A flexible MATLAB tool for optimal fractional-order PID controller design subject to specications
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

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

A polynomial approach to a nonlinear model matching problem
Belikov, Juri; Halas, Miroslav; **Kotta, Ülle**; Moog, Claude Proceedings of the Estonian Academy of Sciences 2016 / p. 330-344 : ill https://doi.org/10.3176/proc.2016.4.02

Adjoint polynomial formulas for nonlinear state-space realization
Belikov, Juri; **Kotta, Ülle**; **Tõnso, Maris** IEEE transactions on automatic control 2014 / p. 256-261

Algebraic approach for analysis and control of a water tank system
Belikov, Juri; **Kotta, Ülle**; **Tepljakov, Aleksei** Information technology and control 2016 / p. 175-183 : ill http://dx.doi.org/10.5755/j01.itc.45.2.13212

Analyzing the dynamics and stability of DQ0 systems based on a Port-Hamiltonian approach
Levron, Yoash; **Kaparin, Vadim**; **Belikov, Juri** 2019 27th Mediterranean Conference on Control and Automation (MED) 2019 / p. 410-415 : ill https://doi.org/10.1109/MED.2019.8798495

Application of genetic algorithms to neural networks based control of a liquid level tank system
Vassiljeva, Kristina; **Belikov, Juri**; **Petlenkov, Eduard** 2014 International Joint Conference on Neural Networks (IJCNN) : July 6-11, 2014, Beijing, China 2014 / p. 2525-2530 : 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 networks based ANARX structure to backing up control of a truck-trailer [Electronic resource]
Belikov, Juri; **Petlenkov, Eduard**; **Nõmm, Sven** 6th IFAC Symposium on Intelligent Autonomous Vehicles : IFAC \IAV 2007 : September 3-5, 2007, Touluse, France : symposium proceedings CD ROM 2007 / [5] p. [CD-ROM] https://www.sciencedirect.com/science/article/pii/S147466701634647X

Application of neural networks based SANARX model for identification and control liquid level tank system
Belikov, Juri; **Nõmm, Sven**; **Petlenkov, Eduard**; **Vassiljeva, Kristina** 2013 12th International Conference on Machine Learning and Applications : ICMLA 2013 : 4-7 December 2013, Miami, Florida, USA : proceedings. Vol. 1 2013 / p. 246-251 : ill

Application of neural-network based variable fractional order PID controllers for load frequency control in isolated microgrids
Belikov, Juri; Nosrati, Komeil; **Škiparev, Vjatšeslav**; **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 Newton's method to analog and digital realization of fractional-order controllers
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** International journal of microelectronics and computer science 2012 / p. 45-52 : ill
https://www.researchgate.net/publication/259741864_Application_of_Newton%27s_Method_to_Analog_and_Digital_Realization_of_Fractional-order_Controllers

Applications of digital twins for demand side recommendation scheme with consumer comfort constraints
Onile, Abiodun Emmanuel; **Belikov, Juri**; **Petlenkov, Eduard**; Levron, Yoash IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p https://doi.org/10.1109/ISGTEUROPE56780.2023.10407399

Applications of game theory to design and operation of modern power systems: a comprehensive review
Navon, Aviad; Yosef, Gefen Ben; Machlev, Ram; Shapira, Shmuel; Chowdhury, Nilanjan Roy; **Belikov, Juri**; Orda, Ariel; Levron, Yoash Energies 2020 / art. 3982, 34 p https://doi.org/10.3390/en13153982 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Assessing energy generation and consumption patterns in times of crisis : COVID-19 as a case study
Ofir, Ron; Zargari, Noa; Levron, Yoash; **Belikov, Juri** 2021 IEEE Madrid PowerTech 2021 / 6 l https://doi.org/10.1109/PowerTech46648.2021.9494753

Automated neural network model selection algorithm for feedback linearization based control
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 235-238 : ill

Battery storage technologies for electrical applications : impact in stand-alone photovoltaic systems
Akinyele, Daniel; **Belikov, Juri**; Levron, Yoash Energies 2017 / art. 1760, 39 p. : ill https://doi.org/10.3390/en10111760

Bridging the gap in technology transfer for advanced process control with industrial applications
Vansovitš, Vitali; **Petlenkov, Eduard**; **Tepljakov, Aleksei**; **Vassiljeva, Kristina**; **Belikov, Juri** Sensors 2022 / art. 4149 https://doi.org/10.3390/s22114149 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Challenges and perspectives in control of ionic polymer-metal composite (IPMC) actuators : a survey
Aabloo, Alvo; **Belikov, Juri**; **Kaparin, Vadim**; **Kotta, Ülle** IEEE Access 2021 / art. 9133056, p. 121059-121073 https://doi.org/10.1109/ACCESS.2020.3007020 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Challenges of microgrids in remote communities: a STEEP model application
Akinyele, Daniel; **Belikov, Juri**; Levron, Yoash Energies 2018 / art. 432, 35 p. : ill https://doi.org/10.3390/en11020432 Journal metrics at Scopus Article at Scopus Journal metric at WOS Article at WOS

Closed-loop identification of fractional-order models using FOMCON toolbox for MATLAB
Tepljakov, Aleksei; **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

A comparative study on graph-based ranking algorithms for consumer-oriented demand side management
Onile, Abiodun Emmanuel; **Belikov, Juri**; **Petlenkov, Eduard**; Levron, Yoash 2021 IEEE Madrid PowerTech 2021 / 6 l https://doi.org/10.1109/PowerTech46648.2021.9494752

