

Publications in international peer reviewed conference papers and journals

1. Fondi et al, MeDuSa: A multi-draft based scaffolder. submitted Bioinformatics.
2. P Liò (2014) Computing Longevity: Insights from Controls. Formal Methods in Macro-Biology. Lecture Notes in Computer Science Volume 8738, 2014, pp 40-46
3. M Fondi, P Liò (2015) Genome-Scale Metabolic Network Reconstruction, Bacterial Pangenomics, Methods in Molecular Biology Volume 1231, 2015, pp 233-256
4. Felicetti, L., Femminella, M., Reali, G., Lio', P. (2014) Effect of Aging, Disease vs Health Conditions in the design of Nano-Communications in Blood Vessels Springer book on Modeling, Methodologies and Tools for Molecular and Nano-scale Communications.
5. Azad S, Lio P. (2014) Emerging trends of malaria-dengue geographical coupling in the Southeast Asia region. J Vector Borne Dis. 51(3):165-71.
6. Capobianco E. and Liò, P. (2014). Advances in translational biomedicine from systems approaches. Frontiers in Genetics, 14 August 2014 doi: 10.3389/fgene.2014.00273 (Editorial)
7. Pratanwanich, N. and Liò, P. (2014) Exploring the complexity of pathway-drug relationships using latent Dirichlet allocation. Computational Biology and Chemistry. in press.
8. Pratanwanich, N. and Liò, P. (2014) Who Wrote This? Textual Modeling with Authorship Attribution in Big Data. ICDM 2nd Workshop for High Dimensional Data Mining.
9. Moni MA, Liò P (2014). "comoR: a software for disease comorbidity risk assessment". Journal of Clinical Bioinformatics, 4(1):8, 2014.
10. Moni MA, Liò P (2014). "Network-based analysis of comorbidities risk during an infection: SARS and HIV case studies". BMC bioinformatics 15.1(2014):333.
11. Moni, MA, Haoming Xu, Liò, P (2014). "CytoCom: a Cytoscape app to visualise, query and analyse disease comorbidity networks". Bioinformatics (in press).
12. Moni MA, Liò P (2014). "How to build personalised multi-omics comorbidity profiles". (accepted with minor revision in Frontiers of Systems biology)

13. Moni, MA., Haoming Xu, Liò, P (2014). "Network regulised Cox Regression Model to predict survival and comorbidity of cancer". (Submitted to *Frontiers of Systems biology*)
14. Angione, C., Pratanwanich, N., & Lio, P. (2014, June 11). A hybrid of multi-omics FBA and Bayesian factor modeling to identify pathway crosstalks. In *Proceedings of the 6th International Workshop on Bio-Design Automation (IWBD A)*. Boston.
15. Angione, C., Bartocci, E., Bortolussi, L., Lio, P., Occhipinti, A., & Sanguinetti, G. (2014, July 23). Bayesian Design for Whole Cell Synthetic Biology Models. In *Proceedings of the Third International Workshop on Hybrid Systems Biology (HSB 2014)*. Vienna.
16. Fernandes, P., Lio, P., & Milanesi, L. (2014, July 17-19). CHALLENGES IN BUILDING AN E-HEALTH INFRASTRUCTURE FOR P5 MEDICINE. In *Proceedings of The International Conference on e-Health*. Lisbon
17. Bartoszek, K., & Lio, P. (2014, May 14). A novel algorithm to reconstruct phylogenies using gene sequences and expression data. In *2014 6th International Conference on Bioinformatics and Biomedical Technology (ICBBT 2014)*. Gdansk.
18. Fondi, M., Maida, I., Perrin, E., Mellerà, A., Mocali, S., Parrilli, E., . . . Fani, R. (2014). Genome scale metabolic reconstruction and constraints-based modelling of the Antarctic bacterium *Pseudoalteromonas haloplanktis* TAC125.. *Environ Microbiol*. doi:10.1111/1462-2920.12513
19. Taffi, M., Paoletti, N., Lio', P., Tesei, L., Pucciarelli, S., & Marini, M. (2014). Estimation and Modelling of PCBs Bioaccumulation in the Adriatic Sea Ecosystem. Retrieved from <http://arxiv.org/abs/1405.6384v1>
20. Petrov, V., Balasubramaniam, S., Lale, R., Moltchanov, D., Lio', P., & Koucheryavy, Y. (2014). Forward and Reverse coding for chromosome transfer in bacterial nanonetworks. *Nano Communication Networks*.
21. Pratanwanich, N., & Lio', P. (2013). Bayesian Inference for Learning Between-Pathway Network: A New Tool for Studying Drug-Disease Interactions. In *HUMAN HEREDITY* Vol. 76 (pp. 99).
22. Pratanwanich, N., & Lio', P. (2014). Pathway-based Bayesian inference of drug-disease interactions. *Mol Biosyst*, 10(6), 1538-1548. doi:10.1039/c4mb00014e
23. Shavit, Y., & Lio', P. (2014). Combining a wavelet change point and the Bayes factor for analysing chromosomal interaction data.. *Mol Biosyst*, 10(6), 1576-1585. doi:10.1039/c4mb00142g

24. Ascolani, G., & Lio', P. (2014). Modeling TGF- β in early stages of cancer tissue dynamics.. *PLoS One*, 9(2), e88533.
doi:10.1371/journal.pone.0088533
25. Nardi, F., Lio', P., Carapelli, A., & Frati, F. (2014). MtPAN(3): site-class specific amino acid replacement matrices for mitochondrial proteins of Pancrustacea and Collembola. *Mol Phylogenet Evol*, 75, 239-244.
doi:10.1016/j.ympev.2014.02.001
26. Bianchi, L., Fernandes, P., & Lio, P. (2013). Improving collective awareness and education about the privacy and ethical issues connected with the genome technologies. In *The Future of Education, Conference Proceedings 2013*. Florence: Libreria universitaria. Retrieved from <http://libreriauniversitaria.it/>
27. Angione, C., Carapezza, G., Costanza, J., Lio, P., & Nicosia, G. (2013). The Role of the Genome in the Evolution of the Complexity of Metabolic Machines. In T. Gilbert, M. Kirkilionis, & G. Nicoli (Eds.), *Proceedings of the European Conference on Complex Systems 2012* (pp. 1063-1070). Bruxelles: Springer.
28. Lio, P., Iacovella, L., Bianchi, L., & Nguyen, V. (2013). Information Filtering and Learning: From Heuristics to Social Eudaimonia. In T. Gilbert, M. Kirkilionis, & G. Nicoli (Eds.), *Proceedings of the European Conference on Complex Systems 2012* (pp. 1051-1057). Bruxelles: Springer.
29. Bansal, A., Azad, S., & Lio, P. (2013). Malaria Incidence Forecasting and Its Implication to Intervention. In T. Gilbert, M. Kirkilionis, & G. Nicoli (Eds.), *Proceedings of the European Conference on Complex Systems 2012* (pp. 919-926). Bruxelles: Springer.
30. Fondi, M., Orlandini, V., Perrin, E., Maida, I., Bosi, E., Papaleo, M. C., . . . Fani, R. (2014). Draft genomes of three Antarctic Psychrobacter strains producing antimicrobial compounds against Burkholderia cepacia complex, opportunistic human pathogens.. *Mar Genomics*, 13, 37-38.
doi:10.1016/j.margen.2013.12.009
31. Iacovella, L., & Lio, P. (2013). Speeding up the transition to collective awareness. *2013 IEEE International Conference on Communications Workshops, ICC 2013*, 220-224.
32. Angione, C., Carapezza, G., Costanza, J., Lio', P., & Nicosia, G. (2013). Rational design of organelle compartments in cells. *EMBnet. journal*, 18(B), 20-22.
33. Angione, C., Carapezza, G., Costanza, J., Lio, P., & Nicosia, G. (2013). Multi objective design for bacterial communication networks. *2013 IEEE International Conference on Communications Workshops, ICC 2013*, 813-817.

34. Lu, X., Lio, P., Hui, P., & Jin, H. (2013). A Location Prediction Algorithm for Mobile Communications Using Directional Antennas. *INTERNATIONAL JOURNAL OF DISTRIBUTED SENSOR NETWORKS*. doi:10.1155/2013/418606
35. Angione, C., Carapezza, G., Costanza, J., Lio', P., & Nicosia, G. (2013). Pareto optimality in organelle energy metabolism analysis.. *IEEE/ACM Trans Comput Biol Bioinform*, 10(4), 1032-1044. doi:10.1109/TCBB.2013.95
36. Angione, C., Carapezza, G., Costanza, J., Lio', P., & Nicosia, G. (2013). Design and strain selection criteria for bacterial communication networks. *Nano Communication Networks*, 4(4), 155-163.
37. Moni, M. A., Mariani, S., Poli, G., Lio, P., & Vicenzi, E. (2013). Differential impacts of R5 vs. X4 HIV-1 on the transcriptome of primary CD4(+) T cells. *RETROVIROLOGY*, 10, S39.
38. Castiglione, F., Tieri, P., De Graaf, A., Franceschi, C., Lio', P., Van Ommen, B., ... Ernst, M. (2013). The onset of type 2 diabetes: proposal for a multi-scale model.. *JMIR Res Protoc*, 2(2), e44. doi:10.2196/resprot.2854
39. Taffi, M., Paoletti, N., Lio', P., Tesei, L., Merelli, E., & Marini, M. (2013). A systems biology and ecology framework for POPs bioaccumulation in marine ecosystems. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 8130 LNBI, 238-239.
40. Di Stefano, A., La Corte, A., Leotta, M., Lio', P., & Scat', M. (2013). It measures like me: An IoTs algorithm in WSNs based on heuristics behavior and clustering methods. *Ad Hoc Networks*, 11(8), 2637-2647.
41. Lio', P. (2013). Methodologies for Systems Medicine: Time to Join the Forces of Bioengineering and Bioinformatics.. In P. Fernandes, J. SolÈ-Casals, A. L. N. Fred, & H. Gamboa (Eds.), *BIOINFORMATICS* (pp. 1S-27). SciTePress.
42. Merelli, I., Lio', P., & Milanese, L. (2013). NuChart: An R Package to Study Gene Spatial Neighbourhoods with Multi-Omics Annotations. *PLoS ONE*, 8(9).
43. Xiaofeng, L., Pan, H., & Lio, P. (2013). Offloading Mobile Data from Cellular Networks Through Peer-to-Peer WiFi Communication: A Subscribe-and-Send Architecture. *CHINA COMMUNICATIONS*, 10(6), 35-46.
44. Angione, C., Costanza, J., Carapezza, G., LiO', P., & Nicosia, G. (2013). A design automation framework for computational bioenergetics in biological networks.. *Mol Biosyst*, 9(10), 2554-2564. doi:10.1039/c3mb25558a

