

Address-based data processing over N-ary trees

Sklyarov, Valery; Skliarova, Iuliia; **Kruus, Margus; Mihhailov, Dmitri; Sudnitsõn, Aleksander** EuroCon 2013 : 01-04 July 2013, Zagreb, Croatia 2013 / p. 1790-1797 : ill

Architectural solutions for high-speed data processing demands of CERN LHC detectors with FPGA and high-level synthesis

Devadze, Sergei; Nielsen, Christine Elizabeth; **Mihhailov, Dmitri; Ellervee, Peeter** 2024 IEEE Nordic Circuits and Systems Conference (NorCAS) 2024 <https://doi.org/10.1109/NorCAS64408.2024.10752490> [Article at Scopus](#)

Area efficient hexadecimal divider circuit implementation based on USP-awadhoot division algorithm

Patankar, Udayan Sunil; Koel, Ants; Patankar, Sunil M.; Flores, Miguel E. IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC) 2021 / p. 1-8 <https://doi.org/10.1109/ICE/ITMC52061.2021.9570263>

Bidirectional operation of the single-phase neutral-point-clamped quasi-Z-source inverter

Husev, Oleksandr; Zakis, Janis; Vinnikov, Dmitri; Savenko, O. BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 221-224 : ill

Combining multiple sound sources localization hybrid algorithm and fuzzy rule based classification for real-time speaker tracking application

Ibala, Christian; **Astapov, Sergei; Riid, Andri** International journal of microelectronics and computer science 2013 / p. 12-25 : ill https://www.researchgate.net/publication/261467057_Combining_Multiple_Sound_Sources_Localization_Hybrid_Algorithm_and_Fuzzy_Rule_Based_Classification_for_Real-time_Speaker_Tracking_Application

Complex division by Baudhayan triplet algorithm using novel state of the art USP-awadhoot divider

Patankar, Udayan Sunil; Koel, Ants; Patankar, Sunil M.; Flores, Miguel E. IEEE 4th Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC) 2021 / p. 1918-1922 <https://doi.org/10.1109/IMCEC51613.2021.9482010>

Divider implementation based on USP-awadhoot division algorithm For area optimization

Patankar, Udayan Sunil; Koel, Ants; Patankar, Sunil M.; Flores, Miguel E. IEEE 4th Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC) 2021 / p. 1675-1682 <https://doi.org/10.1109/IMCEC51613.2021.9482132>

Elliptic-curve crypto processor for RFID applications

Rashid, Muhammad; Jamal, Sajjad Shaukat; Khan, Sikandar Zulqarnain; Alharbi, Adel R.; Aljaedi, Amer; **Imran, Malik** Applied Sciences (Switzerland) 2021 / art. 7079 <https://doi.org/10.3390/app11157079> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fast processing of non-repeated values in hardware

Skliarova, Iuliia; Sklyarov, Valery; **Sudnitsõn, Aleksander** Elektronika ir elektrotehnika = Electronics and electrical engineering 2017 / p. 74-77 : ill <https://doi.org/10.5755/j01.eie.23.3.18336> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

FPGA-based critical computing : TEMPUS and FP7 projects issues

Kharchenko, Vyacheslav; **Vain, Jüri; Krispin, Madli** 10th European Workshop on Microelectronics Education : EWME 2014 : May 14-16, 2014, Tallinn, Estonia 2014 / p. 74-79 : ill

Fully-fusible convolutional neural networks for end-to-end fused architecture with FPGA implementation

Dadras, Iman; Seydi, Sakineh; **Ahmadilivani, Mohammad Hasan; Raik, Jaan**; Salehi, Mostafa E. 2023 30th IEEE International Conference on Electronics, Circuits and Systems (ICECS) 2023 / 5 p. <https://doi.org/10.1109/ICECS58634.2023.10382831>

Hardware accelerators for information retrieval and data mining

Sklyarov, Valery; Skliarova, Iuliia; Silva, João; **Sudnitsõn, Aleksander; Rjabov, Artjom** 2015 International Conference on Information and Communication Technology Research (ICTRC2015) : Abu Dhabi, United Arab Emirates, May 17-19, 2015 2015 / p. 202-205 : ill <http://dx.doi.org/10.1109/ICTRC.2015.7156457>

Hardware implementation of face recognition using low precision representation

Dwivedi, Sai Kumar; **Azad, Siavoosh Payandeh; Ellervee, Peeter**; Dash, Ratnakar BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 63-66 : ill http://www.eester.ee/record=b2150914*est