Comparison of LPV and nonlinear system theory : a realization problem
Belikov, Juri; **Kotta, Ülle**; **Tõnso, Maris** Systems & control letters 2014 / p. 72-78

Comparison of time-varying phasor and dq0 dynamic models for large transmission networks
Belikov, Juri; Levron, Yoash International journal of electrical power & energy systems 2017 / p. 65-74 https://doi.org/10.1016/j.ijepes.2017.05.017

Computation of open-loop frequency-domain characteristics of fractional FORDT plants with FOPID controllers
Tepljakov, Aleksei; **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

Computational intelligence methods based design of closed-loop system
Belikov, Juri; **Petlenkov, Eduard**; **Vassiljeva, Kristina**; **Nõmm, Sven** Neural information processing : 20th International Conference, ICONIP 2013, Daegu, Korea, November 3-7, 2013 : proceedings. Part I 2013 / p. 215-224 : ill

Constrained intelligent frequency control in an AC Microgrid : an Online reinforcement learning based PID tuning approach
Nosrati, Komeil; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; **Škiparev, Vjatšeslav**; **Belikov, Juri**; Levron, Yoash 2023 IEEE Power & Energy Society General Meeting (PESGM) 2023 / 5 p. : ill https://doi.org/10.1109/PESGM52003.2023.10252482

Construction of nonlinear feedback strategies for energy storage systems : a stochastic dynamic programming approach
Chowdhury, Nilanjan Roy; Baimel, Dmitry; **Belikov, Juri**; Levron, Yoash 2021 IEEE Madrid PowerTech 2021 / 6 l https://doi.org/10.1109/PowerTech46648.2021.9494819

Control of energy storage devices under uncertainty using nonlinear feedback systems
Levron, Yoash; **Belikov, Juri** 2020 IEEE Power & Energy Society General Meeting : (PESGM 2020) Montreal, Quebec, Canada, 2-6 August 2020 : proceedings 2020 / p. 95-99 https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9281879

Coordinated PI-based frequency deviation control of isolated hybrid microgrid : an online multi-agent tuning approach via reinforcement learning
Nosrati, Komeil; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; Levron, Yoash; **Škiparev, Vjatšeslav**; **Belikov, Juri** 2022 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : proceedings 2022 / p. 1-5 : ill https://doi.org/10.1109/ISGT-Europe54678.2022.9960311

Day-ahead PV output power forecasting utilizing boosting recursive lightGBM-LSTM framework

Hokmabad, Hossein Nourollahi; **Husev, Oleksandr**; **Vinnikov, Dmitri**; **Belikov, Juri**; **Petlenkov, Eduard** IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p
https://doi.org/10.1109/ISGTEUROPE56780.2023.10408090

Death spiral of the legacy grid : a game-theoretic approach for studying grid defection
Navon, Aviad; **Belikov, Juri**; **Ofir, Ron**; **Parag, Yael**; **Orda, Ariel**; **Levron, Yoash** iScience 2023 / art. 106415, 17 p. : ill
https://doi.org/10.1016/j.isci.2023.106415

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
https://doi.org/10.1080/00207179.2017.1361042 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

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

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

Digitaalsed kaksikud teevad säästlikust energiatarbimisest võistluse [Võrguväljaanne]
Harrik, Airika novaator.err.ee 2021 / fot Digitaalsed kaksikud teevad säästlikust energiatarbimisest võistluse

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** 2016 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

Distributed storage placement policy for minimizing frequency deviations: A combinatorial optimization approach based on enhanced cross-entropy method
Machlev, Ram; Chowdhury, Nilanjan Roy; **Belikov, Juri**; **Levron, Yoash** International Journal of Electrical Power and Energy Systems 2022 / p. 1-14 : ill https://doi.org/10.1016/j.ijepes.2021.107332 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dynamic modeling and stability analysis of power networks using DQ0 transformations with a unified reference frame
Belikov, Juri; Levron, Yoash Proceedings of the Estonian Academy of Sciences 2018 / p. 368-377 : ill
http://www.kirj.ee/public/proceedings_pdf/2018/issue_4/proc-2018-4-368-377.pdf https://doi.org/10.3176/proc.2018.67.4.05 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dynamic modeling of networks, microgrids, and renewable sources in the dq0 reference frame : a survey
Baimel, Dmitry; **Belikov, Juri**; Guerrero, Joseph M.; Levron, Yoash IEEE Access 2017 / p. 21323-21335 : ill
http://dx.doi.org/10.1109/ACCESS.2017.2758523

Dynamic output feedback linearization based adaptive control of nonlinear MIMO systems
Petlenkov, Eduard; **Belikov, Juri**; **Nõmm, Sven**; Wyrwas, Małgorzata The American Control Conference (ACC2008) : Seattle, Washington, USA, June 11-13, 2008 2008 / p. 3446-3451

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

Effects of economic shocks on power systems: {COVID-19} as a case study
Navon, Aviad; Orda, Ariel; Levron, Yoash; **Belikov, Juri** 2021 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 5 p. : ill https://doi.org/10.1109/ISGTEurope52324.2021.9640021

Effects of the COVID-19 pandemic on energy systems and electric power grids — a review of the challenges ahead
Navon, Aviad; Machlev, Ram; Carmon, David; **Onile, Abiodun Emmanuel**; **Belikov, Juri**; Levron, Yoash Energies 2021 / art. 1056, 14 p. : ill https://doi.org/10.3390/en14041056 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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 Perła 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

Emerging role of industry 5.0 digital twins in demand response electricity market and applications
Onile, Abiodun Emmanuel; **Belikov, Juri**; **Petlenkov, Eduard**; Levron, Yoash IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 6 p https://doi.org/10.1109/ISGTEUROPE56780.2023.10407322