45. Capobianco, E., & Lio', P. (2013). Comorbidity: a multidimensional approach. *Trends in Molecular Medicine*.
46. Angione, C., Costanza, J., Carapezza, G., Lio', P., & Nicosia, G. (2013). Pareto epsilon-dominance and identifiable solutions for BioCAD modeling. *Proceedings - Design Automation Conference*.
47. Lio, P. (2013). Pathways to P4 medicine. *BIOINFORMATICS 2013 - Proceedings of the International Conference on Bioinformatics Models, Methods and Algorithms*, IS15-IS20.
48. Moni, M. A., Lio', P., & Milanesi, L. (2013). Comparing viral (HIV) and bacterial (staphylococcus aureus) infection of the bone tissue. *BIOINFORMATICS 2013 - Proceedings of the International Conference on Bioinformatics Models, Methods and Algorithms*, 196-201.
49. Balasubramaniam, S., Ben-Yehuda, S., Pautot, S., Jesorka, A., Lio', P., & Koucheryavy, Y. (2013). A review of experimental opportunities for molecular communication. *Nano Communication Networks*, 4(2), 43-52.
50. Carapezza, G., Umeton, R., Costanza, J., Angione, C., Stracquadanio, G., Papini, A., . . . Nicosia, G. (2013). Efficient behavior of photosynthetic organelles via Pareto optimality, identifiability, and sensitivity analysis.. *ACS Synth Biol*, 2(5), 274-288. doi:10.1021/sb300102k
51. Brillì, M., Lio, P., Lacroix, V., & Sagot, M. F. (2013). Short and long-term genome stability analysis of prokaryotic genomes.. *BMC Genomics*, 14, 309. doi:10.1186/1471-2164-14-309
52. Castiglione, F., Diaz, V., Gaggioli, A., Lio, P., Mazza, C., Merelli, E., . . . von Ammon, R. (2013). Physio-Environmental Sensing and Live Modeling. *JOURNAL OF MEDICAL INTERNET RESEARCH*, 15(1). doi:10.2196/ijmr.2092
53. Aldinucci, M., Bracciali, A., Lio', P., Sorathiya, A., & Torquati, M. (2010). StochKit-FF: Efficient Systems Biology on Multicore Architectures.. In M. R. Guarracino, F. Vivien, J. L. Trff, M. Cannataro, M. Danelutto, A. Hast, . . . M. Alexander (Eds.), *Euro-Par Workshops* Vol. 6586 (pp. 167-175). Springer. doi:10.1007/978-3-642-21878-1_21
54. Coello, C. A. C., Greensmith, J., Krasnogor, N., Lio', P., Nicosia, G., & Pavone, M. (Eds.) (2012). Artificial Immune Systems - 11th International Conference, ICARIS 2012, Taormina, Italy, August 28-31, 2012. Proceedings. In *ICARIS* Vol. 7597. Springer. doi:10.1007/978-3-642-33757-4

55. Bartocci, E., Lio', P., Merelli, E., & Paoletti, N. (2012). Multiple Verification in Complex Biological Systems: The Bone Remodelling Case Study.. *T. Comp. Sys. Biology*, *14*, 53-76. doi:10.1007/978-3-642-35524-0_3
56. Angione, C., Lio', P., & Nicosia, G. (2012). How to Compute with Metabolism in Bacteria?. *ERCIM News*, *2012*.
57. Lio', P., Nicosia, G., & Stibor, T. (Eds.) (2011). Artificial Immune Systems - 10th International Conference, ICARIS 2011, Cambridge, UK, July 18-21, 2011. Proceedings. In *ICARIS* Vol. 6825. Springer. doi:10.1007/978-3-642-22371-6
58. Lio', P., Merelli, E., & Paoletti, N. (2012). Disease processes as hybrid dynamical systems. *EPTCS 92, 2012*, pp. 152-166. doi:10.4204/EPTCS.92.11
59. Leung, I. X. Y., Chan, S. Y., Hui, P., & Lio', P. (2011). Intra-City Urban Network and Traffic Flow Analysis from GPS Mobility Trace. <http://arxiv.org/abs/1105.5839v1>
60. Lio', P., Bianchi, L., Nguyen, V., & Kitchovich, S. (2013). Risk Perception, Heuristics and Epidemic Spread. In P. Manfredi, & A. D'Onofrio (Eds.), *Modeling the Interplay Between Human Behavior and the Spread of Infectious Diseases* (pp. 139-152).
61. Shavit, Y., & Lio', P. (2013). CytoHiC: a cytoscape plugin for visual comparison of Hi-C networks.. *Bioinformatics*, *29*(9), 1206-1207. doi:10.1093/bioinformatics/btt120
62. Balasubramaniam, S., & Lio', P. (2013). Multi-hop conjugation based bacteria nanonetworks.. *IEEE Trans Nanobioscience*, *12*(1), 47-59. doi:10.1109/TNB.2013.2239657
63. Vicenzi, E., Lio', P., & Poli, G. (2013). The puzzling role of CXCR4 in human immunodeficiency virus infection.. *Theranostics*, *3*(1), 18-25. doi:10.7150/thno.5392
64. Costanza, J., Carapezza, G., Angione, C., Lio', P., & Nicosia, G. (2012). Multi-objective optimisation, sensitivity and robustness analysis in FBA modelling. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *7605 LNBI*, 127-147.
65. Lio', P., Paoletti, N., Moni, M. A., Atwell, K., Merelli, E., & Viceconti, M. (2012). Modelling osteomyelitis.. *BMC Bioinformatics*, *13 Suppl 14*, S12. doi:10.1186/1471-2105-13-S14-S12

66. Costanza, J., Carapezza, G., Angione, C., Lio', P., & Nicosia, G. (2012). Robust design of microbial strains.. *Bioinformatics*, 28(23), 3097-3104. doi:10.1093/bioinformatics/bts590
67. Haider, S., Cordeddu, L., Robinson, E., Movassagh, M., Siggens, L., Vujic, A., . . . Foo, R. (2012). The landscape of DNA repeat elements in human heart failure.. *Genome Biol*, 13(10), R90. doi:10.1186/gb-2012-13-10-r90
68. Peng, C., Jin, X., Wong, K. C., Shi, M., & LiO', P. (2012). Correction: Collective Human Mobility Pattern from Taxi Trips in Urban Area.. *PLoS One*, 7(8). doi:10.1371/annotation/f0d48839-ed4b-4cb2-822a-d449a6b4fa5d
69. Lio', P., Angelini, C., De Feis, I., & Nguyen, V. A. (2012). Statistical approaches to use a model organism for regulatory sequences annotation of newly sequenced species.. *PLoS One*, 7(9), e42489. doi:10.1371/journal.pone.0042489
70. Paoletti, N., Lio', P., Merelli, E., & Viceconti, M. (2012). Multilevel computational modeling and quantitative analysis of bone remodeling.. *IEEE/ACM Trans Comput Biol Bioinform*, 9(5), 1366-1378. doi:10.1109/TCBB.2012.51
71. Xiaofeng, L., Hu, P., & Lio, P. (2012). High Delivery Performance Opportunistic Routing Scheme for Delay Tolerant Networks. *CHINA COMMUNICATIONS*, 9(6), 145-153. Retrieved from
72. Lu, X. F., Towsley, D., Lio, P., & Xiong, Z. (2012). An adaptive directional MAC protocol for ad hoc networks using directional antennas. *Science China Information Sciences*, 55(6), 1360-1371.
73. Massaro, E., Bagnoli, F., Guazzini, A., & LiO', P. (2012). Information dynamics algorithm for detecting communities in networks. *Communications in Nonlinear Science and Numerical Simulation*, 17(11), 4294-4303.
74. Laise, P., Fanelli, D., Lio, P., & Arcangeli, A. (2012). Modeling TGF-beta signaling pathway in epithelial-mesenchymal transition. *AIP ADV*, 2(1), . doi:10.1063/1.3697962
75. Peng, C., Jin, X., Wong, K. C., Shi, M., & LiO', P. (2012). Collective human mobility pattern from taxi trips in urban area.. *PLoS One*, 7(4), e34487. doi:10.1371/journal.pone.0034487
76. Lu, X., Xin, Y., & Lio, P. (2011). ADMAC: An adaptive directional MAC protocol for mobile ad hoc networks. *Proceedings - 2011 4th IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT 2011*, 488-492.

