WARSAW UNIVERSITY OF TECHNOLOGY FACULTY OF TRANSPORT

ARCHIVES OF QUARTERLY TRANSPORT

ISSN 0866-9546 E-ISSN 2300-8830

> volume 71 issue 3 Warsaw 2024

Detailed instructions for authors and contacts to editors can be found on journal's webpage: www.archivesoftransport.com

The Archives of Transport is indexed by the Polish Ministry of Education and Science.

Archives of Transport received funding under the "Development of scientific journals" program implemented by the Ministry of Education and Science of the Republic of Poland. The project aims to improve the quality of the journal, including the quality of the publishing process, increase the range of its impact and maintain the journal in international circulation.





CO-FINANCED FROM THE STATE BUDGET

DEVELOPMENT OF SCIENTIFIC JOURNALS Support for the development of the Archives of Transport journal (ISSN: 0866-9546)

FUNDING 80 000 PLN

TOTAL VALUE 80 000 PLN

All articles are peer-reviewed by two reviewers. Reviewers list is published once each year in the last issue of the journal and also on the journal's webpage.

Copyright © 2024 by Warsaw University of Technology.

Archives of Transport provides all articles in free open access. Articles are freely available to wider public with permitted reuse under Creative Commons 4.0 BY license (https://creativecommons.org/).

Print run of 40 copies. Free and unlimited online access.

ARCHIVES OF TRANSPORT

Editor-in-Chief Marianna Jacyna Warsaw University of Technology, Poland

Deputy Editor-in-Chief

Konrad Lewczuk Warsaw University of Technology, Poland

University of Catania, Catania, Italy

Salvatore Cafiso

Raffaele Mauro

Jerzy Merkisz

Poland

Dariusz Mazurkiewicz

Edward Michlowicz

Universty of Trento, Trento, Italy

Lublin University of Technology, Lublin, Poland

Poznan University of Technology, Poznan, Poland

AGH University of Science and Technology, Cracow,

Emilian Szczepański Warsaw University of Technology, Poland

Tomasz Nowakowski

Lithuania

Editorial Board – Scientific Council

Wroclaw University of Technology, Wroclaw, Poland Marcin Chrzan Agung Pambudi University of Technology and Humanities, Radom, Poland Universitas Negeri Sebelas Maret, Surakarta, Indonesia Antonio Comi Marko Perkovic Università degli Studi di Roma "Tor Vergata", Rome, Italy University of Ljubljana, Ljubljana, Slovenia Piotr Czech Dalibor Pešić Silesian University of Technology, Gliwice, Poland University of Belgrade, Belgrade, Serbia Carmelo D'agostino Zbigniew Pietrzykowski Lund University, Lund, Sweden Maritime University of Szczecin, Szczecin, Poland Ján Dižo Andrea Pompigna University of Žilina, Zilina, Slovakia University of Trento, Trento, Italy Goran Dukic **Basil Psarianos** University of Zagreb, Zagreb, Croatia National Technical University of Athens, Athens, Greece Andrii Galkin Laurence R. Rilett O.M. Beketov National University of Urban Economy in Auburn University, Auburn, USA Kharkiv, Kharkiv, Ukraine Mirosław Siergiejczyk Juraj Gerlici Warsaw University of Technology, Warsaw, Poland University of Žilina, Zilina, Slovakia Kumares Sinha Jesus Gonzalez-Feliu Purdue University, West Lafavette, USA Excelia Business School, La Rochelle, France Edgar Sokolovskij Csaba Koren Vilniaus Gedimino Technikos Universitetas, Vilnius, Széchenyi István University of Applied Sciences, Győr, Hungary Andrzej Szarata Radim Lenort Cracow University of Technology, Cracow, Poland ŠKODA AUTO University, Mladá Boleslav, Czech Republic

> Zbigniew Tarapata Military University of Technology, Warsaw, Poland

Raca Todosijevic Polytechnic University of Hauts-de-France, Valenciennes, France

> Adam Weintrit Gdynia Maritime University, Gdynia, Poland

Editorial Office

Editorial Secretary: Roland Jachimowski *Warsaw University of Technology, Poland* Linguistic Editor Joseph Woodburn University of Bristol, United Kingdom

Karol Nehring Warsaw University of Technology, Poland

Editorial Office Contact

Editorial Office

Archives of Transport Faculty of Transport, Warsaw University of Technology Koszykowa 75, 00-662 Warsaw, Poland Phone/fax: +48 22 234-14-10 E-mail: aot.wt@pw.edu.pl

Contents

Yunzhu Yan, Zhongning Fu, Jintian Yue
Study on the environmental benefits of truck parking space for trucks waiting
to enter freight terminal - A case study of Gangchen Logistics Park
Jerzy Merkisz, Adam Sordyl, Zdzisław Chłopek
Non-repeatability of the WLTP vehicle test results
Yaling Ma, Xiangfei Yang
Gansu, Qinghai and Ningxia regions of the new western land and sea corridor
Freight network optimization
<u>Zhongjie Zhang, Xinwen Yang, Yanyan Zhang, Caixia Miao,</u>
Yipeng Cui, Jiqiang Shen
Wheel-rail wear characteristics of a modern tram passing curves with small radius
<u>Marcin Chrzan, Tomasz Ciszewski, Waldemar Nowakowski</u>
Selected applications of satellite technologies in rail transport
<u>Xuanhua Lin, Chaojian Tan, Xiaohui Lin</u>
Short term road network Macroscopic Fundamental Diagram parameters and traffic
state prediction based on LSTM
Roksana Licow, Franciszek Tomaszewski
Application of vibration signals in railway track diagnostics using a mobile
railway platform
Anna Grana, Nicola Dinnella, Sandro Chiappone
Enhancing road safety with the infrastructure-adaptable NDBA 2.0 concrete median
barrier: An Italian experience
Oleksandr Gorobchenko, Halyna Holub, Denys Zaika
Theoretical basics of the self-learning system of intelligent locomotive decision
support systems