Energiainformaatika: energia ja infotehnoloogia ühinemine
Petlenkov, Eduard; **Belikov, Juri** Elektriala 2023 / lk. 12-13 : ill., portr https://www.ester.ee/record=b1240496*est

Energy consumption characteristics based on monitored data : a school case study
Vassiljeva, Kristina; **Matson, Margarita**; **Petlenkov, Eduard**; **Belikov, Juri**; **Thalfeldt, Martin**; **Kurnitski, Jarek** CLIMA 2022 : REHVA 14th HVAC World Congress 22nd-25th May in Rotterdam, The Netherlands 2022 / 5 p. : ill https://doi.org/10.34641/clima.2022.274

Energy efficient behavior modeling for demand side recommender system in solar microgrid applications using multi-agent reinforcement learning model
Onile, Abiodun Emmanuel; **Belikov, Juri**; Levron, Yoash; **Petlenkov, Eduard** Sustainable cities and society 2023 / art. 104392, 20 p. : ill https://doi.org/10.1016/j.scs.2023.104392

Energy storage for mitigating grid congestion caused by electric vehicles : a techno-economic analysis using a computationally efficient graph-based methodology
Navon, Aviad; Nitskansky, Ran; Lipman, Eshel; **Belikov, Juri**; Gal, Nurit; Orda, Ariel; Levron, Yoash Journal of energy storage 2023 / art. 106324 https://doi.org/10.1016/j.est.2022.106324

An enhanced NN-based load frequency control design of MGs : a fractional order modeling method
Škiparev, Vjatšeslav; **Nosrati, Komeil**; **Belikov, Juri**; **Tepljakov, Aleksei**; **Petlenkov, Eduard** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227392

Evaluating the energy readiness of national building stocks through benchmarking
Ferrantelli, Andrea; **Belikov, Juri**; **Petlenkov, Eduard**; **Thalfeldt, Martin**; **Kurnitski, Jarek** IEEE Access 2022 / p. 45430-45443 : ill https://doi.org/10.1109/ACCESS.2022.3170716 Journal metrics at Scopus Article at Scopus Journalmetrics at WOS Article at WOS

Evolutionary optimisation-based fractional order controller for web transport systems in process industries
Haripriya, N.; Kavitha, P.; Srinivasan, Seshadhri; **Belikov, Juri** International Journal of Advanced Intelligence Paradigms 2019 / p. 317-330 http://doi.org/10.1504/IJAIP.2018.10006748

Explainability and transparency of classifiers for air-handling unit faults using explainable artificial intelligence (XAI)
Meas, Molika; Machlev, Ram; **Köse, Ahmet**; **Tepljakov, Aleksei**; **Loo, Lauri**; Levron, Yoash; **Petlenkov, Eduard**; **Belikov, Juri** Sensors 2022 / art. 6338 : ill https://doi.org/10.3390/s22176338 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Explainability-based trust algorithm for electricity price forecasting models
Heistrene, Leena; Machlev, Ram; Perl, Michael; **Belikov, Juri**; Baimel, Dmitry; Levy, Kfir; Mannor, Shie; Levron, Yoash Energy and AI 2023 / art 100259, 18 p https://doi.org/10.1016/j.egyai.2023.100259

Explainable AI based fault detection and diagnosis system for air handling units
Belikov, Juri; **Meas, Molika**; Machlev, Ram; **Köse, Ahmet**; **Tepljakov, Aleksei**; Loo, Lauri; **Petlenkov, Eduard**; Levron, Yoash Proceedings of the 19th International Conference on Informatics in Control, Automation and Robotics - ICINCO, 2022 , Lisbon, Portugal 2022 / p. 271-279 https://doi.org/10.5220/0011350000003271

Explainable Artificial Intelligence (XAI) techniques for energy and power systems: Review, challenges and opportunities
Machlev, Ram; Heistrene, L.; Perl, M.; Levy, K. Y.; **Belikov, Juri**; Mannor, S.; Levron, Yoash Energy and AI 2022 / art. 100169, 13 p. : ill https://doi.org/10.1016/j.egyai.2022.100169 Journal metrics at Scopus Article at Scopus Article at WOS

Explaining the decisions of deep learning models for load disaggregation (NILM) based on XAI

Machlev, Ram; Malka, Asaf; Perl, Michael; Levron, Yoash; **Belikov, Juri** 2022 IEEE Power & Energy Society General Meeting (PESGM) 2022 / art. 183865 , p. 1-5 : ill https://doi.org/10.1109/PESGM48719.2022.9917049

Explaining the decisions of power quality disturbance classifiers using latent space features
Machlev, Ram; Perl, Michael; Caciularu, Avi; **Belikov, Juri**; Levy, Kfir Yehuda; Levron, Yoash International journal of electrical power & energy systems 2023 / art. 108949 https://doi.org/10.1016/j.ijepes.2023.108949

An Extended flatness-based controller for permanent magnet synchronous machines incorporating an event-based mechanism
Belikov, Juri; **Kaldmäe, Arvo**; Levron, Yoash 2019 27th Mediterranean Conference on Control and Automation (MED) 2019 / p. 416-421 : ill https://doi.org/10.1109/MED.2019.8798551

Extended fractional singular Kalman filter
Nosrati, Komeil; **Belikov, Juri**; **Tepljakov, Aleksei**; **Petlenkov, Eduard** Applied mathematics and computation 2023 / art. 127950, 15 p. : ill https://doi.org/10.1016/j.amc.2023.127950