Implementation in FPGA of address-based data sorting

Sklyarov, Valery; Skliarova, Iuliia; **Mihhailov, Dmitri; Sudnitsõn, Aleksander** 21st International Conference on Field Programmable Logic and Applications : FPL 2011 : Chania, Crete, Greece, 5-7 September 2011 2011 / p. 405-410 : ill https://www.researchgate.net/publication/220760392_Implementation_in_FPGA_of_Address-Based_Data_Sorting

Measuring and identifying aging-critical paths in FPGAs

Pfeifer, Petr; **Raik, Jaan; Jenihhin, Maksim; Ubar, Raimund-Johannes**; Pliva, Zdenek MEDIAN 2015 : the 4th Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale : March 13, 2015, Grenoble, France 2015 / p. 56-61 : ill

Multisine signal generation method for a bioimpedance measurement device

Gorev, Maksim; Pesonen, Vadim; Ellervee, Peeter Proceedings of the 2012 IEEE 15th International Symposium on Design and Diagnostics of Electronic Circuits & Systems (DDECS) : April 18-20, 2012 Tallinn, Estonia 2012 / p. 111-114 : ill

Optimization of boundary scan tests using FPGA-based efficient scan architectures

Aleksejev, Igor; Devadze, Sergei; Jutman, Artur; Shibin, Konstantin Journal of electronic testing : theory and applications (JETTA) 2016 / p. 245-255 : ill <https://doi.org/10.1007/s10836-016-5588-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of multisine excitation for a bioimpedance measurement device

Ojarand, Jaan; Annus, Paul; Min, Mart; Gorev, Maksim; Ellervee, Peeter I2MTC 2014 IEEE International Instrumentation and Measurement Technology Conference : Instrumentation and Measurement for Sustainable Development : Radisson Montevideo Victoria Plaza Hotel & Conference Center, May 12-15, 2014, Montevideo, Uruguay : proceedings 2014 / p. 829-832 : ill <https://doi.org/10.1109/I2MTC.2014.6860859> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Processing N-ary trees in reconfigurable hardware

Sklyarov, Valery; Skliarova, Iouliia; Sudnitsõn, Aleksander 2013 25th International Conference on Microelectronics (ICM) : 15-18 December 2013, Beirut-Lebanon 2013 / p. 13-16 : ill

Processing tree-like data structures in different computing platforms

Sklyarov, Valery; Skliarova, Iouliia; Oliveira, Ramiro; **Mihhailov, Dmitri; Sudnitsõn, Aleksander** 2011 International Conference on Information and Computer Applications (ICICA 2011) : Dubai, United Arab Emirates, March 18-20, 2011 2011 / p. 112-116 : ill https://sweet.ua.pt/iouliia/Papers/2011/rp025_ICICA2011-A067.pdf

Real-time regulation of beam-based feedback : implementing an FPGA solution for a continuous wave linear accelerator

Maalberg, Andrei; Kuntzsch, Michael; **Petlenkov, Eduard** Sensors 2022 / art. 6236, 22 p. : ill <https://doi.org/10.3390/s22166236> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review of basic classes of dividers based on division algorithm

Patankar, Udayan Sunil; Koel, Ants IEEE Access 2021 / p. 23035-23069 <https://doi.org/10.1109/ACCESS.2021.3055735> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Solving computationally intensive problems in reconfigurable hardware : a case study

Skliarova, Iouliia; Vallejo, Tiago; Sklyarov, Valery; **Sudnitsõn, Aleksander; Kruus, Margus** Journal of convergence information technology (JCIT) : an international journal 2013 / p. 601-609 : ill

Study of estimation based functional iteration approximation dividers

Patankar, Udayan Sunil; Flores, Miguel E.; Koel, Ants ICCE-2021 IEEE International Conference on Consumer Electronics, CES 2021 / p. 1-4 <https://doi.org/10.1109/ICCE50685.2021.9427657> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Ways for board and system test to benefit from FPGA embedded instrumentation

Ehrenberg, Heiko; **Odintsov, Sergei; Devadze, Sergei; Jutman, Artur; Aleksejev, Igor**; Wenzel, Thomas 2019 IEEE AUTOTESTCON 2019 / 10 p : ill <https://doi.org/10.1109/AUTOTESTCON43700.2019.8961057>

Versatile direct and transpose matrix multiplication with chained operations : an optimized architecture using circulant matrices

Iakymchuk, Taras; Rosado-Munoz, Alfredo; Mompean, Manuel Bataller; Villora, Jose Vicente Frances; **Osimiry, Emmanuel Ovie** IEEE Transactions on Computers 2016 / p. 3470 - 3479 <https://doi.org/10.1109/TC.2016.2538235> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)