

### **Accelerating transient fault injection campaigns by using Dynamic HDL Slicing**

**Bagbaba, Ahmet Cagri; Jenihhin, Maksim; Raik, Jaan;** Sauer, Christian 2019 IEEE Nordic Circuits and Systems Conference (NORCAS) : NORCHIP and International Symposium of System-on-Chip (SoC), 29-30 October 2019, Helsinki, Finland : proceedings in IEEE Xplore 2019 / 7 p. : ill <https://doi.org/10.1109/NORCHIP.2019.8906932>

### **Adaptive Kalman filter based data aggregation in fault-resilient Underwater Sensor Networks**

**Vihman, Lauri; Raik, Jaan** 2023 24th International Conference on Digital Signal Processing (DSP) 2023 / p. 1-5  
<https://doi.org/10.1109/DSP58604.2023.10167982>

### **An optimization framework for dynamic pipeline management in computing systems**

Naqvi, Syed Rameez; Zahid, Anjum; Sawalha, Lina; **Jenihhin, Maksim** Computers & electrical engineering 2019 / p. 242-258 : ill  
<https://doi.org/10.1016/j.compeleceng.2019.07.013> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Analysis of fault-tolerant operation capabilities of an isolated bidirectional current-source DC–DC converter**

**Blinov, Andrei; Kosenko, Roman; Chub, Andrii;** Ivakhno, Volodymyr Energies 2019 / art. 3203, p. 14 : ill  
<https://doi.org/10.3390/en12163203> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **APPRAISER : DNN fault resilience analysis employing approximation errors**

**Taheri, Mahdi; Ahmadilivani, Mohammad Hasan; Jenihhin, Maksim; Raik, Jaan; Daneshtalab, Masoud** 26th International Symposium on Design and Diagnostics of Electronic Circuits and Systems, May 3-5, 2023, Tallinn 2023 / p. [?]  
<https://ddec2023.taltech.ee/>

### **Assessment of diagnostic test for automated bug localization**

**Tihhomirov, Valentin; Tšepurov, Anton; Jenihhin, Maksim; Raik, Jaan; Ubar, Raimund-Johannes** LATW2013 : 14th IEEE Latin-American Test Workshop, Cordoba, Argentina, April 3-5, 2013 : [proceedings] 2013 / [6] p. : ill

### **AWAIT : an ultra-lightweight soft-error mitigation mechanism for network-on-chip links**

**Janson, Karl; Pihlak, Rene; Azad, Siavoosh Payandeh; Niazmand, Behrad; Jervan, Gert; Raik, Jaan** 2018 13th International Symposium on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC), Lille, France, July 9th-11th, 2018 2018 / p. 1-6 : ill  
<https://doi.org/10.1109/ReCoSoC.2018.8449374>

### **Combining fault analysis technologies for ISO26262 functional safety verification**

Augusto da Silva, Felipe; **Bagbaba, Ahmet Cagri;** Hamdioui, Said; Sauer, Christian 2019 IEEE 28th Asian Test Symposium (ATS) : 10–13 December 2019, Kolkata, India : proceedings 2019 / p. 129–134 : ill <https://doi.org/10.1109/ATS47505.2019.00024>

### **Controlled bidirectional DC circuit breaker with zero negative current for high load shift applications**

Raghavendra I, Venkata; Naik, Satish B.; Sreekanth, Thamballa; **Chub, Andrii** IEEE transactions on industry applications 2022 / p. 6942-6951 <https://doi.org/10.1109/TIA.2022.3193345> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Cooperative scheduler to enhance massive connectivity in 5G and beyond by minimizing interference in OMA and NOMA**

**Mwakwata, Collins Burton; Elgarhy, Osama Mohamed Mostafa; Alam, Muhammad Mahtab; Le Moullec, Yannick;** Päränd, Sven; Trichias, Konstantinos; Ramantas, Kostas IEEE Systems Journal 2022 / p. 5044-5055  
<https://doi.org/10.1109/JSYST.2021.3114338> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Data-driven fault-resilient cross-layer sensor network architecture = Andmepõhine tõrkekindel kihtideülene sensorvõrgu arhitektuur**

