

Adaptive controller for networked control systems subjected to random communication delays

Srinivasan, Seshadhri; Saravanakumar, G.; Subathra, B.; **Kotta, Ülle** Soft computing applications : proceedings of the 7th International Workshop Soft Computing Applications (SOFA 2016). Vol. 1 2018 / p. 78-94 https://doi.org/10.1007/978-3-319-62521-8_8
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Adaptive LQR controller for Networked Control Systems subjected to random communication delays

Srinivasan, Seshadhri; Vallabhan, Mishiga; Ramaswamy, Srin; **Kotta, Ülle** American Control Conference (ACC), 2013 : 17 - 19 June 2013, Washington, DC, USA (2013) 2013 / p. 783 - 787 <https://doi.org/10.1109/acc.2013.6579931> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Adaptive output feedback linearization for a class of NN-based ANARX models

Petlenkov, Eduard; Nömm, Sven; **Kotta, Ülle** 5th Junior European Meeting on Control & Information Technology : September 20-22, 2006, Tallinn, Estonia : book of abstracts 2006 / p. 10

AG-model for design of testable controllers

Kasirova, Lilia BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 303-306: ill

Akvaator ehk lihtne akvaariumikontroller

Sinivee, Veljo Praktiline Arvutikasutaja 2007 / 3, lk. 32-35 : ill

AL – A prototype autonomous ship model for navigating in ice conditions

Bolbot, Victor; Sandru, Andrei; Saarniniemi, Ture; Freter, Jan Hendrik; Puolakka, Otto; **Kujala, Pentti**; Valdez Banda, Osiris A. Proceedings of ASME 2024 43rd International Conference on Ocean, Offshore and Arctic Engineering (OMAE2024) June 9-14, 2024, Singapore, Singapore Volume 5 Ocean engineering A 2024 / art. v05at06a049, 10 p. <https://doi.org/10.1115/OMAE2024-127465>
[Conference proceedings at Scopus](#) [Article at Scopus](#)

An indirect adaptive control paradigm for wind generation systems

Kamal, Tariq; Karabacak, Murat; Hassan, Syed Zulqadar; Fernández Ramírez, Luis M.; **Roasto, Indrek**; Khan, Laiq Advanced control and optimization paradigms for wind energy systems 2019 / p. 235-257 https://doi.org/10.1007/978-981-13-5995-8_10 [Article collection metrics at Scopus](#) [Article at Scopus](#)

Analogue controller of rotation speed for AC motor drives

Bashkys, A.; Gobis, V. BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 371-372: ill

Application of MPC to industrial water boiler control system in district heat plant

Vansovitš, Vitali; **Petlenkov, Eduard**; **Vassiljeva, Kristina**; **Tepljakov, Aleksei**; **Belikov, Juri** 2014 13th International Conference on Control, Automation, Robotics & Vision (ICARCV 2014) : Marina Bay Sands, Singapore, 10-12th December 2014 2014 / p. 1609-1614 : ill

Application of neural-network based variable fractional order PID controllers for load frequency control in isolated microgrids

Belikov, Juri; Nosrati, Komeil; **Škiparev, Vjatseslav**; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; Levron, Yoash Power system frequency control : modeling and advances. 1st Ed 2023 / p. 203-216 : ill <https://www.elsevier.com/books/power-system-frequency-control/mishra/978-0-443-18426-0>

Application of PLC in industrial automation

Müür, Margus; **Pettai, Elmo**; Lepiksoo, Urmo 2011 http://www.ester.ee/record=b2742452*est

Automatic flow-through control with PI and PID controllers

Ruban, Olga; **Laugis, Juhan** 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 106-111 : ill

Automatic FSM synthesis for low-power mixed synchronous/asynchronous implementation

Oelmann, Bengt; **Tammemäe, Kalle**; **Kruus, Margus**; O'Nils, Mattias VLSI design 2001 / 2, p. 167-186 : ill
<https://www.semanticscholar.org/paper/Automatic-FSM-Synthesis-for-Low-Power-Mixed-Oelmann/923183be619b345243d45eac268c190ebb308e3c>

Bilateral output feedback control of fractional PDEs with space-dependent coefficients

Chen, Juan; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; Zhuang, Bo IFAC-PapersOnLine 2020 / p. 3743 - 3748
<https://doi.org/10.1016/j.ifacol.2020.12.2555> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Binary logic vs. fuzzy logic techniques for tuning robust controllers

Vodovozov, Valery 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 49-50

https://www.ester.ee/record=b5183874*est

Boost half-bridge DC-DC converter with reconfigurable rectifier for ultra-wide input voltage range applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Siwakoti, Yam P. 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 / p. 1528-1532 : ill
<https://doi.org/10.1109/APEC.2018.8341219> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Boundary state and output feedbacks for underactuated systems of coupled time-fractional PDEs with different space-dependent diffusivity

Chen, Juan; Tepļakov, Aleksej; Petlenkov, Eduard; Zhuang, Bo International journal of systems science 2020 / p. 2922-2942
<https://doi.org/10.1080/00207721.2020.1803442> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Closed-loop droplet size control in microfluidics = Suletud ahelaga tilkade suuruse juhtimine mikrofluidikas

Gyimah, Nafisat 2024 <https://digikogu.taltech.ee/et/Item/c4a0c9de-83e5-41ff-bdcf-24ba61182d1f> https://www.ester.ee/record=b5698980*est
<https://doi.org/10.23658/taltech.47/2024>

Closed-loop identification of fractional-order models using FOMCON toolbox for MATLAB

Tepļakov, Aleksej; Petlenkov, Eduard; Belikov, Juri 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. 213-216 : ill

Comparative evaluation of various generations of Controller Area Network based on timing analysis

Berisa, Aldin; Panjevic, Adis; Kovac, Imran; Lyngbäck, Hans; Ashjaei, Mohammad; Daneshmand, Masoud; Sjödin, Mikael; Mubeen, Saad 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 2023 / p. 1-8
<https://doi.org/10.1109/ETFA54631.2023.10275549>

Comparison of single-rate and two-rate neural control approaches for coaxial rotor/ducted-fan UAV for situational awareness applications

Pedai, Andrus; Astrov, Igor; Udál, Andres 2018 IEEE 16th International Symposium on Intelligent Systems and Informatics (SISY), 13-15 Sept. 2018 : proceedings 2018 / p. 63-68 : ill <http://dx.doi.org/10.1109/SISY.2018.8524720>

Computation of open-loop frequency-domain characteristics of fractional FORDT plants with FOPID controllers

