

Accessibility and orbits for discrete-time nonlinear control systems

Bartosiewicz, Zbigniew; **Kotta, Ülle**; Wyrwas, Malgorzata 60th IEEE Conference on Decision and Control, CDC 2021, Austin, 13-17 December 2021 / p. 4594-4601 <https://doi.org/10.1109/CDC45484.2021.9682853> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Accommodation to defects in the discrete dynamic systems

Zhirabok, Alexey N.; **Kotta, Ülle**; Shumsky, A. E. Automation and remote control 2014 / p. 997-1009 : ill <https://doi.org/10.1134/S0005117914060010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Advanced design of nonlinear discrete-time and delayed systems = Diskreetsete ja hilistumistega mittelineaarsete juhtimissüsteemide süntees

Kaldmäe, Arvo 2016 <https://digi.lib.ttu.ee/ii/?5215> https://www.ester.ee/record=b4569894*est

Algebraic necessary and sufficient condition for difference flatness

Kaldmäe, Arvo International Journal of Control 2021 / 8 p <https://doi.org/10.1080/00207179.2021.1908598> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An algorithm to transform discrete-time state equations into the extended observer form

Kaldmäe, Arvo; **Kotta, Ülle** Automatica 2024 / art. 111598 <https://doi.org/10.1016/j.automatica.2024.111598> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of cost function composition based on the horizon time prediction of an indirect MPC current control in single-phase grid-connected PV inverters

Pimentel, Sergio Pires; **Husev, Oleksandr**; **Vinnikov, Dmitri**; **Stepenko, Serhii** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982377>

Comparative analysis of two types of models for multirate linear multivariable discrete-time control systems

Astrov, Igor; **Rüstern, Ennu** Proceedings of the 13th International Conference "Systems for Automation of Engineering and Research" (SAER'99) : Varna, Bulgaria, September 18-19, 1999 1999 / p. 44-48

A comparison of a discrete-time PI and an indirect MPC current controllers for a single-phase grid-connected inverter operating with distorted grid and significant computation feedback delay

Pimentel, Sergio Pires; **Husev, Oleksandr**; **Vinnikov, Dmitri**; **Stepenko, Serhii**; **Kütt, Lauri**; Rodriguez, Jose 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC) 2019 / 6 p.: ill <https://doi.org/10.1109/COBEP/SPEC44138.2019.9065396>

Conserved quantities in discrete dynamics : what can be recovered from Noether's theorem, how, and why?

Capobianco, Silvio; Toffoli, Tommaso Natural computing 2012 / p. 565-577 : ill <https://link.springer.com/article/10.1007/s11047-012-9336-7>

Construction of flat outputs of nonlinear discrete-time systems in a geometric and an algebraic framework

Kolar, Bernd; **Kaldmäe, Arvo**; Schöberl, Markus; **Kotta, Ülle**; Schlacher, Kurt IFAC-PapersOnLine 2016 / p. 796-801 <https://doi.org/10.1016/j.ifacol.2016.10.263> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Controller and controllability canonical forms for discrete-time nonlinear systems

Kotta, Ülle Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2005 / 1, p. 55-62

Decentralization of stochastic multivariable discrete-time control systems on two-rate aggregative subsystems

Astrov, Igor; **Rüstern, Ennu** Proc. 14th International Conf. Systems for Automation of Engineering and Research 2000 / p. 57-61

Decentralized partitioning and simulation of three-rate stochastic multidimensional continuous-time state-space models

Astrov, Igor; **Em, Juri**; **Pedai, Andrus**; **Rüstern, Ennu** Proc. 4th Portuguese Conference on Automatic Control (CONTROLO'2000) 2000 / p. 226-231

Decentralized partitioning of centralized controller on three-rate subcontrollers for the multidimensional stochastic state-space continuous-time model of an experimental aircraft

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** Proc. 14th International Conf. Systems for Automation of Engineering and Research 2000 / p. 62-66

Decomposition of discrete-time nonlinear control systems

Kotta, Ülle Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2005 / 3, p. 154-161

Degree of Dieudonne determinant defines the order of nonlinear system

Kotta, Ülle; **Belikov, Juri**; Halas, Miroslav; **Leibak, Alar** International journal of control 2019 / p. 518-527

Design of multirate nonlinear discrete control systems

Astrov, Igor BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 355-358

Design of multivariable discrete time regulators

Jaaksoo, Ülo A link between science and applications of automatic control : preprints of the seventh Triennial World Congress of the International Federation of Automatic Control Helsinki, Finland, 12-16 June 1978. Vol. 3 1978 / p. 1831-1837

Design of multivariable discrete time regulators for plants with unmeasurable disturbances

Jaaksoo, Ülo Zbornik radova JUREMA. 23 1978 / p. 61-65

DILOS - автоматизированная система декомпозиционного синтеза и верификации дискретных управляющих устройств

Kruus, Margus; Keevallik, Andres; Berkman, Boriss; Sudnitsõn, Aleksander Внедрение новых информационных технологий в процесс обучени профессионально-технических учебных заведений стран - членов СЭВ 1989 / с. ?

