

Publication list

Prof Mikhail Prokopenko
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Summary:

7 January 2016	ISI data *	Google Scholar **
Articles with citation data	76	154
Sum of the times cited	710	2348
Average citations per article	9.9	15.2
h-index	15	27

* <http://www.researcherid.com/rid/A-3995-2008>

** <http://scholar.google.com/citations?hl=en&user=5omOfnYAAAAJ>

Publications (total: **151**; books: **3**; book chapters: **10**; journals: **48**; conferences: **81**; patents: **9**)

Books (3):

1. M. Prokopenko (ed.), *Guided Self-Organisation: Inception*, Springer, 2014 (475 pages).
2. M. Prokopenko (ed.), *Advances in Applied Self-organizing Systems*, 2nd edition, Springer, London, UK, 2013 (439 pages).
3. M. Prokopenko (ed.), *Advances in Applied Self-organizing Systems*, Springer, London, UK, 2008 (374 pages).

Book chapters (10)

1. M. Prokopenko, N. Ay, D. Polani, On the cross-disciplinary nature of Guided Self-Organisation, in M. Prokopenko (ed.), *Guided Self-Organisation: Inception*, Springer, pp. 3-15, 2014.
2. J. M. Miller, X. R. Wang, J. T. Lizier, M. Prokopenko, L. F. Rossi, Measuring Information Dynamics in Swarms, in Prokopenko M. (ed.), *Guided Self-Organisation: Inception*, Springer, pp. 343-364, 2014.
3. J. T. Lizier, M. Prokopenko, A. Y. Zomaya, A framework for the local information dynamics of distributed computation in complex systems, in Prokopenko M. (ed.), *Guided Self-Organisation: Inception*, Springer, pp. 115-158, 2014.
4. M. Prokopenko, Design vs Self-Organization, in M. Prokopenko (ed.), *Advances in Applied Self-organizing Systems*, 2nd edition, 3-21, Springer, London, 2013.
5. A. Adamatzky, M. Prokopenko, Tracing historical development of Australian highways, *Bioevaluation of World Transport Networks*, chapter 4, pp. 47-68, World Scientific, 2012.
6. A. Adamatzky, S. Akl, R. Alonso-Sanz, W. van Dessel, Z. Ibrahim, A. Ilachinski, J. Jones, A. V. D. M. Kayem, G. J. Martinez, P. de Oliveira, M. Prokopenko, T. Schubert, P. Sloot, E. Strano, X.-S. Yang, Biorationality of motorways, *Bioevaluation of World Transport Networks*, chapter 18, pp. 309-325, World Scientific, 2012.
7. M. Piraveenan, M. Prokopenko, P. Wang, A. Zeman, Decentralised multi-agent clustering in scale-free sensor networks, in J. Fulcher and L. C. Jain (eds.), *Studies in Computational Intelligence (SCI)*, 115, 485–515, Springer, Berlin, 2008.
8. M. Prokopenko, Design vs Self-Organization, in M. Prokopenko (ed.), *Advances in Applied Self-organizing Systems*, 3-17, Springer, London, 2008.
9. G. Mathews, H. Durrant-Whyte, M. Prokopenko, Decentralised Decision Making for Multi-Agent Systems, in M. Prokopenko (ed.), *Advances in Applied Self-organizing Systems*, 77-103, Springer, London, UK, 2008.
10. M. Prokopenko, G. Poulton, D. C. Price, P. Wang, P. Valencia, N. Hoschke, A. J. Farmer, M. Hedley, C. Lewis, D. A. Scott. Self-Organising Impact Sensing Networks in Robust Aerospace Vehicles, In J. Fulcher (ed.) *Advances in Applied Artificial Intelligence*, 186-233, Idea Group, 2006.

