

2010 Index

IEEE Transactions on Evolutionary Computation

Vol. 14

This index covers all technical items — papers, correspondence, reviews, etc. — that appeared in this periodical during 2010, and items from previous years that were commented upon or corrected in 2010. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

AUTHOR INDEX

A

- Ahmadabadi, M. N.**, *see* Farahmand, A.-M., *TEVC Feb. 2010 23-57*
Akbarzadeh-Totonchi, M.-R., *see* Jahan, M. V., *TEVC Aug. 2010 591-601*
Alba, E., *see* Durillo, J. J., *TEVC Aug. 2010 618-635*
Antonsson, E. K., *see* Yogev, O., *TEVC April 2010 301-325*
Araabi, B. N., *see* Farahmand, A.-M., *TEVC Feb. 2010 23-57*

B

- Bader, J.**, *see* Zitzler, E., *TEVC Feb. 2010 58-79*
Bai, R., Burke, E. K., Kendall, G., Li, J., and McCollum, B., A Hybrid Evolutionary Approach to the Nurse Rostering Problem; *TEVC Aug. 2010 580-590*
Battiti, R., and Passerini, A., Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker; *TEVC Oct. 2010 671-687*
Bechikh, S., *see* Ben Said, L., *TEVC Oct. 2010 801-818*
Ben Said, L., Bechikh, S., and Ghedira, K., The r-Dominance: A New Dominance Relation for Interactive Evolutionary Multicriteria Decision Making; *TEVC Oct. 2010 801-818*
Bernado-Mansilla, E., *see* Fernandez, A., *TEVC Dec. 2010 913-941*
Beyer, H.-G., and Finck, S., Performance of the $(\mu/\mu_I, \lambda)$ - σ SA-ES on a Class of PDQFs; *TEVC June 2010 400-418*
Brown, E., *see* James, T., *TEVC Feb. 2010 103-111*
Burke, E. K., *see* Bai, R., *TEVC Aug. 2010 580-590*
Burke, E. K., Hyde, M., Kendall, G., and Woodward, J., A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics; *TEVC Dec. 2010 942-958*

C

- Carrano, E. G.**, Takahashi, R. H. C., Fonseca, C. M., and Neto, O. M., Non-linear Network Optimization—An Embedding Vector Space Approach; *TEVC April 2010 206-226*
Chan, R. R., and Sudhoff, S. D., An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties; *TEVC Dec. 2010 900-912*
Chaudhuri, S., *see* Deb, K., *TEVC Dec. 2010 821-841*
Chen, G., *see* Chen, T., *TEVC Feb. 2010 1-22*
Chen, G., *see* Peng, F., *TEVC Oct. 2010 782-800*
Chen, S., Hong, X., and Harris, C. J., Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling; *TEVC Aug. 2010 477-499*
Chen, T., Tang, K., Chen, G., and Yao, X., Analysis of Computational Time of Simple Estimation of Distribution Algorithms; *TEVC Feb. 2010 1-22*
Chen, W.-N., Zhang, J., Chung, H. S. H., Zhong, W.-L., Wu, W.-G., and Shi, Y.-H., A Novel Set-Based Particle Swarm Optimization Method for Discrete Optimization Problems; *TEVC April 2010 278-300*
Chen, Y., *see* Teng, H.-F., *TEVC June 2010 438-455*

- Chen, Y.**, *see* Xing, L., *TEVC June 2010 356-374*
Chung, H. S. H., *see* Chen, W.-N., *TEVC April 2010 278-300*
Chung, H. S.-H., *see* Hu, X.-M., *TEVC Oct. 2010 766-781*
Coello, C. A. C., *see* Lara, A., *TEVC Feb. 2010 112-132*
Coello, C. A. C., *see* Durillo, J. J., *TEVC Aug. 2010 618-635*
Colutto, S., Fruhauf, F., Fuchs, M., and Scherzer, O., The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images; *TEVC April 2010 227-245*

D

- de Filho, A. C. M.**, *see* Soares, C. F. T., *TEVC June 2010 375-380*
Deb, K., Miettinen, K., and Chaudhuri, S., Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches; *TEVC Dec. 2010 821-841*
Deb, K., and Koksalan, M., Guest Editorial Special Issue on Preference-Based Multiobjective Evolutionary Algorithms; *TEVC Oct. 2010 669-670*
Deb, K., Sinha, A., Korhonen, P. J., and Wallenius, J., An Interactive Evolutionary Multiobjective Optimization Method Based on Progressively Approximated Value Functions; *TEVC Oct. 2010 723-739*
den Hertog, D., *see* Vladislavleva, E., *TEVC April 2010 252-277*
Dick, G., *see* Whigham, P. A., *TEVC April 2010 173-190*
Dumitrescu, D., *see* Stocan, C., *TEVC Dec. 2010 842-864*
Durillo, J. J., Nebro, A. J., Coello, C. A. C., Garcia-Nieto, J., Luna, F., and Alba, E., A Study of Multiobjective Metaheuristics When Solving Parameter Scalable Problems; *TEVC Aug. 2010 618-635*

F

- Farahmand, A.-M.**, Ahmadabadi, M. N., Lucas, C., and Araabi, B. N., Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design; *TEVC Feb. 2010 23-57*
Fernandez, A., Garcia, S., Luengo, J., Bernado-Mansilla, E., and Herrera, F., Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study; *TEVC Dec. 2010 913-941*
Fernando, P. R., Katkooori, S., Keymeulen, D., Zebulum, R., and Stoica, A., Customizable FPGA IP Core Implementation of a General-Purpose Genetic Algorithm Engine; *TEVC Feb. 2010 133-149*
Finck, S., *see* Beyer, H.-G., *TEVC June 2010 400-418*
Fonseca, C. M., *see* Carrano, E. G., *TEVC April 2010 206-226*
Fruhauf, F., *see* Colutto, S., *TEVC April 2010 227-245*
Fuchs, M., *see* Colutto, S., *TEVC April 2010 227-245*

