

AI piilub kapoti alla

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An enhancement of the driver distraction detection and evaluation method based on computational intelligence algorithms

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard** 2018 IEEE 16th International Conference on Industrial Informatics (INDIN 2018) : Porto, Portugal, 18-20 July 2018 / p. 201-206 : ill <https://doi.org/10.1109/INDIN.2018.8472045>

Blended antilock braking system control method for all-wheel drive electric sport utility vehicle

Aksjonov, Andrei; **Vodovozov, Valery**; Augsburg, Klaus; **Petlenkov, Eduard** Electrimacs 2019 : Selected Papers, Vol. 1 2020 / p. 229-241 https://doi.org/10.1007/978-3-030-37161-6_17 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Design and experimentation of fuzzy logic control for an anti-lock braking system

Aksjonov, Andrei; **Vodovozov, Valery**; **Petlenkov, Eduard** BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 207-210 : ill http://www.ester.ee/record=b2150914*est

Design and implementation of intelligent ground vehicle safety systems of high robustness to varying environmental and human factors

Aksjonov, Andrei 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. 107-108 https://www.ester.ee/record=b5183874*est

Design and simulation of the robust ABS and ESP fuzzy logic controller on the complex braking maneuvers

Aksjonov, Andrei; Augsburg, Klaus; **Vodovozov, Valery** Applied sciences 2016 / p. 1-18 : ill <https://doi.org/10.3390/app6120382> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design of regenerative anti-lock braking system controller for 4 in-wheel-motor drive electric vehicle with road surface estimation

Aksjonov, Andrei; **Vodovozov, Valery**; Augsburg, Klaus; **Petlenkov, Eduard** International journal of automotive technology 2018 / p. 727-742 : ill <https://doi.org/10.1007/s12239-018-0070-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Detection and evaluation of driver distraction using machine learning and fuzzy logic

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Herrmann, Martin IEEE Transactions on Intelligent Transportation Systems 2019 / p. 2048 - 2059 <https://doi.org/10.1109/TITS.2018.2857222> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Driver distraction detection and evaluation with artificial neural network and fuzzy logic : In-vehicle information system as a driver's secondary activity: case study

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard** 2018 IEEE 15th International Workshop on Advanced Motion Control (AMC 2018) 2018 / p. 523-528 : ill [Driver distraction detection and evaluation with artificial neural network and fuzzy logic : In-vehicle information system as a driver's secondary activity: case study](#)

Driver distraction while performing a secondary task evaluation approach based on fuzzy expert system

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Herrmann, Martin 2017 / p. 1-27 : ill <https://www.etis.ee/File/DownloadPublic/9fe35346-efcf-4429-af04-ba8325dc1480?name=GSVF2017-Aksjonov.pdf&type=application%2Fpdf> <https://www.gsvf.at/index.php/en/program-2017>

Fuzzy control of energy recovery in electric vehicles with hybrid energy storage

Vodovozov, Valery; **Aksjonov, Andrei**; Ricciardi, Vincenzo; **Raud, Zoja** 2019 International Conference on Clean Electrical Power (ICCEP) 2019 / p. 345-350 : ill <https://doi.org/10.1109/ICCEP.2019.8890103>

Fuzzy gradient control of electric vehicles at blended braking with volatile driving conditions

Vodovozov, Valery; **Petlenkov, Eduard**; **Aksjonov, Andrei**; **Raud, Zoja** ICINCO 2020 : 17th International Conference on Informatics in Control, Automation and Robotics, July 7-9, 2020 : online 2020 / p. 250-261 <http://wikicfp.com/cfp/servlet/event.showcfp?eventid=97093©ownerid=45217>

Fuzzy logic control of electric vehicles in changing braking conditions

Vodovozov, Valery; **Raud, Zoja**; **Aksjonov, Andrei**; **Petlenkov, Eduard** 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2020 / art. 20192756, p. 107-112 <https://doi.org/10.1109/ICEPDS47235.2020.9249083>

Hardware-in-the-Loop test of an open loop fuzzy control method for decoupled electro-hydraulic antilock braking system

Aksjonov, Andrei; Ricciardi, Vincenzo; Augsburg, Klaus; **Vodovozov, Valery**; **Petlenkov, Eduard** IEEE transactions on fuzzy systems 2020 / p. 965-975: ill <https://doi.org/10.1109/TFUZZ.2020.2965868> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A method for detection and evaluation of driver distraction induced by in-vehicle information systems

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 4513-4518 : ill <https://doi.org/10.1109/IECON.2018.8591252>

A method of driver distraction evaluation using fuzzy logic : phone usage as a driver's secondary activity : case study

