

LISTA PUBLICAȚIILOR

Structurată ca în O.M. 5691/27.10.2011, Anexa 1, Articolul 15

a) Lista lucrărilor prevăzute la art. 12 alin. 1 litera h) - incluse în format electronic în dosar

1. O. Matei, P.C. Pop, I. Sas and C. Chira, An improved immigration memetic algorithm for solving the heterogeneous fixed fleet vehicle routing problem, *Neurocomputing*, Elsevier, Vol. 150, Part A, pp. 58-66, 2015.
2. P.C. Pop, O. Matei and C.-A. Comes, Reducing the bandwidth of sparse matrix with a genetic algorithm, *Optimization*, Taylor & Francis, Vol. 63(4), pp. 1851-1876, 2014.
3. M. Demange, J. Monnot, P.C. Pop and B. Ries, On the complexity of the selective graph coloring problem in some special classes of graphs, *Theoretical Computer Science*, Elsevier, Vol. 540-541, pp. 82-102, 2014.
4. P.C. Pop, O. Matei and C. Pop Sitar, An improved hybrid algorithm for solving the generalized vehicle routing problem, *Neurocomputing*, Elsevier, Vol. 109, pp. 76-83, 2013.
5. P.C. Pop and O. Matei, A memetic algorithm for solving the multidimensional multi-way number partitioning problem, *Applied Mathematical Modelling*, Elsevier, Vol. 37, Issue 22, pp. 9191-9202, 2013.
6. O. Matei, P.C. Pop and H. Valean, Optical Character Recognition in Real Environments using Neural Networks and k-Nearest Neighbor, *Applied Intelligence*, Springer, Vol. 39(4), pp. 739-748, 2013.
7. P.C. Pop, I. Kara and A. Horvat Marc, New Mathematical Models of the Generalized Vehicle Routing Problem and Extensions, *Applied Mathematical Modelling*, Elsevier, Vol. 36, Issue 1, pp. 97-107, 2012.
8. P.C. Pop and S. Iordache, A Hybrid Heuristic Approach for Solving the Generalized Traveling Salesman Problem, in *Proc. of GECCO 2011*, Association for Computing Machinery, pp. 481-488, 2011, ISBN: 978-1-4503-0557-0.
9. P.C. Pop, On the Prize-Collecting Generalized Minimum Spanning Tree Problem, *Annals of Operations Research*, Springer, Vol. 150, No. 1, pp. 193-204, 2007.
10. P.C. Pop, W. Kern and G. Still, A New Relaxation Method for the Generalized Minimum Spanning Tree Problem, *European Journal of Operational Research*, Elsevier, Vol. 170, pp. 900-908, 2006.

b) Teza de doctorat

1. P.C. Pop, The Generalized Minimum Spanning Tree Problem, PhD Thesis in Combinatorial optimization, Twente University Press, Enschede, the Netherlands, 2002.

c) Brevete de invenție și alte titluri de proprietate industrială

1. C.N. Sabo, P.C. Pop and N. Tomai, SYSTEM AND PROCESS FOR DYNAMIC GENERATION OF COMPUTER APPLICATION INTERFACES, patent number RO128876-A0, 2012.
2. C.N. Sabo, N. Tomai and P.C. Pop, SYSTEM AND PROCESS FOR THE AUTOMATIC ANALYSIS OF THE COMMUNICATION LANGUAGE BETWEEN TWO INFORMATIC SYSTEMS, patent number RO128954-A0, 2013.

d) Cărți

1. P.C. Pop, Generalized Network Design Problems. Modeling and Optimization, De Gruyter Series in Discrete Mathematics and Applications, Germany, 2012.
2. P.C. Pop, Modelare si Programare Matematica. Teorie si Aplicatii, Editura Universitatii de Nord Baia Mare, 2009.
3. P.C. Pop, Cercetari Operationale, Editura RisoPrint, 2005.

e) Articole/studii *in extenso* publicate în reviste din fluxul științific internațional principal

1. P.C. Pop, C.M. Pinte, C. Pop Sitar and M. Macelaru, An efficient reverse distribution system for solving a sustainable supply chain network design problem, Journal of Applied Logic, Elsevier, Vol. 13(2), Part A, pp. 105-113, 2015.
2. C.M. Pinte and P.C. Pop, An improved hybrid algorithm for capacitated fixed-charge transportation problem, Logic Journal of IJPL, Oxford University Press, DOI: 10.1093/jigpal/jzv014, in press.
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5. P.C. Pop, C. Pop Sitar, I. Zelina, V. Lupse and C. Chira, Heuristic algorithms for solving the generalized vehicle routing problem, International Journal of Computers, Communications & Control, Vol. 6, No. 1, pp. 158-166, 2011.
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7. P.C. Pop, O. Matei and H. Valean, An Efficient Soft Computing Approach to the Generalized Vehicle Routing Problem, Advances in Intelligent and Soft Computing, Springer, Vol. 87, pp. 281-289, 2011.