**Vihman, Lauri** 2024 [https://www.ester.ee/record=b5657135\\*est](https://www.ester.ee/record=b5657135*est) <https://digikogu.taltech.ee/et/Item/00a93258-dc0f-4a4d-822f-099fff757224>  
<https://doi.org/10.23658/taltech.7/2024>

### **Description of digital objects with alternative graphs for test generation purposes**

**Ubar, Raimund-Johannes; Lohuaru, Tõnu** Fault Tolerant Systems and Diagnostics : XI. International Conference ; Proceedings ; Suhl, June 6-9, 1988 1988 / p. [?]

### **Design and test technology for dependable systems-on-chip**

2011 [https://www.ester.ee/record=b4467408\\*est](https://www.ester.ee/record=b4467408*est)

### **Effective scalable IEEE 1687 instrumentation network for fault management**

**Jutman, Artur; Shibin, Konstantin; Devadze, Sergei** IEEE design & test 2013 / p. 26-35 : ill

### **Efficient fault injection based on dynamic HDL slicing technique**

**Bagbaba, Ahmet Cagri; Jenihhin, Maksim; Raik, Jaan;** Sauer, Christian 2019 IEEE 25th International Symposium on On-Line Testing and Robust System Design (IOLTS 2019) : 1-3 July 2019, Greece 2019 / p. 52-53 : ill  
<https://doi.org/10.1109/IOLTS.2019.8854419>

**Elektriliseadmed madalpingepaigaldistes [Võrguteavik] : raadiohäiringute tunnussuurused. Piirväärtused ja**

**mõõtemetodid. Osa 1, Majasisene aparatuur = Power line communication apparatus used in low-voltage installations : radio disturbance characteristics. Limits and methods of measurement. Part 1, Apparatus for in-home use**  
2015 [http://www.ester.ee/record=b4460215\\*est](http://www.ester.ee/record=b4460215*est)

#### **Elektromagnetiline ühilduvus**

**Risthein, Endel** 2006 [https://www.ester.ee/record=b2175290\\*est](https://www.ester.ee/record=b2175290*est)

**Elektromagnetiline ühilduvus. Osa 6-2, Erialased põhstandardid. Häiringutaluvus tööstuskeskkondades [Võrguteavik] = Electromagnetic compatibility (EMC). Part 6-2, Generic standards. Immunity standard for industrial environments (IEC 61000-6-2:2016)**

2019 [https://www.ester.ee/record=b5205860\\*est](https://www.ester.ee/record=b5205860*est)

#### **Fault diagnosis and identification of malfunctioning protection devices in a power system via time series similarity matching**

Xu, Bing; Wang, Chongyu; **Wen, Fushuan; Palu, Ivo**; Pang, Kaiyuan Energy Conversion and Economics 2020 / p. 81-92  
<https://doi.org/10.1049/enc2.12008>

#### **Fault diagnosis of output-side diode-bridge in isolated DC-DC series resonant converter**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 <https://doi.org/10.1109/ENERGYCON53164.2022.9830339>

#### **Fault management instrumentation network based on IEEE P1687 IJTAG**

**Shibin, Konstantin; Jutman, Artur; Devadze, Sergei** European Test Symposium (ETS), 2013, Avignon, France 2013

#### **Fault tolerance in integration interfaces of business software**

**Lemmik, Rivo; Karjust, Kristo; Otto, Tauno** International Journal Of Scientific Knowledge (Computing and Information Technology) IJSK 2014 / p. 35-43 : ill

#### **Fault tolerant control of a grid-connected microgrid with high penetration of renewable energy**

Senanayaka, Jagath; Khang, Huynh Van; **Vaimann, Toomas; Rassõlkin, Anton** 24th International Conference on Electrical Machines and Systems (ICEMS) 2021 / p. 938-943 <https://doi.org/10.23919/ICEMS52562.2021.9634364>