G

- Garcia, S.**, *see* Fernandez, A., *TEVC Dec. 2010 913-941*
Garcia-Nieto, J., *see* Durillo, J. J., *TEVC Aug. 2010 618-635*
Ghedira, K., *see* Ben Said, L., *TEVC Oct. 2010 801-818*
Grogono, P., *see* Yao, J., *TEVC Feb. 2010 80-102*

H

- Habibullah, M. S.**, *see* Soh, H., *TEVC June 2010 419-437*
Handoko, S. D., Kwok, C. K., and Ong, Y.-S., Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms; *TEVC Oct. 2010 740-758*
Harris, C. J., *see* Chen, S., *TEVC Aug. 2010 477-499*
Herrera, F., *see* Fernandez, A., *TEVC Dec. 2010 913-941*
Hong, X., *see* Chen, S., *TEVC Aug. 2010 477-499*
Hu, Q.-H., *see* Teng, H.-F., *TEVC June 2010 438-455*
Hu, X.-M., Zhang, J., Yu, Y., Chung, H. S.-H., Li, Y.-L., Shi, Y.-H., and Luo, X.-N., Hybrid Genetic Algorithm Using a Forward Encoding Scheme for

Lifetime Maximization of Wireless Sensor Networks; *TEVC Oct. 2010* 766-781

Hung, T., see Soh, H., *TEVC June 2010* 419-437

Hyde, M., see Burke, E. K., *TEVC Dec. 2010* 942-958

I

Ishibuchi, H., Tsukamoto, N., and Nojima, Y., Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization; *TEVC Dec. 2010* 985-998

J

Jahan, M. V., and Akbarzadeh-Totonchi, M.-R., From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection; *TEVC Aug. 2010* 591-601

James, T., Brown, E., and Ragsdale, C. T., Grouping Genetic Algorithm for the Blockmodel Problem; *TEVC Feb. 2010* 103-111

Jin, Y., see Lim, D., *TEVC June 2010* 329-355

K

Karahan, I., and Koksalan, M., A Territory Defining Multiobjective Evolutionary Algorithms and Preference Incorporation; *TEVC Aug. 2010* 636-664

Karahan, I., see Koksalan, M., *TEVC Oct. 2010* 702-722

Katkoori, S., see Fernando, P. R., *TEVC Feb. 2010* 133-149

Kendall, G., see Bai, R., *TEVC Aug. 2010* 580-590

Kendall, G., see Burke, E. K., *TEVC Dec. 2010* 942-958

Keymeulen, D., see Fernando, P. R., *TEVC Feb. 2010* 133-149

Kharma, N., see Yao, J., *TEVC Feb. 2010* 80-102

Koksalan, M., and Karahan, I., An Interactive Territory Defining Evolutionary Algorithm: iTDEA; *TEVC Oct. 2010* 702-722

Koksalan, M., see Soylu, B., *TEVC April 2010* 191-205

Koksalan, M., see Karahan, I., *TEVC Aug. 2010* 636-664

Koksalan, M., see Deb, K., *TEVC Oct. 2010* 669-670

Korhonen, P. J., see Deb, K., *TEVC Oct. 2010* 723-739

Kuo, J.-L., see Soh, H., *TEVC June 2010* 419-437

Kwoh, C. K., see Handoko, S. D., *TEVC Oct. 2010* 740-758

L

Lam, A. Y. S., and Li, V. O. K., Chemical-Reaction-Inspired Metaheuristic for Optimization; *TEVC June 2010* 381-399

Lara, A., Sanchez, G., Coello, C. A. C., and Schutze, O., HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms; *TEVC Feb. 2010* 112-132

Li, C., see Yang, S., *TEVC Dec. 2010* 959-974

Li, J., see Bai, R., *TEVC Aug. 2010* 580-590

Li, V. O. K., see Lam, A. Y. S., *TEVC June 2010* 381-399

Li, X., Erratum to "Niching Without Niching Parameters: Particle Swarm Optimization Using a Ring Topology" [Feb 10 150-169]; *TEVC Aug. 2010* 665

Li, X., Niching Without Niching Parameters: Particle Swarm Optimization Using a Ring Topology; *TEVC Feb. 2010* 150-169

Li, Y.-L., see Hu, X.-M., *TEVC Oct. 2010* 766-781

Lim, D., Jin, Y., Ong, Y.-S., and Sendhoff, B., Generalizing Surrogate-Assisted Evolutionary Computation; *TEVC June 2010* 329-355

Liu, W., see Zhang, Q., *TEVC June 2010* 456-474

Louis, S. J., see Shankar, A., *TEVC Aug. 2010* 547-560

Lucas, C., see Farahmand, A.-M., *TEVC Feb. 2010* 23-57

Luengo, J., see Fernandez, A., *TEVC Dec. 2010* 913-941

Luna, F., see Durillo, J. J., *TEVC Aug. 2010* 618-635

Luo, X.-N., see Hu, X.-M., *TEVC Oct. 2010* 766-781

M

Mallipeddi, R., and Suganthan, P. N., Ensemble of Constraint Handling Techniques; *TEVC Aug. 2010* 561-579

Massera, G., see Tuci, E., *TEVC Dec. 2010* 885-899

McCollum, B., see Bai, R., *TEVC Aug. 2010* 580-590

Miettinen, K., see Deb, K., *TEVC Dec. 2010* 821-841

Moon, B.-R., see Oh, S., *TEVC April 2010* 246-251

N

Naldi, M., see Salcedo-Sanz, S., *TEVC Aug. 2010* 602-617

Nebro, A. J., see Durillo, J. J., *TEVC Aug. 2010* 618-635

Neto, O. M., see Carrano, E. G., *TEVC April 2010* 206-226

Nguyen, Q. C., see Soh, H., *TEVC June 2010* 419-437

Nguyen, Q. H., see Soh, H., *TEVC June 2010* 419-437

Nojima, Y., see Ishibuchi, H., *TEVC Dec. 2010* 985-998

Nolfi, S., see Tuci, E., *TEVC Dec. 2010* 885-899

O

Oh, S., and Moon, B.-R., Automatic Reproduction of a Genius Algorithm: Strassen's Algorithm Revisited by Genetic Search; *TEVC April 2010* 246-251