Tepļakov, Aleksej; Petlenkov, Eduard; Belikov, Juri Doctoral School in Information and Communication Technology : proceedings of doctoral session of BEC 2014 : October 6-8 2014, Laulasmaa 2014 / p. 23-26

Control challenges of 3D printed switched reluctance motor

Rassõlkin, Anton; Kallaste, Ants; Vaimann, Toomas; Tiismus, Hans 2019 26th International Workshop on Electric Drives : Improvement in Efficiency of Electric Drives (IWED) : Moscow Power Engineering Institute, Moscow, Russia 30th of January - 02nd of February 2019 : proceedings 2019 / 5 p. : ill <https://doi.org/10.1109/IWED.2019.8664282>

Control intensive digital system synthesis

Tammemäe, Kalle 1997 http://www.ester.ee/record=b1060033*est

Control of a three-input DC-DC converter suitable for DC motors

Alizadeh Asl, Amin; Hosseini, Seyed Hossein; Vosoughi Kurdkandi, Naser; Alizadeh Asl, Ramin International transactions on electrical energy systems 2022 / art. 4264649, 20 p. : ill <https://doi.org/10.1155/2022/4264649> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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

Controller synthesis in control and memory centric high level synthesis system

Ellervee, Peeter; Hemani, Ahmed; Kumar, Anshul; Svantesson, Bengt; Öberg, Johnny; Tenhunen, Hannu BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 393-396: ill

Coordinated optimization of parameters of PSS and UPFC-PODCs to improve small-signal stability of a power system with renewable energy generation

He, Ping; Shen, Runjie; Wen, Fushuan; Pan, Qi Journal of energy engineering 2021 / p. 04020089-1-04020089-11 : ill
[https://doi.org/10.1061/\(ASCE\)EY.1943-7897.0000737](https://doi.org/10.1061/(ASCE)EY.1943-7897.0000737) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cyber-physical universal safety and crash detection system for autonomous robot

Pikner, Heiko; Malayjerdi, Mohsen Robotic systems and applications 2021 / p. 46-52 : ill <https://doi.org/10.21595/rsa.2021.22113>

Cyber-physical universal safety and crash detection system for autonomous robot

Pikner, Heiko; Sell, Raivo; Malayjerdi, Mohsen The 16th International Conference "Mechatronic Systems and Materials" MSM

Data-driven control for nonlinear automated vehicles with multi-description coding for handling data dropouts

Zhang, Shuhua; Ma, Lifeng; **Charalambous, Themistoklis** 2024 IEEE 63rd Conference on Decision and Control (CDC) 2024 / p. 7387 - 7392 <https://doi.org/10.1109/CDC56724.2024.10886494> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Data-driven model predictive techniques for unknown linear time invariant systems

Ghorbani, Majid IEEE Control Systems Letters 2024 / p. 199 - 204 <https://doi.org/10.1109/LCSYS.2024.3359068> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Decision-making method for sound volume control in the 'Smart House' system

Hovorushchenko, Tetiana; Aleksov, Serhii; **Boyarchuk, Artem** 2024 IEEE 19th International Conference on Computer Science and Information Technologies (CSIT) : proceedings, 16-19 October 2024, Lviv, Ukraine 2024 / 4 p. <https://doi.org/10.1109/CSIT65290.2024.10982549> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Decompositional synthesis of low power controllers

Kasirova, Lilia; Keevallik, Andres; Sudnitsõn, Aleksander BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 191-194: ill

Depth control of an autonomous underwater vehicle in situational awareness a mission [Electronic resource]

Astrov, Igor; Rüstern, Ennu ICROS-SICE 2009 proceedings : ICROS-SICE International Joint Conference 2009 : Fukuoka, Japan, August 18-21, 2009 2009 / p. 560-564 [DVD-ROM]

Depth controls of an autonomous underwater vehicle by neurocontrollers for enhanced situational awareness

Astrov, Igor; Pedai, Andrus Proceedings of the World Academy of Science, Engineering and Technology 2009 / 55, p. 486-489

Depth controls of an autonomous underwater vehicle by neurocontrollers for enhanced situational awareness [Electronic resource]

Astrov, Igor; Pedai, Andrus WCSET 2009 CD-ROM proceedings : International Conference on Marine and Naval Engineering ICMNE 2009. 2009 World Congress on Science, Engineering and Technology : WCSET 2009 : Oslo, Norway, July 29-31, 2009 2009 / p. 486-489 [CD-ROM]

Design and implementation of fractional-order PID controllers for a fluid tank system

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri; Halas, Miroslav 2013 American Control Conference (ACC) : Washington, DC, USA, June 17-19, 2013 2013 / p. 1777-1782 : ill <https://doi.org/10.1109/acc.2013.6580093> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Design of a generalized fractional-order PID controller using operational amplifiers

Gonzalez, Emmanuel A.; Alimisis, Vassilis; Psychalinos, Costas; **Tepljakov, Aleksei** 2018 25th IEEE International Conference on Electronics Circuits and Systems (ICECS), Bordeaux, France, December 9–12, 2018 2018 / p. 253-256 : ill <http://dx.doi.org/10.1109/ICECS.2018.8617954>

Design of low power controllers

Kasirova, Lilia; Keevallik, Andres; Meškov, Mihhail 2nd IMACS Multiconference CESA'98, Computational Engineering in System Applications, Tunesia, 1998 1998

Design of retuning fractional PID controllers for a closed-loop magnetic levitation control system

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri; Gonzalez, Emmanuel A. 2014 13th International Conference on Control, Automation, Robotics & Vision (ICARCV 2014) : Marina Bay Sands, Singapore, 10-12th December 2014 2014 / p. 1345-1350 : ill

Design of three-rate continuous-time subcontrollers for the multidimensional stochastic state-space model of an experimental aircraft

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 277-280 : ill

Development of analytical tuning methods for fractional-order controllers

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 93-96 : ill

Development of anti-lock braking system (ABS) for vehicles braking

Vu, Trieu Minh; Oamen, Godwin; Vassiljeva, Kristina; Teder, Leo Open engineering 2016 / p. 554-559 : ill <https://doi.org/10.1515/eng-2016-0078> [Journal metrics at Scopus](#) [Article at scopus](#)

Digital fractional-order control of a position servo

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri; Astapov, Sergei Proceedings of the 20th International Conference Mixed Design of Integrated Circuits and Systems : MIXDES 2013, Gdynia, Poland, June 20-22, 2013 2013 / p. 462-467 : ill