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Hermann, Martin Proceedings : IACAT 2017 : XXVI International Conference on Information, Communication and Automation Technologies, October 26-28, 2017, Sarajevo, Bosnia-Herzegovina 2017 / 6 p. : ill <https://doi.org/10.1109/ICAT.2017.8171599>

Modelling a blended braking system of electric vehicles

Vodovozov, Valery; **Aksjonov, Andrei** 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 16-22 : ill http://ise.elnet.ee/record=b2949856~S2*est

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>

Neural network control of green energy vehicles with blended braking systems

Vodovozov, Valery; **Petlenkov, Eduard**; **Aksjonov, Andrei**; **Raud, Zoja** Renewable Energy & Power Quality Journal 2021 / p. 344-349 <https://doi.org/10.24084/repqj19.291> [Journal metrics at Scopus](#) [Article at Scopus](#)

Neural network-based model reference control of braking electric vehicles

Vodovozov, Valery; **Aksjonov, Andrei**; **Petlenkov, Eduard**; **Raud, Zoja** Energies 2021 / art. 2373 <https://doi.org/10.3390/en14092373> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A Novel driver performance model based on machine learning

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Hermann, Martin IFAC-PapersOnLine 2018 / p. 267-272 : ill <http://dx.doi.org/10.1016/j.ifacol.2018.07.044>

A novel human-machine interface evaluation methodology for passenger vehicles

Aksjonov, Andrei 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 72-78 : ill http://www.estee.ee/record=b4763182*est http://ise.elnet.ee/record=b2950019~S2*est

Promotion of the students' success in higher engineering education

Raud, Zoja; **Vodovozov, Valery**; **Aksjonov, Andrei**; **Petlenkov, Eduard** 2017 IEEE 58th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings : Latvia, Riga, 12-13 October, 2017 2017 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2017.8124806>

Research and development of computational-intelligence-based safety Systems for ground vehicles = Tehisintellekti meetoditel põhinevate ohutussüsteemide uurimine ja arendamine maapealsete sõidukite jaoks

Aksjonov, Andrei 2019 <https://digi.lib.ttu.ee/i/?12389>

Robust speed controllers with autotuning for electrically driven equipment

Aksjonov, Andrei; **Serbin, Aleksandr**; **Vodovozov, Valery**; **Raud, Zoja** 2019 26th International Workshop on Electric Drives : Improvement in Efficiency of Electric Drives (IWED) : Moscow Power Engineering Institute, Moscow, Russia, 30th of January - 2nd of February 2019 : proceedings 2019 / 6 p. : ill <https://doi.org/10.1109/IWED.2019.8664397>

Self-scaling laboratory crane fuzzy logic control with anti-swing regulation [Online resource]

Aksjonov, Andrei; **Vodovozov, Valery**; **Petlenkov, Eduard** 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763088>

Sensorless control of the three-dimensional crane using the Euler-Lagrange approach with a built-in state-space model

Aksjonov, Andrei; **Vodovozov, Valery**; **Petlenkov, Eduard** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 255-258 : ill

Simulation study of electric vehicles at fuzzy PID control of braking torque

Vodovozov, Valery; **Petlenkov, Eduard**; **Aksjonov, Andrei**; **Raud, Zoja** Informatics in Control, Automation and Robotics : 17th International Conference, ICINCO 2020 Lieusaint - Paris, France, July 7-9, 2020, Revised Selected Papers 2022 / p. 261-290 https://doi.org/10.1007/978-3-030-92442-3_15 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Speed control of electric vehicle propulsion with autotuning at changeable driving modes and road conditions

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Raud, Zoja**; **Petlenkov, Eduard** 2019 IEEE International Conference on

Mechatronics (ICM) : proceedings 2019 / p. 584-589 : ill <https://doi.org/10.1109/ICMECH.2019.8722909>

Three-dimensional crane modelling and control using Euler-Lagrange state-space approach and anti-swing fuzzy logic
Aksjonov, Andrei; Vodovozov, Valery; Petlenkov, Eduard Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2015 / p. 5-13 : ill <http://dx.doi.org/10.1515/ecce-2015-0006>

Torque control in blended antilock braking systems of electric vehicles [Online resource]

Vodovozov, Valery; Petlenkov, Eduard; Raud, Zoja; Aksjonov, Andrei BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600978>

Trajectory phase-plane method - based analysis of stability and performance of a fuzzy logic controller for an anti-lock braking system

Aksjonov, Andrei; Ricciardi, Vincenzo; **Vodovozov, Valery;** Augsburg, Klaus 2019 IEEE International Conference on Mechatronics (ICM) : proceedings 2019 / p. 602-607 : ill <https://doi.org/10.1109/ICMECH.2019.8722831>