77. Lio', P., & Balasubramaniam, S. (2012). Opportunistic routing through conjugation in bacteria communication nanonetwork. *Nano Communication Networks*, 3(1), 36-45.
78. Lu, X., Hui, P., & Lio', P. (2011). Evolving model of opportunistic routing in delay tolerant networks. *Proceedings - 2011 7th International Conference on Mobile Ad-hoc and Sensor Networks, MSN 2011*, 276-281.
79. Merelli, E., Paoletti, N., & Lio, P. (2011). Methodological Bridges for Multi-Level Systems. In E. Giacobino, & R. Pfeifer (Eds.), *Procedia Computer Science* Vol. 7 (pp. 180-182). Budapest: Elsevier.
80. Khoo, W. M., & Lio', P. (2011). Unity in diversity: Phylogenetic-inspired techniques for reverse engineering and detection of malware families. *Proceedings - 1st SysSec Workshop, SysSec 2011*, 3-10.
81. Nazri, A., & Lio', P. (2012). Investigating meta-approaches for reconstructing gene networks in a mammalian cellular context.. *PLoS One*, 7(1), e28713. doi:10.1371/journal.pone.0028713
82. Umeton, R., Stracquadanio, G., Papini, A., Costanza, J., Lio', P., & Nicosia, G. (2012). Identification of sensitive enzymes in the photosynthetic carbon metabolism.. *Adv Exp Med Biol*, 736, 441-459. doi:10.1007/978-1-4419-7210-1_26
83. Movassagh, M., Choy, M. K., Knowles, D. A., Cordeddu, L., Haider, S., Down, T., Lio', P., Foo, R. S. (2011). Distinct epigenomic features in end-stage failing human hearts.. *Circulation*, 124(22), 2411-2422. doi:10.1161/CIRCULATIONAHA.111.040071
84. Lio', P., & Sasitharan Balasubramaniam, S. B. (2011). Opportunistic routing through conjugation in bacteria communication nanonetwork. *Nano Communication Networks*, 2(October 2011). doi:10.1016/j.nancom.2011.10.003
85. Bagnoli, F., & Lio', P. (2011). HOW THE MUTATIONAL-SELECTION INTERPLAY ORGANIZES THE FITNESS LANDSCAPE. *J NONLINEAR MATH PHY*, 18, 265-286. doi:10.1142/S1402925111001532
86. Lio', P., & Verma, D. (2011). *Biologically Inspired Networking and Sensing*. Medical Info Science Reference.
87. Balasubramaniam, S., Leibnitz, K., Lio', P., Botvich, D., & Murata, M. (2011). Biological Principles for Future Internet Architecture Design. *IEEE COMMUN MAG*, 49(7), 44-52.
88. Yoneki, E., Crowcroft, J., Lio', P., Walton, N., Vojnovic, M., & Whitaker, R. (2011). Message from the Workshop on the Future of Social Networking. *COMPUT COMMUN REV*, 41(3), 14-18. doi:10.1145/2002250.2002254

89. Giampieri, E., Remondini, D., de Oliveira, L., Castellani, G., & Lio', P. (2011). Stochastic analysis of a miRNA-protein toggle switch.. *Mol Biosyst*, 7(10), 2796-2803. doi:10.1039/c1mb05086a
90. Lio', P., Merelli, E., Paoletti, N., & Viceconti, M. (2011). A combined process algebraic and stochastic approach to bone remodeling. *Electronic Notes in Theoretical Computer Science*, 277(1), 41-52.
91. Gilks, W. R., Nye, T. M. W., & Lio', P. (2011). A Variance-Components Model for Distance-Matrix Phylogenetic Reconstruction. *STAT APPL GENET MOL*, 10(1), . doi:10.2202/1544-6115.1574
92. Schwarz, E., Whitfield, P., Nahnsen, S., Wang, L., Major, H., Leweke, F. M., Lio' P. . . Bahn, S. (2011). Alterations of primary fatty acid amides in serum of patients with severe mental illness.. *Front Biosci (Elite Ed)*, 3, 308-314. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21196311>
93. Balocco, C., & Lio', P. (2011). Assessing ventilation system performance in isolation rooms. *ENERG BUILDINGS*, 43(1), 246-252. doi:10.1016/j.enbuild.2010.09.020
94. Kitchovitch, S., & Lio', P. (2011). Community structure in social networks: applications for epidemiological modelling.. *PLoS One*, 6(7), e22220. doi:10.1371/journal.pone.0022220
95. Umeton, R., Stracquadanio, G., Sorathiya, A., Papini, A., Lio', P., & Nicosia, G. (2011). Design of robust metabolic pathways. *Proceedings - Design Automation Conference*, 747-752.
96. Song, Y., & Lio', P. (2011). Epileptic EEG detection via a novel pattern recognition framework. *5th International Conference on Bioinformatics and Biomedical Engineering, iCBBE 2011*.
97. Lio', P., Merelli, E., & Paoletti, N. (2011). Multiple verification in computational modeling of bone pathologies. In *EPTCS Vol. 67* (pp. 82-96). Aachen, Germany <http://combio.abo.fi/compmod11/>.
98. Paoletti, N., Lio', P., Merelli, E., & Viceconti, M. (2011). Osteoporosis: A multiscale modeling viewpoint. *Proceedings of the 9th International Conference on Computational Methods in Systems Biology, CMSB'11*, 183-193.
99. Van Der Wath, R. C., Van Der Wath, E. C., & Lio', P. (2011). Parallel hematopoietic stem cell division rate estimation using an agent-based model on the grid. *Proceedings - 19th International Euromicro Conference on Parallel, Distributed, and Network-Based Processing, PDP 2011*, 311-317.

100. Lio', P., & Verma, D. (2011). Biologically inspired networking and sensing: Algorithms and architectures. *IEEE Network*, 24, 4. doi:10.1109/MNET.2010.5464220.
101. Aldinucci, M., Bracciali, A., Lio', P., Sorathiya, A., & Torquati, M. (2011). StochKit-FF: Efficient systems biology on multicore architectures. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 6586 LNCS, 167-175.
102. Hebenstreit, D., Gu, M., Haider, S., Turner, D. J., Lio', P., & Teichmann, S. A. (2011). EpiChIP: gene-by-gene quantification of epigenetic modification levels.. *Nucleic Acids Res*, 39(5), e27. doi:10.1093/nar/gkq1226
103. Sorathiya, A., Bracciali, A., & Lio', P. (2010). An integrated modelling approach for R5-X4 mutation and HAART therapy assessment. *SWARM INTELL-US*, 4(4), 319-340. doi:10.1007/s11721-010-0046-4
104. Lio', P., Guazzini, A., Passarella, A., & Conti, M. (2010). Modeling perisaccadic time perception. *Journal of Biomedical Science and Engineering*, 3(12), 1133-1142. doi:10.4236/jbise.2010.312147
105. Brillì, M., Fani, R., & Lio', P. (2010). Bioinformatics of gene families. In U. Bastolla, M. Porto, E. Roman, & M. Vendruscolo (Eds.), *Structural Approaches to Sequence Evolution* (pp. 368 pages).
106. Botta, M., Haider, S., Leung, I. X., Lio', P., & Mozziconacci, J. (2010). Intra- and inter-chromosomal interactions correlate with CTCF binding genome wide.. *Mol Syst Biol*, 6, 426. doi:10.1038/msb.2010.79
107. Papini, A., Mosti, S., Lio, P., & Haider, S. (2010). BIOLIP, a biotechnology-oriented database of oil content in plants, algae, fungi and cyanobacteria. In *JOURNAL OF BIOTECHNOLOGY* Vol. 150 (pp. S204-S205). doi:10.1016/j.jbiotec.2010.09.012
108. Papini, A., Nicosia, G., Stracquadiano, G., Lio', P., & Umeton, R. (2010). Key Enzymes for the Optimization of CO2 Uptake and Nitrogen Consumption in the C-3 Photosynthetic Carbon Metabolism. In *JOURNAL OF BIOTECHNOLOGY* Vol. 150 (pp. S525-S526). doi:10.1016/j.jbiotec.2010.09.846
109. Lu, X. F., Wicker, F. D., Towsley, D., Xiong, Z., & Lio', P. (2010). Detection Probability Estimation of Directional Antennas and Omni-Directional Antennas. *WIRELESS PERS COMMUN*, 55(1), 51-63. doi:10.1007/s11277-009-9785-1

