

## Список литературы

- [Aggarwal(2003)] AGGARWAL, V. (2003). Evolving sinusoidal oscillators using genetic algorithms. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Aguirre & Coello(2003)] AGUIRRE, A. & COELLO, C. (2003). Fitness landscape and evolutionary boolean synthesis using information theory concepts. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Amaral et al.(2003)] AMARAL, J. F., SANTINI, C., TANSCHKEIT, R., VELLASCO, M., PACHECO, M. & MESQUITA, A. (2003). Evolvable building blocks for analog fuzzy logic controllers. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [A.Stoica et al.(2003)] A.STOICA, R.ZEBULUM, X.GUO, D.KEYMEULEN, DUONG & M.I.FERGUSON] A.STOICA, R.ZEBULUM, X.GUO, D.KEYMEULEN, DUONG, V. & M.I.FERGUSON (2003). Silicon validation of evolution-designed circuits. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Botelho et al.(2003)] BOTELHO, J., LEONARDO, B., VIEIRA, P. & MESQUITA, A. (2003). An experiment on nonlinear synthesis using evolutionary techniques based only on cmos transistors. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Coello et al.(2003)] COELLO, C., ALBA, E., LUQUE, G. & AGUIRRE, A. (2003). Comparing different serial and parallel heuristics to design combinatorial logic circuits. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Dinerstein et al.(2003)] DINERSTEIN, J., DINERSTEIN, N. & DE GARIS, H. (2003). Automatic multi-module neural network evolution in an artificial brain. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Gallagher(2003)] GALLAGHER, J. (2003). The once and future analog alternative: Evolvable hardware and analog computation. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Garvie & Thompson(2003)] GARVIE, M. & THOMPSON, A. (2003). Evolution of combinational and sequential on-line self-diagnosing hardware. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Greenwood et al.(2003)] GREENWOOD, G., RAMSDEN, E. & AHMED, S. (2003). An empirical comparison of evolutionary algorithms for evolvable hardware

- with minimum time-to-reconfigure requirements. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Gwaltney & Ferguson(2003)] GWALTNEY, D. & FERGUSON, M. I. (2003). Intrinsic hardware evolution for the design and reconfiguration of analog speed controllers for a dc motor. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Harding & Miller(2003)] HARDING, S. & MILLER, J. F. (2003). A scalable platform for intrinsic hardware and in materio evolution. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Jackson *et al.*(2003)Jackson, Canham & Tyrrell] JACKSON, A. H., CANHAM, R. & TYRRELL, A. M. (2003). Robot fault-tolerance using and embryonic array. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Kamio *et al.*(2003)Kamio, Liu, Mitsuhasi & Iba] KAMIO, S., LIU, H., MITSUHASI, H. & IBA, H. (2003). Researches on ingeniously behaving agents. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL <http://ieeexplore.ieee.org/iel5/8637/27376/01217668.pdf?tp=&arnumber=1217668&isnumber=27376>.
- [Koza *et al.*(2003)Koza, Keane & Streeter] KOZA, J., KEANE, M. & STREETER, M. (2003). the importance of reuse and development in evolvable hardware. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Kramer & Gallagher(2003)] KRAMER, G. R. & GALLAGHER, J. (2003). Improvements to the \*cga enabling online intrinsic evolution in compact eh devices. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Louis(2003)] LOUIS, S. J. (2003). Learning for evolutionary design. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Plante *et al.*(2003)Plante, Shaw, Mickens & Johnson-Be] PLANTE, J., SHAW, H., MICKENS, L. & JOHNSON-BE, C. (2003). Overview of field programmable analog arrays as enabling technology for evolvable hardware for high reliability systems. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [R. Canham & Tyrrell(2003)] R. CANHAM, A. H. J. & TYRRELL, A. (2003). Robot error detection using an artificial immune system. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).

- [Roggen *et al.*(2003)] ROGGEN, D., HOFMANN, S., THOMA, Y. & FLOREANO, D. (2003). Hardware spiking neural network with run-time reconfigurable connectivity in an autonomous robot. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [R.Zebulum *et al.*(2003)] R.ZEBULUM, A.STOICA, X.GUO, D.KEYMEULEN, DUONG, V. & M.I.FERGUSON (2003). Experimental results in evolutionary fault-recovery for field programmable. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Sayama(2003)] SAYAMA, H. (2003). Self-protection maintains diversity of artificial self-replicators evolving in cellular automata. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Sekanina & Ruzicka(2003)] SEKANINA, L. & RUZICKA, R. (2003). Easily testable image operators: The class of circuits where evolution beats engineers. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Shanthi & R.Parthasarathi(2003)] SHANTHI, A. P. & R.PARTHASARATHI (2003). Exploring fpga structures for evolving fault tolerant hardware. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Stauffer & Sipper(2003)] STAUFFER, A. & SIPPER, M. (2003). Data and signals: A new kind of cellular automation for growing systems. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Takahashi *et al.*(2003)] TAKAHASHI, E., MURAKAWA, M., KASAI, Y. & HIGUCHI, T. (2003). Power dissipation reductions with genetic algorithms. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Tempesti *et al.*(2003)] TEMPESTI, G., MANGE, D., PETRAGLIO, E., STAUFFER, A. & THOMA, Y. (2003). Developmental processes in silicon: An engineering perspective. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Thomson & Arslan(2003)] THOMSON, R. & ARSLAN, T. (2003). The evolutionary design and synthesis of non-linear digital vlsi systems. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).
- [Tian & Arslan(2003)] TIAN, L. & ARSLAN, T. (2003). An evolutionary power management algorithm for soc based ehw systems. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA

Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).

[Vinger & Torresen(2003)] VINGER, K. & TORRESEN, J. (2003). Implementing evolution of fir-filters efficiently in an fpga. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).

[Zinchenko & Sorokin(2003)] ZINCHENKO, L. & SOROKIN, S. (2003). Fitness estimations for evolutionary antenna design. In: *2003 NASA/DoD Conference on Evolvable Hardware* (LOHN, J., ZEBULUM, R., STEINCAMP, J., KEYMEULEN, D., STOICA, A. & FERGUSON, M. I., eds.). NASA Ames Research Center, Chicago, Illinois: IEEE Computer Society. URL [EHWhttp://ehw.jpl.nasa.gov](http://ehw.jpl.nasa.gov).