Name	Oleksii Breslavets
Position, Department/Faculty	Part-Time Senior Teacher, Department of Information and Communication Technologies named after O.O. Zelensky (504) / Faculty of Radio Electronics, Computer Systems and Infocommunications
Academic Degree, Academic Title	Doctor of Philosophy in 2024, None.
Email:	o.breslavets@khai.edu
Scopus Author ID:	57200138306
Web of Science ResearcherID:	ADY-7319-2022
ORCID iD:	0000-0001-9065-2982
Google Scholar:	https://scholar.google.com/citations?user=Tx-AqCAAAAAJ&hl=uk
ResearchGate:	https://www.researchgate.net/profile/Oleksiy-Breslavets/research

EDUCATION:

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

- M.S. with honor, National Aerospace University – "Kharkiv Aviation Institute", Kharkiv, Ukraine, Telecommunications and Radio Engineering, 2018.
- B.S., National Aerospace University – "Kharkiv Aviation Institute", Kharkiv, Ukraine, Telecommunications, 2017.

Postgraduate/Doctoral studies:

Doctor of Philosophy, O. Ya. Usikov Institute for Radio Physics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine, Physics and Astronomy, “High-Q oscillations in microwave resonant structures with metallic and dielectric inhomogeneities”, 2024. / None

Additional training, certification programs:

None

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

- Department of Acoustic and Electromagnetic Spectroscopy, O. Ya. Usikov Institute for Radio Physics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine, 2023 – to present, Research Scientist;
- Department of Acoustic and Electromagnetic Spectroscopy, O. Ya. Usikov Institute for Radio Physics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine, 2019 – 2023, Junior Research Scientist;
- Department of Acoustic and Electromagnetic Spectroscopy, O. Ya. Usikov Institute for Radio Physics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine, 2017 – 2019, Laboratory Assistant.

Teaching Experience:

- Laboratory practices, Department of Information and Communication Technologies named after O.O. Zelensky (504), Faculty of Radio Electronics, Computer Systems and Infocommunications, National Aerospace University – "Kharkiv Aviation Institute", Kharkiv, Ukraine, 2022 – to present, Part-Time Senior Teacher;

Experience in International or National Projects:
- Project number - Contract # WHTM18UK0620 "Scientific and Technical Research and Joint Development of the Device for Measurement of Complex Dielectric Permeability in Solid Materials with Low Losses (Device" CPLX ")" Ltd. Anhui East China Research Institute "Photoelectronics" Wuhu, PRC), 2018-2021. Project participant.

RESEARCH ACTIVITIES:

Main Research Areas:
- Experimental and numerical simulation study of resonant frequencies in realistic open resonator for wide-range permittivity measurements of solid-state dielectrics.
- Microwave resonant near-field electromagnetic computer simulations in planar metal-dielectric and all-dielectric metasurfaces.
- Numerical simulation study of eigenfrequencies in random-shaped microwave cavity resonators.

Number of Publications (Scopus, WoS, others):
5 articles («Journal of Applied Physics», «IEEE Transactions on Microwave Theory and Techniques», «Low Temperature Physics», «Functional Materials») and 11 theses

Monographs, Textbooks:
None

Participation in Scientific Conferences:
«2023 53rd European Microwave Conference (EuMC)», «The Twenty-Fourth Annual Conference (YUCOMAT)», «2022 IEEE 2nd Ukrainian Microwave Week (UkrMW)», «2022 24th International Microwave and Radar Conference (MIKON)», «“East Meets West” IEEE International Conference on Nanomaterials: Applications & Properties (NAP-2021)», «II International Advanced Study Conference "Condensed Matter and Low Temperature Physics 2021" (CM & LTP 2021)», «2020 IEEE Ukrainian Microwave Week (UkrMW)», «V International Advanced Study Conference "Condensed Matter and Low Temperature Physics 2025" (CM & LTP 2025)»

TEACHING ACTIVITIES:

Courses Taught:
- Fundamentals of Programming in Python – Spring semesters 2022–2023, 2023–2024; 2024–2025 academic year.
- Mobile Application Programming in Kotlin and Android – Spring semesters 2022–2023, 2023–2024.
- Machine Learning and Data Analysis – Spring semesters 2022–2023, 2023–2024.
- Fundamentals of Machine Learning – Autumn semester 2023–2024; 2024–2025 academic year.
- Fundamentals of Infocommunications – 2024–2025 academic year.
- Fundamentals of Information Systems – 2024–2025 academic year.
- Software-Configured Devices and Radio Systems (course project) – 2024–2025 academic year.
- Modern Methods of Signal Processing – 2024–2025 academic year.