Journal papers (48):

1. Prokopenko, M., Einav, I. Information thermodynamics of near-equilibrium computation. *Physical Review E (Statistical, Nonlinear, and Soft Matter Physics)*, 91(6), 1-8, 2015 (impact factor **2.288**).
2. Budden, D., Wang, P., Obst, O., Prokopenko, M. RoboCup Simulation Leagues: Enabling Replicable and Robust Investigation of Complex Robotic Systems, *IEEE Robotics & Automation Magazine*, 22(3), 140-146, 2015 (impact factor **2.413**).
3. Salge, C., Ay, N., Polani, D., Prokopenko, M. Zipf's Law: Balancing Signal Usage Cost and Communication Efficiency, *PLoS ONE*, 10(10): e0139475, 2015 (impact factor **3.534**).
4. Prokopenko, M., Barnett, L. Harré, M., Lizier, J.T., Obst, O., Wang X.R., Fisher Transfer Entropy: Quantifying the gain in transient sensitivity, *Proceedings of The Royal Society A*, 471 (2184), 20150610, 2015 (impact factor **2.192**).
5. M. Prokopenko and C. Gershenson, Entropy Methods in Guided Self-Organisation, *Entropy*, 16(10), 5232-5241, 2014 (impact factor **1.564**).
6. M. Prokopenko and J. T. Lizier, Transfer Entropy and Transient Limits of Computation, *Nature Scientific Reports*, 4: 5394, 2014 (impact factor **5.078**).
7. M. Prokopenko, Grand challenges for Computational Intelligence, *Frontiers in Robotics and AI*, 1:2, 1-3, 2014.
8. X. R. Wang, J. T. Lizier, T. Nowotny, A. Z. Berna, M. Prokopenko, S. C. Trowell, Feature Selection for Chemical Sensor Arrays Using Mutual Information, *PLoS ONE*, 9(3): e89840, 2014 (impact factor **3.534**).
9. M. Prokopenko, J. T. Lizier, D. C. Price, On thermodynamic interpretation of transfer entropy, *Entropy*, 15(2), 524–543, 2013 (impact factor **1.564**).
10. D. Polani, M. Prokopenko, L. S. Yaeger, Information and Self-Organization of Behavior, *Advances in Complex Systems*, 16(2): 1303001-1-1303001-12, 2013 (impact factor **0.65**).
11. V. Cupac, J. T. Lizier, M. Prokopenko, Comparing dynamics of cascading failures between network-centric and power flow models, *International Journal of Electrical Power and Energy Systems*, 49: 369–379, 2013 (impact factor **2.247**).
12. M. Piraveenan, M. Prokopenko, L. Hossein, Percolation Centrality: Quantifying Graph-Theoretic Impact of Nodes during Percolation in Networks, *PLoS ONE*, 8(1): e53095, 2013 (impact factor **4.092**).
13. X. R. Wang, J. M. Miller, J. T. Lizier, M. Prokopenko, L. F. Rossi, Quantifying and Tracing Information Cascades in Swarms, *PLoS ONE*, 7(7): e40084, 2012 (impact factor **4.092**).
14. J. T. Lizier, M. Prokopenko, and A. Y. Zomaya, Local measures of information storage in complex distributed computation, *Information Sciences*, 208: 39–54, 2012 (impact factor **2.833**).
15. J. T. Lizier, M. Prokopenko, and A. Y. Zomaya, Coherent information structure in complex computation, *Theory in Biosciences*, special issue on Guided Self-Organisation (GSO-2010), 131: 193–203, 2012 (impact factor **1.278**).
16. N. Ay, H. Bernigau, R. Der, M. Prokopenko, Information driven self-organization: The dynamical system approach to autonomous robot behavior, *Theory in Biosciences*, special issue on Guided Self-Organisation (GSO-2010), 131: 161–179, 2012 (impact factor **1.278**).
17. N. Ay, R. Der, M. Prokopenko, Guided Self-Organization: Perception-Action Loops of Embodied Systems, *Theory in Biosciences*, special issue on Guided Self-Organisation (GSO-2010), 131: 125–127, 2012 (impact factor **1.278**).
18. M. Piraveenan, M. Prokopenko, A. Y. Zomaya, On congruity of nodes and assortative information content in complex networks, *Networks and Heterogeneous Media*, 7(3): 441–461, 2012 (impact factor **0.909**).