110. Emiliani, G., Fondi, M., Lio', P., & Fani, R. (2010). Evolution of Metabolic Pathways and Evolution of Genomes. In A. Loy (Ed.), *Geomicrobiology* (pp. 485 pages). Springer Verlag.
111. Balocco, C., & Lio', P. (2010). Modelling infection spreading control in a Hospital isolation room. *Journal of Biomedical Science and Engineering*, 3(7), 653-663. doi:10.4236/jbise.2010.37089
112. Lio', P., & Brillì, M. (2010). Transcription factors and gene regulatory networks. In M. Buchanan, G. Caldarelli, & P. D. L. Rios (Eds.), *Networks in Cell Biology* (pp. 271 pages). Cambridge Univ Pr.
113. Lio', P., & Song, Y. (2010). A new approach for epileptic seizure detection: sample entropy based feature extraction and extreme learning machine. *Journal of Biomedical Science and Engineering*, 3(6), 556-567. doi:10.4236/jbise.2010.36078
114. Lio', P., & Verma, D. (2010). Biologically Inspired Networking. *IEEE NETWORK*, 24(3), 4.
115. Brillì, M., & Lio', P. (2010). The structural and dynamical properties of biological systems. In S. Boccaletti, V. Latora, & Y. Moreno (Eds.), *Handbook on Biological Networks* (pp. 441 pages). World Scientific Pub Co Inc.
116. Cheng, T. M., Lu, Y. E., Guest, P. C., Rahmoune, H., Harris, L. W., Wang, L., Lio', P., . . . Bahn, S. (2010). Identification of targeted analyte clusters for studies of schizophrenia. *Mol Cell Proteomics*, 9(3), 510-522. doi:10.1074/mcp.M900372-MCP200
117. Song, Y., Azad, S., & Lio', P. (2010). A new approach for epileptic seizure detection using extreme learning machine. *BIOSIGNALS 2010 - Proceedings of the 3rd International Conference on Bio-inspired Systems and Signal Processing, Proceedings*, 436-441.
118. Sorathiya, A., Bracciali, A., & Lio', P. (2010). An integrated modelling approach for R5-X4 mutation and HAART therapy assessment. *Swarm Intelligence*, 1-22.
119. Stracquadanio, G., Umeton, R., Papini, A., Lio, P., & Nicosia, G. (2010). Analysis and optimization of C3 photosynthetic carbon metabolism. *10th IEEE International Conference on Bioinformatics and Bioengineering 2010, BIBE 2010*, 44-51.
120. Guazzini, A., Lio', P., Bagnoli, F., Passarella, A., & Conti, M. (2010). Cognitive network dynamics in chatlines. In *ICCS 2010 - INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE, PROCEEDINGS* Vol. 1 (pp. 2349-2356). doi:10.1016/j.procs.2010.04.265

121. Guazzini, A., Lio', P., Bagnoli, F., Passarella, A., & Conti, M. (2010). Cognitive network dynamics in chatlines. *Procedia Computer Science*, 1(1), 2355-2362.
122. Angelini, C., De Feis, I., Nguyen, V. A., Van Der Wath, R., & Lio', P. (2010). Combining replicates and nearby species data: A Bayesian approach. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 6160 LNBI, 191-205.
123. Nguyen, V. A., & Lio', P. (2010). Filling in the gaps of biological network. In S. Do'eroski, S. Rogers, & G. Sanguinetti (Eds.), *Machine Learning in Systems Biology, Proceedings of the Fourth International Workshop Edinburgh, Scotland October 15-16, 2010* (pp. 147-149). Edinburgh.
124. Xie, S., Lawniczak, A. T., Song, Y., & Lio', P. (2010). Feature extraction via dynamic PCA for epilepsy diagnosis and epileptic seizure detection. *Proceedings of the 2010 IEEE International Workshop on Machine Learning for Signal Processing, MLSP 2010*, 337-342.
125. Xie, S., Lawniczak, A. T., & Lio', P. (2010). Features extraction via wavelet kernel PCA for data classification. *Proceedings of the 2010 IEEE International Workshop on Machine Learning for Signal Processing, MLSP 2010*, 438-443.
126. Sorathiya, A., Bracciali, A., & Lio', P. (2010). Formal reasoning on qualitative models of coinfection of HIV and Tuberculosis and HAART therapy.. *BMC Bioinformatics*, 11 Suppl 1, S67. doi:10.1186/1471-2105-11-S1-S67
127. Aldinucci, M., Bracciali, A., & Lio', P. (2010). Formal Synthetic Immunology. *Ercim News*, 82, 40-41.
128. Chan, T. M., Leung, K. S., Lee, K. H., & Lio', P. (2010). Generic Spaced DNA Motif Discovery Using Genetic Algorithm. In *2010 IEEE CONGRESS ON EVOLUTIONARY COMPUTATION (CEC)* (pp.).
129. Lio', P., & Verma, D. (2010). Guest Editorial: Biologically inspired networking. *IEEE Network*, 24(3), 4.
130. Bartoszek, K., Lio', P., & Sorathiya, A. (2010). INFLUENZA DIFFERENTIATION AND EVOLUTION. In A. T. Lawniczak, D. Makowiec, & B. N. Di Stefano (Eds.), *SUMMER SOLSTICE 2009 INTERNATIONAL CONFERENCE ON DISCRETE MODELS OF COMPLEX SYSTEMS* Vol. 3 (pp. 417-452).

131. Pappas, V., Verma, D. C., & Lio', P. (2010). Morphogenesis in computer networks. *33rd IEEE Sarnoff Symposium 2010, Conference Proceedings*.
132. Kitchovitch, S., & Lio, P. (2010). Risk perception and disease spread on social networks. In *ICCS 2010 - INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE, PROCEEDINGS* Vol. 1 (pp. 2339-2348). doi:10.1016/j.procs.2010.04.264 *Procedia Computer Science*, 1(1), 2345-2354.
133. Ostilli, M., Yoneki, E., Leung, I. X. Y., Mendes, J. F. F., Lio', P., & Crowcroft, J. (2010). Statistical mechanics of rumour spreading in network communities. In *ICCS 2010 - INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE, PROCEEDINGS* Vol. 1 (pp. 2325-2333). doi:10.1016/j.procs.2010.04.262
134. Milanesi, L., Romano, P., Castellani, G., Remondini, D., & Lio', P. (2009). Trends in modeling Biomedical Complex Systems. *BMC BIOINFORMATICS*, 10, . doi:10.1186/1471-2105-10-S12-11
135. Fondi, M., Emiliani, G., Lio', P., Gribaldo, S., & Fani, R. (2009). The evolution of histidine biosynthesis in archaea: insights into the his genes structure and organization in LUCA.. *J Mol Evol*, 69(5), 512-526. doi:10.1007/s00239-009-9286-6
136. Bianchi, L., & Lio', P. (2009). La legge e il DNA. *Le Scienze, Italian Edition Scientific American*, (September 2009). Retrieved from <http://www.lescienze.it/>
137. Nguyen, V. A., & Lio', P. (2009). Measuring similarity between gene expression profiles: a Bayesian approach. In *BMC GENOMICS* Vol. 10 (pp.). doi:10.1186/1471-2164-10-S3-S14
138. Brilli, M., Fondi, M., Lio', P., & Fani, R. (2009). The Origin and Evolution of Nitrogen Fixation Genes. *ORIGINS LIFE EVOL B*, 39(3-4), 310-311.
139. Wilson, A., Laurenti, E., Oser, G., van der Wath, R. C., Blanco-Bose, W., Jaworski, M., Lio', P. . . Trumpp, A. (2009). Hematopoietic Stem Cells Reversibly Switch from Dormancy to Self-Renewal during Homeostasis and Repair (vol 135, pg 1118, 2008). *CELL*, 138(1), 209. doi:10.1016/j.cell.2009.06.020
140. Lee, U., Magistretti, E., Gerla, M., Bellavista, P., Lio', P., & Lee, K. W. (2009). Bio-inspired multi-agent data harvesting in a proactive urban monitoring environment. *AD HOC NETW*, 7(4), 725-741. doi:10.1016/j.adhoc.2008.03.009

141. Leung, I. X. Y., Hui, P., Lio', P., & Crowcroft, J. (2009). Towards real-time community detection in large networks. *PHYS REV E*, 79(6), . doi:10.1103/PhysRevE.79.066107
142. Carla Balocco, C. B., Lio', P., & Luca Sani. (2009). Simulazione di un sistema di ventilazione per il controllo degli agenti eziologici nei reparti infettivi. Un caso reale. *CDA CONDIZIONAMENTO DELL'ARIA RISCALDAMENTO REFRIGERAZIONE*, May 2009(May 2009), 1-9.
143. Xie, S. K., Lio', P., & Lawniczak, A. T. (2009). A Case Study of ICA with Multi-scale PCA of Simulated Traffic Data. In C. Alippi, M. Polycarpou, C. Panayiotou, & G. Ellinas (Eds.), *ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT II* Vol. 5769 (pp. 358-367).
144. Xie, S. K., Lio', P., & Lawniczak, A. T. (2009). A Comparative Study of Noise Effect on Wavelet Based De-noising Methods. In *IEEE TIC-STH 09: 2009 IEEE TORONTO INTERNATIONAL CONFERENCE: SCIENCE AND TECHNOLOGY FOR HUMANITY* (pp. 919-926).
145. Bella, G., & Lio', P. (2009). Analysing the microRNA-17-92/Myc/E2F/RB Compound Toggle Switch by Theorem Proving. In *Proc. of the 9th Workshop on Network Tools and Applications in Biology (Nettabi09)* Vol. Liberodiscrivere (2009) (pp. 59-62). Catania: Liberodiscrivere (2009).
146. Schwarz, E., Leweke, F. M., Bahn, S., & Lio', P. (2009). Clinical bioinformatics for complex disorders: a schizophrenia case study.. *BMC Bioinformatics*, 10 Suppl 12, S6. doi:10.1186/1471-2105-10-S12-S6
147. van der Wath, R. C., Wilson, A., Laurenti, E., Trumpp, A., & Lio', P. (2009). Estimating dormant and active hematopoietic stem cell kinetics through extensive modeling of bromodeoxyuridine label-retaining cell dynamics.. *PLoS One*, 4(9), e6972. doi:10.1371/journal.pone.0006972
148. Chan, S. Y., Leung, I. X. Y., & Lio', P. (2009). Fast centrality approximation in modular networks. *International Conference on Information and Knowledge Management, Proceedings*, 31-38.
149. Bella, G., & Lio', P. (2009). Formal Analysis of the Genetic Toggle. In P. Degano, & R. Gorrieri (Eds.), *COMPUTATIONAL METHODS IN SYSTEMS BIOLOGY, PROCEEDINGS* Vol. 5688 (pp. 96-110).
150. Wilson, A., Laurenti, E., Oser, G., van der Wath, R. C., Blanco-Bose, W., Jaworski, M., . . . Trumpp, A. (2009). Hematopoietic Stem Cells Reversibly Switch from Dormancy to Self-Renewal during Homeostasis and Repair (DOI:10.1016/j.cell.2008.10.048). *Cell*, 138(1), 209.
151. Cheng, T. M. K., Lu, Y. -E., & Lio', P. (2009). Identification of structurally important amino acids in proteins by graph-theoretic

measures. *Proceedings of the KDD-09 Workshop on Statistical and Relational Learning in Bioinformatics, StReBio '09*, 7-11.