DILOS - интеративная система декомпозиционного логического синтеза

Berkman, Boriss; Keevallik, Andres; Sudnitsõn, Aleksander Тезисы докладов XXX всесоюзной школы-семинара им. М.А. Гаврилова "Развитие теории дискретных систем и проблемы логического проектирования СБИС" (27 июня - 3 июля 1988 г.) 1988 / с. 3

Discrete- time linear- analytic system linearization and decoupling via application of right inverse system

Kotta, Ülle Eesti NSV Teaduste Akadeemia toimetised. Füüsika. Matemaatika = Известия Академии наук Эстонской ССР. Физика. Математика = Proceedings of Academy of Sciences of the Estonian SSR. Physics. Mathematics 1988 / lk. 257-262
https://www.ester.ee/record=b1264310*est

Diskreetsignaale ja -süsteemide alused : õppevahend

Heinrichsen, Vladimir 1984 https://www.ester.ee/record=b1238966*est

Disturbance decoupling of multi-input multi-output discrete-time nonlinear systems by static measurement feedback

Kaldmäe, Arvo; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2012 / p. 77-88
https://artiklid.elnet.ee/record=b2497319*est

Disturbance decoupling of time delay systems

Kaldmäe, Arvo; Moog, Claude Asian journal of control 2016 / p. 1130-1134 <https://doi.org/10.1002/asjc.1169> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Dynamic pole placement based control of nonlinear discrete time systems with input delay

Belikov, Juri; Petlenkov, Eduard Control Applications (CCA) & Intelligent Control (ISIC) : 2009 IEEE : 8-10 July 2009, St.Petersburg 2009 / p. 394-399

Erratum : Linearization of discrete-time control system by state transformation

Mullari, Tanel; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2021 / p. 307 <https://doi.org/10.3176/proc.2021.1.09>
https://kirj.ee/wp-content/plugins/kirj/pub/Erratum-proc-3-2021-307_20210822154030.pdf

Extended observer form : simple existence conditions

Kaparin, Vadim; Kotta, Ülle; Mullari, Tanel International journal of control 2013 / p. 794-803 : ill
<https://doi.org/10.1080/00207179.2012.760048> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extended observer form with vector fields

Mullari, Tanel; Kotta, Ülle; Kaldmäe, Arvo; Kaparin, Vadim; Simha, Ashutosh International journal of control 2024 / p. 2399 - 2412
<https://doi.org/10.1080/00207179.2023.2274060> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extended observer forms for submersive discrete-time systems

Simha, Ashutosh; Kaparin, Vadim; Mullari, Tanel; Kotta, Ülle IEEE Transactions on Automatic Control 2023 / p. 2684 - 2688
<https://doi.org/10.1109/TAC.2023.3336253> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Faulty plant reconfiguration based on disturbance decoupling methods

Kaldmäe, Arvo; Kotta, Ülle; Jiang, Bin; Shumsky, Alexey Ye.; Zhirabok, Alexey N. Asian journal of control 2016 / p. 858-867 : ill
<https://doi.org/10.1002/asjc.1185> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feedback linearization and lattice theory

Kotta, Ülle; Tõnso, Maris; Shumsky, Alexey Ye.; Zhirabok, Alexey N. Systems & control letters 2013 / p. 248-255
<https://doi.org/10.1016/j.sysconle.2012.11.014> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feedback linearization of discrete-time nonlinear control systems : computational aspects

Mullari, Tanel; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2020 / p. 11-26 <https://doi.org/10.3176/proc.2020.1.03>
http://kirj.ee/32996/?tpl=1061&c_tpl=1064 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fixed order stabilizing controller design via random reflection segments

Nurges, Ülo; Avanesov, Sergei The 12th International Conference on Control, Automation, Robotics and Vision, ICARCV 2012 : 5-7 December, 2012, Guangzhou, China : [proceedings] 2012 / p. 530-535 : ill
<https://ieeexplore.ieee.org/document/5983069/similar#similar>

Fixed-order stabilising controller design by a mixed randomised/deterministic method