#### **Fault-tolerant high step-up DC-DC converters**

**Chub, Andrii** 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 67-68 : ill [https://www.ester.ee/record=b5291755\\*est](https://www.ester.ee/record=b5291755*est)

#### **Fault-tolerant soft-switching current-fed DC-DC converter**

**Zinchenko, Denys; Kosenko, Roman; Blinov, Andrei; Vinnikov, Dmitri** 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 437-440 : ill <https://doi.org/10.1109/UKRCON.2019.8879973>

#### **FESDA : fog-enabled secure data aggregation in smart grid IoT network**

Saleem, Ahsan; Khan, Abid; Malik, Saif Ur Rehman; Pervaiz, Haris; **Malik, Hassan**; Alam, Masoom; Jindal, Anish IEEE Internet of Things Journal 2020 / p. 6132-6142 <https://doi.org/10.1109/IJOT.2019.2957314> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **FP7 DIAMOND : design error diagnosis and correction success stories**

**Raik, Jaan; Jenihhin, Maksim; Könighofer, Robert** European Test Symposium (ETS), 2013, Avignon, France 2013 / p. 1-6

#### **Handling of SETs on NoC links by exploitation of inherent redundancy in circular input buffers [Online resource]**

**Janson, Karl; Pihlak, Rene; Azad, Siavoosh Payandeh; Niazmand, Behrad; Jervan, Gert; Raik, Jaan** BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600989>

#### **Health management for self-aware SoCs based on IEEE 1687 infrastructure**

**Shibin, Konstantin; Devadze, Sergei; Jutman, Artur; Grabmann, Martin; Pricken, Robin** IEEE Design & Test 2017 / p. 27-35 : ill <https://doi.org/10.1109/MDAT.2017.2750902>

#### **A hierarchical approach for devising area efficient concurrent online checkers**

**Niazmand, Behrad; Azad, Siavoosh Payandeh; Ghasempouri, Tara; Raik, Jaan; Jervan, Gert** Proceedings 2nd IEEE International Test Conference in Asia : ITC-Asia 2018, 15-17 August 2018, Harbin, China 2018 / p. 139-144 : ill <https://doi.org/10.1109/ITC-Asia.2018.00034>

#### **Hierarchical calculation of malicious faults for evaluating the fault-tolerance**

**Ubar, Raimund-Johannes; Devadze, Sergei; Jenihhin, Maksim; Raik, Jaan; Jervan, Gert; Ellervee, Peeter** Proceedings : Fourth IEEE International Symposium on Electronic Design, Test and Applications : [DELTA 2008] : 23-25 January 2008, Hong Kong, SAR, China 2008 / p. 222-227 : ill <https://ieeexplore.ieee.org/document/4459544>

### **Hybrid DC–DC converters with topology morphing control and post-fault operation capability**

**Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Blinov, Andrei; Liivik, Elizaveta** Electrimacs 2019 : Selected Papers, Vol. 1 2020 / p. 433-445 [https://doi.org/10.1007/978-3-030-37161-6\\_33](https://doi.org/10.1007/978-3-030-37161-6_33) [Conference proceeding at Scopus](#) [Article at Scopus](#)

### **Improving legibility of motor current spectrum for broken rotor bars fault diagnostics**

**Asad, Bilal; Vaimann, Toomas; Kallaste, Ants; Rassõlkin, Anton; Belahcen, Anouar; Iqbal, Muhammad Naveed** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2019 / p. 1–8 : ill <https://doi.org/10.2478/ecce-2019-0001>

### **Infoedastus pidevate signaalidega : õppevahend. I osa, Pidevate signaalide edastus ja häirekindlus**

**Eiskop, Ilmar** 1978 [https://www.ester.ee/record=b1274915\\*est](https://www.ester.ee/record=b1274915*est)

### **Integration of iUML-B and UPPAAL timed automata for development of real-time systems with concurrent processes**

**Shokri-Manninen, Fatima; Tsiopoulos, Leonidas; Vain, Jüri; Walden, Marina** Rigorous State-Based Methods 7th International Conference, ABZ 2020, Ulm, Germany, May 27–29, 2020 : proceedings 2020 / p. 186-202 [https://doi.org/10.1007/978-3-030-48077-6\\_13](https://doi.org/10.1007/978-3-030-48077-6_13) [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **International summer school on real-time, fault-tolerance and artificial intelligence : Neeruti, June 30 - July 2, 1992**