Digital implementation of retuning fractional controllers for an existing closed-loop magnetic levitation control system
Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri 39th International Conference on Telecommunications and Signal Processing : TSP : June 27-29, 2016, Vienna, Austria 2016 / p. 630-633 : ill <https://doi.org/10.1109/TSP.2016.7760958>

Digital realization of retuning fractional-order controllers for an existing closed-loop control system
Tepljakov, Aleksei; Petlenkov, Eduard; Gonzalez, Emmanuel A.; Belikov, Juri Journal of circuits, systems, and computers 2017 / art. 1750165, p. 1-26 <https://doi.org/10.1142/S0218126617501651> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Digital twin for controlled generation of water-in-oil microdroplets with required size
Gyimah, Nafisat; Scheler, Ott; Rang, Toomas; Pardy, Tamas 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), 25-27 April 2022, St Julian, Malta : proceedings 2022 / p. 85-91 <https://doi.org/10.1109/EuroSimE54907.2022.9758876>

Eestis valmis üliväike hiiglane
Põldre, Jüri; Ubar, Raimund-Johannes Uus Meedia : Eesti Päevalehe lisa 1997 / 13. nov., lk. 6

Efficient analog implementations of fractional-order controllers
Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Proceedings of the 2013 14th International Carpathian Control Conference (ICCC) : Rytro, Hotel Perla Południa, Poland, May 26-29, 2013 2013 / p. 377-382 : ill

Embedded system implementation of digital fractional filter approximations for control applications
Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Proceedings of the 21st International Conference Mixed Design of Integrated Circuits and Systems : MIXDES 2014 : Lublin, Poland, June 19-21, 2014 2014 / p. 441-445 : ill

Enhancing grid-forming converters control in hybrid AC/DC microgrids using bidirectional virtual inertia support
Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Abid, Abderahmane; Zaid, Sherif A.; Alghamdi, T. A. H.; Salama, Hossam S. Processes 2024 / art. 139 <https://doi.org/10.3390/pr12010139> <https://www.mdpi.com/2227-9717/12/1/139/htm> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimating time constants for underfloor heating control
Kull, Tuule Mall; Thalfeldt, Martin; Kurnitski, Jarek Journal of physics : conference series 2019 / art. 012121, 6 p. : ill <https://doi.org/10.1088/1742-6596/1343/1/012121> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A fast current harmonic detection and mitigation strategy for shunt active filter
Firouzjah, Khalil Gorgani; Ahmadihangar, Roya; Rosin, Argo; Häring, Tobias 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 5 p. : ill <https://doi.org/10.1109/PQ.2019.8818253>

Feasibility of a multi-tier cyber physical system as a self-aware entity
Tammemäe, Kalle; Hollstein, Thomas AmiES-2017 : Ambient Intelligence and Embedded Systems : International Symposium, 14-16 September, 2017, Vaasa, Finland 2017 / 3 p. : ill <http://amies-2017.international-symposium.org/abstracts.html#tammemae>

Fed-batch fermentation controller design with evolutionary computation
Riid, Andri; Rüstern, Ennu CSTST '08 Proceedings of the 5th international conference on Soft computing as transdisciplinary science and technology 2008 / p. 371-377 : ill

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](#)

A flexible MATLAB tool for optimal fractional-order PID controller design subject to specifications
Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Proceedings of the 31st Chinese Control Conference : July, 2012, Hefei, China 2012 / p. 4698-4703 : ill https://www.researchgate.net/publication/259741861_A_Flexible_MATLAB_Tool_for_Optimal_Fractional-order_PID_Controller_Design_Subject_to_Specifications

Flight control of TUAV with coaxial rotor and ducted fan configuration by NARMA-L2 controllers for enhanced situational awareness
Astrov, Igor; Pedai, Andrus; Gordon, Boris World Academy of Science, Engineering and Technology 2012 / p. 75-81 : ill <https://publications.waset.org/13553/flight-control-of-tuav-with-coaxial-rotor-and-ducted-fan-configuration-by-narma-l2-controllers-for-enhanced-situational-awareness>

Flight control of TUAV with coaxial rotor and ducted fan configuration by NARMA-L2 controllers for enhanced situational awareness [Electronic resource]
Astrov, Igor; Pedai, Andrus; Gordon, Boris ICCEA 2012 CD-ROM Proceedings : [International Conference on Computer

Engineering and Applications (ICCEA 2012) : Copenhagen, Denmark, June 11-12, 2012] 2012 / p. 75-81 : ill [CD-ROM]
<https://publications.waset.org/13553/flight-control-of-tuav-with-coaxial-rotor-and-ducted-fan-configuration-by-narma-i2-controllers-for-enhanced-situational-awareness>

FOMCON : a MATLAB toolbox for fractional-order system identification and control

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri International journal of microelectronics and computer science 2011 / p. 51-62 https://www.researchgate.net/publication/259741855_FOMCON_a_MATLAB_toolbox_for_fractional-order_system_identification_and_control

FOMCON : fractional-order modeling and control toolbox for MATLAB

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Proceedings of the 18th International Conference Mixed Design of Integrated Circuits and Systems : MIXDES 2011 : Gliwice, Poland 16 - 18 June, 2011 2011 / p. 684-689
https://www.researchgate.net/publication/259741855_FOMCON_a_MATLAB_toolbox_for_fractional-order_system_identification_and_control

FOMCON toolbox for modeling, design and implementation of fractional-order control systems

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Handbook of fractional calculus with applications 2019 / p. 211-236
<https://doi.org/10.1515/9783110571745>

FOPID controller tuning for fractional FOPDT plants subject to design specifications in the frequency domain

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri 2015 European Control Conference (ECC) : July 15-17, 2015, Linz, Austria 2015 / p. 3502-3507 : ill <http://dx.doi.org/10.1109/ECC.2015.7331076>

FOPID controllers and their industrial applications: a survey of recent results

Tepljakov, Aleksei; Alagoz, Baris Baykant; Petlenkov, Eduard IFAC-PapersOnLine 2018 / p. 25-30
<https://doi.org/10.1016/j.ifacol.2018.06.014> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Fractional-order controller design and digital implementation using FOMCON toolbox for MATLAB

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri; Finajev, Jevgeni 2013 IEEE Conference on Computer Aided Control System Design (CACSD) : Part of 2013 IEEE Multi-Conference on Systems and Control : Hyderabad, India, August 28-30, 2013 2013 / p. 340-345 : ill

Fractional-order controller design for a magnetic levitation system

Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 137-140 : ill

From online fault detection to fault management in network-on-chips : a ground-up approach

