

Most frequently cited publications: Peter Schuster, October 4, 2011

Citations: 7559 h-index: 43

Articles:

- [1] I. L. Hofacker, W. Fontana, P. F. Stadler, L. S. Bonhoeffer, M. Tacker, and P. Schuster. **Fast Folding and Comparison of RNA Secondary Structures**. *Mh. Chemie*, 125:167–188, 1994.
Publ. 205, Citations: **832**.
- [2] M. Eigen and P. Schuster. **The Hypercycle. A Principle of Natural Self-Organization. Part A: Emergence of the Hypercycle**. *Naturwissenschaften*, 64:541–565, 1977.
Publ. 078, Citations: **593**.
- [3] M. Eigen, J. McCaskill, and P. Schuster. **The Molecular Quasispecies**. *Adv. Chem. Phys.*, 75:149–263, 1989.
Publ. 176, Citations: **411**.
- [4] M. Eigen and P. Schuster. **The Hypercycle. A Principle of Natural Self-Organization. Part C: The Realistic Hypercycle**. *Naturwissenschaften*, 65:341–369, 1978.
Publ. 080, Citations: **374**.
- [5] P. Schuster, W. Fontana, P. F. Stadler, and I. L. Hofacker. **From Sequences to Shapes and Back: A Case Study in RNA secondary Structures**. *Proc. Roy. Soc. London B*, 255:279–284, 1994.
Publ. 206, Citations: **318**.
- [6] M. Eigen, J. McCaskill, and P. Schuster. **Molecular Quasispecies**. *J. Phys. Chem.*, 92:6881–6891, 1988.
Publ. 175, Citations: **255**.
- [7] M. Eigen, W. Gardiner, P. Schuster, and R. Winkler-Oswatitsch. **The Origin of Genetic Information**. *Scientific American*, 244(4):88–118, 1981. German Version: Spektrum 6(4):37-56, 1981.
Publ. 107, Citations: **246**.
- [8] M. Eigen and P. Schuster. **The Hypercycle. A Principle of Natural Self-Organization. Part B: The Abstract Hypercycle**.

- Naturwissenschaften*, 65:7–41, 1978.
Publ. 079, Citations: 218.
- [9] W. Fontana and P. Schuster. **Continuity in Evolution. On the Nature of Transitions.** *Science*, 280:1451–1455, 1998.
Publ. 250, Citations: 205.
- [10] J. Swetina and P. Schuster. **Self-Replication with Errors - A Model for Polynucleotide Replication.** *Biophys. Chem.*, 16:329–345, 1982.
Publ. 126, Citations: 200.
- [11] S. Wuchty, W. Fontana, I. L. Hofacker, and P. Schuster. **Complete Suboptimal Folding of RNA and the Stability of Secondary Structures.** *Biopolymers*, 49:145–165, 1999.
Publ. 253, Citations: 198.
- [12] W. Fontana, D. A. M. Konings, P. F. Stadler, and P. Schuster. **Statistics of RNA secondary structures.** *Biopolymers*, 33:1389–1404, 1993.
Publ. 197, Citations: 156.
- [13] M. Nowak and P. Schuster. **Error Thresholds of Replication in Finite Populations. Mutation Frequencies and the Onset of Muller’s Ratchet.** *J. Theor. Biol.*, 137:375–395, 1989.
Publ. 178, Citations: 156.
- [14] P. Schuster, W. Jakubetz, and W. Marius. **Molecular Models for the Solvation of Small Ions and Polar Molecules.** *Topics in Current Chemistry*, 60:1–107, 1975.
Publ. 057, Citations: 145.
- [15] P. Schuster and K. Sigmund. **Replicator Dynamics.** *J. Theor. Biol.*, 100:533–538, 1983.
Publ. 128, Citations: 141.
- [16] W. Fontana, P. F. Stadler, E. G. Bornberg-Bauer, T. Griesmacher, I. L. Hofacker, M. Tacker, P. Tarazona, E. D. Weinberger, and P. Schuster. **RNA Folding and Combinatory Landscapes.** *Phys. Rev. E*, 47:2083–2099, 1993.
Publ. 201, Citations: 132.

- [17] C. Flamm, W. Fontana, I. L. Hofacker, and P. Schuster. **RNA Folding at Elementary Step Resolution**. *RNA*, 6:325–338, 2000.
Publ. 265, Citations: 118.
- [18] P. Schuster, O. E. Polansky, and F. Wessely. **Zur Kenntnis zyklischer Acylale, 6. Mitt.** *Mh. Chem.*, 95:53–88, 1964.
Publ. 001, Citations: 111.
- [19] C. Reidys, P. F. Stadler, and P. Schuster. **Generic Properties of Combinatory Maps. Neutral Networks of RNA Secondary Structure**. *Bull. Math. Biol.*, 59:339–397, 1997.
Publ. 224, Citations: 111.
- [20] P. Schuster and J. Swetina. **Stationary Mutant Distribution and Evolutionary Optimization**. *Bull. Math. Biol.*, 50:635–660, 1988.
Publ. 174, Citations: 111.
- [21] P. Schuster. **LCAO-MO-Studies on Hydrogen Bonding: The Interaction between Carbonyl and Hydroxyl Groups (LCAO-MO-Studies on Molecular Structure II.)**. *Int. J. Quant. Chem.*, 3:851–871, 1969.
Publ. 025, Citations: 106.
- [22] J. Hofbauer, P. Schuster, and K. Sigmund. **A Note on Evolutionary Stable Strategies and Game Dynamics**. *J. Theor. Biol.*, 81:609–612, 1979.
Publ. 088, Citations: 105.
- [23] W. Fontana and P. Schuster. **A Computer Model of Evolutionary Optimization**. *Biophys. Chem.*, 26:123–147, 1987.
Publ. 166, Citations: 104.
- [24] P. Schuster. **LCAO-MO-SCF Calculations on the Stability and Stereochemistry of Hydrogen Bonds (LCAO-MO Calculation on Molecular Structure VI)**. *Theor. Chim. Acta*, 19:212–224, 1970.
Publ. 037, Citations: 100.
- [25] P. Schuster, G. Zundel, and C. Sándorfy, editors. *The Hydrogen Bond - Recent Developments in Theory and Experiment*, volume I – III. North Holland Publ. Co., Amsterdam, NL, 1976.

- [26] M. Eigen and P. Schuster. *The Hypercycle – A Principle of Natural Self-Organization*. Springer-Verlag, Berlin, DE, 1979. Translated into Russian, Bulgarian and Chinese.