**Vain, Jüri** Eesti Teaduste Akadeemia Toimetised. Füüsika. Matemaatika 1992 / 4, lk. 288-290

### **Invited paper: System-Wide Fault Management based on IEEE P1687 IJTAG**

**Jutman, Artur; Devadze, Sergei; Aleksejev, Jevgeni** 6th International Workshop on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC) : 20-22 June 2011, Montpellier, France 2011 / [4] p.: ill <https://ieeexplore.ieee.org/document/5981520>

### **Juhusliku algfaasiga impulss-signaali optimaalne vastuvõtt ja häirekindlus**

**Mürsepp, Ivo** Ringhääling 2003 : X rahvusvahelise telekommunikatsioonipäeva materjalid 2003 / lk. 90-97 : ill

### **Kodeerimine**

**Madar, Urve; Puusepp, Peeter** 2000 [https://www.ester.ee/record=b1445483\\*est](https://www.ester.ee/record=b1445483*est)

### **Machine learning to tackle the challenges of transient and soft errors in complex circuits**

**Lange, Thomas; Balakrishnan, Aneesh; Glorieux, Maximilien; Alexandrescu, Dan; Sterpone, Luca** 2019 IEEE 25th International Symposium on On-Line Testing and Robust System Design (IOLTS), 1-3 July 2019, Greece 2019 / p. 7-14 : ill <https://doi.org/10.1109/IOLTS.2019.8854423>

### **Mixed-level identification of fault redundancy in microprocessors**

**Oyeniran, Adeboye Stephen; Ubar, Raimund-Johannes; Jenihhin, Maksim; Gürsoy, Cemil Cem; Raik, Jaan** LATS 2019 : 20th IEEE Latin American Test Symposium : Santiago, Chile, March 11th - 13th 2019 2019 / 6 p. : ill <https://doi.org/10.1109/LATW.2019.8704591>

### **Motor failure tolerant control system with self diagnostics for unmanned multirotors**

**Ambroziak, Leszek; Simha, Ashutosh; Pawluszewicz, Ewa; Kotta, Ülle** 2019 24th International Conference on Methods and Models in Automation and Robotics (MMAR) 2019 / p. 422–427 : ill <https://doi.org/10.1109/MMAR.2019.8864726>

### **Observer-based residual generation for nonlinear discrete-time systems**

**Kaldmäe, Arvo; Kotta, Ülle** Proceedings of the Estonian Academy of Sciences 2018 / p. 325-336

[http://www.kirj.ee/public/proceedings\\_pdf/2018/issue\\_4/proc-2018-4-325-336.pdf](http://www.kirj.ee/public/proceedings_pdf/2018/issue_4/proc-2018-4-325-336.pdf) <https://doi.org/10.3176/proc.2018.4.01>

[https://artiklid.einet.ee/record=b2868167\\*est](https://artiklid.einet.ee/record=b2868167*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Self-healing photovoltaic microconverter with zero redundancy and accurate low-cost fault detection**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri** IEEE transactions on industrial electronics 2024 / p. 646-656 <https://doi.org/10.1109/TIE.2023.3250836>

### **Short-circuit fault detection and remedial in full-bridge rectifier of series resonant DC-DC converter based on inductor voltage signature**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316482>

### **Spectrum analysis for condition monitoring and fault diagnosis of ventilation motor : a case study**

**Shabbir, Noman; Kütt, Lauri; Asad, Bilal; Jawad, Muhammad; Iqbal, Muhammad Naveed; Daniel, Kamran** Energies 2021 / art. 2001 <https://doi.org/10.3390/en14072001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Systematic review of fault tolerant techniques in underwater sensor networks**

