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International Researcher IDs

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Research Areas

Electrical and Electronics Engineering, Electronic, Electronic Circuits, Engineering and Technology

Courses

Postgraduate

VLSI Design, Postgraduate, 2019 - 2020

Undergraduate

Linear Algebra and Differential Equations, Undergraduate, 2019 - 2020

Introduction to Programming for Engineers, Undergraduate, 2019 - 2020

Journal articles indexed in SCI, SSCI, and AHCI

- I. **A 70-to-2 v Triboelectric Energy Harvesting System Utilizing Parallel-SSHI Rectifier and DC-DC Converters**
Kara I., Becermis M., Kamar M. A., Aktan M., Dogan H., Mutlu S.
IEEE Transactions on Circuits and Systems I: Regular Papers, vol.68, no.1, pp.210-223, 2021 (SCI-Expanded)
- II. **An Ultra Low Power Integrated Radio TX Link Supplied from a Switched Capacitor DC-DC Converter in 65-nm CMOS Achieving 2 Mbps**
Rady R., DOĞAN H., Aktan M., Mohammed S. A., Ozgun M. T.
IEEE Transactions on Circuits and Systems II: Express Briefs, vol.67, no.10, pp.1899-1903, 2020 (SCI-Expanded)
- III. **An alternative carry-save arithmetic for new generation field programmable gate arrays**
Çİni U., Aktan M., Morgül A.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.24, no.2, pp.435-447, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **An algorithm for the design of low-power hardware-efficient FIR filters**
Aktan M., Yurdakul A., Dündar G.
IEEE Transactions on Circuits and Systems I: Regular Papers, vol.55, no.6, pp.1536-1545, 2008 (Scopus)

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **High performance FIR filter design for 6-input LUT based FPGAs**
ÇİNİ U., Aktan M.
IEEE International Conference on Electronics, Circuits, and Systems, ICECS 2015, Cairo, Egypt, 6 - 09 December 2015, vol.2016-March, pp.653-656, (Full Text)
- II. **Minimizing Energy by Achieving Optimal Sparseness in Parallel Adders**
Aktan M., Baran D., Oklobdzija V. G.
22nd IEEE Symposium on Computer Arithmetic, ARITH 2015, Lyon, France, 22 - 24 June 2015, vol.2015-August, pp.10-17, (Full Text)
- III. **Optimal transistor sizing and voltage scaling for minimal energy use at fixed performance**
Oklobdzija V. G., Aktan M., Baran D.
7th Argentine School of Micro-Nanoelectronics, Technology and Applications, EAMTA 2012, Cordoba, Argentina, 4 - 12 August 2012, pp.1-10, (Full Text)
- IV. **Circuit topology considerations for energy efficient design of data-driven systems**
Nawathe V., Wang L., Aktan M., Balsara P., Oklobdzija V. G.
2012 28th International Conference on Microelectronics, MIEL 2012, Nis, Serbia, 13 - 16 May 2012, pp.415-418, (Full Text)
- V. **A quick method for energy optimized gate sizing of digital circuits**
Aktan M., Baran D., Oklobdzija V. G.
21st International Workshop on Power and Timing Modeling, Optimization, and Simulation, PATMOS 2011, Madrid, Spain, 26 - 29 September 2011, vol.6951 LNCS, pp.1-10, (Full Text)
- VI. **Multiplier structures for low power applications in deep-CMOS**
Baran D., Aktan M., Oklobdzija V. G.
2011 IEEE International Symposium of Circuits and Systems, ISCAS 2011, Rio de Janeiro, Brazil, 15 - 18 May 2011, pp.1061-1064, (Full Text)
- VII. **Energy efficient implementation of parallel CMOS multipliers with improved compressors**
Baran D., Aktan M., Oklobdzija V. G.
16th ACM/IEEE International Symposium on Low-Power Electronics and Design, ISLPED'10, Austin, TX, United States Of America, 18 - 20 August 2010, pp.147-152, (Full Text)
- VIII. **Clocked storage elements robust to process variations**
Moon J., Aktan M., Oklobdzija V. G.
2009 8th IEEE International Conference on ASIC, ASICON 2009, Changsha, China, 20 - 23 October 2009, pp.827-830, (Full Text)
- IX. **Switching activity calculation of VLSI adders**
Baran D., Aktan M., Karimiyani H., Oklobdzija V. G.
2009 8th IEEE International Conference on ASIC, ASICON 2009, Changsha, China, 20 - 23 October 2009, pp.46-49, (Full Text)
- X. **Exploration of switching activity behavior of addition algorithms**
Baran D., Aktan M., Karimiyani H., Oklobdzija V. G.
2009 52nd IEEE International Midwest Symposium on Circuits and Systems, MWSCAS '09, Cancun, Mexico, 2 - 05 August 2009, pp.523-526, (Full Text)
- XI. **Design methodology for clocked storage elements robust to process variations**
Moon J., Aktan M., Oklobdzija V. G.
2nd International Conference on Advances in Circuits, Electronics and Micro-electronics - CENICS 2009, Sliema, Malta, 11 - 16 October 2009, pp.20-23, (Full Text)
- XII. **Low-power hardware efficient MMSE equalizer design**
Aktan M., Dündar G., Koca M.
2008 4th IEEE International Conference on Circuits and Systems for Communications, ICCSC, Shanghai, China, 26 - 28 May 2008, pp.307-311, (Full Text)
- XIII. **Design of digital filters for low power applications using integer quadratic programming**
Aktan M., Dündar G.

15th International Workshop on Integrated Circuit and System Design: Power and Timing Modeling, Optimization and Simulation, PATMOS 2005, Leuven, Belgium, 20 - 23 September 2005, vol.3728 LNCS, pp.137-145, (Full Text)

- XIV. **Design of digital filters for low power applications by reducing the Hamming distance of the filter coefficients using Mean Field Annealing algorithm MFA Yöntemi ile Katsayıların Hamming Uzaklığını Azaltarak Düşük Güç Uygulamalarına Yönelik Sayısal Süzgeç Tasanmi**

Aktan M., Çini U., Dündar G.

Proceedings of the IEEE 12th Signal Processing and Communications Applications Conference, SIU 2004, Kusadası, Turkey, 28 - 30 April 2004, pp.646-648, (Full Text)

Metrics

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