Ong, Y.-S., see Handoko, S. D., *TEVC Oct. 2010* 740-758

Ong, Y.-S., see Lim, D., *TEVC June 2010* 329-355

Ong, Y.-S., see Soh, H., *TEVC June 2010* 419-437

Ortiz-Garcia, E. G., see Salcedo-Sanz, S., *TEVC Aug. 2010* 602-617

P

Park, T., and Ryu, K. R., A Dual-Population Genetic Algorithm for Adaptive Diversity Control; *TEVC Dec. 2010* 865-884

Passerini, A., see Battiti, R., *TEVC Oct. 2010* 671-687

Peng, F., Tang, K., Chen, G., and Yao, X., Population-Based Algorithm Portfolios for Numerical Optimization; *TEVC Oct. 2010* 782-800

Perez-Bellido, A. M., see Salcedo-Sanz, S., *TEVC Aug. 2010* 602-617

Petraglia, A., see Soares, C. F. T., *TEVC June 2010* 375-380

Polani, D., see Steuernagel, O., *TEVC Oct. 2010* 759-765

Portilla-Figueras, J. A., see Salcedo-Sanz, S., *TEVC Aug. 2010* 602-617

Preuss, M., see Stocan, C., *TEVC Dec. 2010* 842-864

Prugel-Bennett, A., see Qasem, M., *TEVC Aug. 2010* 518-529

Prugel-Bennett, A., Benefits of a Population: Five Mechanisms That Advantage Population-Based Algorithms; *TEVC Aug. 2010* 500-517

Q

Qasem, M., and Prugel-Bennett, A., Learning the Large-Scale Structure of the MAX-SAT Landscape Using Populations; *TEVC Aug. 2010* 518-529

R

Rachmawati, L., and Srinivasan, D., Incorporating the Notion of Relative Importance of Objectives in Evolutionary Multiobjective Optimization; *TEVC Aug. 2010* 530-546

Ragsdale, C. T., see James, T., *TEVC Feb. 2010* 103-111

Rohlfshagen, P., see Xing, L., *TEVC June 2010* 356-374

Ryu, K. R., see Park, T., *TEVC Dec. 2010* 865-884

S

Salcedo-Sanz, S., Naldi, M., Perez-Bellido, A. M., Portilla-Figueras, J. A., and Ortiz-Garcia, E. G., Evolutionary Optimization of Service Times in Interactive Voice Response Systems; *TEVC Aug. 2010* 602-617

Sanchez, G., see Lara, A., *TEVC Feb. 2010* 112-132

Scherzer, O., see Colutto, S., *TEVC April 2010* 227-245

Schutze, O., see Lara, A., *TEVC Feb. 2010* 112-132

Sendhoff, B., see Lim, D., *TEVC June 2010* 329-355

Shankar, A., and Louis, S. J., XCS for Personalizing Desktop Interfaces; *TEVC Aug. 2010* 547-560

Shapiro, A. A., see Yorgev, O., *TEVC April 2010* 301-325

Shi, Y.-H., see Chen, W.-N., *TEVC April 2010* 278-300

Shi, Y.-H., see Hu, X.-M., *TEVC Oct. 2010* 766-781

Shi, Y.-J., see Teng, H.-F., *TEVC June 2010* 438-455

Sinha, A., see Deb, K., *TEVC Oct. 2010* 723-739

- Smits, G.**, see Vladislavleva, E., *TEVC April 2010 252-277*
- Soares, C. F. T.**, de Filho, A. C. M., and Petraglia, A., Optimizing Capacitance Ratio Assignment for Low-Sensitivity SC Filter Implementation; *TEVC June 2010 375-380*
- Soh, H.**, Ong, Y.-S., Nguyen, Q. C., Nguyen, Q. H., Habibullah, M. S., Hung, T., and Kuo, J.-L., Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis; *TEVC June 2010 419-437*
- Soylu, B.**, and Koksalan, M., A Favorable Weight-Based Evolutionary Algorithm for Multiple Criteria Problems; *TEVC April 2010 191-205*
- Srinivasan, D.**, see Rachmawati, L., *TEVC Aug. 2010 530-546*
- Steuernagel, O.**, and Polani, D., Multiobjective Optimization Applied to the Eradication of Persistent Pathogens; *TEVC Oct. 2010 759-765*
- Stoean, C.**, Preuss, M., Stoean, R., and Dumitrescu, D., Multimodal Optimization by Means of a Topological Species Conservation Algorithm; *TEVC Dec. 2010 842-864*
- Stoean, R.**, see Stoean, C., *TEVC Dec. 2010 842-864*
- Stoica, A.**, see Fernando, P. R., *TEVC Feb. 2010 133-149*
- Sudhoff, S. D.**, see Chan, R. R., *TEVC Dec. 2010 900-912*
- Suganthan, P. N.**, see Mallipeddi, R., *TEVC Aug. 2010 561-579*

T

- Takahashi, R. H. C.**, see Carrano, E. G., *TEVC April 2010 206-226*
- Tang, K.**, see Chen, T., *TEVC Feb. 2010 1-22*
- Tang, K.**, see Peng, F., *TEVC Oct. 2010 782-800*
- Teng, H.-F.**, Chen, Y., Zeng, W., Shi, Y.-J., and Hu, Q.-H., A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design; *TEVC June 2010 438-455*
- Thiele, L.**, see Zitzler, E., *TEVC Feb. 2010 58-79*
- Trautmann, H.**, see Wagner, T., *TEVC Oct. 2010 688-701*
- Tsang, E.**, see Zhang, Q., *TEVC June 2010 456-474*
- Tsukamoto, N.**, see Ishibuchi, H., *TEVC Dec. 2010 985-998*
- Tuci, E.**, Massera, G., and Nolfi, S., Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm; *TEVC Dec. 2010 885-899*

V

- Virginas, B.**, see Zhang, Q., *TEVC June 2010 456-474*
- Vladislavleva, E.**, Smits, G., and den Hertog, D., On the Importance of Data Balancing for Symbolic Regression; *TEVC April 2010 252-277*

