

## Thirty papers to remember

1. Grasselli A., Luccio F., “A method for minimizing the number of internal states in incompletely specified sequential networks”, *IEEE Transactions on Electronic Computers* 14, 3 (1965) 350–359.
2. Luccio F., “A method for the selection of prime implicants”, *IEEE Transactions on Electronic Computers* 15, 2 (1966) 205–212.
3. Luccio F., “Reduction of the number of columns in flow table minimization”, *IEEE Transactions on Electronic Computers* 15, 5 (1966) 803–805.
4. Luccio F., “A comment on index register allocation”, *Communications of the ACM* 10, 9 (1967) 572–574.
5. Luccio F., Sami M., “On the decomposition of networks in minimally interconnected subnetworks”, *IEEE Transactions on Circuit Theory* 16, 2 (1969) 184–188.
6. Luccio F., “Extending the definition of prime compatibility classes of states in incomplete sequential machine reduction”, *IEEE Transactions on Computers* 18, 6 (1969) 537–540.
7. Luccio F., “Weighted increment linear search for scatter tables”, *Communications of the ACM* 15, 12 (1972) 1045–1047.
8. Bongiovanni G., Luccio F., Zorat A., “The discrete equation of the straight line”, *IEEE Transactions on Computers* 24, 3 (1975) 310–313.
9. Kung H.T., Luccio F., Preparata F.P., “On finding the maxima of a set of vectors”, *Journal of the ACM* 22, 4 (1975) 469–476.
10. Luccio F., Pagli L., “On the height of height balanced trees”, *IEEE Transactions on Computers* 25, 1 (1976) 87–90.
11. Luccio F., Pagli L., “Rebalancing height balanced trees”, *IEEE Transactions on Computers* 27, 5 (1978) 386–396.
12. Luccio F., Pagli L., “Power trees”, *Communications of the ACM* 21, 11 (1978) 941–947.
13. Bongiovanni G., Luccio F., “Permutation of data blocks in a bubble memory”, *Communications of the ACM* 22, 1 (1979) 21–25.

14. Chung K.M., Luccio F., Wong C.K., “On the complexity of sorting in magnetic bubble memory systems”, *IEEE Transactions on Computers* 29, 7 (1980) 553–563.
15. Luccio F., “Variations on a method for representing data items of unlimited length”, *IEEE Transactions on Software Engineering* 11, 4 (1985) 439–441.
16. Lodi E., Luccio F., Pagli L., “A preliminary study of a diagonal channel routing model”, *Algorithmica* (1989) 4, 585–597.
17. Bertossi A.A., Lodi E., Luccio F., Pagli L., “String matching with weighted errors”, *Theoretical Computer Science* 73 (1990) 319–328.
18. Luccio F., Pietracaprina A., Pucci G., “A new scheme for the deterministic simulation of PRAM’s in VLSI”, *Algorithmica* 5 (1990) 529–544.
19. Luccio F., Pagli L., “A model of sequential computation based on a pipelined access to memory”, *Mathematical Systems Theory* 26 (1993) 343–356.
20. Ferragina P., Luccio F., “Dynamic Dictionary Matching in External Memory”, *Information and Computation*, 146 (2) (1998) 85–99.
21. Luccio F., Pagli L., “Computing with time-varying data: sequential complexity and parallel speed up”, *Theory of Computing Systems* 31, 1 (1998) 5–26.
22. Luccio F., Pagli L., “On a new Boolean function with applications”, *IEEE Transactions on Computers* 48, 3 (1999) 296–310.
23. Luccio F., “Algorithms, nymphs, and shepherds”, *Theoretical Computer Science* 282, 2 (2002) 223–229. (Most TCS downloaded paper, 2002-2004)
24. Bernasconi A., Ciriani V., Luccio F., Pagli L., “Three-Level Logic Minimization Based on Function Regularities”, *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* 22, 8 (2003) 1005-1016.
25. Franceschini G., Luccio F., Pagli L., “Dense trees: a new look at degenerate graphs.” *Journal of Discrete Algorithms* 4 (2006) 455-474.
26. Ciriani V., Ferragina P., Luccio F., Muthukrishnan S., “A Data Structure for a Sequence of Strings Accesses in External Memory”. *ACM Transactions on Algorithms* 3 (1) (2007) 1-23.

27. Ferragina P., Luccio F., Manzini G., Muthukrishnan S., “Compressing and Indexing Labeled Trees, with Applications”. *Journal of the ACM* 57 (1) (2010) 4:1-4:33.
28. Bernasconi A., Ciriani V., Luccio F., Pagli L., “Compact DSOP and partial DSOP Forms”, *Theory of Computing Systems* 53 (2013) 583-608.
29. Luccio F., “Arithmetic for Rooted Trees”. *Theory of Computing Systems* (2017) 60:3352.
30. Bernasconi A., Boffa A., Luccio F., Pagli L., “The Connection Layout in a Lattice of Four-Terminal Switches”. In: Bombieri N. et al, Eds, *Design and Engineering of Electronics Systems Based on New Computing Paradigms*, Springer (2019).