152. Xu, K., Hui, P., Li, V. O. K., Crowcroft, J., Latora, V., & Lio', P. (2009). Impact of Altruism on Opportunistic Communications. In *2009 FIRST INTERNATIONAL CONFERENCE ON UBIQUITOUS AND FUTURE NETWORKS* (pp. 153-158).
153. Guazzini, A., Lio', P., Passarella, A., & Conti, M. (2009). Information Processing and Timing Mechanisms in Vision. In C. Alippi, M. Polycarpou, C. Panayiotou, & G. Ellinas (Eds.), *ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT I* Vol. 5768 (pp. 325-334).
154. Sorathiya, A., Lio', P., & Sguanci, L. (2009). Mathematical Model of HIV Superinfection and Comparative Drug Therapy. In P. S. Andrews, J. Timmis, N. D. L. Owens, U. Aickelin, E. Hart, A. Hone, . . . A. M. Tyrrell (Eds.), *ARTIFICIAL IMMUNE SYSTEMS, PROCEEDINGS* Vol. 5666 (pp. 41-53).
156. Lu, X. F., Towsley, D., Lio', P., Wicker, F., & Xiong, Z. (2009). Minimizing Detection Probability Routing in Ad Hoc Networks Using Directional Antennas. *EURASIP J WIREL COMM*, . doi:10.1155/2009/256714
157. Nguyen, V. A., Koukolikova-Nicola, Z., Bagnoli, F., & Lio', P. (2009). Noise and non-linearities in high-throughput data. *J STAT MECH-THEORY E*, . doi:10.1088/1742-5468/2009/01/P01014
158. Lu, Y. -E., Roberts, S. G. B., Cheng, T. M. K., Dunbar, R., Lio', P., & Crowcroft, J. (2009). On optimising personal network size to manage information flow.. In J. Wang, S. Zhou, & D. Zhang (Eds.), *CIKM-CNIKM* (pp. 19-26). ACM. doi:10.1145/1651274.1651279
159. Sorathiya, A., Jucikas, T., Pieciewicz, S., Sengupta, S., & Lio', P. (2009). Searching for Glycomics Role in Stem Cell Development. In F. Masulli, R. Tagliaferri, & G. M. Verkhivker (Eds.), *COMPUTATIONAL INTELLIGENCE METHODS FOR BIOINFORMATICS AND BIOSTATISTICS* Vol. 5488 (pp. 198-209).
160. Hui, P., Xu, K., Li, V. O. K., Crowcroft, J., Latora, V., & Lio', P. (2009). Selfishness, Altruism and Message Spreading in Mobile Social Networks. In *IEEE INFOCOM 2009 - IEEE CONFERENCE ON COMPUTER COMMUNICATIONS WORKSHOPS* (pp. 284-289).
161. Lu, Y. -E., Roberts, S. G. B., Lio', P., Dunbar, R., & Crowcroft, J. (2009). Size Matters: Variation in Personal Network Size, Personality and Effect on Information Transmission.. In *CSE (4)* (pp. 188-193). IEEE Computer Society. doi:10.1109/CSE.2009.179

162. Kitchovitch, S., Song, Y. D., van der Wath, R., & Lio', P. (2009). Substitution Matrices and Mutual Information Approaches to Modeling Evolution. In T. Stutzle (Ed.), *LEARNING AND INTELLIGENT OPTIMIZATION* Vol. 5851 (pp. 259-272).
163. Milanese, L., Romano, P., Castellani, G., Remondini, D., & Lio', P. (2009). Trends in modeling Biomedical Complex Systems.. *BMC Bioinformatics*, 10 Suppl 12, I1. doi:10.1186/1471-2105-10-S12-I1
164. Kitchovitch, S., Leung, I., Song, Y. D., & Lio, P. (2009). Using Mutual Information and Models of Evolution for improved pattern detection. In J. Zhang, G. Z. Li, & J. Y. Yang (Eds.), *2009 INTERNATIONAL JOINT CONFERENCE ON BIOINFORMATICS, SYSTEMS BIOLOGY AND INTELLIGENT COMPUTING, PROCEEDINGS* (pp. 215-221). doi:10.1109/IJCBS.2009.77
165. Wilson, A., Laurenti, E., Oser, G., van der Wath, R. C., Blanco-Bose, W., Jaworski, M., Lio', P., Trumpp, A. (2008). Hematopoietic stem cells reversibly switch from dormancy to self-renewal during homeostasis and repair.. *Cell*, 135(6), 1118-1129. doi:10.1016/j.cell.2008.10.048
166. Wilson, A., Osee, G., van der Wath, R., Blanco-Bose, W., Laurenti, E., Dunant, C., Lio' P., Trumpp, A. (2008). Haematopoietic stem cells reversibly switch from dormancy to self-renewal during homeostasis and repair. *SWISS MED WKLY*, 138, 46S.
167. Bagnoli, F., Guazzini, A., & Lio', P. (2008). Human Heuristics for Autonomous Agents. CoRR, abs/0801.3048.
168. Kershenbaum, A., Pappas, V., Lee, K. W., Lio', P., Sadler, B., & Verma, D. (2008). A Biologically-Inspired MANET Architecture. In *Proceedings of SPIE, the International Society for Optical Engineering* (pp. 698106.1-698106.9).
169. Kershenbaum, A., Pappas, V., Lee, K. W., Lio', P., Sadler, B., & Verma, D. (2008). A biologically-inspired MANET architecture - art. no. 698106. In R. Suresh (Ed.), *DEFENSE TRANSFORMATION AND NET-CENTRIC SYSTEMS 2008* Vol. 6981 (pp. 98106).
170. Lu, X., Wicker, F., Leung, I., Lio', P., & Xiong, Z. (2008). A location prediction algorithm for directional communication. *IWCMC 2008 - International Wireless Communications and Mobile Computing Conference*, 159-164.
171. Lu, X. F., Chen, Y. C., Leung, I., Xiong, Z., & Lio', P. (2008). A novel mobility model from a heterogeneous military MANET trace. In D. Coudert, D. SimplotRyl, & I. Stojmenovic (Eds.), *AD-HOC, MOBILE AND WIRELESS NETWORKS, PROCEEDINGS* Vol. 5198 (pp. 463-474).

172. van der Wath, R. C., & Lio', P. (2008). A Stochastic Multi-agent Model of Stem Cell Proliferation. In H. Umeo, S. Morishita, K. Nishinari, T. Komatsuzaki, & S. Bandini (Eds.), *CELLULAR AUTOMATA, PROCEEDINGS* Vol. 5191 (pp. 500-505).
173. van der Wath, R. C., & Lio', P. (2008). A Stochastic Single Cell Based Model of BrdU Measured Hematopoietic Stem Cell Kinetics. In M. Heiner, & A. M. Uhrmacher (Eds.), *COMPUTATIONAL METHODS IN SYSTEMS BIOLOGY, PROCEEDINGS* Vol. 5307 (pp. 387-401).
174. Brillì, M., Mengoni, A., Fondi, M., Bazzicalupo, M., Lio', P., & Fani, R. (2008). Analysis of plasmid genes by phylogenetic profiling and visualization of homology relationships using Blast2Network.. *BMC Bioinformatics*, 9, 551. doi:10.1186/1471-2105-9-551
175. Nguyen, V. A., Koukolikova-Nicola, Z., Bagnoli, F., & Lio', P. (2008). Bayesian Inference on Hidden Knowledge in High-Throughput Molecular Biology Data. In T. B. Ho, & Z. H. Zhou (Eds.), *PRICAI 2008: TRENDS IN ARTIFICIAL INTELLIGENCE* Vol. 5351 (pp. 829-838).
176. van der Wath, R. C., van der Wath, E., Carapelli, A., Nardi, F., Frati, F., Milanese, L., . Lio', P. (2008). Bayesian phylogeny on grid. In M. Elloumi, J. Kung, M. Linial, R. F. Murphy, K. Schneider, & C. Toma (Eds.), *BIOINFORMATICS RESEARCH AND DEVELOPMENT, PROCEEDINGS* Vol. 13 (pp. 404-416).
177. Lu, Y. E., Lio', P., & Hand, S. (2008). Beta Random Projection. In P. Lio, E. Yoneki, & D. C. Verma (Eds.), *BIO-INSPIRED COMPUTING AND COMMUNICATION* Vol. 5151 (pp. 319-331).
178. Lee, U., Magistretti, E., Gerla, M., Bellavista, P., Lio', P., & Lee, K. W. (2008). Bio-Inspired Multi-agent Collaboration for Urban Monitoring Applications. In P. Lio, E. Yoneki, & D. C. Verma (Eds.), *BIO-INSPIRED COMPUTING AND COMMUNICATION* Vol. 5151 (pp. 204-216).
179. Lio', P., Yoneki, E., Crowcroft, J., & Verma, D. C. (Eds.) (2008). Bio-Inspired Computing and Communication, First Workshop on Bio-Inspired Design of Networks, BIOWIRE 2007, Cambridge, UK, April 2-5, 2007, Revised Selected Papers. In BIOWIRE Vol. 5151. Springer.
180. Angelini, C., Cutillo, L., De Feis, I., Lio', P., & van der Wath, R. (2008). Combining experimental evidences from replicates and nearby species data for annotating novel genomes. In L. M. Ricciardi, A. Buonocore, & E. Pirozzi (Eds.), *COLLECTIVE DYNAMICS: TOPICS ON COMPETITION AND COOPERATION IN THE BIOSCIENCES* Vol. 1028 (pp. 277-291).
181. Schwarz, E., Leweke, F. M., Bahn, S., & Lio', P. (2008). Combining molecular and physiological data of complex disorders. In M. Elloumi, J. Kung, M. Linial, R. F. Murphy, K. Schneider, & C. Toma (Eds.),

BIOINFORMATICS RESEARCH AND DEVELOPMENT, PROCEEDINGS Vol. 13 (pp. 362-376).