Azad, Siavoosh Payandeh; Niazmand, Behrad; Janson, Karl; Nevin, George; Oyeniran, Adeboye Stephen; Putkaradze, Tsotne; Apneet Kaur; Raik, Jaan; Jervan, Gert; Ubar, Raimund-Johannes; Hollstein, Thomas Proceedings 2017 IEEE 20th International Symposium on Design and Diagnostics of Electronic Circuit & Systems(DDECS) : April 19-21, 2017, Dresden, Germany 2017 / p. 48-53 : ill <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7934553>

Fuzzy logic control for a ball and beam system

Moezzi, Reza; Vu, Trieu Minh; Tamre, Mart International Journal of Innovative Technology and Interdisciplinary Sciences : IJTIS 2018 / p. 39-48 : ill <https://doi.org/10.1515/IJTIS.2018.1.1.39-48>

Fuzzy logic control for non-linear model of the ball and beam system

Moezzi, Reza; Vu, Trieu Minh Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 60-65 : ill <http://innomet.ttu.ee/daaam/>

Grid-connected single-phase 3L-T-type qZS inverter for renewable energy

Roncero-Clemente, Carlos; Husev, Aleksandr; Ruiz-Cortes, Mercedes; Romero-Cadaval, Enrique; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5003-5007 : ill <https://doi.org/10.1109/IECON.2019.8926888> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Holistic web-based Virtual Micro Controller Framework for research and education

Seiler, Sven; Sell, Raivo; Ptasiak, Dennis; Bölter, Martin International journal of online engineering 2012 / p. 58-64 <https://online-journals.org/index.php/i-joe/article/view/2169>

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 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Identification of industrial water boiler for model predictive control of district heat plant

Vansovitš, Vitali; Petlenkov, Eduard; Vassiljeva, Kristina; Guljajev, Aleksandr BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 315-318 : ill

Identification, control and tuning of the motor speed in TIA portal

Ruban, Olga 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 34-37 : ill http://www.estee.ee/record=b4650094*est

Implementation and real-time simulation of a fractional-order controller using a MATLAB based prototyping platform
Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 145-148 : ill

Implementation of a web-based remote control system for qZS DAB application using low-cost ARM platform
Korzeniewski, Marek; Kulikowski, Krzysztof; **Zakis, Janis**; Jasiński, Marek Tomasz; Malinowski, Aleksander Bulletin of the Polish Academy of Sciences: Technical Sciences 2016 / p. 887-896 <https://doi.org/10.1515/bpasts-2016-0097> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improved DC-Link voltage transient response and stability issues in energy router with fuzzy logic control method
Najafzadeh, Mahdiyyeh; Husev, Oleksandr; Roasto, Indrek; Jalakas, Tanel 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/RTUCON51174.2020.9316477>

Incorporation of fractional-order dynamics into an existing PI/PID DC motor control loop
Tepljakov, Aleksei; Gonzales, Emmanuel A.; Petlenkov, Eduard; Belikov, Juri; Monje, Concepcion A.; Petraš, Ivo ISA transactions 2016 / p. 262-273 : ill <https://doi.org/10.1016/j.isatra.2015.11.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indirect model predictive control for inverter connected to distorted grid with significant computation delay
Husev, Oleksandr; Pimentel, Sergio Pires; Vinnikov, Dmitri; Kütt, Lauri; Rodriguez, Jose IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 6483-6488 : ill <https://doi.org/10.1109/IECON.2019.8927279>

Intelligent control of robots with minimal power consumption in pick-and-place operations
Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard Energies 2023 / art. 7418 <https://doi.org/10.3390/en16217418> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Intelligent frequency control of AC microgrids with communication delay : an online tuning method subject to stabilizing parameters
Nosrati, Komeil; Škiparev, Vjatseslav; Tepljakov, Aleksei; Petlenkov, Eduard; Belikov, Juri Energy and AI 2024 / art. 100421 <https://doi.org/10.1016/j.egyai.2024.100421> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Intense limitation of internal surges using controlled ferromagnetic reactors
Evdokunin, G.A.; Neshataev, V.V.; **Sepping, Eino; Järvi, Jaan** Soviet electrical engineering 1991 / p. 106-110: ill

Investigating and analyzing CAN-to-TSN gateway forwarding techniques
Berisa, Aldin; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 2023 IEEE 26th International Symposium on Real-Time Distributed Computing : ISORC 2023 : Nashville, Tennessee, USA, 23-25 May 2023 : proceedings 2023 / p. 136-145 <https://doi.org/10.1109/ISORC58943.2023.00026>

32-bitiste protsessorite maailm ja "Motorola"
Tammemäe, Kalle Arvutustehnika ja Andmetöötlus 1991 / lk. 5-16; 5, lk. 7-9: joon

Lift monitoring and process control over PLC integrated HTML server
Kruus, Reivo; Rosin, Argo; Steinbrunn, Johannes Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 89-92 : ill

Low-power Wind Generation grid-connected system with MPPT and PC control
Rosa, Carlos; **Vinnikov, Dmitri**; Romero-Cadaval, Enrique; Pires, Vitor; Martins, Joao Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5991-5996 : ill <https://doi.org/10.1109/IECON.2013.6700118> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Management of braking energy in electric vehicles using reinforcement learning
Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard 2023 International Conference on Clean Electrical Power (ICCEP) 2023 / p. 559-564 <https://doi.org/10.1109/ICCEP57914.2023.10247359>

Microgrid for the Department of Electrical Drives and Power Electronics
Palamar, Andriy; Pettai, Elmo 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 54-61

Misconfiguration-free compositional SDN for cloud networks
Pan, Heng; Li, Zhenyu; Zhang, Penghao; Cui, Penglai; **Salamatian, Mohammad Reza Kave**; Xie, Gaogang IEEE Transactions on Dependable and Secure Computing 2023 / p. 2484 - 2499 <https://doi.org/10.1109/TDSC.2022.3185096> [Journal metrics at Scopus](#)

MLC: a machine learning based checker for soft error detection in embedded processors

Nosrati, Nooshin; **Jenihhin, Maksim**; Navabi, Zainalabedin Proceedings - 2022 IEEE 28th International Symposium on On-Line Testing and Robust System Design, IOLTS 2022 2022 / Code 183305 <https://doi.org/10.1109/IOLTS56730.2022.9897309> [Article at Scopus](#) [Article at WOS](#)

Model predictive control for buck-boost inverter based on unfolding circuit

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 431-436 : ill <https://doi.org/10.1109/UKRCON.2019.8879870>

