



Name	Natalia CHORNA
Position, Department/Faculty	Associate Professor, Aerospace Thermal Engineering Department/Aviation Engine Faculty
Academic Degree, Academic Title	PhD in Technical Science, Associate Professor
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Scopus Author ID:	57190837440
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ORCID iD:	0000-0002-9161-0298
Google Scholar:	https://scholar.google.com.ua/citations?user=vDaPcTYAAAAAJ&hl=uk
ResearchGate:	-

EDUCATION:

Basic education (university, major, year of graduation):

Master's Degree, Faculty of Sanitary and Technical, specialty «Heat and gas supply, ventilation and use of thermal secondary energy resources», Kharkiv State Technical University of Construction and Architecture, 1997.

Postgraduate/Doctoral studies:

PhD in Technical Science, Institute of Mechanical Engineering A.M. Podgorny NAS of Ukraine, 2006.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

National Aerospace University "Kharkiv Aviation Institute", 2018 – up to now, Associate Professor of Aerospace Thermal Engineering Department

Teaching Experience:

National Aerospace University "Kharkiv Aviation Institute", 2018 – up to now, Associate Professor of Aerospace Thermal Engineering Department

RESEARCH ACTIVITIES:

Main Research Areas:

Storage and use of hydrogen, renewable energy.

Number of Publications (Scopus, WoS, others):



Associate Professor Natalia CHORNA is the author of more than 75 scientific publications devoted to the development of hydrogen storage and utilization systems for the aerospace industry, as well as to the numerical modeling and optimization of these systems.

TEACHING ACTIVITIES:

Courses Taught:

Energy Audit and Energy Management, Fundamentals of Energy-Saving Technologies, Thermal Engineering Processes and Installations

Author Courses, Academic Programs:

Energy Audit and Energy Management, Fundamentals of Energy-Saving Technologies, Thermal Engineering Processes and Installations

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. N.A. Chorna, A.M. Avramenko, A.A. Shevchenko, A.L. Kotenko. Application of highly efficient hydrogen generation and storage systems for autonomous energy supply. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 2021, № 3, Pp. 69–74. <https://doi.org/10.33271/nvngu/2021-3/069>
2. N.A. Chorna. Prospects for application of hydrogen technologies for autonomous power complexes based on renewable energy sources. *Scientific and Applied Journal Vidnovluvana energetika*, 2021, № 3(66), Pp. 18-32. [https://doi.org/10.36296/1819-8058.2021.3\(66\).18-32](https://doi.org/10.36296/1819-8058.2021.3(66).18-32)
3. N.A. Chorna. Research of the efficiency of fuel cell as part of autonomous power plants. *Journal of Mechanical Engineering*. – 2021. – Vol. 22, №. 4. – pp. 48–52. <https://doi.org/10.15407/pmach2019.04.048>
4. N.A. Chorna, V.V. Hanchyn. Application of Mathematical Modeling for the Improvement of Mass and Size Parameters of Metal-Hydride Installations. *Journal of Mathematical Sciences*. – 2022. – Vol. 263, №. 1. – pp. 185–194. DOI 10.1007/s10958-022-05916-7
5. N.A. Chorna. Utilisation of high-efficiency systems for generation and storage of hydrogen for stand-alone power supply. *BOOK OF ABSTRACTS: INTERNATIONAL CONFERENCE ON "ENERGY SYSTEMS AND ALTERNATIVE ENERGY SOURCES" (ESAES – 2024)*. – pp. 335-336. ISBN 978-617-8238-51-3

Links to Citation Database Profiles:

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ADDITIONAL INFORMATION:

Language Proficiency:
English

IT Skills:
Microsoft Office, Java.