Feature engineering for short-term forecast of energy consumption
Spitšakova, Margarita; **Belikov, Juri**; Nõu, Kalvi; **Petlenkov, Eduard** Proceedings of 2019 IEEE PES : Innovative Smart Grid Technologies Europe : (ISGT-Europe), Bucharest Romania, 29 September - 2 October, 2019 2019 / 5 p. : ill https://doi.org/10.1109/ISGTEurope.2019.8905698

Feature engineering of Weather Data for Short-Term Energy Consumption Forecast
Sinimaa, Maria; **Spitšakova, Margarita**; **Belikov, Juri**; **Petlenkov, Eduard** 2021 IEEE Madrid PowerTech 2021 / 6 p. https://doi.org/10.1109/PowerTech46648.2021.9494920

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

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

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

Fractional-order calculus application to industrial control problems
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Nelijärve 2011 / p. 47-50 : ill

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

Fractional-order digital filter approximation method for embedded control applications
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** International journal of microelectronics and computer science 2014 / p. 54-60 : ill

Fractional-order modeling and control of dynamic systems = Murrulistel tuletistel põhinev dünaamiliste süsteemide identifitseerimine ja juhtimine
Tepljakov, Aleksei 2015

Fractional-order modeling and control of ionic polymer-metal composite actuator
Tepljakov, Aleksei; Vunder, Veiko; **Petlenkov, Eduard**; Nakshatharan, S Sunjai; Punning, Andres; **Kaparin, Vadim**; **Belikov, Juri**; Aabloo, Alvo Smart materials and structures 2019 / 12 p. : ill https://doi.org/10.1088/1361-665X/ab2c75 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Frequency stability of the Israeli power grid with high penetration of renewable sources and energy storage systems
Ben Yosef, Gefen; Navon, Aviad; Poliak, Olga; Etzion, Naomi; Gal, Nurit; **Belikov, Juri**; **Levron, Yoash** Energy reports 2021 / p. 6148−6161 : ill https://doi.org/10.1016/j.egyr.2021.09.057 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.; **Tõnso, 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

GA based optimization of NN-SANARX model for adaptive control of nonlinear systems
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** WCCI 2012 : IEEE World Congress on Computational Intelligence : June, 10-15, 2012, Brisbane, Australia 2012 / p. 1674-1681 : ill https://ieeexplore.ieee.org/document/6252598

Gain and order scheduled fractional-order PID control of fluid level in a multi-tank system
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** 2014 International Conference on Fractional Differentiation and its Applications (ICFDA) : Catania, Italy, 23-25 June 2014 2014 / [6] p. : ill

Generation of stable polytopes of Hurwitz polynomials via Routh parameters
Nurges, Ülo; **Artemtšuk, Igor**; **Belikov, Juri** 53rd IEEE Conference on Decision and Control : December 15-17, 2014, Los Angeles, California, USA 2014 / p. 2390-2395 : ill

Genetic algorithm based structure identification for feedback control of nonlinear MIMO systems
Vassiljeva, Kristina; **Belikov, Juri**; **Petlenkov, Eduard** Lecture notes in computer science 2011 / p. 215-226 : ill

Global linearization approach to nonlinear control systems : a brief tutorial overview
Belikov, Juri; **Kaldmäe, Arvo**; **Kotta, Ülle** Proceedings of the Estonian Academy of Sciences 2017 / p. 243-263 https://doi.org/10.3176/proc.2017.3.01 http://www.ester.ee/record=b2355998*est

Grey box identification of fractional-order system models from frequency domain data
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** 41th International Conference on Telecommunications and Signal Processing : July 4-6, 2018, Athens, Greece : proceedings 2018 / p. 319-322 : ill https://doi.org/10.1109/TSP.2018.8441247

Image encryption using fractional singular chaotic systems : an extended Kalman filtering approach
Nosrati, Komeil; **Belikov, Juri**; **Tepljakov, Aleksei**; **Petlenkov, Eduard** 2022 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2022 / 6 p. : ill https://doi.org/10.1109/ICECET55527.2022.9873484

Impact of COVID-19 pandemic on energy demand in Estonia
Belikov, Juri; **Kalda, Jaan** IEEE Power & Energy Society General Meeting (PESGM) 2022 / 5 l. https://doi.org/10.1109/PESGM48719.2022.9916825

Impact of the COVID-19 pandemic on the energy use and performance in commercial buildings
Belikov, Juri; **Köse, Ahmet**; **Petlenkov, Eduard**; **Tepljakov, Aleksei**; Loo, Lauri 2022 45th International Conference on Telecommunications and Signal Processing, TSP 2022 2022 / p. 187-191 https://doi.org/10.1109/TSP55681.2022.9851384

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

Improved fractional open circuit voltage MPPT methods for PV systems
Baimel, Dmitry; Tapuchi, Saad; Levron, Yoash; **Belikov, Juri** Electronics 2019 / art. 321 https://doi.org/10.3390/electronics8030321 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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 http://dx.doi.org/10.1016/j.isatra.2015.11.012

Innovative energy services for behavioral-reflective attributes and intelligent recommender system
Onile, Abiodun Emmanuel; **Belikov, Juri**; Levron, Yoash Proceedings of 2020 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 26-28 October, 2020 2020 / p. 242-246 https://doi.org/10.1109/ISGT-Europe47291.2020.9248810

Integration of long transmission lines in large-scale DQ0 dynamic models
Belikov, Juri; Levron, Yoash Electrical Engineering 2018 / p. 1219–1228 https://doi.org/10.1007/s00202-017-0582-7 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Juri Belikov: elektritootmise pardikõverast päästavad nutikad algoritmid [Võrguväljaanne]