Model predictive control-based dual input split source inverter for PV applications

Abu-Zaher, Mustafa; Aly, Mokhtar; Zhuo, Fang; Ahmed, Mostafa; Rodriguez, Jose; **Bakeer, Abualkasim Ahmed Ali**; Hassan, Alaaeldien IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905950> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A model-based adaptive control of turning maneuver for catamaran autonomous surface vessel

Astrov, Igor; Astrova, Irina WSEAS Transactions on Systems and Control 2024 / p. 135-142 <https://doi.org/10.37394/23203.2024.19.14> [Journal metrics at Scopus](#) [Article at Scopus](#)

Model-based control design for a district heating plant

Vansovits, Vitali; Godoy, Boris I.; **Tepljakov, Aleksei; Vassiljeva, Kristina; Petlenkov, Eduard** 2017 IEEE 15th International Conference on Industrial Informatics (INDIN 2017) : Emden, Germany, 24-26 July 2017 / p. 615-620 : ill <https://doi.org/10.1109/INDIN.2017.8104842>

A model-based PID control of turning maneuver for catamaran autonomous surface vessel

Astrov, Igor 2023 International Conference on Engineering and Emerging Technologies (ICEET), Istanbul, Turkiye, 2023 2023 / 6 p <https://doi.org/10.1109/ICEET60227.2023.10526157>

Modeling and robust control algorithms for a linear belt driven system

Vu, Trieu Minh; Tamre, Mart; **Sekhri, Even** Open computer science 2018 / p. 142-153 : ill <https://doi.org/10.1515/comp-2018-0010> [Journal metrics at Scopus](#) [Article at Scopus](#)

Modelling of a versatile vehicle braking system with a fuzzy PID torque controller

Vodovozov, Valery; Raud, Zoja; Aksjonov, Andrei; Petlenkov, Eduard 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/BEC49624.2020.9276798>

Motion tracking glove for augmented reality and virtual reality

Vu, Trieu Minh; Katushin, Nikita; Pumwa, John Paladyn, journal of behavioral robotics 2019 / p. 160-166 : ill <https://doi.org/10.1515/pjbr-2019-0012> [Journal metrics at Scopus](#) [Article at Scopus](#)

Multi-loop model reference adaptive control of fractional-order PID control systems

Alagoz, Baris Baykant; **Tepljakov, Aleksei; Petlenkov, Eduard**; Yeroglu, Celaledin 2017 40th International Conference on Telecommunications and Signal Processing TSP : July 5-7, 2017, Barcelona, Spain 2017 / p. 702-705 : ill <https://doi.org/10.1109/TSP.2017.8076078>

Multi-loop model reference proportional integral derivative controls: design and performance evaluations

Alagoz, Baris Baykant; **Tepljakov, Aleksei; Petlenkov, Eduard; Yeroglu, Celaledin** Algorithms 2020 / 26 p. : ill <https://doi.org/10.3390/a13020038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multirate depth control of an AUV by neural network model reference controller for enhanced situational awareness

Astrov, Igor; Gordon, Boris Recent researches in applied information science : proceedings of the 5th WSEAS World Congress on Applied Computing Conference (ACC '12) : proceedings of the 1st International Conference on Biologically Inspired Computation (BIC '12) : University of Algarve, Faro, Portugal, May 2-4, 2012 2012 / p. 32-37 : ill <http://www.wseas.us/e-library/conferences/2012/Algarve/BICA/BICA-04.pdf>

Multirate depth control of an AUV by neural network model reference controller for enhanced situational awareness [Electronic resource]

Astrov, Igor; Gordon, Boris Proceedings of the International Conferences : Recent Researches in Applied Information Science : [Faro, Portugal, May 2-4, 2012] 2012 / p. 32-37 : ill [CD-ROM] <http://www.wseas.us/e-library/conferences/2012/Algarve/BICA/BICA-04.pdf>

A NARX model reference adaptive control scheme: Improved disturbance rejection fractional-order PID control of an experimental magnetic levitation system

Alimohammadi, Hossein; Alagoz, Baris Baykant; **Tepljakov, Aleksei; Vassiljeva, Kristina; Petlenkov, Eduard** Algorithms 2020 / p. 1-27 <https://doi.org/10.3390/a13080201> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Neural network motion control of VTAV by NARMA-L2 controller for enhanced situational awareness

Astrov, Igor; Berezovski, Natalya International journal of computer, electrical, automation, control and information engineering 2015 / p. 1784-1788 : ill <http://scholar.waset.org/1999.4/10001781>

Neural predictive tracking control of catamaran model sailboat for situation awareness applications

Astrov, Igor; Udal, Andres INES 2020 : IEEE 24th International Conference on Intelligent Engineering Systems, July 8-10, 2020, Reykjavik, Iceland : proceedings 2020 / p. 153-158 : ill <https://doi.org/10.1109/INES49302.2020.9147126>

A new master-slave based centralized control method for an AC microgrid with multiple distributed energy resources

Habibnia, Saba; Mahdavi, Mohammad Saeed; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo; Vinnikov, Dmitri** IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 p. <https://doi.org/10.1109/PEDG54999.2022.9923216>

A new resonant fault current limiter for improved wind turbine transient stability

Demin, Slava; Sitbon, Moshe; Aharon, Ilan; Barbi, Eli; Machlev, Ram; **Belikov, Juri**; Levron, Yoash; Baimel, Dmitry Electric Power Systems Research 2023 / art. 109600, 8 p <https://doi.org/10.1016/j.epr.2023.109600> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

NN-ANARX model based control of liquid level using visual feedback

Vassiljeva, Kristina; Tepljakov, Aleksei; Petlenkov, Eduard 2015 IEEE International Conference on Industrial Informatics (INDIN) : proceedings : Robinson College, Cambridge, United Kingdom, 22-24 July, 2015 2015 / p. 133-138 : ill <http://dx.doi.org/10.1109/INDIN.2015.7281723>

NN-SANARX model based control of a water tank system using embedded microcontroller Arduino

Škiparev, Vjatšeslav; Belikov, Juri; Petlenkov, Eduard Proceedings of the 2019 10th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications : IDAACS'2019, 18-21 Sept. 2019 2019 / p. 372-377 : ill <https://doi.org/10.1109/IDAACS47747.2019>

Nonlinear model predictive controller and feasible path planning for autonomous robots

Vu, Trieu Minh Open computer science 2016 / p. 178-186 : ill <https://doi.org/10.1515/comp-2016-0015> [Journal metrics at Scopus](#) [Article at Scopus](#)