Nurges, Ülo; Avanesov, Sergei International journal of control 2015 / p. 335-346 <https://doi.org/10.1080/00207179.2014.953208>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Functions' algebra in nonlinear control : computational aspects and software

Belikov, Juri; Kaldmäe, Arvo; Kaparin, Vadim; Kotta, Ülle; Shumsky, Alexey Ye.; **Tönso, Maris;** Zhirabok, Alexey Proceedings of the Estonian Academy of Sciences 2017 / p. 89-107 <https://doi.org/10.3176/proc.2017.1.06> http://www.ester.ee/record=b2355998*est
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Further results on identifiability of discrete-time nonlinear systems

Nõmm, Sven; Moog, Claude Automatica 2016 / p. 69-74 : ill <https://doi.org/10.1016/j.automatica.2016.01.054> [Journal metrics at Scopus](#)
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An indirect model predictive current control (CCS-MPC) for grid-connected single-phase three-level NPC quasi-z-source PV inverter

Pires Pimentel, Sergio; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Stepenko, Serhii** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659840>

Input-output decoupling of discrete-time nonlinear systems by dynamic measurement feedback

Kaldmäe, Arvo; Kotta, Ülle European journal of control 2017 / p. 31-38 : ill <https://doi.org/10.1016/j.ejcon.2016.12.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Input-output linearization of discrete-time systems by dynamic output feedback

Kaldmäe, Arvo; Kotta, Ülle European journal of control 2014 / p. 73-78 <https://doi.org/10.1016/j.ejcon.2013.12.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Integrability for nonlinear time-delay systems

Kaldmäe, Arvo; Califano, Claudia; Moog, Claude IEEE transactions on automatic control 2016 / p. 1912-1917
<https://doi.org/10.1109/TAC.2015.2482003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Intrinsic conditions for extended observer forms for nonlinear systems

Simha, Ashutosh; Respondek, Witold; **Kaldmäe, Arvo; Kaparin, Vadim; Kotta, Ülle** 2018 IEEE Conference on Decision and Control (CDC), 17-19 Dec. 2018, 17-19 Dec. 2018 : proceedings 2018 / p. 1373-1378 <https://doi.org/10.1109/CDC.2018.8619122>
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Kahekiiruselise mitmemõõtmelise diskreetse objekti uurimine : [magistritöö] : õppesuund: arvuti- ja süsteemitehnika

Astrov, Igor 1992 http://www.ester.ee/record=b2676838*est

Laguerre state equations of a multivariable discrete time system

Jaaksoo, Ülo; Nurges, Ülo Control science and technology for the progress of society : IFAC 8th Triennial World Congress, Aug. 24-28, 1981, Kyoto, Japan, Preprints. Vol.1-20, 22-23 1981 / p. 56-62 https://www.ester.ee/record=b2014744*est

Linearization of discrete-time control system by state transformation

Mullari, Tanel; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2021 / p. 62-79 <https://doi.org/10.3176/proc.2021.1.09>
https://kirj.ee/wp-content/plugins/kirj/pub/proc-1-2021-62-79_20210630094644.pdf?v=a57b8491d1d8 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Linearization of discrete-time nonlinear control systems

Kaldmäe, Arvo Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK seitsmenda aastakonverentsi artiklite kogumik : 15.-16. novembril 2013, Haapsalu 2013 / p. 29-32

Measurement feedback disturbance decoupling in discrete-event systems

Kaldmäe, Arvo; Kotta, Ülle; Shumsky, Alexey; Zhirabok, Alexey International journal of robust and nonlinear control 2015 / p. 3330-3348 <https://doi.org/10.1002/rnc.3265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Measurement feedback disturbance decoupling in discrete-time nonlinear systems

Kaldmäe, Arvo; Kotta, Ülle; Shumsky, Alexey Ye.; Zhirabok, Alexey N. Automatica 2013 / p. 2887-2891 : ill

<https://doi.org/10.1016/j.automatica.2013.06.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Model based Test framework for communications-critical internet of things systems

Pal, Deepak; Vain, Jüri Databases and information systems X : selected papers from the thirteenth International Baltic Conference,

DB&IS 2018 2019 / p. 79-94 https://www.ester.ee/record=b5203991*est <https://doi.org/10.3233/978-1-61499-941-6-79> [Conference](#)

[proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Model matching problem for discrete-time nonlinear systems

Belikov, Juri; Halas, Miroslav; **Kotta, Ülle**; Moog, Claude Proceedings of the Estonian Academy of Sciences 2015 / p. 457-472 : ill

https://artiklid.elnet.ee/record=b2750720*est <https://doi.org/10.3176/proc.2015.4.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal](#)