19. M. Piraveenan, M. Prokopenko, A. Y. Zomaya. Assortative mixing in directed biological networks, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 9(1): 66–78, 2012 (impact factor **1.866**).
20. A. Adamatzky, M. Prokopenko, Slime mould evaluation of Australian motorways, *International Journal of Parallel, Emergent and Distributed Systems*, 27(4): 275–295, 2012.
21. A. Adamatzky, S. Akl, R. Alonso-Sanz, W. van Dessel, Z. Ibrahim, A. Ilachinski, J. Jones, A. V. D. M. Kayem, G. J. Martinez, P. de Oliveira, M. Prokopenko, T. Schubert, P. Sloom, E. Strano, X.-S. Yang, Are motorways rational from slime mould's point of view?, *International Journal of Parallel, Emergent and Distributed Systems*, accepted, 2012.
22. M. Prokopenko, J. T. Lizier, O. Obst, and X. R. Wang, Relating Fisher information to order parameters, *Physical Review E*, 84, 041116, 2011 (impact factor **2.508**).
23. C. Gershenson, M. Prokopenko, Complex networks, *Artificial Life*, special issue on Complex Networks, 17(4), 259-261, 2011 (impact factor **1.960**).
24. J. T. Lizier, S. Pritam, M. Prokopenko, Information dynamics in small-world Boolean networks, *Artificial Life*, special issue on Complex Networks, 17(4), 293-214, 2011 (impact factor **1.960**).
25. X. R. Wang, J. T. Lizier, M. Prokopenko, Fisher Information at the Edge of Chaos in Random Boolean Networks, *Artificial Life*, special issue on Complex Networks, 17(4), 315-329, 2011 (impact factor **1.960**).
26. J. T. Lizier, J. Heinzle, C. S. Soon, J.-D. Haynes, M. Prokopenko, Spatiotemporal information transfer pattern differences in motor selection, *BMC Neuroscience*, 12(Suppl 1):P261, 2011 (impact factor **3.091**).
27. M. Rubinov, J. T. Lizier, M. Prokopenko, M. Breakspear, Maximized directed information transfer in critical neuronal networks, *BMC Neuroscience*, 12(Suppl 1):P18, 2011 (impact factor **3.091**).
28. M. Prokopenko, N. Ay, O. Obst and D. Polani, Phase Transitions in Least-Effort Communications, *Journal of Statistical Mechanics: Theory and Experiment*, 2010(11): P11025, 2010 (impact factor **2.670**).
29. J. T. Lizier, M. Prokopenko, and A. Y. Zomaya, Information modification and particle collisions in distributed computation, *Chaos*, 20(3): 037109, 2010 (impact factor **1.795**).
30. J. T. Lizier, J. Heinzle, A. Horstmann, J.-D. Haynes, M. Prokopenko, Multivariate information-theoretic measures reveal directed information structure and task relevant changes in fMRI connectivity, *Journal of Computational Neuroscience*, 30:85–107, 2010 (impact factor **2.220**).
31. M. Piraveenan, M. Prokopenko, A. Y. Zomaya. Local assortativeness in scale-free networks – Addendum, *Europhysics Letters*, 89, 49901, 2010 (impact factor **2.203**).
32. J. T. Lizier, M. Prokopenko. Differentiating information transfer and causal effect, *European Physical Journal B*, 73(4), 605-615, 2010 (impact factor **1.568**).
33. M. Prokopenko. Guided Self-Organization (Editorial), *HFSP Journal*, 3(5), 287-289, 2009 (impact factor **1.786**).
34. M. Prokopenko, D. Polani, M. Chadwick. Stigmergic gene transfer and emergence of universal coding, *HFSP Journal*, 3(5), 317-327, 2009 (impact factor **1.786**).
35. M. Prokopenko, F. Boschetti, A. Ryan. An information-theoretic primer on complexity, self-organisation and emergence, *Complexity*, 15(1), 11-28, Wiley, DOI: 10.1002/cplx.20249, 2009 (impact factor **1.020**).
36. M. Prokopenko. Book review: Information and Self-Organization: A Macroscopic Approach to Complex Systems (H. Haken), *Artificial Life*, 15(3), 377-383, DOI: 10.1162/artl.2009.Prokopenko.B4, 2009 (impact factor **1.164**).
37. J. T. Lizier, J.-D. Haynes, J. Heinzle, M. Prokopenko. Directed information structure in inter-regional cortical interactions in a visuomotor tracking task, *BMC Neuroscience*, 10(Suppl 1):P117 doi:10.1186/1471-2202-10-S1-P117, 2009 (impact factor **2.850**).