182. Leung, I. X. Y., Gibbs, G., Bagnoli, F., Sorathiya, A., & Lio', P. (2008). Contact Network Modeling of Flu Epidemics. In H. Umeo, S. Morishita, K. Nishinari, T. Komatsuzaki, & S. Bandini (Eds.), *CELLULAR AUTOMATA, PROCEEDINGS* Vol. 5191 (pp. 354-361).
183. Brilli, M., Fani, R., & Lio', P. (2008). Current trends in the bioinformatic sequence analysis of metabolic pathways in prokaryotes.. *Brief Bioinform*, 9(1), 34-45. doi:10.1093/bib/bbm051
184. Stajano, F., Bianchi, L., Lio', P., & Korff, D. (2008). Forensic genomics: Kin privacy, driftnets and other open questions. *Proceedings of the ACM Conference on Computer and Communications Security*, 15-22.
185. Bagnoli, F., Guazzini, A., & Lio', P. (2008). Human Heuristics for Autonomous Agents. In P. Lio, E. Yoneki, & D. C. Verma (Eds.), *BIO-INSPIRED COMPUTING AND COMMUNICATION* Vol. 5151 (pp. 340-351).
186. Lu, X. F., Hui, P., Lio', P., & Xiong, Z. (2008). Identity Privacy Protection by Delayed Transmission in Pocket Switched Networks. In M. Guo, Z. J. Wang, F. Tang, & C. Z. Xu (Eds.), *EUC 2008: PROCEEDINGS OF THE 5TH INTERNATIONAL CONFERENCE ON EMBEDDED AND UBIQUITOUS COMPUTING, VOL 2, WORKSHOPS* (pp. 272-277).
187. Koukolikova-Nicola, Z., Lio', P., & Bagnoli, F. (2008). Inference on missing values in genetic networks using high-throughput data. In E. Marchiori, & J. H. Moore (Eds.), *EVOLUTIONARY COMPUTATION, MACHINE LEARNING AND DATA MINING IN BIOINFORMATICS, PROCEEDINGS* Vol. 4973 (pp. 106-116).
188. Lio', P., & Bishop, M. (2008). Modeling sequence evolution. *Methods Mol Biol.*, 452, 255-285.
189. Lio', P., & Bishop, M. (2008). Modeling sequence evolution.. *Methods Mol Biol*, 452, 255-285. doi:10.1007/978-1-60327-159-2_13
190. Lu, Y. E., Lio', P., & Hand, S. (2008). On low dimensional random projections and similarity search. *International Conference on Information and Knowledge Management, Proceedings*, 749-758.
191. Xie, S. K., Lawniczak, A. T., & Lio', P. (2008). Parametric & non-parametric analysis of mean treatment effects of number of packets in transit in data network model. In *2008 CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING, VOLS 1-4* (pp. 1931-1936).
192. Cheng, T. M., Lu, Y. E., Vendruscolo, M., Lio', P., & Blundell, T. L. (2008). Prediction by graph theoretic measures of structural effects in

proteins arising from non-synonymous single nucleotide polymorphisms..
PLoS Comput Biol, 4(7), e1000135. doi:10.1371/journal.pcbi.1000135

193. Lu, X. F., Wicker, F., Lio', P., & Towsley, D. (2008). Security Estimation Model with Directional Antennas. In *2008 IEEE MILITARY COMMUNICATIONS CONFERENCE: MILCOM 2008, VOLS 1-7* (pp. 3808-3813).
194. Allen, S. M., Conti, M., Crowcroft, J., Dunbar, R., Lio', P., Mendes, J. F., ... Whitaker, R. M. (2008). Social Networking for Pervasive Adaptation. In G. D. Serugendo (Ed.), *SASOW 2008: SECOND IEEE INTERNATIONAL CONFERENCE ON SELF-ADAPTIVE AND SELF-ORGANIZING SYSTEMS WORKSHOPS, PROCEEDINGS* (pp. 49-54).
195. Lio', P., Angelini, C., DeFeis, I., Nguyen, V., Cutillo, L., & va der Wath, R. (2008). Statistical issues for combining replicates and nearby species data and different omics. In *Proceedings The Art and Science of Statistical Bioinformatics The 27th Leeds Annual Statistical Research Workshop 15th - 17th July 2008* (pp. 50-54). Leeds: S. Barber, P.D. Baxter, A. Gusnanto & K.V. Mardia (eds) Leeds University Press.
196. Lio', P., Brilli, M., & Fani, R. (2008). Topological metrics in Blast data mining: Plasmid and nitrogen-fixing proteins case studies. In M. Elloumi, J. Kung, M. Linial, R. F. Murphy, K. Schneider, & C. Toma (Eds.), *BIOINFORMATICS RESEARCH AND DEVELOPMENT, PROCEEDINGS* Vol. 13 (pp. 207-220).
197. Lio', P., Lawniczak, A. T., Xie, S., & Xu, J. (2008). Wavelet-domain statistics of packet switching networks near traffic congestion. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 5151 LNCS, 268-279.
198. Bagnoli, F., Lio', P., & Sguanci, L. (2007). Risk perception in epidemic modeling.. *Phys Rev E Stat Nonlin Soft Matter Phys*, 76(6 Pt 1), 061904. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18233866>
199. Papetti, C., Lio', P., Ruber, L., Patarnello, T., & Zardoya, R. (2007). Antarctic fish mitochondrial genomes lack ND6 gene. *J MOL EVOL*, 65(5), 519-528. doi:10.1007/s00239-007-9030-z
200. Caretta-Cartozo, C., De Los Rios, P., Piazza, F., & Lio', P. (2007). Bottleneck genes and community structure in the cell cycle network of *S-pombe*. *PLOS COMPUT BIOL*, 3(6), 968-976. doi:10.1371/journal.pcbi.0030103
201. van der Wath, E., Moutsianas, L., van der Wath, R., Visagie, A., Milanese, L., & Lio', P. (2007). Grid methodology for identifying co-

- regulated genes and transcription factor binding sites. *IEEE T NANOBIOSCI*, 6(2), 162-167. doi:10.1109/TNB.2007.897470
202. Bianchi, L., & Lio', P. (2007). Forensic DNA and bioinformatics. *BRIEF BIOINFORM*, 8(2), 117-128. doi:10.1093/bib/bbm006
203. Brillì, M., Fani, R., & Lio', P. (2007). MotifScorer: using a compendium of microarrays to identify regulatory motifs. *BIOINFORMATICS*, 23(4), 493-495. doi:10.1093/bioinformatics/btl607
204. Sguanci, L., Bagnoli, F., & Lio', P. (2007). Modeling HIV quasispecies evolutionary dynamics. In *BMC EVOLUTIONARY BIOLOGY* Vol. 7 (pp.). doi:10.1186/1471-2148-7-S2-S5
205. Carapelli, A., Lio', P., Nardi, F., van der Wath, E., & Frati, F. (2007). Phylogenetic analysis of mitochondrial protein coding genes confirms the reciprocal paraphyly of Hexapoda and Crustacea. In *BMC EVOLUTIONARY BIOLOGY* Vol. 7 (pp.). doi:10.1186/1471-2148-7-S2-S8
206. Fani, R., Brillì, M., Fondi, M., & Lio', P. (2007). The role of gene fusions in the evolution of metabolic pathways: the histidine biosynthesis case. In *BMC EVOLUTIONARY BIOLOGY* Vol. 7 (pp.). doi:10.1186/1471-2148-7-S2-S4
207. Lu, Y. E., Lio', P., & Hand, S. (2007). Beta random projection. In *ISM WORKSHOPS 2007: NINTH IEEE INTERNATIONAL SYMPOSIUM ON MULTIMEDIA - WORKSHOPS, PROCEEDINGS* (pp. 323-328). doi:10.1109/ISM.Workshops.2007.61
208. Weston, E. M., Friday, A. E., & Lio', P. (2007). Biometric evidence that sexual selection has shaped the hominin face. *PLoS One*, 2(8), e710. doi:10.1371/journal.pone.0000710
209. Caretta-Cartozo, C., De Los Rios, P., Piazza, F., & Lio', P. (2007). Bottleneck genes and community structure in the cell cycle network of *S. pombe*. *PLoS Computational Biology*, 3(6), 0968-0976.
210. Angelini, C., Cutillo, L., De Feis, I., Van der Wath, R., & Lio', P. (2007). Identifying regulatory sites using neighborhood species. In E. Marchiori, J. H. Moore, & J. C. Rajapakse (Eds.), *Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics, Proceedings* Vol. 4447 (pp. 1-10).
211. Lu, Y. E., Hand, S., & Lio', P. (2007). Keyword searching in structured overlays via content distance addressing. In G. Moro, S. Bergamaschi, S. Joseph, J. H. Morin, & A. M. Ouksel (Eds.), *Databases, Information Systems, and Peer-to-Peer Computing* Vol. 4125 (pp. 259-272).

