

Publications

A. Books and Edited Works

1. R. Shamir. "On the complexity of the Simplex method", Ph.D. dissertation, College of Engineering, University of California, Berkeley, 1984.
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6. S. Istrail, P. Pevzner, R. Shamir, Editors. *Discrete Applied Mathematics*, Third Special volume in the Computational Molecular Biology Series, Volume 104, issues 1-3, August 2000.
7. R. Shamir, Editor. Selected papers from RECOMB 2000. Special issue of *Journal of Computational Biology*, Vol 7 issues 3/4, 2000.
8. M. Li, P. Pevzner, R. Shamir, guest editors. *Journal of Computer and System Sciences*, Special issue on Computational Biology, Volume 65, No. 3, November 2002.
9. S. Istrail, P. Pevzner, R. Shamir, Editors. *Discrete Applied Mathematics*, Fourth Special Issue in the Computational Molecular Biology Series, Volume 127, number 1, April 2003.
10. S. Istrail, P. Pevzner, R. Shamir, Editors. *Computational Molecular Biology Topics in Discrete Mathematics*, Volume 12, North-Holland, Amsterdam 2003. Reprinted from *Discrete Applied Mathematics*, Volume 127, number 1, April 2003.
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14. R. M. Karp, M. Li, P. Pevzner, R. Shamir, guest editors. *Journal of Computer and System Sciences*, 3rd special issue on Computational Biology, Volume 73, No. 7, November 2007.

15. S. Istrail, P. Pevzner, R. Shamir. F. Sun, guest editors *Communication in Information and Systems* Special issues dedicated to Michael Waterman on the occasion of his 67th birthday. Vol 9 3-4 (2009), Vol 10 1-2 (2010).

B. Chapters in Books

16. R. Shamir. “Probabilistic analysis in linear programming”. Chapter 9 of *Probability and Algorithms*, pp 131–148, National Academy Press, Washington D.C. 1992.
17. I. Adler, R. Shamir. “Greedy solvable transportation networks and edge-guided vertex elimination”. *Network Optimization Problems: Algorithms, Complexity and Applications* (D.-Z. Du and P. M. Pardalos, eds.) pp. 1–22, World Scientific Press, Singapore, 1993.
18. I. Pe’er, R. Shamir. “Approximation Algorithms for the Median Problem in the Breakpoint Model” *Comparative Genomics: Empirical and Analytical Approaches to Gene Order Dynamics, Map Alignment and the Evolution of Gene Families* (D. Sankoff and J. H. Nadeau, editors), Kluwer Academic Press (Dordrecht) 2000.
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C. Journal Articles

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E. Submissions for Publications

210. I. Ulitsky, L. Laurent, F.-J. Mueller, J. Loring, R. Shamir “Placing stem cell microRNAs in a network context: Integrated analysis of microRNA expression and protein interactions”
211. L. C. Laurent, H.-S. Park, I. Ulitsky, R. Graichen, S. Murray, R. Shamir, J. F. Loring. “High resolution SNP genotyping reveals recurrent duplications of pluripotency-associated genes in human embryonic stem cells”
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F. Titles in Preparation.

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221. T. Elkan, I. Ulitsky, R. Shamir, K. Avraham. “Integration of transcriptomic and proteomic data to identify microRNA targets in the mammalian inner ear”.

G. Software

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- E. Hartuv, R. Shamir, “HCS: A new clustering algorithm”
- R. M. Karp, R. Shamir, I. Pe’er, “A practical algorithm for optical mapping”
- A. Ben-Dor, R. Shamir, Z. Yakhini, “CAST: Methods and system for partitioning data into subsets of related data”
- R. Sharan, R. Shamir, “CLICK: CLuster Identification via Connectivity Krenels”. A program for rapid clustering of large scale expression and other data.
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- A. Tanay, R. Shamir. “GENESYS: Genetic Expansion of NETwork SYStem”
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- C. Linhart, R. Elkon, Y. Shiloh, R. Shamir. “PRIMA: PRomoter Integration in Microarray Analysis” A program for finding transcription factors) whose binding sites are enriched in a given set of promoters.
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- T. Barzuza, I. Pe’er, J. Beckman, R. Shamir. “GREAL: Software for the Graph Realization Problem” A program for constructing a tree from a set of its edge-labeled paths.
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H. Patents

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