38. G. M. Mathews, H. F. Durrant-Whyte, M. Prokopenko. Decentralised decision making in heterogeneous teams using anonymous optimisation, *Robotics and Autonomous Systems*, 57(3): 310-320, 2009 (impact factor **1.214**).
39. M. Piraveenan, M. Prokopenko, A. Y. Zomaya. Local Assortativity and Growth of Internet, *European Physical Journal B*, 70, 275–285, 2009 (impact factor **1.568**).
40. M. Piraveenan, M. Prokopenko, A. Y. Zomaya. Assortativeness and information in scale-free networks, *European Physical Journal B*, 67, 291–300, 2009 (impact factor **1.568**).
41. J. T. Lizier, M. Prokopenko, A. Y. Zomaya. Local information transfer as a spatiotemporal filter for complex systems. *Phys. Rev. E* 77, 026110, 2008 (impact factor **2.508**).
42. M. Piraveenan, M. Prokopenko, A. Y. Zomaya. Local assortativeness in scale-free networks, *Europhysics Letters*, 84, 28002, 2008 (impact factor **2.203**).
43. M. Prokopenko, D. Polani, P. Wang. Optimizing Associative Information Transfer within Content-addressable Memory, *International Journal of Unconventional Computation*, vol. 4(3), Special issue "Towards Theory of Unconventional Computing", 273-296, 2008.
44. M. Prokopenko. A Preferential Semantics for Causal Reasoning about Action, *Annals of Mathematics and Artificial Intelligence*, vol. 46(4), 375-413, April, 2006 (impact factor **0.722**).
45. M. Prokopenko, P. Wang, D. C. Price, P. Valencia, M. Foreman, A. J. Farmer. Self-organizing Hierarchies in Sensor and Communication Networks, *Artificial Life*, Special Issue on Dynamic Hierarchies, vol. 11(4), 407-426, 2005 (impact factor **1.960**).
46. M. Prokopenko, P. Wang, M. Foreman, P. Valencia, D. C. Price, G. T. Poulton. On Connectivity of Reconfigurable Impact Networks in Ageless Aerospace Vehicles, *Robotics and Autonomous Systems*, vol. 53(1), 36-58, 2005 (impact factor **1.214**).
47. D.A. Scott, A. Batten, G.C. Edwards, A.J. Farmer, M. Hedley, N. Hoschke, P. Isaacs, M.E. Johnson, A. Murdoch, C.J. Lewis, D.C. Price, M. Prokopenko, P. Valencia and P. Wang, An Intelligent Sensor System for Detection and Evaluation of Particle Impact Damage, *Review of Progress in Quantitative Nondestructive Evaluation*, 24, 1825-1832 (eds. D.O. Thompson and D.E. Chimenti), 2005.
48. D. Abbott, B. Doyle, J.B. Dunlop, A.J. Farmer, M. Hedley, J. Herrmann, G.C. James, M.E. Johnson, B. Joshi, G.T. Poulton, D.C. Price, M. Prokopenko, T. Reda, D.E. Rees, D.A. Scott, P. Valencia, D. Ward and J.G. Winter, Concepts for an Integrated Vehicle Health Monitoring System, *Review of Progress in Quantitative Nondestructive Evaluation*, Vol. 22, pp. 1606-14 (eds. D.O. Thompson and D.E. Chimenti), 2003.

Fully-refereed conference papers (81):

1. Budden, D., Wang, P., Obst, O., Prokopenko, M. Simulation leagues: Analysis of competition formats. 18th Annual RoboCup International Symposium, Germany: Springer Verlag, 2015.
2. Nakashima, T., Mifune, S., Henrio, J., Obst, O., Wang, P., Prokopenko, M. Kick Extraction for Reducing Uncertainty in RoboCup Logs, In S. Yamamoto (ed.) Human Interface and the Management of Information. Information and Knowledge, 17th International Conference, HCI International 2015, Los Angeles, CA, USA, August 27, 2015, Proceedings, Part II, Lecture Notes in Computer Science vol. 9173, 2015.
3. T. Nowotny, A. Z. Berna, R. Binions, X. R. Wang, J. T. Lizier, M. Prokopenko, S. Trowell, Feature selection in Enose applications, *1st International Workshop on Odor Spaces*, Hannover, Germany, 4-7 September, 2014.
4. D. Budden, P. Wang, O. Obst, M. Prokopenko, Simulation leagues: Analysis of competition formats, *The 18th annual RoboCup International Symposium*, João Pessoa, Brazil, 26 July, 2014.
5. Y. Sun, L. F. Rossi, C. Shen, J. Miller, X. R. Wang, J. T. Lizier, U. Senanayake, and M. Prokopenko, Information Transfer in Swarms with Leaders, *Collective Intelligence Conference 2014*, MIT, 10-12 June, 2014.