[metrics at WOS](#) [Article at WOS](#)

Modelling of two-dimensional elastic wave propagation with continuous cellular automata

Berezovski, Arkadi Proceedings of the Estonian Academy of Sciences. Engineering 1999 / p. 112-121

<https://doi.org/10.3176/eng.1999.2.02>

Neuro-fuzzy dynamic pole placement control of nonlinear discrete-time systems

Belikov, Juri; Petlenkov, Eduard Proceedings of International Joint Conference on Neural Networks : San Jose, California, USA,

July 31 – August 5, 2011 2011 / p. 1577-1582 : ill <https://ieeexplore.ieee.org/document/6033412>

New stability conditions for discrete polynomials

Nurges, Ülo; Rüstern, Ennu Proceedings of the 2005 American Control Conference : June 8-June 10, 2005, Hilton Portland & Executive Tower, Portland, Oregon. Vol. 6 2005 / p. 4149-4153 : ill

https://folk.ntnu.no/skoge/prost/proceedings/acc05/PDFs/Papers/0742_FrB05_6.pdf

New stability conditions for discrete-time systems

Nurges, Ülo; Rüstern, Ennu Proceedings of the 6th Asia-Pacific Conference on Control & Measurement : 12-19 August, 2004, Chengdu, China 2004 / p. 167-173

New stability conditions via reflection coefficients of polynomials

Nurges, Ülo IEEE transactions on automatic control 2006 / 9, p. 1354-1360 : ill <https://ieeexplore.ieee.org/document/1506942>

New test design techniques for fault detection in digital objects

Alango, Villem; Kont, Toomas; Ubar, Raimund-Johannes Tallinna Tehnikaülikooli Toimetised 1990 / lk. 45-62: ill

Non-equilibrium contact quantities and compound deficiency at interfaces between discrete systems

Muschik, Wolfgang; **Berezovski, Arkadi** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2007 / 2, p. 133-145

A novel Taylor series based approach for control computation in NN-ANARX structure based control of nonlinear systems

Belikov, Juri; Vassiljeva, Kristina; Petlenkov, Eduard; Nõmm, Sven Proceedings of the 27th Chinese Control Conference : July 16-18, 2008, Kunming, Yunnan, China. 2 2008 / p. 474-478 <https://ieeexplore.ieee.org/document/4605837>

Observer-based residual generation for nonlinear discrete-time systems

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

<https://doi.org/10.3176/proc.2018.4.01> http://www.kirj.ee/public/proceedings_pdf/2018/issue_4/proc-2018-4-325-336.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On flatness of discrete-time nonlinear systems

Kaldmäe, Arvo; Kotta, Ülle 9th IFAC Symposium on Nonlinear Control Systems 2013 : Toulouse, France, 4 - 6 September 2013

2013 / p. 588 - 593 <https://doi.org/10.3182/20130904-3-FR-2041.00017> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

On the finiteness of accessibility test for nonlinear discrete-time systems

Sarafrazi, Mohammad Amin; Pawluszewicz, Ewa; Bartosiewicz, Zbigniew; **Kotta, Ülle** International journal of control 2021 / p. 2330-

2336 <https://doi.org/10.1080/00207179.2019.1706102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the properties of forward and backward shifts of vector fields

Kaldmäe, Arvo; Kaparin, Vadim; Kotta, Ülle; Mullari, Tanel; Pawluszewicz, Ewa Proceedings of the Estonian Academy of

Sciences 2022 / p. 314-325 <https://doi.org/10.3176/proc.2022.4.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the robust control of polytopic plants

Nurges, Ülo; Rüstern, Ennu Proceedings of the 1999 American Control Conference : June 2-4, 1999, Hyatt Regency San Diego, San Diego, California, USA. Vol. 1 1999 / p. 435-439 : ill <https://ieeexplore.ieee.org/document/782865>

On the robust controller design via reflection coefficients

Nurges, Ülo; Rüstern, Ennu Proceedings of the 5th Asia-Pacific Conference on Control & Measurement, Dali, China, 2002 2002 / p. 160-165

On the robust output control via reflection vectors [Electronic resource]

Nurges, Ülo; Rüstern, Ennu Preprints of the 16th IFAC World Congress : Prague, Czech Republic, July 3-8, 2005 2005 / [6] p. [CD-ROM] <https://www.sciencedirect.com/science/article/pii/S1474667016370434>

On the robust stability and robust control via reflections coefficients [Electronic resource]

