

Applying reinforcement learning method for real-time energy management

Borhan Dayani, Aida; **Fazlollahab, Hamed; Ahmadihangar, Roya; Rosin, Argo** 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 5 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783766>

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>

Digital twin simulations based reinforcement learning for navigation and control of a wheel-on-leg mobile robot

Alsaleh, Saleh Ragheb Saleh; Tepljakov, Aleksei; Tamre, Mart; Kuts, Vladimir; Petlenkov, Eduard Proceedings of ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022), 2B: Columbus, Ohio, USA, October 30 - November 3, 2022 2022 / art. IMECE2022-95411, V02BT02A025, 8 p <https://doi.org/10.1115/IMECE2022-95411>

EcoLight : Eco-friendly traffic signal control driven by urban noise prediction

Ounoughi, Chahinez; Touibi, Ghofrane; Ben Yahia, Sadok Database and Expert Systems Applications : 33rd International Conference, DEXA 2022, Vienna, Austria, August 22-24, 2022 : proceedings, Part I 2022 / p. 205–219 https://doi.org/10.1007/978-3-031-12423-5_16 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

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>

Frequency and power allocation schemes for heterogeneous networks including femto cells

Ahmed, Tauseef; Le Moulec, Yannick 2015 23rd Telecommunications Forum (TELFOR) : Belgrade, Serbia, November, 24-26, 2015 : proceedings of papers = XXIII Телекомуникациони Форум ТЕЛФОР 2015 : зборник радова 2015 / p. 277-280 : ill <http://dx.doi.org/10.1109/TELFOR.2015.7377464>

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](#)

Joint optimization via deep reinforcement learning in wireless networked controlled systems

Ashraf, Kanwal; Le Moulec, Yannick; Pardy, Tamas; Rang, Toomas IEEE Access 2022 / p. 67152-67167 <https://doi.org/10.1109/ACCESS.2022.3185244> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning techniques for wireless-powered ambient backscatter communications : enabling intelligent iot networks in 6g era

Jameel, Furqan; **Sharma, Navuday;** Khan, Muhammad Awais; Khan, Imran; **Alam, Muhammad Mahtab;** Alam, Muhammad Mahtab; Mavromoustakis, Constandinos X. Internet of Things / 2020 https://doi.org/10.1007/978-3-030-44907-0_8 [Article collection metrics 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>

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>

On coverage of critical nodes in UAV-assisted emergency networks

Waheed, Maham; Ahmad, Rizwan; Ahmed, Waqas; **Alam, Muhammad Mahtab;** Magarini, Maurizio Sensors 2023 / art. 1586

Optimal tuning of fractional order sliding mode controller for PMSM speed using neural network with reinforcement learning

Zahraoui, Younes; Zaihidee, Fardila M.; Kermadi, Mostefa; Mekhilef, Saad; Alhamrouni, Ibrahim; Seyedmahmoudian, Mehdi; Stojcevski, Alex *Energies* 2023 / art. 4353 <https://doi.org/10.3390/en16114353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of channel allocation in wireless body area networks by means of reinforcement learning

Ahmed, Tauseef; Ahmed, Faisal; Le Moullec, Yannick *APWiMob* : IEEE Asia Pacific Conference on Wireless and Mobile 2016 : conference proceedings : 13-15 September 2016, Grand Royal Panghegar Hotel, Bandung, Indonesia 2016 / p. 120-123 : ill <https://doi.org/10.1109/APWiMob.2016.7811445>

Power-efficient frequency allocation algorithms for self-organized networks

Ahmed, Tauseef; Le Moullec, Yannick 2015 *Advances in Wireless and Optical Communications RTUWO* : 5-6 November 2015, Riga, Latvia : proceedings 2015 / p. 142-145 : ill <http://dx.doi.org/10.1109/RTUWO.2015.7365738>

A QoS optimization approach in cognitive body area networks for healthcare applications

Ahmed, Tauseef; Le Moullec, Yannick *Sensors* 2017 / art. 780, p. 1-23 : ill <https://doi.org/10.3390/s17040780> [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, 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 model-based and model-free paradigms for optimal control problems in power systems: comprehensive review and future directions

Ginzburg-Ganz, Elinor; Segev, Itay; Balabanov, Alexander; Segev, Elior; Kaully Naveh, Sivan; Machlev, Ram; **Belikov, Juri;** Katzir, Liran; Keren, Sarah; Levron, Yoash *Energies* 2024 / art. 5307, 54 p. : ill <https://doi.org/10.3390/en17215307> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A reinforcement learning routing protocol for UAV aided public safety networks

Minhas, Hassan Ishtiaq; Ahmad, Rizwan; Ahmed, Waqas; Waheed, Maham; **Alam, Muhammad Mahtab;** Gul, Sufi Tabassum *Sensors* 2021 / Art. nr. 4121 <https://doi.org/10.3390/s21124121> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reward function evaluation in a reinforcement learning approach for energy management [Online resource]

Rioual, Yohann; **Le Moullec, Yannick;** Laurent, Johann; **Khan, Muhidul Islam;** Diguët, Jean-Philippe *BEC* 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2019 / 4 p <https://doi.org/10.1109/BEC.2018.8600992>

Simulation study of processes in electric vehicles under braking control based on reinforcement learning

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard 2023 *IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG)* 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227478>

Strengthening active learning with a reinforcement approach in engineering education

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard 2024 *IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON)* 2024 / 5 p

Using reinforcement learning to optimize the acceptance threshold of a credit scoring model

Herasymovych, Mykola; **Märka, Karl;** Lukason, Oliver *Applied Soft Computing Journal* 2019 / Art. 105697 <https://doi.org/10.1016/j.asoc.2019.105697> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)