ПРИАЗОВСЬКИЙ ДЕРЖАВНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ



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RESEARCHER DATA	https://orcid.org/0000-0001-5216-6641 https://www.scopus.com/authid/detail.uri?authorId=57195838370
SCIENTIFIC INTERESTS / RESEARCH AREAS	Up-to-date methods of teaching physics. Prospects and development of a virtual workshop in general physics. Physics of metals.
ACADEMIC DISCIPLINES	Physics
EDUCATION	**1987.** PhD (Candidate of Science). Kyiv National University. Physics of Metals. **1979.** Donetsk State University. Physics.
ACADEMIC TITLES	**1995**. Docent of Physics Department, Pryazovskyi State Technical University.
LABOR ACTIVITY INFORMATION	**1979-present**. Teacher (Assistant Professor, Associate Professor) of Physics Department, Pryazovskyi State Technical University.
OTHER POSITIONS AND ACTIVITIES	**2016-2023**. Lecturer at the Institute of Professional Development of the Pryazovskyi State Technical University
CERTIFICATION TRAININGS (FOR THE LAST 5 YEARS)	**2024**. Professional trainings and workshops «Modern Physical Effects-based Methods of Materials Characterization» at International Research Institute for Steel Technology of Wuhan University of Science and Technology (China), 3 credits ESTC (90 hours). Certificate, 25.06.2024. **2023**. Professional training, PSTU, 3 credits ESTC (90 hours). Topic "Teaching under war conditions: quality, creativity, stress resistance tools". КПК 130-23, 24.07.2023.

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INTERNATIONAL PROJECTS	**2022-2023.** Slovak-Ukrainian research project.
INTERNATIONAL RESEARCH COOPERATION	**2022-present.** Institute of Materials Research of Slovak Academy of Science (Kosice, Slovakia).
PARTICIPATION IN RESEARCH PROJECTS AND GRANTS	**2018-2021.** The participation in five R&D projects funded by industrial enterprises of Ukraine. **2023-2026.** The participation in a basic research project (funded by the Ministry of Education and Science of Ukraine).
LANGUAGES	Mother language: Ukrainian Foreign language: English

PUBLICATIONS

Total number: (articles, books, proceedings, virtual workshops) 39	**Including last 5 years: 11**

1. Б. В. Єфременко, Ю. Г. Чабак, Л. Фалат, В. Г. Єфременко, А. Аманов, А. М. Сиротюк, **О. В. Цветкова**. Вплив відпалу та UNSM оброблення на стійкість до водневого окрихчування LPBF-друкованої сталі 316L. Фізико-хімічна механіка матеріалів. 2026. 62. т.1. С. 17-30. 10.15407/pcmm2026.01.017
2. B.V. Efremenko, Yu.G. Chabak, A. Amanov, V.G. Efremenko, O. Milkovič, **E.V. Tsvetkova**, I.M. Olejnik, Dzherenova A.V. Effect of Ultrasonic Nanocrystal Surface Modification on Microhardness and Tensile Properties of Laser Powder Bed Fusion 316L Steel Jourbnal of Nano- Electronic Physics. 2025, 17 (No 5), 05019. https://doi.org/10.21272/jnep.17(5).05019
3. Efremenko B.V., Chabak Yu.G., **Tsvetkova E.V**., Oleinyk I.M., Efremenko V.G., **Dzherenova A.V**. Influence of annealing temperature on the Charpy fracture characteristics of selective laser melted 316L steel at ambient and cryogenic temperatures. Physics and Chemistry of Solid State. V. 2025, 26, No. 4, pp. 844-851. https://doi.org/10.15330/pcss.26.4.844-851
4. Efremenko B.V., Chabak Yu.G., Efremenko V.G., Kromka F., Olejnik I.M., Shalomeev V.A., **Tsvetkova E.V.**, Dzherenova A.V. Laser Surface Modification of the Wrought and LPBF-Printed Biomedical Co-28Cr-6Mo Alloys: Effects on nanoindentation and Tribological Behaviors. Journal of Nano- and Electronic Physics. 2024, Vol. 16, No 4, 04022 (Scopus) https://doi.org/10.21272/jnep.16(4).04022
5. Курс фізики у визначеннях, прикладах і задачах: Навчальний посібник для самостійної роботи студентів технічних спеціальностей / О. В. Цветкова, В.Г. Єфременко, Ю.Г. Чабак. 2-ге вид., виправ. та доп.– Маріуполь: ДВНЗ «ПДТУ», 2024. – 151 с.
https://docs.google.com/document/d/1uu3E9oBQ4gEwJqWaAH1sqmUuwk9k9Bb6/edit?usp=drive_link&ouid=112377945895680322885&rtpof=true&sd=true
6. Chabak Yu.G., Golinskyi M.A., V.G. Efremenko, Halfa H., Zurnadzhy V.I., Efremenko B.V., **Tsvetkova E.V.**, Dzherenova A.V. Ti-rich carboborides in the multi-component

high-boron alloy: morphology and elemental distribution. Physics and Chemistry of Solid State. 2023, vol. 24, is.4, P. 707-713. (Scopus) https://doi.org/10.15330/pcss.24.4.707-713

7. Efremenko B.V., Chabak Yu.G., **Tsvetkova E.V**., Dzherenova A.V., Efremenko V.G., Kromka F., Zurnadzhy V.I., Olejnik I.M. Surface laser melting of a carburized LPBF-manufactured Ti-based biomedical grade alloy. Journal of Nano- and Electronic Physics. 2023, Vol. 15, No 4, 04035. (Scopus**)** https://doi.org/10.21272/jnep.13(2).02030
8. Chabak Y.G., Efremenko V.G., Fedun V.I. Kromka F., **Tsvetkova E.V.** Surface Modification of Grey Cast Iron by Pulsed-plasma Deposition and Subsequent Laser Beam Melting. Journal of Nano- and Electronic Physics, 2021, 13(2), 02030-1–02030-7. (Scopus)
9. Chabak Yu.G., **Tsvetkova E. V.,** Pastukhova T. V., Efremenko V. G., Zurnadzhy V. I., Fedun V. I., Dzherenova A. V. Pulsed plasma surface modification of grey cast iron. Journal of Physical Studies v. 24, No. 2 (2020) 2501(8 p.) (Scopus)

H-index

Scopus: 17 articles, 50 citations, **H-index**=4

Date of filling

14.04.2026