W

- Wagner, T.**, and Trautmann, H., Integration of Preferences in Hypervolume-Based Multiobjective Evolutionary Algorithms by Means of Desirability Functions; *TEVC Oct. 2010 688-701*
- Wallenius, J.**, see Deb, K., *TEVC Oct. 2010 723-739*
- Whigham, P. A.**, and Dick, G., Implicitly Controlling Bloat in Genetic Programming; *TEVC April 2010 173-190*
- Woodward, J.**, see Burke, E. K., *TEVC Dec. 2010 942-958*
- Wu, W.-G.**, see Chen, W.-N., *TEVC April 2010 278-300*

X

- Xing, L.**, Rohlfschagen, P., Chen, Y., and Yao, X., An Evolutionary Approach to the Multidepot Capacitated Arc Routing Problem; *TEVC June 2010 356-374*

Y

- Yang, S.**, and Li, C., A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments; *TEVC Dec. 2010 959-974*
- Yao, J.**, Kharmra, N., and Grogono, P., Bi-Objective Multipopulation Genetic Algorithm for Multimodal Function Optimization; *TEVC Feb. 2010 80-102*
- Yao, X.**, see Xing, L., *TEVC June 2010 356-374*
- Yao, X.**, see Chen, T., *TEVC Feb. 2010 1-22*

- Yao, X.**, see Peng, F., *TEVC Oct. 2010 782-800*
- Yogev, O.**, Shapiro, A. A., and Antonsson, E. K., Computational Evolutionary Embryogeny; *TEVC April 2010 301-325*
- Yu, Y.**, see Hu, X.-M., *TEVC Oct. 2010 766-781*

Z

- Zamani, R.**, An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem; *TEVC Dec. 2010 975-984*
- Zebulum, R.**, see Fernando, P. R., *TEVC Feb. 2010 133-149*
- Zeng, W.**, see Teng, H.-F., *TEVC June 2010 438-455*
- Zhang, J.**, see Chen, W.-N., *TEVC April 2010 278-300*
- Zhang, J.**, see Hu, X.-M., *TEVC Oct. 2010 766-781*
- Zhang, Q.**, Liu, W., Tsang, E., and Virginas, B., Expensive Multiobjective Optimization by MOEA/D With Gaussian Process Model; *TEVC June 2010 456-474*
- Zhong, W.-L.**, see Chen, W.-N., *TEVC April 2010 278-300*
- Zitzler, E.**, Thiele, L., and Bader, J., On Set-Based Multiobjective Optimization; *TEVC Feb. 2010 58-79*

SUBJECT INDEX

A

Actuators

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M.*, +, *TEVC Feb. 2010 23-57*

Agricultural safety

Multiobjective Optimization Applied to the Eradication of Persistent Pathogens. *Steuernagel, O.*, +, *TEVC Oct. 2010 759-765*

Algorithm design and analysis

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010 959-974*

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010 900-912*

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H.*, +, *TEVC Dec. 2010 985-998*

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A.*, +, *TEVC Dec. 2010 913-941*

Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoean, C.*, +, *TEVC Dec. 2010 842-864*

Approximation theory

Generalizing Surrogate-Assisted Evolutionary Computation. *Lim, D.*, +, *TEVC June 2010 329-355*

Artificial intelligence

From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection. *Jahan, M. V.*, +, *TEVC Aug. 2010 591-601*

Artificial neural networks

Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm. *Tuci, E.*, +, *TEVC Dec. 2010 885-899*

Artificial satellites

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F.*, +, *TEVC June 2010 438-455*

B

Benchmark testing

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010 900-912*

Bilinear systems

Automatic Reproduction of a Genius Algorithm: Strassen's Algorithm Revisited by Genetic Search. *Oh, S.*, +, *TEVC April 2010 246-251*

Bioinformatics

An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010 975-984*

Biological cells

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A.*, +, *TEVC Dec. 2010* 913-941

Biology computing

Computational Evolutionary Embryogeny. *Yogev, O.*, +, *TEVC April 2010* 301-325

Boolean functions

Analysis of Computational Time of Simple Estimation of Distribution Algorithms. *Chen, T.*, +, *TEVC Feb. 2010* 1-22

Brain-computer interfaces

Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R.*, +, *TEVC Oct. 2010* 671-687

C**Call centers**

Evolutionary Optimization of Service Times in Interactive Voice Response Systems. *Salcedo-Sanz, S.*, +, *TEVC Aug. 2010* 602-617

Cellular biophysics

Computational Evolutionary Embryogeny. *Yogev, O.*, +, *TEVC April 2010* 301-325

Chemical reactions

Chemical-Reaction-Inspired Metaheuristic for Optimization. *Lam, A. Y. S.*, +, *TEVC June 2010* 381-399

Classification

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A.*, +, *TEVC Dec. 2010* 913-941

Clustering algorithms

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010* 959-974

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010* 959-974

Combinatorial mathematics

Chemical-Reaction-Inspired Metaheuristic for Optimization. *Lam, A. Y. S.*, +, *TEVC June 2010* 381-399

Computability

Learning the Large-Scale Structure of the MAX-SAT Landscape Using Populations. *Qasem, M.*, +, *TEVC Aug. 2010* 518-529

Computational complexity

Analysis of Computational Time of Simple Estimation of Distribution Algorithms. *Chen, T.*, +, *TEVC Feb. 2010* 1-22

Chemical-Reaction-Inspired Metaheuristic for Optimization. *Lam, A. Y. S.*, +, *TEVC June 2010* 381-399

From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection. *Jahan, M. V.*, +, *TEVC Aug. 2010* 591-601

Learning the Large-Scale Structure of the MAX-SAT Landscape Using Populations. *Qasem, M.*, +, *TEVC Aug. 2010* 518-529

Constraint handling

A Hybrid Evolutionary Approach to the Nurse Rostering Problem. *Bai, R.*, +, *TEVC Aug. 2010* 580-590

Ensemble of Constraint Handling Techniques. *Mallipeddi, R.*, +, *TEVC Aug. 2010* 561-579

Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms. *Handoko, S. D.*, +, *TEVC Oct. 2010* 740-758

Control engineering computing

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M.*, +, *TEVC Feb. 2010* 23-57

Convergence

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010* 959-974

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H.*, +, *TEVC Dec. 2010* 985-998

Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms. *Handoko, S. D.*, +, *TEVC Oct. 2010* 740-758

Cooperative systems

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F.*, +, *TEVC June 2010* 438-455

Covariance matrices

Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S.*, +, *TEVC Aug. 2010* 477-499

The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S.*, +, *TEVC April 2010* 227-245

Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoeran, C.*, +, *TEVC Dec. 2010* 842-864

Crops

Multiobjective Optimization Applied to the Eradication of Persistent Pathogens. *Steuernagel, O.*, +, *TEVC Oct. 2010* 759-765

D**Data analysis**

On the Importance of Data Balancing for Symbolic Regression. *Vladislavleva, E.*, +, *TEVC April 2010* 252-277

Data handling

Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S.*, +, *TEVC Aug. 2010* 477-499

Decision making

A Territory Defining Multiobjective Evolutionary Algorithms and Preference Incorporation. *Karahan, I.*, +, *TEVC Aug. 2010* 636-664

An Interactive Territory Defining Evolutionary Algorithm: iTDEA. *Koksalan, M.*, +, *TEVC Oct. 2010* 702-722

Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R.*, +, *TEVC Oct. 2010* 671-687

Guest Editorial Special Issue on Preference-Based Multiobjective Evolutionary Algorithms. *Deb, K.*, +, *TEVC Oct. 2010* 669-670

Integration of Preferences in Hypervolume-Based Multiobjective Evolutionary Algorithms by Means of Desirability Functions. *Wagner, T.*, +, *TEVC Oct. 2010* 688-701

The r-Dominance: A New Dominance Relation for Interactive Evolutionary Multicriteria Decision Making. *Ben Said, L.*, +, *TEVC Oct. 2010* 801-818

Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K.*, +, *TEVC Dec. 2010* 821-841

Decision trees

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A.*, +, *TEVC Dec. 2010* 913-941

XCS for Personalizing Desktop Interfaces. *Shankar, A.*, +, *TEVC Aug. 2010* 547-560

Design engineering

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F.*, +, *TEVC June 2010* 438-455

Detectors

Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoeran, C.*, +, *TEVC Dec. 2010* 842-864

Distributed algorithms

Analysis of Computational Time of Simple Estimation of Distribution Algorithms. *Chen, T.*, +, *TEVC Feb. 2010* 1-22

Diversity reception

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884

DNA

Computational Evolutionary Embryogeny. *Yogev, O.*, +, *TEVC April 2010* 301-325

E**Electromagnets**

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010* 900-912

Encoding

An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010* 975-984

Evolutionary Optimization of Service Times in Interactive Voice Response Systems. *Salcedo-Sanz, S.*, +, *TEVC Aug. 2010* 602-617

Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010* 766-781

Energy conservation

Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010* 766-781

Estimation

Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K.*, +, *TEVC Dec. 2010* 821-841
Analysis of Computational Time of Simple Estimation of Distribution Algorithms. *Chen, T.*, +, *TEVC Feb. 2010* 1-22

Euclidean distance

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H.*, +, *TEVC Dec. 2010* 985-998

Evolutionary computation

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F.*, +, *TEVC June 2010* 438-455
A Favorable Weight-Based Evolutionary Algorithm for Multiple Criteria Problems. *Soylu, B.*, +, *TEVC April 2010* 191-205
A Territory Defining Multiobjective Evolutionary Algorithms and Preference Incorporation. *Karahan, I.*, +, *TEVC Aug. 2010* 636-664
An Evolutionary Approach to the Multidepot Capacitated Arc Routing Problem. *Xing, L.*, +, *TEVC June 2010* 356-374
An Interactive Evolutionary Multiobjective Optimization Method Based on Progressively Approximated Value Functions. *Deb, K.*, +, *TEVC Oct. 2010* 723-739
An Interactive Territory Defining Evolutionary Algorithm: iTDEA. *Koksalan, M.*, +, *TEVC Oct. 2010* 702-722
Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R.*, +, *TEVC Oct. 2010* 671-687
Computational Evolutionary Embryogeny. *Yogev, O.*, +, *TEVC April 2010* 301-325
Ensemble of Constraint Handling Techniques. *Mallipeddi, R.*, +, *TEVC Aug. 2010* 561-579
Evolutionary Optimization of Service Times in Interactive Voice Response Systems. *Salcedo-Sanz, S.*, +, *TEVC Aug. 2010* 602-617
Expensive Multiobjective Optimization by MOEA/D With Gaussian Process Model. *Zhang, Q.*, +, *TEVC June 2010* 456-474
Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms. *Handoko, S. D.*, +, *TEVC Oct. 2010* 740-758
Generalizing Surrogate-Assisted Evolutionary Computation. *Lim, D.*, +, *TEVC June 2010* 329-355
Guest Editorial Special Issue on Preference-Based Multiobjective Evolutionary Algorithms. *Deb, K.*, +, *TEVC Oct. 2010* 669-670
HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. *Lara, A.*, +, *TEVC Feb. 2010* 112-132
Integration of Preferences in Hypervolume-Based Multiobjective Evolutionary Algorithms by Means of Desirability Functions. *Wagner, T.*, +, *TEVC Oct. 2010* 688-701
On Set-Based Multiobjective Optimization. *Zitzler, E.*, +, *TEVC Feb. 2010* 58-79
The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S.*, +, *TEVC April 2010* 227-245
The r-Dominance: A New Dominance Relation for Interactive Evolutionary Multicriteria Decision Making. *Ben Said, L.*, +, *TEVC Oct. 2010* 801-818

F

Field programmable gate arrays

Customizable FPGA IP Core Implementation of a General-Purpose Genetic Algorithm Engine. *Fernando, P. R.*, +, *TEVC Feb. 2010* 133-149

Frequency response

Optimizing Capacitance Ratio Assignment for Low-Sensitivity SC Filter Implementation. *Soares, C. F. T.*, +, *TEVC June 2010* 375-380

Functions

Performance of the $(\mu/\mu_I, \lambda)$ - σ SA-ES on a Class of PDQFs. *Beyer, H.-G.*, +, *TEVC June 2010* 400-418

+ Check author entry for coauthors

G

Gaussian processes

Expensive Multiobjective Optimization by MOEA/D With Gaussian Process Model. *Zhang, Q.*, +, *TEVC June 2010* 456-474