Nurges, Ülo; Rüstern, Ennu Proceedings of the First African Control Conference : University of Cape Town, Cape Town, South Africa, 3-5 December 2003 2003 / p. 381-386 [CD-ROM] <https://folk.ntnu.no/skoge/prost/proceedings/afcon03/Papers/003.pdf>

On the robust stability of discrete-time systems

Nurges, Ülo; Rüstern, Ennu The 1998 IEEE Asia Pacific Conference on Circuits and Systems : Microelectronics and Integrating Systems : November 24-27, 1998, Chiangmai Plaza Hotel, Chiangmai, Thailand 1998 / p. 407-410

On the transformation of a nonlinear discrete-time input-output system into the strong row-reduced form

Bartosiewicz, Zbigniew; **Belikov, Juri; Kotta, Ülle; Tönso, Maris; Wyrwas, Małgorzata** Proceedings of the Estonian Academy of Sciences 2016 / p. 220-236 <https://doi.org/10.3176/proc.2016.3.02> https://artiklid.elnet.ee/record=b2798394*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of stochastic stratified compensation systems for discrete manufacturing

Kiitam, Andres 14th IFIP Conference on System Modelling and Optimization : Leipzig, GDR, July 3 - 7, 1989 Fourteenth IFIP Conference on System Modelling and Optimization : Leipzig, GDR, July 3 - 7, 1989 1989 / p. 115-116

Optimization-based design of compengational control system for multistage discrete manufacturing processes

Kiitam, Andres; Saks, Eva 10th World Congress on Automatic Control : preprints : [vol. 4] 1987 / p. 151-166 https://www.ester.ee/record=b2501388*est

Popov form and the explicit equations of inverse systems

Bartosiewicz, Zbigniew; **Kotta, Ülle**; Pawluszewicz, Ewa; Tönso, Maris; Wyrwas, Małgorzata Proceedings of the Estonian Academy of Sciences 2018 / p. 432-355 : ill http://www.kirj.ee/public/proceedings_pdf/2018/issue_4/proc-2018-4-342-355.pdf <https://doi.org/10.3176/proc.2018.4.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Practical evaluation of two-layer perceptrons optimal architecture for identification of 2-nd and 3-d order nonlinear dynamic discrete time SISO systems

Kondratjeva, Julija; Petlenkov, Eduard 5th Junior European Meeting on Control & Information Technology : September 20-22, 2006, Tallinn, Estonia : book of abstracts 2006 / p. 16-17

Realization and identification of discrete-time nonlinear systems

Nömm, Sven 2004 https://www.ester.ee/record=b1910554*est

Reducibility condition for nonlinear discrete-time systems : behavioral approach

Bartosiewicz, Zbigniew; **Kotta, Ülle**; Pawluszewicz, Ewa; Tönso, Maris; Wyrwas, Małgorzata Control and Cybernetics 2013 / p. 329-346 <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d858f3fd9c2acd98e41f35a0bed4c0cb9efab59c> [Journal metrics at Scopus](#) [Article at Scopus](#)

Reflection segments based robust PID controller solution for benchmark problem

Avanessov, Sergei; Nurges, Ülo 2014 22nd Mediterranean Conference on Control and Automation (MED) : University of Palermo, June 16-19, 2014, Palermo, Italy 2014 / p. 1406-1411 : ill

Reflection segments based stability domain approximation of the robust PID controller parameters

Avanessov, Sergei; Nurges, Ülo 2012 20th Mediterranean Conference on Control & Automation (MED), MED 2012 : Conference Proceedings : July 3-6, 2012, Catalonia Barcelona PlazaHotel, Barcelona, Spain 2012 / p. 204-209 : ill <https://ieeexplore.ieee.org/document/6265639>

Robust control via polytopic stability region approximations

Nurges, Ülo; Rüstern, Ennu Proceedings of the 15th Mediterranean Conference on Control and Automation : MED'07 : Athena (Greece), June 27-29, 2007 2007 / [5] p <https://ieeexplore.ieee.org/document/4433838>

Robust pole placement by quadratic programming

Nurges, Ülo; Rüstern, Ennu 5th IFAC Symposium on Robust Control Design : Toulouse, France, July 4-7, 2006 2006 / p. 333-338 <https://www.sciencedirect.com/science/article/pii/S1474667015335217>

Robust pole placement via polytope of reflection vectors

Nurges, Ülo; Rüstern, Ennu ECC'07 European Control Conference : July 2-5, 2007, Kos, Greece : proceedings 2007 / p. 798-803
<https://ieeexplore.ieee.org/document/7068240>