6. M. Prokopenko, Information Dynamics at the Edge of Chaos: Measures, Examples, and Principles, *Proceedings of the 2013 IEEE Symposium on Artificial Life, Singapore, April 2013*, 148-152, Springer, 2013.
7. D. Budden, M. Prokopenko, Improved Particle Filtering for Pseudo-Uniform Belief Distributions in Robot Localisation, *The 17th annual RoboCup International Symposium, Eindhoven, The Netherlands, 2013*.
8. O. M. Cliff, J. T. Lizier, X. R. Wang, P. Wang, O. Obst, M. Prokopenko, Towards Quantifying Interaction Networks in a Football Match, *The 17th annual RoboCup International Symposium, Eindhoven, The Netherlands, 2013*.
9. X. R. Wang, J. M. Miller, J. T. Lizier, M. Prokopenko and L. F. Rossi, Measuring Information Storage and Transfer in Swarms, *Advances in Artificial Life, ECAL 2011, Proceedings of The Eleventh European Conference on the Synthesis and Simulation of Living Systems (ECAL 2011), Paris, 2011*, MIT Press, 838-845, 2011.
10. J. T. Lizier, S. Pritam and M. Prokopenko, Computational capabilities of small-world Boolean networks, *Advances in Artificial Life, ECAL 2011, Proceedings of The Eleventh European Conference on the Synthesis and Simulation of Living Systems (ECAL 2011), Paris, 2011*, MIT Press, 463-464, 2011.
11. M. Piraveenan, M. Prokopenko and A. Y. Zomaya, Classifying Complex Networks using Unbiased Local Assortativity, in H. Fellermann, M. Dörr, M. M. Hanczyc, L. Ladegaard Laursen, S. Maurer, D. Merkle, P.-A. Monnard, K. Stoy and S. Rasmussen (eds.) *Artificial Life XII, Proceedings of the Twelfth International Conference on the Synthesis and Simulation of Living Systems*, 329-336, MIT Press, 2010.
12. R. X. Wang, J. T. Lizier and M. Prokopenko, A Fisher Information Study of Phase Transitions in Random Boolean Networks, in H. Fellermann, M. Dörr, M. M. Hanczyc, L. Ladegaard Laursen, S. Maurer, D. Merkle, P.-A. Monnard, K. Stoy and S. Rasmussen (eds.) *Artificial Life XII, Proceedings of the Twelfth International Conference on the Synthesis and Simulation of Living Systems*, 305-312, MIT Press, 2010.
13. X.R. Wang, G. Mathews, D.C. Price, M. Prokopenko, Optimising Sensor Layouts for Direct Measurement of Discrete Variables, In *Proceedings of The Third IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO 2009)*, San Francisco, California, September 14-18, 2009, pp. 99-102, 2009.
14. J. T. Lizier, M. Prokopenko, D. Cornforth, The information dynamics of cascading failures in energy networks, In *Proceedings of European Conference on Complex Systems 2009 (ECCS'09)*, p. 54, Warwick, 2009.
15. J. T. Lizier, M. Piraveenan, D. Pradhana, M. Prokopenko, L. S. Yaeger, Functional and Structural Topologies in Evolved Neural Networks, *Advances in Artificial Life: Tenth European Conference on Artificial Life (ECAL '09)*, Springer, LNCS 5777, 135-142, 2011.
16. O. Obst, D. Polani, M. Prokopenko, Origins of Scaling in Genetic Code, *Advances in Artificial Life: Tenth European Conference on Artificial Life (ECAL '09)*, Springer, LNCS 5778, 82-89, 2011.
17. J. T. Lizier, M. Prokopenko, A. Y. Zomaya. The Information Dynamics of Phase Transitions in Random Boolean Networks, in S. Bullock, J. Noble, R. Watson, and M. A. Bedau (eds) *Artificial Life XI - Proceedings of the Eleventh International Conference on the Simulation and Synthesis of Living Systems*, 374-381, MIT Press, 2008.
18. J. T. Lizier, M. Prokopenko, I. Tanev, A. Y. Zomaya. Emergence of Glider-like Structures in a Modular Robotic System, in S. Bullock, J. Noble, R. Watson, and M. A. Bedau (eds) *Artificial Life XI - Proceedings of the Eleventh International Conference on the Simulation and Synthesis of Living Systems*, 366-373, MIT Press, 2008.
19. O. Obst, X. R. Wang, M. Prokopenko, Using Echo State Networks for Anomaly Detection in Underground Coal Mines, in *Proceedings of the International Conference on Information Processing in Sensor Networks (IPSN 2008)*, 219-229, IEEE Computer Society, 2008.
20. D. Polani, M. Prokopenko, and M. Chadwick. Modelling Stigmergic Gene Transfer, in S. Bullock, J. Noble, R. Watson, and M. A. Bedau (eds) *Artificial Life XI - Proceedings of the Eleventh International Conference on the Simulation and Synthesis of Living Systems*, 490-497, MIT Press, 2008.
21. M. Prokopenko, A. Zeman, R. Li, Homeotaxis: Coordination with Persistent Time-Loops, in M. Asada et al. (eds.), in *From Animals to Animats 10: the 10th International Conference on Simulation of Adaptive Behavior (SAB 2008)*, *Lecture Notes in Artificial Intelligence*, vol. 5040, 403-414, Springer, Berlin, 2008.