8. P.C. Pop, O. Matei and C. Sabo, A Memetic Algorithm for Solving the Generalized Minimum Spanning Tree Problem, *Advances in Intelligent and Soft Computing*, Springer, Vol. 96, pp. 187-194, 2011.
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11. P.C. Pop, On the Generalized Network Design Problems, *Carpathian Journal of Electronic and Computer Engineering*, Vol. 3, No. 1, pp. 103-107, 2010.
12. P.C. Pop, A survey of different integer programming formulations of the generalized minimum spanning tree problem, *Carpathian Journal of Mathematics*, Vol. 25, No. 1, pp. 104-118, 2009.
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15. P.C. Pop, C.D. Zaroliagis and G. Hadjicharalambous, A cutting plane approach to solve the railway traveling salesman problem, *Studia Univ. Babes-Bolyai, Mathematica*, Volume LIII, Number 1, pp. 63-73, March 2008.
16. P.C. Pop, New integer programming formulations of the generalized traveling salesman problem, *American Journal of Applied Sciences*, Vol. 4(11), pp. 932-937, 2007.
17. C. Pinteaa, P.C Pop and C. Chira, The Generalized Traveling Salesman Problem Solved with Ant Algorithms, *Journal of Universal Computer Science*, vol. 13, No. 7, pp. 1065-1075, 2007.
18. P.C. Pop, C. Sabo, C. Pop Sitar and M. Craciun, A Simulated Annealing Based Approach for Solving the Generalized Minimum Spanning Tree Problem, *Creative Mathematics and Informatics*, Vol. 16, pp. 42-53, 2007.
19. P.C. Pop, A. Horvat Marc and C. Pop Sitar, An Approximation Algorithm for the At Least version of the Generalized Minimum Spanning Tree Problem, *Revue d'Analyse Numerique et de Theorie de l'Approximation*, Tome 35, No. 1, pp. 95-103, 2006.
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27. P.C. Pop, C. Pop Sitar and I. Zelina, Efficient Algorithms for the Generalized Minimum Spanning Tree Problem, *Carpathian Journal of Mathematics*, Vol. 20, No. 1, pp. 109-117, 2004.
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29. P.C. Pop, Polyhedral aspects and optimality of the generalized minimum spanning tree problem, *Scientific Revue of the North University of Baia Mare*, Vol. XVI. No. 1, 2000.
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f) Publicații *in extenso* apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. S. Fidanova and P.C. Pop, An ant algorithm for the partition graph coloring problem, *Numerical Methods and Applications, Lecture Notes in Computer Science*, Springer, Vol. 8962, pp. 78-84, 2015.
2. P.C. Pop and C. Chira, A hybrid approach based on genetic algorithms for solving the clustered vehicle routing problem, *IEEE Congress on Evolutionary Computation (CEC-2014)*, pp. 1421-1426, Beijing, China, 6-11 July 2014.
3. O. Matei, D. Contrás and P.C. Pop, Applying evolutionary computation for evolutionary ontologies, *IEEE Congress on Evolutionary Computation (CEC-2014)*, pp. 1520-1527, Beijing, China, 6-11 July 2014.
4. G.C. Crisan, C.M. Pinteá and P.C. Pop, On the resilience of an ant-based system in fuzzy environments. An empirical study, *IEEE International Conference on Fuzzy Systems (FUZZ-2014)*, pp. 2588-2593, Beijing, China, 6-11 July 2014.
5. C. Pinteá and P.C. Pop, Sensitive Ants for Denial Jamming Attack on Wireless Sensor Network, in *Proc. of CISIS 2013, Advances in Intelligent Systems and Computing Volume 239*, pp. 409-418, 2014.

6. P.C. Pop, F. Levente and A. Horvat Marc, A Variable Neighborhood Search approach for solving the generalized vehicle routing problem, in Proc. of HAIS 2014, Lecture Notes in Computer Science, Vol. 8480, pp. 13-24, 2014.
7. P.C. Pop and O. Matei, An efficient metaheuristic approach for solving a class of matrix optimization problems, in Proc. of 15th EU/ME Workshop Metaheuristics and Engineering, pp. 17-25, 2014.
8. P.C. Pop, B. Hu and G.R. Raidl, A memetic algorithm with two distinct solution representations for the partition graph coloring problem, in Proc. of EUROCAST 2013, R. Moreno-Diaz et al. (Eds.), Lecture Notes Computer Science, Springer, Vol. 8111, pp. 219-227, 2013.
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13. C.-M. Pintea and P.C. Pop, Sensor Networks Security Based on Sensitive Robots Agents: A Conceptual Model, in Proc. of CISIS 2012, Advances in Intelligent Systems and Computing, Springer, Vol. 189, pp. 47-56, 2013.
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g) Alte lucrări și contribuții științifice

1. P.C. Pop, The Generalized Minimum Spanning Tree Polytope and Related Polytopes, Memorandum No. 1587, University of Twente, the Netherlands, 2001.
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