A numerical study for plant-independent evaluation of fractional-order PID controller performance

Alagoz, Baris Baykant; **Tepljakov, Aleksei**; Yeroglu, Celalettin; Gonzalez, Emmanuel A.; Hossein Nia, S. Hassan; **Petlenkov, Eduard** IFAC-PapersOnLine 2018 / p. 539-544 : ill <https://doi.org/10.1016/j.ifacol.2018.06.151> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

On chaos control in hierarchical multi-agent systems

Källo, Rommi; Eerme, Martin; Reedik, Vello Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 41-46 : ill

On robust stability of uncertain control systems with time delay : an approach based on the overlap of value sets

Ghorbani, Majid; Tepljakov, Aleksei; Petlenkov, Eduard IEEE Transactions on Automatic Control 2024 / p. 6349 - 6356 <https://doi.org/10.1109/TAC.2024.3381912> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On stable cones of polynomials via reduced Routh parameters

Nurges, Ülo; Belikov, Juri; Artemtšuk, Igor Kybernetika 2016 / p. 461-477 <https://doi.org/10.14736/kyb-2016-3-0461> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the design problem of low power controllers

Kasirova, Lilia; Meškov, Mihhail Proceedings [of the] 15th NORCHIP Conference, Tallinn, 10-11 November 1997 1997 / p. 97-104: ill

On the problem of FSM networks power estimation capability

Kasirova, Lilia; Karabanov, Aleksandr ATMOS '98 : 8th international workshop : Lyngby, Denmark, October 7-9, 1998 1998 <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=3779affbc32be31e7560645f02b808148f8c356a>

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>

Optimal PI control parameters for accurate underfloor heating temperature control

Kull, Tuule Mall; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 / art. 01081, 8 p. : ill <https://doi.org/10.1051/e3sconf/201911101081> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Optimal tuning of resonant and repetitive based controller for single-phase buck-boost inverter with unfolding circuit
Husev, Oleksandr; Belikov, Juri; Matiushkin, Oleksandr; Vinnikov, Dmitri; Ahmadihangar, Roya; Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 954-965
<https://doi.org/10.1109/JESTIE.2021.3121190>

OTA-C realization of PI λ brake and throttle controllers for autonomous vehicles

Dimeas, Ilias; Psychalinos, Costas; Elwakil, Ahmed; **Tepljakov, Aleksei** 2017 European Conference on Circuit Theory and Design (ECCTD 2017) : Catania, Italy, 4 - 6 September, 2017 / p. 39-40 : ill <http://dx.doi.org/10.1109/ECCTD.2017.8093229>

Output voltage control system for a three-level neutral-point clamped quasi-Z-source inverter

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Stepenko, Serhii; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** Przegląd elektrotechniczny = Electrical review 2013 / p. 76-80 : ill <http://pe.org.pl/articles/2013/5/16.pdf> [Journal metrics at Scopus](#) [Article at Scopus](#)

Overview on Energy Management of Electric Vehicles with Intelligent Braking Controllers

Vodovozov, Valery; Raud, Zoja 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), November 15-17, 2021 : conference proceedings 2022 / 4 p. : ill <https://doi.org/10.1109/RTUCON53541.2021.9711715>

Parameter identification of an induction motor using fuzzy logic controller

Lehtla, Tõnu Проблемы автоматизированного электропривода : теория и практика : научно-техническая конференция с международным участием 15-20 сентября 1997 г., Харьков 1997 / 2 с.: ill

Passive power decoupling approach for three-level single-phase impedance source inverter based on resonant and PID controllers

Makovenko, Elena; Husev, Oleksandr; Zakis, Janis; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 / p. 516-521 : ill <https://doi.org/10.1109/CPE.2017.7915225>

A PD-type iterative learning algorithm for semi-linear distributed parameter systems with sensors/actuators

Zhang, Jianxiang; Cui, Baotong; Jiang, Zhengxian; **Chen, Juan** IEEE Access 2019 / p. 159037-159047 : ill <https://doi.org/10.1109/ACCESS.2019.2950456> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance investigation of active, semi-active and passive suspension using quarter car model

Samaroo, Kyle; Awan, Abdul Waheed; Marimuthu, Siva; Iqbal, Muhammad Naveed; **Daniel, Kamran; Shabbir, Noman** Algorithms 2025 / art. 100 <https://doi.org/10.3390/a18020100>

Performances of PID and different fuzzy methods for controlling a ball on beam

Vu, Trieu Minh; Tamre, Mart; Moezzi, Reza; Mets, Oliver; Jürise, Mart; Pölder, Ahti; Teder, Leo; Juurma, Märt Open engineering 2016 / p. 145-151 : ill <https://doi.org/10.1515/eng-2016-0018> [Journal metrics at Scopus](#) [Article at Scopus](#)

PID controller tuning optimization using genetic algorithm for droplet size control in microfluidics

Gyimah, Nafisat; Jöemaa, Rauno; Pärnamets, Kaiser; Scheler, Ott; Rang, Toomas; Pardy, Tamas 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 p <https://doi.org/10.1109/BEC56180.2022.9935596>

PLC and control systems

Ruban, Olga; Laugis, Juhan Tarptautines konferencijas Elektros ir valdymo technologijos - 2006 : pranešimu medžiaga = Proceedings of International Conference Electrical and Control Technologies - 2006 2006 / p. 504-509 : ill

Port-Hamiltonian framework in power systems domain : a survey

Tõnso, Maris; Kaparin, Vadim; Belikov, Juri Energy Reports 2023 / p. 2918 - 2930 <https://doi.org/10.1016/j.egyr.2023.09.077> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Practical example of the development stages of a mechatronic product

Coatanea, Eric; **Sell, Raivo**; Christophe, Francois Integrated systems and design : interstudy, May 9, 2008 2008 / p. 99-115 : ill

Predictive smart thermostat controller for heating, ventilation, and air-conditioning systems

Soudari, Mallikarjun; **Kaparin, Vadim**; Srinivasan, Seshadhri; Seshadhri, Subathra; **Kotta, Ülle** Proceedings of the Estonian Academy of Sciences 2018 / p. 291-299 : ill http://www.kirj.ee/public/proceedings_pdf/2018/issue_3/proc-2018-3-291-299.pdf <https://doi.org/10.3176/proc.2018.3.11> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Programmable logic controllers teaching and using in Estonian industry

Rosin, Argo Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists, Lohusalu, Estonia, June 1-8, 1997 1997 / p. 42-43