212. Chen, F., Archambault, V., Kar, A., Lio', P., D'Avino, P. P., Sinka, R., . . . Glover, D. M. (2007). Multiple protein phosphatases are required for mitosis in *Drosophila*. *CURR BIOL*, *17*(4), 293-303. doi:10.1016/j.cub.2007.01.068
213. Lawniczak, A. T., Xie, S., Lio', P. P., & Xu, J. (2007). Study of packet traffic fluctuations near phase transition point from free flow to congestion in data network model. *Canadian Conference on Electrical and Computer Engineering*, 360-363.
214. Lawniczak, A. T., Lio', P., Xie, S., & Xu, J. Y. (2007). Wavelet spectral analysis of packet traffic near phase transition point from free flow to congestion in data network model. In *2007 CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING, VOLS 1-3* (pp. 364-367).
215. Fani, R., Brilli, M., & Lio', P. (2006). Inference from proteobacterial operons shows piecewise organization: a reply to Price et al.. *J Mol Evol*, *63*(4), 577-580. doi:10.1007/s00239-006-0074-2
216. Fani, R., Caramelli, D., & Lio', P. (2006). [It happened... From prebiotic chemistry to human evolution. In Florence, the First Congress of S.I.B.E. September, 4-6, 2006].. *Riv Biol*, *99*(3), 357-360. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/17342847>
217. Bagnoli, F., Lio', P., & Sguanci, L. (2006). Modeling viral coevolution: HIV multi-clonal persistence and competition dynamics. *PHYSICA A*, *366*(1), 333-346. doi:10.1016/j.physa.2005.10.055
218. Nye, T. M. W., Lio', P., & Gilks, W. R. (2006). A novel algorithm and web-based tool for comparing two alternative phylogenetic trees. *BIOINFORMATICS*, *22*(1), 117-119. doi:10.1093/bioinformatics/bti720
219. Ambesi-Impiombato, A., Bansal, M., Lio', P., & di Bernardo, D. (2006). Computational framework for the prediction of transcription factor binding sites by multiple data integration.. *BMC Neurosci*, *7 Suppl 1*, S8. doi:10.1186/1471-2202-7-S1-S8
220. Fani, R., Caramelli, D., & Lio', P. (2006). From prebiotic chemistry to the evolution of man: The First Conference of the S.I.B.E. (Italian Society of Evolutionary Biology) in Florence | Dalla chimica prebiotica all'evoluzione dell'uomo a Firenze il Primo Congresso della S.I.B.E.. *Rivista di Biologia - Biology Forum*, *99*(3), 357-360.
221. Sguanci, L., Lio, P., & Bagnoli, F. (2006). Modeling evolutionary dynamics of HIV infection. In C. Priami (Ed.), *COMPUTATIONAL METHODS IN SYSTEMS BIOLOGY, PROCEEDINGS* Vol. 4210 (pp. 196-211).
222. Sguanci, L., Lio', P., & Bagnoli, F. (2006). The influence of risk perception in epidemics: A cellular agent model. In S. E. Yacoubi, B.

Chopard, & S. Bandini (Eds.), *CELLULAR AUTOMATA, PROCEEDINGS* Vol. 4173 (pp. 321-329).

223. Piazza, F., & Lio', P. (2005). Statistical analysis of simple repeats in the human genome. *PHYSICA A*, 347, 472-488.
doi:10.1016/j.physa.2004.08.038
224. Fani, R., Brilli, M., & Lio', P. (2005). The origin and evolution of operons: The piecewise building of the proteobacterial histidine operon. *J MOL EVOL*, 60(3), 378-390. doi:10.1007/s00239-004-0198-1
225. Lio', P. (2005). Phylogenetic and structural analysis of mitochondrial complex I proteins. In *GENE* Vol. 345 (pp. 55-64).
doi:10.1016/j.gene.2004.11.033
226. Lu, Y. E., Hand, S., & Lio', P. (2005). Keyword searching in hypercubic manifolds. In G. Caronni, N. Weiler, M. Waldvogel, & N. Shahmehri (Eds.), *Fifth IEEE International Conference on Peer-to-Peer Computing, Proceedings* (pp. 150-151).
227. Carapelli, A., Nardi, F., Dallai, R., Boore, J. L., Lio', P., & Frati, F. (2005). Relationships between hexapods and crustaceans based on 4 mitochondrial genes. In S. Koenemann, & R. A. Jenner (Eds.), *Crustacea and arthropod relationships* (pp. 423 pages). CRC.
228. Tadesse, M. G., Vannucci, M., & Lio', P. (2004). Identification of DNA regulatory motifs using Bayesian variable selection. *BIOINFORMATICS*, 20(16), 2553-2561. doi:10.1093/bioinformatics/bth282
229. Rustici, G., Mata, J., Kivinen, K., Lio', P., Penkett, C. J., Burns, G., . . . Bahler, J. (2004). Periodic gene expression program of the fission yeast cell cycle.. *Nat Genet*, 36(8), 809-817. doi:10.1038/ng1377
230. Lio', P., & Goldman, N. (2004). Phylogenomics and bioinformatics of SARS-CoV. *TRENDS MICROBIOL*, 12(3), 106-111.
231. Lio', P., & Vannucci, M. (2003). Investigating the evolution and structure of chemokine receptors. In *GENE* Vol. 317 (pp. 29-37).
doi:10.1016/S0378-1119(03)00666-8
232. Lio', P. (2003). Dimensionality and dependence problems in statistical genomics.. *Brief Bioinform*, 4(2), 168-177.
<http://www.ncbi.nlm.nih.gov/pubmed/12846397>
233. Lio', P. (2003). Il genoma della Sars. *Le Scienze Italian Edition of Scientific American, June 2003*(June 2003). Retrieved from <http://www.lescienze.it/>

234. Lio', P. (2003). Statistical bioinformatic methods in microbial genome analysis. *BIOESSAYS*, 25(3), 266-273. doi:10.1002/bies.10231
235. Lio', P. (2003). Wavelets in bioinformatics and computational biology: state of art and perspectives. *BIOINFORMATICS*, 19(1), 2-9.
236. Skaer, N., Pistillo, D., Gibert, J. M., Lio', P., Wulbeck, C., & Simpson, P. (2002). Gene duplication at the achaete-scute complex and morphological complexity of the peripheral nervous system in Diptera. *TRENDS GENET*, 18(8), 399-405.
237. Lio', P. (2002). Investigating the relationship between genome structure, composition, and ecology in prokaryotes. *MOL BIOL EVOL*, 19(6), 789-800.
238. Lio', P., & Goldman, N. (2002). Modeling mitochondrial protein evolution using structural information. *J MOL EVOL*, 54(4), 519-529. doi:10.1007/s00239001-0052-7
239. Lio, P. (2002). Structure and evolution of the histidine biosynthetic pathway. In M. Brilli, P. Lio, A. Lazcano, & R. Fani (Eds.), *Origins of Life and Evolution of the Biosphere Vol. 22* (pp. 488). Oaxaca, Mexico: Springer
240. Lio', P., & Goldman, N. (2002). Modeling mitochondrial protein evolution using structural information.. *J Mol Evol*, 54(4), 519-529. doi:10.1007/s00239-001-0052-7
241. Lio', P. (2002). Una vita per le proteine. *Le Scienze Italian Edition of Scientific American, February 2002*(February 2002).
242. Brilli, M., Lio', P., Lazcano, A., & Fani, R. (2002). Evolution of TIM barrel: Multiple gene elongation events in HisA.. In *Origins of Life and Evolution of the Biosphere Vol. 22* (pp. 487). Oaxaca, Mexico: Springer.
243. Renato Fani, R. F., Silvia Casadei, S. C., & Lio', P. (2002). Origin and Evolution of nif Genes. In *NITROGEN FIXATION: FROM MOLECULES TO CROP PRODUCTIVITY* (Vol. 38,, pp. 177-178). doi:10.1007/0-306-47615-0_85
244. Massingham, T., Davies, L. J., & Lio', P. (2001). Analysing gene function after duplication. *BIOESSAYS*, 23(10), 873-876.
245. Bogani, P., Simoni, A., Lio', P., Germinario, A., & Buiatti, M. (2001). Molecular variation in plant cell populations evolving in vitro in different physiological contexts.. *Genome*, 44(4), 549-558. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11550888>
246. Lio', P. (2001). Dal Genoma al Fisioma. Retrieved from <http://www.lescienze.it/>