22. X. R. Wang, J. Lizier, O. Obst, M. Prokopenko, P. Wang, Spatiotemporal Anomaly Detection in Gas Monitoring Sensor Networks, in R. Verdone (ed.), *Proceedings of the 5th European Conference on Wireless Sensor Networks (EWSN-2008)*, *Lecture Notes in Computer Science*, vol. 4913, 90-105, Springer, 2008.
23. A. Zeman, M. Prokopenko, Y. Guo, R. Li. Adaptive Control of Distributed Energy Management: A Comparative Study, *2nd IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO-2008)*, 84-93, IEEE, 2008.
24. J. T. Lizier, M. Prokopenko, A. Y. Zomaya, Information Transfer by Particles in Cellular Automata, in Randall, M., Abbass, H. A., Wiles, J. (eds.) *Proceedings of the Third Australian Conference on Artificial Life*, Gold Coast, Australia, December, 2007, *Lecture Notes in Artificial Intelligence*, vol. 4828, 49-60, Springer, Berlin, 2007.
25. J. T. Lizier, M. Prokopenko, A. Y. Zomaya. Detecting non-trivial computation in complex dynamics, in F. Almeida e Costa, L. M. Rocha, E. Costa, I. Harvey, A. Coutinho (eds.) *Advances in Artificial Life: 9th European Conference on Artificial Life (ECAL-2007)*, Lisbon, Portugal, September 10-14, *Lecture Notes in Artificial Intelligence*, vol. 4648, 895-904, Springer, Berlin, 2007.
26. G. M. Mathews, H. F. Durrant-Whyte, M. Prokopenko. Asynchronous Gradient-Based Optimisation for Team Decision Making, *46th IEEE Conference on Decision and Control*, New Orleans, LA, USA, 3145-3150, IEEE, 2007.
27. E. Ogston, A. Zeman, M. Prokopenko, G. James. Clustering Distributed Energy Resources for Large-Scale Demand Management, in Serugendo, G.D.M. (ed.) *1st IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO-2007)*, *Proceedings*, 97-108, IEEE, Boston, Mass., USA, 2007.
28. M. Piraveenan, M. Prokopenko, A. Zomaya. Information-Cloning of Scale-free Networks, in F. Almeida e Costa, L. M. Rocha, E. Costa, I. Harvey, A. Coutinho (eds.) *Advances in Artificial Life: 9th European Conference on Artificial Life (ECAL-2007)*, Lisbon, Portugal, September 10-14, *Lecture Notes in Artificial Intelligence*, vol. 4648, 925-935, Springer, Berlin, 2007.
29. M. Piraveenan, D. Polani, M. Prokopenko. Emergence of Genetic Coding: an Information-theoretic Model, in F. Almeida e Costa, L. M. Rocha, E. Costa, I. Harvey, A. Coutinho (eds.) *Advances in Artificial Life: 9th European Conference on Artificial Life (ECAL-2007)*, Lisbon, Portugal, September 10-14, *Lecture Notes in Artificial Intelligence*, vol. 4648, 42-52, Springer, Berlin, 2007.
30. V. Gerasimov, G. Healy, M. Prokopenko, P. Wang, and A. Zeman. Symbiotic Sensor Networks in Complex Underwater Terrains: a Simulation Framework, in B. Gabrys, R.J. Howlett, and L.C. Jain (Eds), *Knowledge-Based Intelligent Information and Engineering Systems, 10th International Conference, KES 2006, Bournemouth, UK, October 9-11 2006, Proceedings, Part III*, LNAI 4253, 315-323, Springer Berlin, 2006.
31. G. M. Mathews, H. F. Durrant-Whyte, M. Prokopenko. Scalable Decentralised Decision Making and Optimisation in Heterogeneous Teams, *IEEE International Conference on Multi-Sensor Fusion and Integration for Intelligent Systems (MFI-2006)*, Heidelberg, Germany, 383-388, September, 2006.
32. M. Prokopenko, V. Gerasimov, I. Tanev. Evolving Spatiotemporal Coordination in a Modular Robotic System, in Nolfi, S., Baldassarre, G., Calabretta R., Hallam, J. C. T., Marocco, D., Meyer J.-A., Miglino, O., Parisi, D., eds. *From Animals to Animats 9: 9th International Conference on the Simulation of Adaptive Behavior (SAB 2006)*, Rome, Italy, *Lecture Notes in Computer Science*, vol. 4095, 558-569, Springer, 2006.
33. M. Prokopenko, D. Polani, P. Wang. Optimizing Potential Information Transfer with Self-referential Memory, in Calude, C. S., Dinneen, M. J., Paun, G., Rozenberg, G., and Stepney S., eds. *Unconventional Computation : 5th International Conference (UC '06)*, York, UK, *Lecture Notes in Computer Science*, vol. 4135, 228-242, Springer, 2006.
34. M. Prokopenko, V. Gerasimov, I. Tanev. Measuring Spatiotemporal Coordination in a Modular Robotic System, in Rocha, L.M., Jaeger, L.S., Bedau, M.A., Floreano, D., Goldstone, R.L., Vespignani, A. (eds.), *Artificial Life X: Proceedings of The 10th International Conference on the Simulation and Synthesis of Living Systems*, Bloomington IN, USA., 185-191, MIT Press, 2006.

