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Наши публикации про булевы функции, формулы, логические схемы, арифметические полиномы, автоматы и программные реализации на английском языке

На Западе выйдет книга *Stankovic R., Astola J., Shalyto A., Strukov A.* Reprints from the Early Days of Information Sciences. Early Work in Switching Theory and Logic Design in USSR. В ней, в частности, есть ссылка на книгу **Шалыто А.А. Логическое управление. Методы аппаратной и программной реализации алгоритмов». СПб., Наука, 2000. 780 с.** (Shalyto A. A. Logic Control. Hardware and Software Algorithm Implementation. St. Petersburg: Nauka (Science), 2000. 780 p. In Russian), изданная только на русском языке (http://is.ifmo.ru/books/log_upr/1). Однако по многим главам имеются статьи на английском языке, которые, возможно, будут интересны читателям книги. Кроме того, ниже перечислены работы по рассматриваемой тематике, не вошедшие в книгу, демонстрирующие то, что работы в этой области в новых постановках продолжаются в России по сей день.

1. Формульный метод синтеза комбинационных схем из произвольных логических элементов

1.1. *Artyukhov V. L., Kopeikin G. A., Shalyto A. A.* Estimation of the Logical Efficiency of Integrated Microcircuitry // Automatic Control and Computer Sciences. 1981. Vol. 22. No 1, pp.32-34.

1.2. *Artyukhov V. L., Kopeikin G. A., Shalyto A. A.* Bounds On The Realization Complexity Of Boolean Formulas By Tree Circuits Of Tunable Modules // Automation and Remote Control. 1981. Vol. 42, No 11. Part 2, pp. 1532-1537. http://is.ifmo.ru/articles_en/shalyto_articles/1982.pdf

2. Мультиплексный метод реализации булевых функций схемами из произвольных логических элементов

2.1. *Shalyto A. A.* Multiplexor Method for Realization of Boolean Functions by Circuits Composed of Arbitrary Logical Elements // Journal of Computer and Systems Sciences International. 2003. Vol. 42. No 1, pp.101-105.

2.2. *Shalyto A. A.* Decomposition of Boolean Functions with Respect to the Right-Most Input Variables of Truth Tables // Journal of Computer and Systems Sciences International. 2003. Vol.42. No 4, pp.555-561.

3. Методы построения многофункциональных логических модулей

3.1. *Shalyto A. A.* Methods for Constructing Multifunctional Logic Modules // Journal of Computer and Systems Sciences International. 2004. Vol. 43. No 6, pp.923-935.

4. Модули, универсальные в классе самодвойственных функций и в «близких» к ним классах

4.1. *Shalyto A. A.* Modules which Are Universal in the Class of Self-Dual Functions and in Close Classes // Journal of Computer and Systems Sciences International. 2001. Vol. 40. No 5, pp.782-792.

5. Модули, универсальные в классе всех булевых функций

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6. Оценка функциональных возможностей программируемых логических матриц

6.1. *Artyukhov V. L., Shalyto A. A., Kuznetsova O. S.* Evaluation of the Functional Capabilities of Programmable Logical Arrays // Automatic Control and Computer Sciences. 1985. Vol. 26. No 2, pp. 69-73.

7. Однородные модули из элементов с двусторонней проводимостью и реализация комбинационных схем

7.1. *Shalyto A. A.* Multifunctional Logic Modules Consisting of Elements with Bilateral Conductance // Journal of Computer and Systems Sciences International. 2006. Vol. 45. No 1, pp. 73-76.
http://is.ifmo.ru/articles_en/JCSS73.pdf

8. Реализация булевых формул и булевых функций однородными структурами

8.1. *Artyukhov V. L., Shalyto A. A.* Realization of Boolean Formulas by Uniform Multiplexor and Majority Cascades // Journal of Computer and Systems Sciences International. 1996. Vol. 35. No 5, pp. 805-815.

8.2. *Shalyto A. A.* Realization of Boolean Formulas and Boolean Functions by Homogeneous Structures // Journal of Computer and Systems Sciences International. 2002. Vol. 41. No 2, pp.264-273.

9. Реализация булевых формул в базисе И, ИЛИ, НЕ линейными бинарными графами

9.1. *Kuznetsov B. P., Shalyto A. A.* Realization of Boolean Formulas by Linear Binary Graphs. I. Synthesize and Analysis // Journal of Computer and Systems Sciences International. 1994. Vol. 33. No 5, pp.132-142.

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10. Методы построения бинарных графов для автоматов без памяти

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11. Программная реализация автоматов с памятью

11.1. *Sagalovich Yu. L., Shalyto A. A.* Binary Programs and Their Realization by Asynchronous Automata // Problems of Information Transmission. 1987. Vol. 23, No 1, pp. 89-96.

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18. Инструментальные средства для поддержки автоматного программирования

18.1. *Gurov V. S., Mazin M. A., Narvsky A. S., Shalyto A. A.* Tools for Support of Automata-Based Programming // Programming and Computer Software. 2007. Vol. 33. No. 6, pp. 343-355.

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19.1. *Kurbatsky E.* Verification of Automata-Based Programs / Proceedings of the Second Spring Young Researchers Colloquium on Software Engineering (SYRCoSE 2008). SPbSU. 2008. V. 2, pp. 15-17.

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