Single-experiment observability decomposition of discrete-time analytic systems

Kawano, Yu; **Kotta, Ülle** Systems & control letters 2016 / p. 193-199 <https://doi.org/10.1016/j.sysconle.2016.09.016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sixty shades of generalized continua : Dedicated to the 60th birthday of Prof. Victor A. Eremeyev

2023 / XXXIV, 745 p <https://doi.org/10.1007/978-3-031-26186-2>

Some new stability margins for discrete-time systems

Nurges, Ülo Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2003 / 2, p. 186-197

Stability margin via reflection vectors [Electronic resource]

Nurges, Ülo Proceedings of European Control Conference : Cambridge, UK, 2003 2003 / [4] p. : ill. [CD-ROM]
<https://ieeexplore.ieee.org/document/7085050>

Stability of discrete-time systems via polytopes of reflection vector sets

Avanessov, Sergei; Nurges, Ülo Estonian journal of engineering 2012 / p. 291-301

Synthesis of control automata using graph schemes of algorithms

Baranov, S.; **Keevallik, Andres** Digital Processes 1980 / p. [?]

The state-space description of two-rate nonlinear multivariable discrete systems

Astrov, Igor; Rüstern, Ennu Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1997 / 3, p. 187-196

Transfer functions of discrete-time nonlinear control systems

Halas, Miroslav; **Kotta, Ülle** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2007 / 4, p. 322-335

Transformation of nonlinear discrete-time state equations into the observer form : extension to non-reversible case

Mullari, Tanel; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2021 / p. 235-247 <https://doi.org/10.3176/proc.2021.3.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Transformation of nonlinear discrete-time state equations into the observer form : revision

Mullari, Tanel; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2023 / p. 1-5 <https://doi.org/10.3176/proc.2023.1.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Transformation of nonlinear discrete-time system into the extended observer form

Kaparin, Vadim; Kotta, Ülle International journal of control 2018 / p. 848-858 <https://doi.org/10.1080/00207179.2017.1294264> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Transformation of nonlinear MIMO discrete-time systems into the extended observer form

Kaparin, Vadim; Kotta, Ülle Asian journal of control 2019 / p. 2208-2217 : ill <https://doi.org/10.1002/asjc.1824> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Weak reachability and controllability of discrete-time nonlinear systems: generic approach and singular points

Mullari, Tanel; Kotta, Ülle; Bartosiewicz, Zbigniew; Sarafrazi, Mohammad Amin; Moog, Claude; Pawluszewicz, Ewa International journal of control 2020 / p. 483-489 <https://doi.org/10.1080/00207179.2018.1479076> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Web-based system for sequential machines decomposition

Devadze, Sergei; Fomina, Jelena; Kruus, Margus; Sudnitsõn, Aleksander The IEEE Region 8 EUROCON 2003 : Computer as a Tool : 22-24. September 2003, Ljubljana, Slovenia : proceedings. Volume A 2003 / p. 57-61 : ill
https://pld.ttu.ee/decomposition/publications/Sudnitsõn-EUROCON_v5%20_1_.pdf

Web-based tools for decomposition-oriented digital design

Kruus, Margus; Lensen, Harri; Sudnitsõn, Aleksander MEET/MARIND'2002 : proceedings of First International Congress on Mechanical and Electrical Engineering and Technology and Fourth International Conference on Marine Industry, 07-11 October 2002, Varna Bulgaria. Volume 1 2002 / p. 261-266 : ill

Web-based tools for finite state machine decomposition with analysis of information flows

Fomina, Jelena; Keevallik, Andres; Kruus, Margus; Sudnitsõn, Aleksander BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 165-168 : ill

Альтернативные графы и техническая диагностика дискретных объектов

Ubar, Raimund-Johannes Электронная техника. Серия 8, Управление качеством и стандартизация : научно-технический сборник 1988 / с. 33-57

Базовая система для создания АИС ВЦ ЭССР (система АСТА-32)

Võhandu, Leo; Kracht, Wilhelm; Mikli, Toomas Кибернетика и вуз : сборник работ по актуальным проблемам высшего образования и разработки АИС ВШ 1976 / с ?