Belikov, Juri novaator.err.ee 2022 Juri Belikov: elektritootmise pardikõverast päästavad nutikad algoritmid

Measuring explainability and trustworthiness of power quality disturbances classifiers using XAI - explainable artificial intelligence
Machlev, Ram; Perl, Michael; **Belikov, Juri**; Levy, Kfir; Levron, Yoash IEEE transactions on industrial informatics 2022 / p. 5127−5137 https://doi.org/10.1109/TII.2021.3126111 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

MIMO model of an industrial water boiler
Vansovitš, Vitali; **Tepljakov, Aleksei**; **Belikov, Juri** Doctoral School in Information and Communication Technology : proceedings of doctoral session of BEC 2014 : October 6-8 2014, Laulasmaa 2014 / p. 27-28 : ill

MIMO reinforcement learning based approach for frequency support in microgrids with high renewable energy penetration
Škiparev, Vjatšeslav; **Belikov, Juri**; **Petlenkov, Eduard** 2021 IEEE Power & Energy Society General Meeting (PESGM), 26-29 July 2021 2021 / 5 p. : ill https://doi.org/10.1109/PESGM46819.2021.9637942

Minimal energy storage required for stability of low inertia distributed sources
Fahima, Aviad; Ofir, Ron; Levron, Yoash; **Belikov, Juri** 2018 5th IEEE International Energy Conference (ENERGYCON), Limassol, Cyprus, June 3-7, 2018 : proceedings 2018 / 5 p. : ill https://doi.org/10.1109/ENERGYCON.2018.8398775

Minimal output impedance required for stability of grid-supporting inverters
Ofir, Ron; Zargari, Noa; **Belikov, Juri**; Levron, Yoash IEEE transactions on power delivery 2021 / p. 2241-2244 https://doi.org/10.1109/TPWRD.2021.3071023 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Mis toimub tehisintellekti "kapoti all" ja miks me seda teadma peame?
Härmat, Karin Mente et Manu 2022 / lk. 30-33 : fot https://www.ester.ee/record=b1242496*est

Model based control of a water tank system
Belikov, Juri; **Petlenkov, Eduard** Proceedings of the 19th IFAC World Congress, 2014 : Cape Town, South Africa, 24-29 August 2014 2014 / p. 10838-10843 : ill

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

Model reference control of nonlinear MIMO systems by dynamic output feedback linearization of ANARX models
Belikov, Juri; **Petlenkov, Eduard** IEEE International Conference on Control and Automation : ICCA 2009 : Christchurch, New Zealand, December 9-11, 2009 2009 / p. 536-541 https://ieeexplore.ieee.org/document/5410177?tp=&arnumber=5410177

Model reference control of nonlinear TITO systems by dynamic output feedback linearization of neural network based ANARX models
Belikov, Juri; **Petlenkov, Eduard** Control Applications (CCA) & Intelligent Control (ISIC) : 2009 IEEE : 8-10 July 2009, St.Petersburg 2009 / p. 1820-1825 https://ieeexplore.ieee.org/document/5410177?tp=&arnumber=5410177

Modeling power networks using dynamic phasors in the dq0 reference frame
Levron, Yoash; **Belikov, Juri** Electric power systems research 2017 / p. 233-242 https://doi.org/10.1016/j.epsr.2016.11.024

MO-NILM: A multi-objective evolutionary algorithm for NILM classification
Machlev, Ram; **Belikov, Juri**; Beck, Yuval; Levron, Yoash Energy and buildings 2019 / p. 134-144 https://doi.org/10.1016/j.enbuild.2019.06.046 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Neural network based dynamic pole placement control of nonlinear systems
Petlenkov, Eduard; **Belikov, Juri** IEEE International Conference on Control and Automation : ICCA 2009 : Christchurch, New Zealand, December 9-11, 2009 2009 / p. 410-415 https://ieeexplore.ieee.org/document/5410160

Neural network based minimal state-space representation of nonlinear MIMO systems for feedback control
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** The 11th International Conference Control, Automation, Robotics and Vision : ICARCV 2010 : 7–10 December 2010, Singapore 2010 / p. 2191-2196

Neural networks based identification for control
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Nelijärve 2011 / p. 157-160 : ill

Neural networks based minimal or reduced model representation for control of nonlinear MIMO systems
Vassiljeva, Kristina; **Belikov, Juri**; **Petlenkov, Eduard** Proceedings of International Joint Conference on Neural Networks : San

Jose, California, USA, July 31 – August 5, 2011 2011 / p. 1706-1713 https://ieeexplore.ieee.org/document/6033430

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

New type of bridge fault current limiter with reduced power losses for transient stability improvement of DFIG wind farm
Baimel, Dmitry; Chowdhury, Nilanjan Roy; **Belikov, Juri**; Levron, Yoash Electric Power Systems Research 2021 / art. 107293, 8 p. : ill https://doi.org/10.1016/j.epsr.2021.107293 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

NN-ANARX model 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. 1039-1044 https://ieeexplore.ieee.org/document/5281182

NN-ANARX structure for control of nonlinear SISO and MIMO systems : neural networks based approach
Petlenkov, Eduard; **Belikov, Juri** Proceedings of th 26th Chinese Control Conference : July 26-31, 2007, Zhangjiajie, Hunan, China. 4 2007 / p. 138-145 https://ieeexplore.ieee.org/document/4347185/keywords#keywords