Programmeeritavad kontrollid

Rosin, Argo Elektriku kalender 1999 1998 / lk. 156-162: ill

Programmeeritavad kontrollid

Lehtla, Tõnu Tehnika ja Tootmine 1987 / lk. 15-17 https://www.ester.ee/record=b1073047*est

Programmeeritavad kontrollid SIMATIC S7

Rosin, Argo 2000 https://www.ester.ee/record=b1354419*est

Programmeeritavad kontrollid tööstusautomaatikas

Müür, Margus; Pettai, Elmo; Lepiksoo, Urmo 2011 http://www.ester.ee/record=b2727832*est

Programmeeritavad kontrollid Unitronics

Doroš, Andrei Elektriala 2004 / 2, lk. 20, 22

Proportional resonant controller tuning in three-phase four-leg VSI based on particle swarm optimization

Akhtar, Zeeshan; Zhu, Jiebei; Husev, Oleksandr; Vinnikov, Dmitri; Yu, Lujie 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 851-856 : ill <https://doi.org/10.1109/PEMC48073.2021.9432607>

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

Restricted connectivity neural networks based identification for control = Piiratud ühenduvusega tehismärgivõrkudel põhinev identifitseerimine juhtimiseks

Vassiljeva, Kristina 2012

Review on Braking Energy Management in Electric Vehicles

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard Energies 2021 / art. 4477 <https://doi.org/10.3390/en14154477> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Robust D-stability analysis of fractional-order controllers

Ghorbani, Majid; Tepļakov, Aleksei; Petlenkov, Eduard 2023 American Control Conference, ACC 2023, San Diego, 31 May-2 June 2023 : proceedings 2023 / p. 3871-3876 : ill <https://doi.org/10.23919/ACC55779.2023.10156257> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Robust FOPI and FOPID controller design for FFOPDT plants in embedded control applications using frequency-domain analysis

Tepļakov, Aleksei; Petlenkov, Eduard; Belikov, Juri 2015 American Control Conference : Hilton Palmer House, Chicago, IL, July 1-3, 2015 2015 / p. 3868-3873 : ill <https://doi.org/10.1109/ACC.2015.7171933> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Robust FOPID stabilization for Smith Predictor structures

Ghorbani, Majid; Tepļakov, Aleksei; Petlenkov, Eduard 61st IEEE Conference on Decision and Control, CDC 2022, Cancun, 6 December - 9 December 2022, proceedings 2022 / p. 1696-1701 <https://doi.org/10.1109/CDC51059.2022.9993283> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Robust PID controller design for continuous-time systems via reduced routh parameters = Pidevaja süsteemide robustse PID kontrolleri süntees taandatud Routh parameetrite kaudu

Artemtšuk, Igor 2019 <https://digi.lib.ttu.ee/i/?13259>

Robust pole assignment via Routh rays of polynomials

Artemtšuk, Igor; Nurges, Ülo; Belikov, Juri 2016 American Control Conference (ACC) : July 6-8, Boston, MA, USA 2016 / p. 7031-7036 : ill <https://doi.org/10.1109/ACC.2016.7526781> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Robust reflection coefficients placement by quadratic programming

Nurges, Ülo; Rüstern, Ennu Proc. IEEE Conference on Decision and Control 2000 / p. 16 https://www.researchgate.net/publication/251794857_Robust_reflection_coefficients_placement_by_quadratic_programming

Robust stabilization criteria of a general form of fractional-order controllers for interval fractional-order plants with complex uncertain parameters

Ghorbani, Majid ISA transactions 2022 / p. 140-151 : ill <https://doi.org/10.1016/j.isatra.2022.02.014> [Journal metrics at Scopus](#) [Article at](#)

Robust stabilization of interval fractional-order plants with an interval time delay by fractional-order proportional integral derivative controllers

Ghorbani, Majid; Tepljakov, Aleksei; Petlenkov, Eduard IET Control Theory and Applications 2024 / p. 614-625

<https://doi.org/10.1049/cth2.12594> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Robust stability analysis of interval fractional-order plants with interval time delay and general form of fractional-order controllers

Ghorbani, Majid; Tavakoli-Kakhki, Mahsan; Tepljakov, Aleksei; Petlenkov, Eduard; Farnam, Arash; Crevecoeur, Guillaume IEEE Control Systems Letters 2022 / p. 1268-1273

<https://doi.org/10.1109/LCSYS.2021.3091525> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Robust stability region of PI controllers for an interval time delayed load frequency control

Ghorbani, Majid; Nosrati, Komeil; Tepljakov, Aleksei; Belikov, Juri; Petlenkov, Eduard IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p

<https://doi.org/10.1109/ISGTEUROPE62998.2024.10863205>

Rolling tyre counting system

Sinani, Uljan; Sajedi Sabegh, Nima; Hiimaa, Mairo; Tamre, Mart Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 209-213 : ill <http://innomet.ttu.ee/daaam/>

Saateks

Rosin, Argo Programmeeritavad kontrollid SIMATIC S7 2000 / lk. 3 https://www.ester.ee/record=b1354419*est

Siemens. Simatic S5, Programmeeritavad kontrollid : tööpõhimõte

1995 https://www.ester.ee/record=b1054893*est

Simulating a cyber-attack on an autonomous sea surface vessel's rudder controller

Astrov, Igor; Bauk, Sanja 2024 13th Mediterranean Conference on Embedded Computing, MECO 2024 2024 / 1 p.

<https://journals.scholarsportal.info/browse/26379511>

Simulating a cyber-attack on an autonomous sea surface vessel's rudder controller

Astrov, Igor; Bauk, Sanja 2024 13th Mediterranean Conference on Embedded Computing (MECO), 11-14 June 2024, Budva, Montenegro 2024 / 7 p. : ill <https://doi.org/10.1109/MECO62516.2024.10577872> [Article at Scopus](#) [Article at WOS](#)

Simulation study of nonlinear PI-controller with quasi-Z-source derived push-pull converter

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 26-31 : ill

Single-Rate versus Three-Rate Neural Assisted Control Approaches for Coaxial Rotor Ducted Fan UAV for Situation Awareness Applications

Pedai, Andrus; Astrov, Igor; Udai, Andres; Sell, Raivo 2019 IEEE International Systems Conference (SysCon 2019), Orlando, FL, USA, April 8-11, 2019 2019 / p. 457-463 : ill <https://doi.org/10.1109/SYSCON.2019.8836871>

Small signal model of the buck-boost bidirectional DC-AC converter based on unfolding circuit

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri 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

