

Reference Papers

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Stephen Wolfram

- S. Wolfram. Cellular automaton fluids 1: Basic theory. *Journal of Statistical Physics*, 45(3):471–526, 1986. ([pdf](#))
- S. Wolfram. Cellular automation supercomputing. 1988. ([html](#))
- S. Wolfram. Minimal cellular automaton approximations to continuum systems. In Stephen Wolfram, editor, *Cellular Automata and Complexity: collected papers*. Addison-Wesley, 1994. ([html](#))
- S. Wolfram. Statistical mechanics of cellular automata. *Reviews of Modern Physics*, 55(3):601–644, 1983. ([pdf](#))
- N.H. Packard and S. Wolfram. Two-dimensional cellular automata. *Journal of Statistical Physics*, 38(5):901–946, 1985. ([pdf](#))
- S. Wolfram. Twenty problems in the theory of cellular automata. *Physica Scripta*, 9:170–183, 1985. ([html](#))
- J.B. Salem and S. Wolfram. Thermodynamics and hydrodynamics with cellular automata. *Theory and Applications of Cellular Automata*. World Scientific, 1986. ([html](#))

Notable Papers

- Frisch, U., Hasslacher, B., and Pomeau, Y. (1986). Lattice-gas automata for the navier-stokes equation. *Physical Review Letters*, 56(14):1505+. ([pdf](#))
- U. Frisch, D. d'Humieres, B. Hasslacher, P. Lallemand, Y. Pomeau, and J-P. Rivet. Lattice gas hydrodynamics in two and three dimensions. In Doolen et al. ([pdf](#))
- HASSLACHER, B. 1987. Discrete fluids. *Los Alamos Sci.* 15, Special Issue, 175–217. ([pdf](#))

Review Papers

- Boghosian, B. M. 1999. Lattice gases and cellular automata. Future Gener. Comput. Syst. 16, 2–3 (Dec. 1999), 171–185. (pdf)

Parallel Computing

- Margolus et al., “Cellular-Automata Supercomputers for Fluid-Dynamics Modeling,” Physical Review Letters, vol. 56, No. 16, pp. 1694–1696 (Apr. 1986) (pdf)

files/Lattice-gas automata fluids on parallel supercomputers.pdf

Books

- Wolf-Gladrow, Dieter. Lattice-Gas Cellular Automata and Lattice Boltzmann Models: an Introduction. Santa Clara: Springer-Verlag TELOS, 2000. (pdf)