NN-SANARX model based control of a multi tank liquid-level system
Belikov, Juri; **Petlenkov, Eduard** International journal of computational intelligence systems 2015 / p. 265-277 http://dx.doi.org/10.1080/18756891.2015.1001950

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

Observable canonical forms of multi-machine power systems using dq0 signals
Levron, Yoash; **Belikov, Juri** 2016 International Conference on the Science of Electrical Engineering (ICSEE) : November 16-18, 2016, Eilat, Israel 2016 / [5] p. : ill https://doi.org/10.1109/ICSEE.2016.7806197

Observer-based detection and identification of sensor attacks in networked CPSs
Chowdhury, Nilanjan Roy; **Belikov, Juri**; Baimel, Dmitry; Levron, Yoash Automatica 2020 / art. 109166, 13 p https://doi.org/10.1016/j.automatica.2020.109166 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

On controllability of switched linear systems on time scales
Belikov, Juri; **Tepljakov, Aleksei** 2015 European Control Conference (ECC) : July 15-17, 2015, Linz, Austria 2015 / p. 1736-1741 http://dx.doi.org/10.1109/ECC.2015.7330788

On stable cones of polynomials via reduced Routh parameters
Nurges, Ülo; **Belikov, Juri**; **Artemtšuk, Igor** Kybernetika 2016 / p. 461-477 http://doi.org/10.14736/kyb-2016-3-0461

On the transformation of a nonlinear discrete-time input-output system into the strong row-reduced form
Bartosiewicz, Zbigniew; **Belikov, Juri**; **Kotta, Ülle**; **Tõnso, Maris**; **Wyrwas, Małgorzata** Proceedings of the Estonian Academy of Sciences 2016 / p. 220-236 http://dx.doi.org/10.3176/proc.2016.3.02

Open source dataset generator for power quality disturbances with deep-learning reference classifiers
Machlev, Ram; Chachkes, A.; **Belikov, Juri**; Beck, Yuval; Levron, Yoash Electric power systems research 2021 / art. 107152, 7 p. : ill https://doi.org/10.1016/j.epsr.2021.107152 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Open-source software for modeling and analysis of power networks in the dq0 reference frame
Levron, Yoash; **Belikov, Juri** 2017 IEEE Manchester PowerTech (PowerTech 2017) : Manchester, United Kingdom, 18-22 June 2017 2017 / p. 623-628 : ill https://doi.org/10.1109/PTC.2017.7980912

An optimal control method for storage systems with ramp constraints, based on an on-going trimming process
Zargari, Noa; Ofir, Ron; Chowdhury, Nilanjan Roy; **Belikov, Juri**; Levron, Yoash IEEE Transactions on Control Systems Technology 2023 / p. 493-496 http://doi.org/10.1109/TCST.2022.3169906

Optimal control of energy storage devices based on Pontryagin's minimum principle and the shortest path method
Zargari, Noa; Levron, Yoash; **Belikov, Juri** Proceedings of 2019 IEEE PES : Innovative Smart Grid Technologies Europe : (ISGT-Europe), Bucharest Romania, 29 September – 2 October, 2019 2019 / 5 p https://doi.org/10.1109/ISGTEurope.2019.8905748

Optimal control of Lossy energy storage systems with nonlinear efficiency based on dynamic programming and Pontryagin's minimum principle
Chowdhury, Nilanjan Roy; Ofir, Ron; Zargari, Noa; Baimel, Dmitry; **Belikov, Juri**; Levron, Yoash IEEE transactions on energy conversion 2021 / p. 524-533 https://doi.org/10.1109/TEC.2020.3004191 Journal metrics at Scopus Article at Scopus Journal metrics at

WOS Article at WOS

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**; **Ahmadiahangar, 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

PF-FEDG : an open-source data generator for frequency disturbance event detection with deep-learning reference classifiers
Sun, Zhenglong; Ram, Machlev; Jiang, Chao; Wang, Qianchao; Michael, Perl; **Belikov, Juri**; Yoash, Levron Energy reports 2023 / p. 397-413 https://doi.org/10.1016/j.egyr.2022.11.182

Polynomial methods for nonlinear control systems = Polünoommeetodid mittelineaarsetes juhtimissüsteemides
Belikov, Juri 2012 http://www.ester.ee/record=b2854462*est

Practical demand side management: one day case study
Köse, Ahmet; **Hokmabad, Hossein Nourollahi**; **Belikov, Juri**; **Tepljakov, Aleksei**; **Petlenkov, Eduard** Healthy Buildings 2023 Europe: Beyond Disciplinary Boundaries: proceedings ; 1 2023 / p. 36-42 https://www.proceedings.com/content/070/070278webtoc.pdf

Professorid Juri Belikov ja Eduard Petlenkov selgitavad, kuidas Eestit rohelisemaks muuta
goodnews.ee 2023 Professorid Juri Belikov ja Eduard Petlenkov selgitavad, kuidas Eestit rohelisemaks muuta Professorid Juri Belikov ja Eduard Petlenkov selgitavad, kuidas Eestit rohelisemaks muuta

Readiness of small energy markets and electric power grids to global health crises: Lessons from the COVID-19 pandemic
Carmon, David; Navon, Aviad; Machlev, Ram; **Belikov, Juri**; Levron, Yoash IEEE Access 2020 / art. 9139437, p. 127234−127243 https://doi.org/10.1109/ACCESS.2020.3008929 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Realization of nonlinear MIMO system on homogeneous time scales
Belikov, Juri; **Kotta, Ülle**; **Tõnso, Maris** European journal of control 2015 / p. 48-54 http://dx.doi.org/10.1016/j.ejcon.2015.01.006