Genetic algorithms

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884
A Hybrid Evolutionary Approach to the Nurse Rostering Problem. *Bai, R.*, +, *TEVC Aug. 2010* 580-590
An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010* 975-984
An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010* 900-912
Automatic Reproduction of a Genius Algorithm: Strassen's Algorithm Revisited by Genetic Search. *Oh, S.*, +, *TEVC April 2010* 246-251
Bi-Objective Multipopulation Genetic Algorithm for Multimodal Function Optimization. *Yao, J.*, +, *TEVC Feb. 2010* 80-102
Customizable FPGA IP Core Implementation of a General-Purpose Genetic Algorithm Engine. *Fernando, P. R.*, +, *TEVC Feb. 2010* 133-149
Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis. *Soh, H.*, +, *TEVC June 2010* 419-437
From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection. *Jahan, M. V.*, +, *TEVC Aug. 2010* 591-601
Grouping Genetic Algorithm for the Blockmodel Problem. *James, T.*, +, *TEVC Feb. 2010* 103-111
Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010* 766-781
Implicitly Controlling Bloat in Genetic Programming. *Whigham, P. A.*, +, *TEVC April 2010* 173-190
Incorporating the Notion of Relative Importance of Objectives in Evolutionary Multiobjective Optimization. *Rachmawati, L.*, +, *TEVC Aug. 2010* 530-546
Nonlinear Network Optimization—An Embedding Vector Space Approach. *Carrano, E. G.*, +, *TEVC April 2010* 206-226
Optimizing Capacitance Ratio Assignment for Low-Sensitivity SC Filter Implementation. *Soares, C. F. T.*, +, *TEVC June 2010* 375-380
XCS for Personalizing Desktop Interfaces. *Shankar, A.*, +, *TEVC Aug. 2010* 547-560

Genetic programming

A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics. *Burke, E. K.*, +, *TEVC Dec. 2010* 942-958

Genetics

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884
An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010* 975-984

Geometry

HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. *Lara, A.*, +, *TEVC Feb. 2010* 112-132

Gradient methods

The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S.*, +, *TEVC April 2010* 227-245

H

Hamming distance

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H.*, +, *TEVC Dec. 2010* 985-998

Heuristic algorithms

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010* 959-974
A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T.*, +, *TEVC Dec. 2010* 865-884
A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics. *Burke, E. K.*, +, *TEVC Dec. 2010* 942-958

Hopfield neural networks

From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection. *Jahan, M. V., +, TEVC Aug. 2010 591-601*

Human computer interaction

Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R., +, TEVC Oct. 2010 671-687*

XCS for Personalizing Desktop Interfaces. *Shankar, A., +, TEVC Aug. 2010 547-560*

Human factors

A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics. *Burke, E. K., +, TEVC Dec. 2010 942-958*

I**IEEE**

Acknowledgment to Reviewers. , *TEVC Dec. 2010 999-1002*

Image reconstruction

The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S., +, TEVC April 2010 227-245*

Image segmentation

The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S., +, TEVC April 2010 227-245*

Integrated circuit layout

Optimizing Capacitance Ratio Assignment for Low-Sensitivity SC Filter Implementation. *Soares, C. F. T., +, TEVC June 2010 375-380*

Interactive systems

The r-Dominance: A New Dominance Relation for Interactive Evolutionary Multicriteria Decision Making. *Ben Said, L., +, TEVC Oct. 2010 801-818*

Isomerism

Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis. *Soh, H., +, TEVC June 2010 419-437*

Iterative methods

An Interactive Evolutionary Multiobjective Optimization Method Based on Progressively Approximated Value Functions. *Deb, K., +, TEVC Oct. 2010 723-739*

HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. *Lara, A., +, TEVC Feb. 2010 112-132*

On the Importance of Data Balancing for Symbolic Regression. *Vladislavleva, E., +, TEVC April 2010 252-277*

K**Knapsack problems**

A Novel Set-Based Particle Swarm Optimization Method for Discrete Optimization Problems. *Chen, W.-N., +, TEVC April 2010 278-300*

L**Large-scale systems**

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F., +, TEVC June 2010 438-455*

Learning (artificial intelligence)

Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R., +, TEVC Oct. 2010 671-687*

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M., +, TEVC Feb. 2010 23-57*

XCS for Personalizing Desktop Interfaces. *Shankar, A., +, TEVC Aug. 2010 547-560*

M**Machine learning**

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A., +, TEVC Dec. 2010 913-941*

Machine learning algorithms

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A., +, TEVC Dec. 2010 913-941*

Maintenance engineering

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H., +, TEVC Dec. 2010 985-998*

Manifolds

The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S., +, TEVC April 2010 227-245*

Matrix multiplication

Automatic Reproduction of a Genius Algorithm: Strassen's Algorithm Revisited by Genetic Search. *Oh, S., +, TEVC April 2010 246-251*

Mean square error methods

Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S., +, TEVC Aug. 2010 477-499*

Metastable states

Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis. *Soh, H., +, TEVC June 2010 419-437*

Microorganisms

Multiobjective Optimization Applied to the Eradication of Persistent Pathogens. *Steuernagel, O., +, TEVC Oct. 2010 759-765*

Minimization

Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K., +, TEVC Dec. 2010 821-841*

Molecular clusters

Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis. *Soh, H., +, TEVC June 2010 419-437*

Multi-robot systems

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M., +, TEVC Feb. 2010 23-57*

N**Network theory (graphs)**

Grouping Genetic Algorithm for the Blockmodel Problem. *James, T., +, TEVC Feb. 2010 103-111*

Neurons

Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm. *Tuci, E., +, TEVC Dec. 2010 885-899*

Next generation networking

A Dual-Population Genetic Algorithm for Adaptive Diversity Control. *Park, T., +, TEVC Dec. 2010 865-884*

Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoian, C., +, TEVC Dec. 2010 842-864*

O**Optimization**

An Interactive Territory Defining Evolutionary Algorithm: iTDEA. *Koksalan, M., +, TEVC Oct. 2010 702-722*

