weight with diversive curiosity. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1753–1760, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhang(2011b)] Zhang, H. (2011b) Assessment of an evolutionary particle swarm optimizer with inertia weight. *Proceedings of the 2011 IEEE Congress on Evolutionary Computation* (ed. A.E. Smith), pp. 1745–1752, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhang et al.(2011b)Zhang, Chen, Levy & Lu] Zhang, J., Chen, S., Levy, D. & Lu, Y. (2011b) Feedback loop mechanisms based particle swarm optimization with neighborhood topology. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1863–1870, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhong et al.(2011)Zhong, Zhang & Liu] Zhong, W., Zhang, Y. & Liu, J. (2011) Evolutionary dynamics of continuous strategy games on social networks under weak selection: A preliminary study. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 2494–2498, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.
- [Zhou et al.(2011)Zhou, Zhou, Zhang & Shi] Zhou, L., Zhou, A., Zhang, G. & Shi, C. (2011) An estimation of distribution algorithm based on nonparametric density estimation. Proceedings of the 2011 IEEE Congress on Evolutionary Computation (ed. A.E. Smith), pp. 1596–1603, IEEE Computational Intelligence Society, IEEE Press, New Orleans, USA.