Recognition of the surgeon's motions during endoscopic operation by statistics based algorithm and neural networks based ANARX models
Nõmm, Sven; **Petlenkov, Eduard**; **Vain, Jüri**; Belikov, Juri; Miyawaki, Fujio; Yoshimitsu, Kitaro Proceedings of the 17th World Congress The International Federation of Automatic Control : Seoul, Korea, July 6-11, 2008 2008 / p. 14773-14778

Reduction of power system dynamic models using sparse representations
Levron, Yoash; **Belikov, Juri** IEEE transactions on power systems 2017 / p. 3893-3900 : ill
https://doi.org/10.1109/TPWRS.2017.2648979

Region of admissible values for discrete-time nonlinear control system linearized by output feedback
Belikov, Juri; **Petlenkov, Eduard** Proceedings of the 18th IFAC World Congress : Milano, Italy, August 28 - September 2, 2011 2011 / p. 209-214

Regions of exponential stability in coefficient space for linear systems on nonuniform discrete domains
Belikov, Juri; **Kaparin, Vadim** Journal of difference equations and applications 2017 / p. 878-892 : ill
https://doi.org/10.1080/10236198.2017.1304931

Relmagine lab : bridging the gap between hands-on, virtual and remote control engineering laboratories using digital twins and extended reality
Alsaleh, Saleh Ragheb Saleh; **Tepljakov, Aleksei**; **Köse, Ahmet**; **Belikov, Juri**; **Petlenkov, Eduard** IEEE Access 2022 / p. 89924-889943 : ill https://doi.org/10.1109/ACCESS.2022.3199371 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Reinforcement learning based approach for virtual inertia control in microgrids with renewable energy sources
Škiparev, Vjatšeslav; **Belikov, Juri**; **Petlenkov, Eduard** Proceedings of 2020 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 26-28 October, 2020 2020 / p. 1020-1024 https://doi.org/10.1109/ISGT-Europe47291.2020.9248777

Reinforcement learning based MIMO controller for virtual inertia control in isolated microgrids
Škiparev, Vjatšeslav; **Belikov, Juri**; **Petlenkov, Eduard**; Levron, Yoash 2022 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : proceedings 2022 / art. 184786, 5 p. : ill https://doi.org/10.1109/ISGT-Europe54678.2022.9960447

A review of optimal control methods for energy storage systems - energy trading, energy balancing and electric vehicles
Machlev, Ram; Zargari, Noa; Chowdhury, N; **Belikov, Juri**; Levron, Yoash Journal of energy storage 2020 / art. 101787, 16 p
https://doi.org/10.1016/j.est.2020.101787 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Robust FOPI and FOPID controller design for FFOPDT plants in embedded control applications using frequency-domain analysis
Tepljakov, Aleksei; **Petlenkov, Eduard**; **Belikov, Juri** 2015 American Control Conference : Hilton Palmer House, Chicago, IL, July 1-3, 2015 2015 / p. 3868-3873 : ill http://dx.doi.org/10.1109/ACC.2015.7171933

Robust PID controller design for continuous-time systems via reduced routh parameters = Pidevaja süsteemide robustse PID kontrolleri süntees taandatud Routh parametrite 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 http://doi.org/10.1109/ACC.2016.7526781

A sparse minimal-order dynamic model of power networks based on DQ0 signals
Belikov, Juri; Levron, Yoash IEEE transactions on power systems 2018 / p. 1059-1067 : ill
https://doi.org/10.1109/TPWRS.2017.2702746 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Stability and stabilizability of linear time-delay systems on homogeneous time scales
Belikov, Juri; Bartosiewicz, Zbigniew Proceedings of the Estonian Academy of Sciences 2017 / p. 124-136
https://doi.org/10.3176/proc.2017.2.02 http://www.ester.ee/record=b2355998*est

Stable cones of polynomials via Routh rays
Artemtšuk, Igor; **Nurges, 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; **Nurges, 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

State feedback linearization of nonlinear control systems on homogeneous time scales
Bartosiewicz, Zbigniew; **Belikov, Juri**; **Kotta, Ülle**; Wyrwas, Małgorzata Nonlinear analysis: hybrid systems 2019 / p. 69-85
https://doi.org/10.1016/j.nahs.2018.08.002 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

State-of-the-art activity recognition and prediction techniques applicable to the home energy management system
Hokmabad, Hossein Nourollahi; **Belikov, Juri**; **Husev, Oleksandr**; **Vinnikov, Dmitri** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / art. 181231 : ill https://doi.org/10.1109/ENERGYCON53164.2022.9830154

State-space control of nonlinear systems identified by ANARX and neural network based SANARX models
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** The 2010 International Joint Conference on Neural Networks (IJCNN) : 18-23 July 2010, Barcelona : proceedings 2010 / p. 3816-3823 : ill

State-space realization of nonlinear control systems : unification and extension via pseudo-linear algebra
Belikov, Juri; **Kotta, Ülle**; **Tõnso, Maris** Kybernetika 2012 / p. 1100-1113 https://www.researchgate.net/publication/269024076_State-space_realization_of_nonlinear_control_systems_Unification_and_extension_via_pseudo-linear_algebra

Steroidid äri jaoks: energiainformaatika tahab viia Eesti majanduse uuele tõusule
postimees.ee 2023 Steroidid äri jaoks: energiainformaatika tahab viia Eesti majanduse uuele tõusule

Storage for grid deferral : the case of Israel
Gal, Nurit; Navon, Aviad; Ben Yosef, Gefen; Levron, Yoash; **Belikov, Juri** 2021 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 5 p https://doi.org/10.1109/ISGTEurope52324.2021.9639938