Benefits of a Population: Five Mechanisms That Advantage Population-Based Algorithms. *Prugel-Bennett, A., +, TEVC Aug. 2010 500-517*

Brain-Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. *Battiti, R., +, TEVC Oct. 2010 671-687*

Chemical-Reaction-Inspired Metaheuristic for Optimization. *Lam, A. Y. S., +, TEVC June 2010 381-399*

A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S., +, TEVC Dec. 2010 959-974*

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R., +, TEVC Dec. 2010 900-912*

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H., +, TEVC Dec. 2010 985-998*

Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms. *Handoko, S. D., +, TEVC Oct. 2010 740-758*

Learning the Large-Scale Structure of the MAX-SAT Landscape Using Populations. *Qasem, M., +, TEVC Aug. 2010 518-529*

Multiobjective Optimization Applied to the Eradication of Persistent Pathogens. *Steuernagel, O.*, +, *TEVC Oct. 2010 759-765*
 Population-Based Algorithm Portfolios for Numerical Optimization. *Peng, F.*, +, *TEVC Oct. 2010 782-800*
 Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoan, C.*, +, *TEVC Dec. 2010 842-864*
 Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K.*, +, *TEVC Dec. 2010 821-841*

P

Pareto analysis

A Favorable Weight-Based Evolutionary Algorithm for Multiple Criteria Problems. *Soylu, B.*, +, *TEVC April 2010 191-205*
 A Study of Multiobjective Metaheuristics When Solving Parameter Scalable Problems. *Durillo, J. J.*, +, *TEVC Aug. 2010 618-635*
 A Territory Defining Multiobjective Evolutionary Algorithms and Preference Incorporation. *Karahan, I.*, +, *TEVC Aug. 2010 636-664*
 HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. *Lara, A.*, +, *TEVC Feb. 2010 112-132*
 Incorporating the Notion of Relative Importance of Objectives in Evolutionary Multiobjective Optimization. *Rachmawati, L.*, +, *TEVC Aug. 2010 530-546*
 Integration of Preferences in Hypervolume-Based Multiobjective Evolutionary Algorithms by Means of Desirability Functions. *Wagner, T.*, +, *TEVC Oct. 2010 688-701*
 On Set-Based Multiobjective Optimization. *Zitzler, E.*, +, *TEVC Feb. 2010 58-79*
 The r-Dominance: A New Dominance Relation for Interactive Evolutionary Multicriteria Decision Making. *Ben Said, L.*, +, *TEVC Oct. 2010 801-818*
 Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K.*, +, *TEVC Dec. 2010 821-841*

Particle swarm optimization

A Novel Set-Based Particle Swarm Optimization Method for Discrete Optimization Problems. *Chen, W.-N.*, +, *TEVC April 2010 278-300*
 A Study of Multiobjective Metaheuristics When Solving Parameter Scalable Problems. *Durillo, J. J.*, +, *TEVC Aug. 2010 618-635*
 Niching Without Niching Parameters: Particle Swarm Optimization Using a Ring Topology. *Li, X.*, +, *TEVC Feb. 2010 150-169*
 Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S.*, +, *TEVC Aug. 2010 477-499*
 The CMA-ES on Riemannian Manifolds to Reconstruct Shapes in 3-D Voxel Images. *Colutto, S.*, +, *TEVC April 2010 227-245*
 A Clustering Particle Swarm Optimizer for Locating and Tracking Multiple Optima in Dynamic Environments. *Yang, S.*, +, *TEVC Dec. 2010 959-974*
 Erratum to "Niching Without Niching Parameters: Particle Swarm Optimization Using a Ring Topology" [Feb 10 150-169]. *Li, X.*, +, *TEVC Aug. 2010 665*

Pattern recognition

Feasibility Structure Modeling: An Effective Chaperone for Constrained Memetic Algorithms. *Handoko, S. D.*, +, *TEVC Oct. 2010 740-758*

Pest control

Multiobjective Optimization Applied to the Eradication of Persistent Pathogens. *Steuernagel, O.*, +, *TEVC Oct. 2010 759-765*

Probability

Diversity Improvement by Non-Geometric Binary Crossover in Evolutionary Multiobjective Optimization. *Ishibuchi, H.*, +, *TEVC Dec. 2010 985-998*

Problem solving

A Dual-System Variable-Grain Cooperative Coevolutionary Algorithm: Satellite-Module Layout Design. *Teng, H.-F.*, +, *TEVC June 2010 438-455*

R

Radial basis function networks

Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S.*, +, *TEVC Aug. 2010 477-499*

Real-time systems

Customizable FPGA IP Core Implementation of a General-Purpose Genetic Algorithm Engine. *Fernando, P. R.*, +, *TEVC Feb. 2010 133-149*

Regression analysis

On the Importance of Data Balancing for Symbolic Regression. *Vladislavleva, E.*, +, *TEVC April 2010 252-277*

Particle Swarm Optimization Aided Orthogonal Forward Regression for Unified Data Modeling. *Chen, S.*, +, *TEVC Aug. 2010 477-499*

Robot kinematics

Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm. *Tuci, E.*, +, *TEVC Dec. 2010 885-899*

Robot sensing systems

Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm. *Tuci, E.*, +, *TEVC Dec. 2010 885-899*

Robotics

Active Categorical Perception of Object Shapes in a Simulated Anthropomorphic Robotic Arm. *Tuci, E.*, +, *TEVC Dec. 2010 885-899*

Robustness

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010 900-912*

S

Search methods

An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010 975-984*
 A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics. *Burke, E. K.*, +, *TEVC Dec. 2010 942-958*
 A Hybrid Evolutionary Approach to the Nurse Rostering Problem. *Bai, R.*, +, *TEVC Aug. 2010 580-590*
 An Interactive Territory Defining Evolutionary Algorithm: iTDEA. *Koksalan, M.*, +, *TEVC Oct. 2010 702-722*
 Automatic Reproduction of a Genius Algorithm: Strassen's Algorithm Revisited by Genetic Search. *Oh, S.*, +, *TEVC April 2010 246-251*
 Benefits of a Population: Five Mechanisms That Advantage Population-Based Algorithms. *Prugel-Bennett, A.*, +, *TEVC Aug. 2010 500-517*
 Bi-Objective Multipopulation Genetic Algorithm for Multimodal Function Optimization. *Yao, J.*, +, *TEVC Feb. 2010 80-102*
 Generalizing Surrogate-Assisted Evolutionary Computation. *Lim, D.*, +, *TEVC June 2010 329-355*
 Population-Based Algorithm Portfolios for Numerical Optimization. *Peng, F.*, +, *TEVC Oct. 2010 782-800*
 Toward an Estimation of Nadir Objective Vector Using a Hybrid of Evolutionary and Local Search Approaches. *Deb, K.*, +, *TEVC Dec. 2010 821-841*