247. Whelan, S., Lio, P., & Goldman, N. (2001). Molecular phylogenetics: state-of-the-art methods for looking into the past. *TRENDS GENET*, 17(5), 262-272.
248. Lio, P. (2001). Le nuove sfide della filogenesi molecolare. *Le Scienze Italian Edition of Scientific American, February 2001* (February 2001).
249. Lio', P., & Vannucci, M. (2000). Finding pathogenicity islands and gene transfer events in genome data. *BIOINFORMATICS*, 16(10), 932-940.
250. Hagelberg, E., Goldman, N., Lio', P., Whelan, S., Schiefenhover, W., Clegg, J. B., . . . Bowden, D. K. (2000). Evidence for mitochondrial DNA recombination in a human population of island Melanesia: correction. *P ROY SOC LOND B BIO*, 267(1452), 1595-1596.
251. Fani, R., Gallo, R., & Lio', P. (2000). Molecular evolution of nitrogen fixation: the evolutionary history of the nifD, nifK, nifE, and nifN genes.. *J Mol Evol*, 51(1), 1-11. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10903367>
252. Lio', P. (2000). Siamo uomini non DNA robot., Newton (June 2000, in Italian).
253. Lio', P., & Vannucci, M. (2000). Wavelet change-point prediction of transmembrane proteins.. *Bioinformatics*, 16(4), 376-382. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10869036>
254. Thomas, N. S., Wilkinson, J., Lio', P., Doull, I., Morton, N. E., & Holgate, S. T. (2000). Investigation of the genetic factors underlying asthma and atopy in outbred UK populations. *REV MAL RESPIR*, 17(1BIS), 177-182.
255. Thomas, N. -S., Wilkinson, J., Lio', P., Doull, I., Morton, N. -E., & Holgate, S. -T. (2000). Investigation of the genetic factors underlying asthma and atopy in outbred UK populations | Facteurs genetiques impliquees dans l'asthme et l'atopie. Etudes dans les familles britanniques. *Revue des Maladies Respiratoires*, 17(1 BIS), 177-182.
256. Lio', P., & Goldman, N. (1999). Using protein structural information in evolutionary inference: transmembrane proteins.. *Mol Biol Evol*, 16(12), 1696-1710. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10605112>
257. Hagelberg, E., Goldman, N., Lio', P., Whelan, S., Schiefenhover, W., Clegg, J. B., . . . Bowden, D. K. (1999). Evidence for mitochondrial DNA recombination in a human population of island Melanesia.. *Proc Biol Sci*, 266(1418), 485-492. doi:10.1098/rspb.1999.0663

258. Mori, E., Lio' P., Daly, S., Damiani, G., Perito, B., & Fani, R. (1999). Molecular nature of RAPD markers from *Haemophilus influenzae* Rd genome.. *Res Microbiol*, *150*(2), 83-93. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10209764>
259. Hagelberg, E., Kayser, M., Nagy, M., Roewer, L., Zimdahl, H., Krawczak, M., . . . Schiefenhel, W. (1999). Molecular genetic evidence for the human settlement of the Pacific: analysis of mitochondrial DNA, Y chromosome and HLA markers.. In *Philos Trans R Soc Lond B Biol Sci* Vol. 354 (pp. 141-152). ENGLAND. doi:10.1098/rstb.1999.0367
260. Lio', P., & Goldman, N. (1998). Models of molecular evolution and phylogeny.. *Genome Res*, *8*(12), 1233-1244. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9872979>
261. Lio', P., Goldman, N., Thorne, J. L., & Jones, D. T. (1998). PASSML: Combining evolutionary inference and protein secondary structure prediction. *Bioinformatics*, *14*(8), 726-733.
262. Lio', P., & Ruffo, S. (1998). Searching for genomic constraints. *NUOVO CIMENTO D*, *20*(1), 113-127.
263. Fani, R., Tamburini, E., Mori, E., Lazcano, A., Lio', P., Barberio, C., . . . Polsinelli, M. (1997). Paralogous histidine biosynthetic genes: evolutionary analysis of the *Saccharomyces cerevisiae* HIS6 and HIS7 genes.. *Gene*, *197*(1-2), 9-17. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9332345>
264. Dewar, J. C., Wilkinson, J., Wheatley, A., Thomas, N. S., Doull, I., Morton, N., Lio', P. . . Hall, I. P. (1997). The glutamine 27 beta2-adrenoceptor polymorphism is associated with elevated IgE levels in asthmatic families.. *J Allergy Clin Immunol*, *100*(2), 261-265. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9275150>
265. Dewar, J., Wheatley, A., Wilkinson, J., Holgate, S. T., Thomas, N. S., Lio', P., . . . Hall, I. P. (1997). Association of the Gln 27 beta(2)-adrenoceptor polymorphism and IgE variability in asthmatic families. In *CHEST* Vol. 111 (pp. S78-S79).
266. Lio', P., & Morton, N. E. (1997). Comparison of parametric and nonparametric methods to map oligogenes by linkage.. *Proc Natl Acad Sci U S A*, *94*(10), 5344-5348. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9144239>
267. Bogani, P., Lio', P., Intrieri, M. C., & Buiatti, M. (1997). A physiological and molecular analysis of the genus *Nicotiana*.. *Mol Phylogenet Evol*, *7*(1), 62-70. doi:10.1006/mpev.1996.0356

268. Lio', P. (1997). Comparison of multipoint analyses for complex inheritance: IDDM and asthma. *Annals of Human Genetics*, 61(6), 541-542.
269. Lio', P. (1997). Correlation methods for genomic constraints analysis. *Annals of Human Genetics*, 61(6), 542.
270. Thomas, N. S., Wilkinson, J., Lio', P., Doull, I., Morton, N. E., & Holgate, S. T. (1997). Investigation of the genetic factors underlying asthma and atopy in outbred UK populations. In C. S. Hong, J. T. Choung, J. H. Chung, J. Jang, T. Y. Jang, K. S. Jung, . . . C. S. Park (Eds.), *5TH WEST-PACIFIC ALLERGY SYMPOSIUM / 7TH KOREA-JAPAN JOINT ALLERGY SYMPOSIUM* (pp. 81-86).
271. Morton, N. E., & Lio', P. (1997). Oligogenic linkage and map integration. In I. H. Pawlowitzki, J. H. Edwards, & E. A. Thompson (Eds.), *GENETIC MAPPING OF DISEASE GENES* (pp. 17-21).
272. Lio', P., Politi, A., Ruffo, S., & Buiatti, M. (1996). Analysis of genomic patchiness of *Haemophilus influenzae* and *Saccharomyces cerevisiae* chromosomes. *J Theor Biol*, 183(4), 455-469. doi:10.1006/jtbi.1996.0235
273. Bogani, P., Simoni, A., Lio', P., Scialpi, A., & Buiatti, M. (1996). Genome flux in tomato cell clones cultured in vitro in different physiological equilibria. II. A RAPD analysis of variability. *Genome*, 39(5), 846-853. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18469940>
274. Lio', P., Politi, A., Buiatti, M., & Ruffo, S. (1996). High statistics block entropy measures of DNA sequences. *J Theor Biol*, 180(2), 151-160. doi:10.1006/jtbi.1996.0091
275. Alifano, P., Fani, R., Lio', P., Lazcano, A., Bazzicalupo, M., Carlomagno, M. S., . . . Bruni, C. B. (1996). Histidine biosynthetic pathway and genes: Structure, regulation, and evolution. *MICROBIOL REV*, 60(1), 44-&.
276. Fani, R., Lio', P., & Lazcano, A. (1995). Molecular evolution of the histidine biosynthetic pathway. *J Mol Evol*, 41(6), 760-774. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8587121>
277. VICARIO, F., VENDRAMIN, G. G., ROSSI, P., Lio', P., & GIANNINI, R. (1995). ALLOZYME, CHLOROPLAST DNA AND RAPD MARKERS FOR DETERMINING GENETIC-RELATIONSHIPS BETWEEN ABIES-ALBA AND THE RELIC POPULATION OF ABIES NEBRODENSIS. *THEOR APPL GENET*, 90(7-8), 1012-1018.
278. Bagnoli, F., & Lio', P. (1995). Selection, mutations and codon usage in a bacterial model. *J Theor Biol*, 173(3), 271-281. doi:10.1006/jtbi.1995.0062

279. Bagnoli, F., Guasti, G., & Lio', P. (1995). Translation optimization in bacteria: Statistical models. In M. Peyrard (Ed.), *NONLINEAR EXCITATIONS IN BIOMOLECULES* (pp. 405-411).
280. Lio', P., Ruffo, S., & Buiatti, M. (1994). Third codon G + C periodicity as a possible signal for an "internal" selective constraint.. *J Theor Biol*, 171(2), 215-223. doi:10.1006/jtbi.1994.1225
281. Fani, R., Lio', P., Chiarelli, I., & Bazzicalupo, M. (1994). The evolution of the histidine biosynthetic genes in prokaryotes: a common ancestor for the hisA and hisF genes.. *J Mol Evol*, 38(5), 489-495. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8028028>
282. Fani, R., Grifoni, A., Damiani, G., Lio, P., & Mori, E. (1994). Nucleotide Sequence of Azospirillum RAPD markers. In *Azospirillum VI and Related Microorganisms:: Genetics - Physiology - Ecology (NATO ASI Series / Ecological Sciences)*. Springer Verlag.
283. Fani, R., Bandi, C., Bazzicalupo, M., Damiani, G., Di Cello, F., Fancelli, S., Lio, P. . . Mori, E. (1994). Phylogenetic Studies of the Genus Azospirillum. In *Related Microorganisms:: Genetics - Physiology - Ecology (NATO ASI Series / Ecological Sciences)*. Hungary: Springer Verlag.
284. Lio, P. (1994) Long Range Properties of DNA Sequences. In Bellacicco, Vulpiani, & Koch (Eds.), *Collana Franco Angeli Editore*. Roma.