<https://doi.org/10.1109/RTUCON48111.2019.8982329>

Smart-bike as one of the ways to ensure sustainable mobility in smart cities

Makarova, Irina; Shubenkova, Ksenia; Pashkevich, Anton; Boyko, Aleksey Sensor Systems and Software : 7th International Conference, S-Cube 2016, Sophia Antipolis, Nice, France, December 1-2, 2016 : revised selected papers 2017 / p. 187-198

https://doi.org/10.1007/978-3-319-61563-9_16 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Special issue on recent advances in the design and applications of fractional-order circuits and systems : [brief introduction]

Psychalinos, Costas; Elwakil, Ahmed S.; Allagui, Anis; Tepljakov, Aleksei International journal of electronics and communications 2017 / p. 132-135

<https://doi.org/10.1016/j.aeeu.2017.07.016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

[Article at WOS](#)

Stabilization and uncertainty analysis of a time-fractional reaction diffusion equation cascaded with a time-fractional hyperbolic partial differential equation

Chen, Juan; Zhuang, Bo; Tepljakov, Aleksei; Petlenkov, Eduard The Asian Journal of Control 2022 / p. 2294-2310

<https://doi.org/10.1002/asjc.2637> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stabilizing region of fractional-order proportional integral derivative controllers for interval delayed fractional-order plants
Ghorbani, Majid; Tepļjakov, Aleksej; Petlenkov, Eduard Asian Journal of Control 2023 / p. 1145 - 1155

<https://doi.org/10.1002/asjc.2894> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stabilizing region of fractional-order proportional integral derivative controllers for interval fractional-order plants
Ghorbani, Majid; Tepļjakov, Aleksej; Petlenkov, Eduard Transactions of the Institute of Measurement and Control 2023 / p. 546-556 : ill <https://doi.org/10.1177/01423312221117866> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stable cones of polynomials via Routh rays
Artemtšuk, Igor; Nurgas, Ülo; Belikov, Juri; Kaparin, Vadim Proceedings of the 2015 20th International Conference on Process Control (PC) : Hotel Sorea Trigan Banik, Štrbske Pleso, Slovakia, June 9-12, 2015 2015 / p. 255-260 : ill
<http://dx.doi.org/10.1109/PC.2015.7169972>

Stable cones of polynomials via Routh rays
Artemtšuk, Igor; Nurgas, Ülo; Belikov, Juri; Kaparin, Vadim 20th International Conference on Process Control 2015 : June 9-12, 2015, Štrbske Pleso, Slovak Republic : summaries volume 2015 / p. 33

Synthesis of digital filters for embedded fractional-order control applications
Tepļjakov, Aleksej; Petlenkov, Eduard; Belikov, Juri Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK seitsmenda aastakonverentsi artiklite kogumik : 15.-16. novembril 2013, Haapsalu 2013 / p. 103-106 : ill

Thickener control on the basis of ultrasonic measurements and fuzzy inference
Morkun, Volodymyr; Morkun, Natalia; Serdiuk, Oleksandra; Haponenko, Alona; Boyarchuk, Artem IntellITSIS 2022 : Proceedings of the 3rd International Workshop on Intelligent Information Technologies and Systems of Information Security 2022 / p. 238-248
<https://ceur-ws.org/Vol-3156/paper17.pdf> <https://ceur-ws.org/Vol-3156/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Three-level single-phase quasi-Z source inverter with active power decoupling circuit
Makovenko, Elena; Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Vinnikov, Dmitri 18th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices : proceedings : Erlagol, Altai - 29 June - 3 July, 2017 2017 / p. 497-502 : ill <https://doi.org/10.1109/EDM.2017.7981804>

TMS320F28335-based high-accuracy complex network analyzer instrument
Reidla, Marko; Märtens, Olev; Land, Raul EDERC 2012 : proceedings of the 5th European DSP in Education & Research Conference : 13-14 September 2012, Amsterdam, The Netherlands 2012 / p. 44-47
<https://ieeexplore.ieee.org/abstract/document/6532222>

Tuning and digital implementation of a fractional-order PD controller for a position servo
Tepļjakov, Aleksej; Petlenkov, Eduard; Belikov, Juri; Astapov, Sergei International journal of microelectronics and computer science 2013 / p. 116-123 : ill

Two-rate neural predictive control of coaxial rotor/ducted-fan UAV for enhanced situational awareness
Astrov, Igor; Berezovski, Natalya; Pikkov, Mihhail; Kimlaychuk, Vadim International Conference on Information Society (i-Society 2015) : London, UK, November 9-11, 2015 2015 / p. 127-132 : ill <http://dx.doi.org/10.1109/i-Society.2015.7366873>

Tööstuskontrollerite kasutamise koolitus
Rosin, Argo Pinger 1998 / 17. apr., lk. 4

Vaba konfiguratsiooniga kontrollervõrgust
Annus, Paul Telekommunikatsioon 2002 : IX rahvusvahelise telekommunikatsioonipäeva materjalid 2002 / lk. 33-35

Virtual inertia control of microgrids using deep reinforcement learning methods = Mikrovõrkude virtuaalse inertsiga juhtimine sügava stiimulõppe meetoditega
Škiparev, Vjatcheslav 2023 <https://doi.org/10.23658/taltech.37/2023> <https://digikogu.taltech.ee/et/Item/6d924a63-2390-4324-bf1c-00b24111605e> https://www.ester.ee/record=b5571224*est

Моделирование походки человека в среде MATLAB/SIMULINK
Ovchinnikov, Ivan; Kovalenko, Pavel; Vu, Trieu Minh Известия высших учебных заведений. Приборостроение = Journal of instrument engineering 2016 / с. 690-694 : ил <http://dx.doi.org/10.17586/0021-3454-2016-59-8-690-694>

Приложение на программируемые логические контроллеры в индустриальной автоматизации
Müür, Margus; Pettai, Elmo; Lepiksoo, Urmo 2011

Программируемый контроллер ГРАНИТ 02-03 : описание конструкций и принципа работы
1989 https://www.ester.ee/record=b1231120*est

Разработка контроллера двухдвигательного МГД-привода

Margus, T.; **Pettai, Elmo** Тезисы докладов семинара "Новые разновидности электропривода и возможности их применения" 1990 / с. 108-113: ил

Ways to increase population mobility through the transition to sustainable transport

Makarova, Irina; **Pashkevich, Anton**; Shubenkova, Ksenia; Mukhametdinov, Eduard Procedia engineering 2017 / p. 756-762 : ill

<https://doi.org/10.1016/j.proeng.2017.04.434> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)