Self-adjusting systems

Performance of the $(\mu/\mu_T, \lambda)$ - σ SA-ES on a Class of PDQFs. *Beyer, H.-G.*, +, *TEVC June 2010 400-418*

Sensor placement

Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010 766-781*

Sensors

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M.*, +, *TEVC Feb. 2010 23-57*

Set theory

A Novel Set-Based Particle Swarm Optimization Method for Discrete Optimization Problems. *Chen, W.-N.*, +, *TEVC April 2010 278-300*
 Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010 766-781*
 On Set-Based Multiobjective Optimization. *Zitzler, E.*, +, *TEVC Feb. 2010 58-79*
 On the Importance of Data Balancing for Symbolic Regression. *Vladislavleva, E.*, +, *TEVC April 2010 252-277*

Simulated annealing

A Genetic Programming Hyper-Heuristic Approach for Evolving 2-D Strip Packing Heuristics. *Burke, E. K.*, +, *TEVC Dec. 2010 942-958*
 A Hybrid Evolutionary Approach to the Nurse Rostering Problem. *Bai, R.*, +, *TEVC Aug. 2010 580-590*
 From Local Search to Global Conclusions: Migrating Spin Glass-Based Distributed Portfolio Selection. *Jahan, M. V.*, +, *TEVC Aug. 2010 591-601*

Sorting

HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. *Lara, A.*, +, *TEVC Feb. 2010 112-132*

Special issues and sections

Guest Editorial Special Issue on Preference-Based Multiobjective Evolutionary Algorithms. *Deb, K.*, +, *TEVC Oct. 2010 669-670*

Statistical analysis

On Set-Based Multiobjective Optimization. *Zitzler, E.*, +, *TEVC Feb. 2010* 58-79

Stochastic processes

A Hybrid Evolutionary Approach to the Nurse Rostering Problem. *Bai, R.*, +, *TEVC Aug. 2010* 580-590

Stochastic programming

Analysis of Computational Time of Simple Estimation of Distribution Algorithms. *Chen, T.*, +, *TEVC Feb. 2010* 1-22

Switched capacitor filters

Optimizing Capacitance Ratio Assignment for Low-Sensitivity SC Filter Implementation. *Soares, C. F. T.*, +, *TEVC June 2010* 375-380

Symbol manipulation

On the Importance of Data Balancing for Symbolic Regression. *Vladislavleva, E.*, +, *TEVC April 2010* 252-277

Systematics

An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010* 975-984

T**Taxonomy**

Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. *Fernandez, A.*, +, *TEVC Dec. 2010* 913-941

Time-varying systems

Performance of the $(\mu/\mu_I, \lambda)$ - σ SA-ES on a Class of PDQFs. *Beyer, H.-G.*, +, *TEVC June 2010* 400-418

Topology

Erratum to "Niching Without Niching Parameters: Particle Swarm Optimization Using a Ring Topology" [Feb 10 150-169]. *Li, X.*, +, *TEVC Aug. 2010* 665

Multimodal Optimization by Means of a Topological Species Conservation Algorithm. *Stoan, C.*, +, *TEVC Dec. 2010* 842-864

Transient analysis

An Accelerating Two-Layer Anchor Search With Application to the Resource-Constrained Project Scheduling Problem. *Zamani, R.*, +, *TEVC Dec. 2010* 975-984

Transportation

An Evolutionary Approach to the Multidepot Capacitated Arc Routing Problem. *Xing, L.*, +, *TEVC June 2010* 356-374

Traveling salesman problems

A Novel Set-Based Particle Swarm Optimization Method for Discrete Optimization Problems. *Chen, W.-N.*, +, *TEVC April 2010* 278-300

Tree data structures

Implicitly Controlling Bloat in Genetic Programming. *Whigham, P. A.*, +, *TEVC April 2010* 173-190

Evolutionary Optimization of Service Times in Interactive Voice Response Systems. *Salcedo-Sanz, S.*, +, *TEVC Aug. 2010* 602-617

Implicitly Controlling Bloat in Genetic Programming. *Whigham, P. A.*, +, *TEVC April 2010* 173-190

Nonlinear Network Optimization—An Embedding Vector Space Approach. *Carrano, E. G.*, +, *TEVC April 2010* 206-226

Turning (maching)

Integration of Preferences in Hypervolume-Based Multiobjective Evolutionary Algorithms by Means of Desirability Functions. *Wagner, T.*, +, *TEVC Oct. 2010* 688-701

U**Uncertainty**

An Evolutionary Computing Approach to Robust Design in the Presence of Uncertainties. *Chan, R. R.*, +, *TEVC Dec. 2010* 900-912

User interfaces

Interaction of Culture-Based Learning and Cooperative Co-Evolution and its Application to Automatic Behavior-Based System Design. *Farahmand, A.-M.*, +, *TEVC Feb. 2010* 23-57

XCS for Personalizing Desktop Interfaces. *Shankar, A.*, +, *TEVC Aug. 2010* 547-560

V**Vehicles**

An Evolutionary Approach to the Multidepot Capacitated Arc Routing Problem. *Xing, L.*, +, *TEVC June 2010* 356-374

W**Water**

Discovering Unique, Low-Energy Pure Water Isomers: Memetic Exploration, Optimization, and Landscape Analysis. *Soh, H.*, +, *TEVC June 2010* 419-437

Wireless sensor networks

Hybrid Genetic Algorithm Using a Forward Encoding Scheme for Lifetime Maximization of Wireless Sensor Networks. *Hu, X.-M.*, +, *TEVC Oct. 2010* 766-781