**Vihman, Lauri; Kruusmaa, Maarja; Raik, Jaan** Sensors 2021 / art. 3264 <https://doi.org/10.3390/s21093264> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **System-wide fault management based on IEEE P1687 IJTAG**

**Shibin, Konstantin; Jutman, Artur; Devadze, Sergei** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 81-84 : ill

### **Tallinna Tehnikaülikooli uus energeetikalabor**

Aro, Rein Elektriala 2018 / lk. 27 : fot [http://www.ester.ee/record=b1240496\\*est](http://www.ester.ee/record=b1240496*est) [https://artiklid.elnet.ee/record=b2868795\\*est](https://artiklid.elnet.ee/record=b2868795*est)

### **TalTech avas energeetikalabori**

Ehitaja 2018 / lk. 30 : fot [http://www.ester.ee/record=b1072123\\*est](http://www.ester.ee/record=b1072123*est)

### **TalTechi uues energeetikalaboris saab testida elektrisüsteemide töökindlust**

Mente et Manu 2018 / lk. 9 : fot [http://www.ester.ee/record=b1242496\\*est](http://www.ester.ee/record=b1242496*est) <http://dea.digar.ee/publication/AKmenteetmanu>  
[https://www.ttu.ee/public/m/mente-et-manu/MM\\_05\\_2018/mobile/index.html](https://www.ttu.ee/public/m/mente-et-manu/MM_05_2018/mobile/index.html)

### **Tarkvara tõrketaluvus**

Petermann, Viktor; **Paluoja, Rein** A & A 2000 / 4, lk. 36-44 [https://artiklid.elnet.ee/record=b1004809\\*est](https://artiklid.elnet.ee/record=b1004809*est)

### **Tõrketaluvus kommertsarvutisüsteemides**

Petermann, Viktor; **Paluoja, Rein** A & A 2000 / 5, lk. 7-17 : ill [https://artiklid.elnet.ee/record=b1005190\\*est](https://artiklid.elnet.ee/record=b1005190*est)

### **Understanding fault-tolerance vulnerabilities in advanced SoC FPGAs for critical applications**

**Cherezova, Natalia; Shibin, Konstantin; Jenihhin, Maksim; Jutman, Artur** Microelectronics reliability 2023 / art. 115010, 10 p. : ill  
<https://doi.org/10.1016/j.microrel.2023.115010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Wide input voltage range high step-up DC-DC vonverter with fault-tolerant operation capability**

**Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Kouro, Samir** 2019 IEEE International Conference on Industrial Technology, ICIT 2019 : Melbourne, Australia, 13-15 February 2019 : proceedings 2019 / p. 1099-1104 : ill <https://doi.org/10.1109/ICIT.2019.8755040>  
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **К вычислению изменения интенсивности отказов элементов по изменениям температуры и нагрузки**

**Koort, Ants** Тезисы докладов Республиканской научно-технической конференции "Современные методы и устройства радиоэлектронного оборудования", посвященной Дню радио. [2], Секция: Компьютерный анализ сигналов и цепей 1981 / с. 9-10 [https://www.ester.ee/record=b1310795\\*est](https://www.ester.ee/record=b1310795*est)

### **Помехоустойчивость и динамика фазовых процессов в синхронных измерительных преобразователях : автореферат ... кандидата технических наук (05.11.05)**

**Min, Mart** 1984 [https://www.ester.ee/record=b2083669\\*est](https://www.ester.ee/record=b2083669*est)

### **Пути повышения помехоустойчивости лазерных атмосферных систем связи**

**Hinrikus, Hiie** Применение лазеров в системах преобразования, передачи и обработки информации : Материалы краткосрочного семинара (12-13 дек.) 1978 / с. 15-16

### **Ускорение определения параметров безотказности элементов радиотехнических схем**

**Koort, Ants** Тезисы докладов Республиканской научно-технической конференции "Современные методы и устройства радиоэлектронного оборудования", посвященной Дню радио. [2], Секция: Компьютерный анализ сигналов и цепей 1981 / с. 7-8  
[https://www.ester.ee/record=b1310795\\*est](https://www.ester.ee/record=b1310795*est)