35. A. Zeman, M. Prokopenko. Predicting Cluster Formation in Decentralized Sensor Grids, in B. Gabrys, R.J. Howlett, and L.C. Jain (eds.), *Knowledge-Based Intelligent Information and Engineering Systems, 10th International Conference, KES 2006, Bournemouth, UK, October 9-11 2006, Proceedings, Part III*, LNAI 4253, 324-332, Springer, Berlin, 2006.
36. F. Boschetti, M. Prokopenko, I. Macreadie, A.-M. Grisogono. Defining and detecting emergence in complex networks, in R. Khosla, R.J. Howlett, L.C. Jain (eds.), *Knowledge-Based Intelligent Information and Engineering Systems, 9th International Conference, KES 2005, Melbourne, Australia, Proceedings, Part IV, Lecture Notes in Artificial Intelligence*, vol. 3684, 573-580, Springer, 2005.
37. G. M. Mathews, H. F. Durrant-Whyte, M. Prokopenko. Measuring Global Behaviour of Multi-Agent Systems from Pair-Wise Mutual Information, in R. Khosla, R.J. Howlett, L.C. Jain (eds.), *Knowledge-Based Intelligent Information and Engineering Systems, 9th International Conference, KES 2005, Melbourne, Australia, Proceedings, Part IV, Lecture Notes in Artificial Intelligence*, vol. 3684, 587-594, Springer, 2005.
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