Декомпозиционный метод синтеза дискретных управляющих устройств : автореферат ... кандидата технических наук (05.255)

Jakobson, Gabriel 1971 https://www.ester.ee/record=b1391118*est

Декомпозиционный метод синтеза дискретных управляющих устройств : диссертация на соискание ученой степени кандидата технических наук

Jakobson, Gabriel 1971 https://www.ester.ee/record=b3040172*est

Декомпозиционный синтез управляющих автоматов на программируемых матрицах и микропроцессорах : автореферат ... кандидата технических наук (05.13.01)

Sudnitsõn, Aleksander 1983 https://www.ester.ee/record=b1291157*est

Декомпозиционный синтез управляющих автоматов на программируемых матрицах и микропроцессорах : диссертация на соискание ученой степени кандидата кандидата технических наук

Sudnitsõn, Aleksander 1983 https://www.ester.ee/record=b4634419*est

Декомпозиция конечного автомата по заданной структуре

Kracht, Wilhelm; Jakobson, Gabriel II Всесоюзное совещание по теории релейных устройств и конечных автоматов. Рига. 28 сент.-1 окт. 1971 г.. 1971 / с. 7-8

Единый подход к решению задач тестового диагностирования дискретных систем

Ubar, Raimund-Johannes; Lohuaru, Tõnu; Evartson, Teet IX симпозиум по проблеме избыточности в информационных системах, 3 июня - 8 июня 1986 года : Тезисы докладов 1986 / с. 32-35

Единый подход к решению задач тестового диагностирования дискретных систем

Ubar, Raimund-Johannes; Lohuaru, Tõnu; Evartson, Teet IX симпозиум по проблеме избыточности в информационных системах, 3-8 июня 1986 г. : тезисы докладов 1986 / с. 32-35

Задача выбора разбиений в декомпозиционном синтезе дискретных управляющих автоматов

Sudnitsõn, Aleksander; Viies, Vladimir Машинное проектирование электронных устройств и систем 1986 / с. 18-28

Исследование взаимосвязанности в многомерных системах управления с дискретным временем : автореферат ... кандидата технических наук (05.13.01)

Oit, Monika 1984 https://www.ester.ee/record=b1268852*est

Исследование взаимосвязанности в многомерных системах управления с дискретным временем : диссертация на соискание ученой степени кандидата технических наук

Oit, Monika 1984 https://www.ester.ee/record=b4634455*est

Исследование и разработка методов тестового диагностирования дискретных систем : автореферат ... доктора технических наук (05.13.13)

Ubar, Raimund-Johannes 1986 https://www.ester.ee/record=b1564280*est

К теории дискретных обратных систем

Jaaksoo, Ülo Известия академии наук СССР. Техническая кибернетика 1980 / с. 165-168
https://www.ester.ee/record=b2143721*est

Комплекс средств диагностирования дискретных устройств

Ubar, Raimund-Johannes; Lohuaru, Tõnu Мир ПК 1991 / 1, с. 122-125 : ил

Комплексный контроль и эффективность функционирования дискретных технологических систем

Puusepp, Märt 1985 https://www.ester.ee/record=b1227155*est

Лагерровы уравнения состояния многомерной дискретной системы

Nurges, Ülo; Jaaksoo, Ülo Eesti NSV Teaduste Akadeemia toimetised. Füüsika. Matemaatika = Известия Академии наук Эстонской ССР. Физика. Математика = Proceedings of Academy of Sciences of the Estonian SSR. Physics. Mathematics 1981 / lk. 209-219 : ill. <https://www.etera.ee/zoom/18899/view?page=1&p=separate>

Лагерровы уравнения состояния многомерной дискретной системы

Nurges, Ülo; Jaaksoo, Ülo Автоматика и телемеханика 1981 / с. 27-30 https://www.ester.ee/record=b1515055*est

Метод программной реализации микропрограммного автомата

Keevallik, Andres; Kitsnik, Peeter; Sudnitsõn, Aleksander Расчет и проектирование систем технической кибернетики 1983 / с. 91-96 : ил https://www.ester.ee/record=b1288991*est <https://digikogu.taltech.ee/et/Item/7d7515af-76b7-4d35-89a7-e80367d5b635>

Методы тестового диагностирования дискретных систем

Ubar, Raimund-Johannes Машинное проектирование электронных устройств и систем 1986 / с. 57-69

Моделирование дискретных адаптивных систем управления

Lehtmets, Andrus; Rüstern, Ennu XXX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 8-10 апреля 1986 года : тезисы докладов. Том II, Автоматика. Энергетика. Механика. Химия 1986 / с. 14 https://www.ester.ee/record=b1305565*est

О моделировании длинных входных последовательностей в дискретных устройствах, содержащих счетные структуры

Ubar, Raimund-Johannes; Evertson, Teet Методы синтеза и диагностирования цифровых схем 1985 / с. 61-74

Об автоматизации процедур синтеза тестов для дискретных систем на модели альтернативных графов

Grigorjeva, Ksenja; Einasto, N. Машинное проектирование электронных устройств и систем 1986 / с. 104-109

