

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>

Constrained intelligent frequency control in an AC Microgrid : an Online reinforcement learning based PID tuning approach

Nosrati, Komeil; Tepljakov, Aleksei; Petlenkov, Eduard; Škiparev, Vjatseslav; Belikov, Juri; Levron, Yoash 2023 IEEE Power & Energy Society General Meeting (PESGM) 2023 / 5 p. : ill <https://doi.org/10.1109/PESGM52003.2023.10252482>

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, Vjatseslav; 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>

An enhanced NN-based load frequency control design of MGs : a fractional order modeling method

Škiparev, Vjatseslav; 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>

Extended reality in power distribution grid : applications and future trends

Nosrati, Komeil; Alsaleh, Saleh; Tepljakov, Aleksei; Petlenkov, Eduard; Onile, Abiodun Emmanuel; Škiparev, Vjatseslav; Belikov, Juri 27th International Conference on Electricity Distribution (CIRED 2023) : Rome, 12-15 June 2023 2023 / p. 3615 - 3619 <https://doi.org/10.1049/icp.2023.0788> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

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](#)

MIMO reinforcement learning based approach for frequency support in microgrids with high renewable energy penetration

Škiparev, Vjatseslav; 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>

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

Škiparev, Vjatseslav; 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>

Reinforcement learning based approach for virtual inertia control in microgrids with renewable energy sources

Škiparev, Vjatseslav; 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, Vjatseslav; 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>

Virtual inertia control methods in islanded microgrids

Škiparev, Vjatseslav; 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, Vjatseslav; Nosrati, Komeil; Tepljakov, Aleksei; Petlenkov, Eduard; Levron, Yoash; Belikov, Juri; Guerrero, Joseph M. IEEE Transactions on sustainable energy 2023 / p. 1558-1568 <https://doi.org/10.1109/TSTE.2023.3237922> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Virtual inertia control of microgrids using deep reinforcement learning methods = Mikrovõrkude virtuaalse inertsia juhtimine sügava stiimulõppe meetoditega

Škiparev, Vjatseslav 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