Structure identification of NN-ANARX model by genetic algorithm with combined cross-correlation-test based evaluation function
Nõmm, Sven; **Vassiljeva, Kristina**; **Belikov, Juri**; **Petlenkov, Eduard** 2011 9th IEEE International Conference on Control and Automation (ICCA) : Santiago, Chile, December 19-21, 2011 : [proceedings] 2011 / p. 65-70 : ill

Symmetry in the narrow sense: on the linearity and time-invariance of DQ0 models
Segev, Elior; Ofir, Ron; **Belikov, Juri**; Levron, Yoash IEEE Transactions on Power Systems 2023 / p. 1751-1754
https://doi.org/10.1109/TPWRS.2022.3229873

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

Tehisintellekt rohepöörde eesmärkide teenistuses
Petlenkov, Eduard; **Belikov, Juri** RUP. Finants- ja õigusajakiri 2023 / lk. 9-13 : ill https://www.ester.ee/record=b5550879*est

Tehisintellektide pealetung: kas inimkond peaks kartma või rõõmustama?
Einama, Kaido Postimees 2023 / Lk. 11 https://dea.digar.ee/article/ak/2023/02/11/7.1

The importance of superspreaders on the spread of the global COVID-19 pandemic
Kalda, Jaan; **Ratas, Mart**; **Kalda, Taavet**; **Ramazanli, Azer**; **Herrmann, Heiko**; **Belikov, Juri** 2021 https://doi.org/10.21203/rs.3.rs-1167477/v1

The role of storage degradation in energy management problems: an optimal control perspective
Chowdhury, Nilanjan Roy; **Belikov, Juri**; Beck, Yuval; Levron, Yoash; Baimel, Dmitry Journal of Energy Storage 2023 / art. 107412, 10 p httpps://doi.org/10.1016/j.est.2023.107412

Towards genetic algorithm based structure identification for minimal state-space representation and feedback control of nonlinear MIMO systems
Vassiljeva, Kristina; **Petlenkov, Eduard**; **Belikov, Juri** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK neljanda aastakonverentsi artiklite kogumik : 26.-27. novembril 2010, Essu mõis 2010 / lk. 11-14 : ill

Transfer matrix and its Jacobson form for nonlinear systems on time scales : mathematica implementation
Belikov, Juri; **Kotta, Ülle**; **Leibak, Alar** Full Papers : 18th International Conference on Process Control '11 : June 14-17, 2011, Tatransk Lomnica, Slovakia 2011 / p. 141-146

Transformation of the transfer matrix of the nonlinear system into the Jacobson form
Belikov, Juri; **Kotta, Ülle**; **Leibak, Alar** Proceedings of the 2010 IRAST International Congress on Computer Applications and Computational Science (CACS 2010) : 4-6 December 2010, Singapore 2010 / p. 495-498

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

A tutorial on dynamics and control of power systems with distributed and renewable energy sources based on the DQ0 transformation
Levron, Yoash; **Belikov, Juri**; Baimel, Dmitry Applied sciences 2018 / art. 1661, 48 p. : ill https://doi.org/10.3390/app8091661 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Uses and misuses of quasi-static time-varying phasor models in power systems
Belikov, Juri; Levron, Yoash IEEE transactions on power delivery 2018 / p. 3263-3266 https://doi.org/10.1109/TPWRD.2018.2852950 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Uses of the digital twins concept for energy services, intelligent recommendation systems, and demand side management: A review
Onile, Abiodun Emmanuel; Machlev, Ram; **Petlenkov, Eduard**; Levron, Yoash; **Belikov, Juri** Energy reports 2021 / p. 997−1015 https://doi.org/10.1016/j.egyr.2021.01.090 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Using DQ0 signals based on the central angle reference frame to Model the dynamics of large-scale power systems
Zargari, Noa; Ofir, Ron; Levron, Yoash; **Belikov, Juri** Proceedings of 2020 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 26-28 October, 2020 2020 / p. 1099-1103 https://doi.org/10.1109/ISGT-Europe47291.2020.9248812

Verification of utility-scale solar photovoltaic plant models for dynamic studies of transmission networks
Machlev, Ram; Batushansky, Zohar; Soni, Sachin; Chadliev, Vladimir; **Belikov, Juri**; Levron, Yoash Energies 2020 / art. 3191, 20 p. : ill https://doi.org/10.3390/en13123191 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Virtual inertia control methods in islanded microgrids
Škiparev, Vjatšeslav; Machlev, Ram; Chowdhury, Nilanjan Roy; Levron, Yoash; **Petlenkov, Eduard**; Belikov, Juri Energies 2021 / art. 1562, 20 p. : ill https://doi.org/10.3390/en14061562 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Virtual inertia control of isolated microgrids using an NN-based VFOPID controller
Škiparev, Vjatšeslav; **Nosrati, Komeil**; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; Levron, Yoash; **Belikov, Juri**; Guerrero, Joseph M. IEEE Transactions on sustainable energy 2023 / p. 1558–1568 http://doi.org/10.1109/TSTE.2023.3237922

Virtual inertia control of microgrids using deep reinforcement learning methods = Mikrovõrkude virtuaalse inertsi juhtimine sügava stiimulõppe meetoditega
Škiparev, Vjatšeslav 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

Искусственный интеллект в решении задач зеленого поворота
Petlenkov, Eduard; **Belikov, Juri** RUP. Финансово-правовой журнал 2023 / с. 3-7 https://www.ester.ee/record=b5550868*est