Об инкрементальном построении цифровых корректоров импульсных систем автоматического регулирования

Kracht, Wilhelm Труды по электротехнике и автоматике : сборник статей. 4 1966 / с. 11-19 : илл https://www.ester.ee/record=b2182106*est <https://digikogu.taltech.ee/et/Item/bb01df36-1dc8-4676-acca-0860fdf8fca2>

Об одном подходе к решению задач в дискретных системах

Maran, Mihkel Труды Московского энергетического института 1975 / с. 126-130 https://www.ester.ee/record=b1407829*est

Один подход к автоматизации проектирования микропроцессорных систем дискретного управления

Keevallik, Andres; Berkman, Boriss; Sudnitsõn, Aleksander Микропроцессорные системы обработки информации и управления : тезисы докладов 1987 / с. ?

Построение тестов для дискретных систем на простых альтернативных графах

Voolaine, Andrus; Pall, M.; Ubar, Raimund-Johannes Тезисы докладов всесоюзной научно-технической конференции "Методы и средства борьбы с помехами в цифровой технике" 1986 / с. 88-89

Разработка декомпозиционных методов синтеза контролепригодных дискретных управляющих устройств : автореферат ... кандидата технических наук (05.13.01)

Kruus, Margus 1987 https://www.ester.ee/record=b1282510*est

Разработка декомпозиционных методов синтеза контролепригодных дискретных управляющих устройств : диссертация на соискание ученой степени кандидата технических наук

Kruus, Margus 1987 https://www.ester.ee/record=b4636146*est

Разработка и исследование методов синтеза тестов для дискретных устройств на основе модели альтернативных графов : автореферат ... кандидата технических наук (05.13.01)

Plakk, Mari 1984 https://www.ester.ee/record=b1235788*est

Разработка и исследование методов синтеза тестов для дискретных устройств на основе модели альтернативных графов : диссертация на соискание ученой степени кандидата технических наук

Plakk, Mari 1984 https://www.ester.ee/record=b4634584*est

Разработка простой схемы импульсного регулирования

Kracht, Wilhelm Труды по электротехнике и автоматике : сборник статей. [1] 1963 / с. 17-25 : илл https://www.ester.ee/record=b2181953*est <https://digikogu.taltech.ee/et/Item/c0cba674-7147-4659-abad-39f8419dd45e>

Распараллеливание и сетевые реализации конечно-автоматных алгоритмов управления

Keevallik, Andres Пятая всесоюзная школа-семинар "Распараллеливание обработки информации" : тезисы доклады и сообщения 1985 / с. 63-64

САПР дискретных систем программно-логического управления

Berkman, Boriss; Keevallik, Andres; Sudnitsõn, Aleksander Международная конференция "Проблемы автоматизированного проектирования в машиностроении "САПР-88", 21-25 марта 1988 г., Москва : Тезисы докладов 1988 /

Синтез мультимикропроцессорных систем дискретного управления

Keevallik, Andres; Sudnitsõn, Aleksander; Berkman, Boriss Тезисы докладов Республиканской научно-технической конференции, посвященной Дню радио, октябрь 1983. Секция "Микропроцессорная техника" 1983 / с. 10-12
https://www.ester.ee/record=b1295287*est

Система автоматизации декомпозиционного синтеза дискретных управляющих устройств (DILOS)

Keevallik, Andres; Sudnitsõn, Aleksander; Berkman, Boriss Методы синтеза и диагностирования цифровых схем 1985 / с. 27-33

Система синтеза тестовых программ для дискретных объектов диагностирования (ОД)

Zaugarov, Viktor; Saarepera, Maimu; Storožev, Sergei Tallinna Tehnikaülikooli Toimetised 1990 / lk. 78-89: ill

Система хранения и обработки дискретной информации

Võhandu, Leo; Luczkowski, Teodor; Mikli, Toomas; Tepandi, Jaak Управляющие системы и машины : УСИМ : научно-производственный журнал 1981 / с. 99-102 https://www.ester.ee/record=b2157161*est

Тестовое диагностирование дискретных систем на модели АГ

Ubar, Raimund-Johannes Техническая диагностика : VI всесоюзное совещание, Ростов н/Д, май 1987 г. : Тезисы докладов 1987 / с. 155

Универсальный подход к автоматизации проектирования тестов для широкого класса дискретных объектов

Ubar, Raimund-Johannes Машинное проектирование электронных устройств и систем 1986 / с. 70-92

Управление дискретными обратимыми справа нелинейными системами : автореферат ... доктора физико-математических наук

Kotta, Ülle 1992 https://www.ester.ee/record=b1164884*est