- Current State and Development Trends in Telecommunications and Radio Engineering (Postgraduate course) – 2024–2025 academic year.

Author Courses, Academic Programs:
None

Methodological Materials, Textbooks:
None

GRANTS AND PROJECTS:

Participation in International and National Projects:
None

Grants, Scholarships, Academic Mobility Programs:
- President of Ukraine scholarship for young scientist, 2024 – present.
- NAS of Ukraine scholarship for young scientist, 2020 – 2022 and 2022 – 2024.
- Grant for participation in the conference “East Meets West” IEEE International Conference on Nanomaterials: Applications & Properties (NAP-2021) – September 2021.

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:
Awarded a Diploma for Scientific Achievements by the Presidium of the National Academy of Sciences of Ukraine and the Council of Young Scientists of NAS of Ukraine for active participation and significant contributions to scientific research (2025).

Distinctions, Awards, Prizes:
Award for the Best Report at the conference 2019 XXIVth International Seminar/Workshop on Direct and Inverse Problem of Electromagnetic and Acoustic Wave Theory (DIPED-2019) – September 2019.

Membership in Professional Associations:
- Member of IEEE Young Professionals, 2021-2022.
- Member of IEEE Electron Devices Society (EDS), 2021-2022.
- Member of IEEE Microwave Theory and Technology Society (MTT-S), 2022.
- Member of European Microwave Association (EuMA), 2025.

INTERNATIONAL ACTIVITIES:

Internships:
None

Cooperation with Foreign Universities:
None

Teaching/Lecturing Abroad:
None

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

- J. Chen, O. A. Breslavets, Y. N. Savin, A.S. Kupriianov, Z. E. Eremenko and V. R. Tuz, Experimental validation of group delay in a multi-window electromagnetically induced transparency metasurface, Journal of Applied Physics, 21 January 2024, Vol. 135, No. 3, pp. 033103(10). DOI: 10.1063/5.0179112
- N. Volovichev, G. P. Zouros, O. A. Breslavets and Z. E. Eremenko, A Local Point Method Based on DFS Expansion of Boundary Conditions for Eigenfrequencies Calculation of BoR Cavities, IEEE Transactions on Microwave Theory and Techniques, Vol. 71, No. 11, pp. 4671-4681, Nov. 2023. DOI: 10.1109/TMTT.2023.3300171
- A.A. Breslavets, Z.E. Eremenko, G.O.Rudnev, M.P. Natarov, V.V. Glamazdin, O.I. Shubnyi, O.A. Voitovich, Zhu Gang, Li Rong and A.A. Prokopenko, Small-sized X-band Open Resonator for Wide-range Permittivity Measurements of Solid-state Dielectrics, American Institute of Physics (AIP) Low Temperature Physics, Vol. 48, No. 12, pp. 1055 - 1061, 2022. DOI: 10.1063/10.0015115
- A.A. Breslavets, Z.E. Eremenko, G.O.Rudnev, M.P. Natarov, V.V. Glamazdin, O.I. Shubny, O.A. Voitovich, Zhu Gang, Li Rong and A.A. Prokopenko, Hemispherical X- band Microwave Small Sized Open Resonator for Wide Range from 1 to 20 Permittivity Characterization of Solid-state Dielectrics, American Institute of Physics (AIP) Low Temperature Physics, Vol. 48, No. 1, pp. 43 - 50, 2022. DOI: 10.1063/10.0008963
- Yu. N. Savin, Z. E. Eremenko, O. A. Breslavets. The electromagnetic wave slow effect induced by the interaction of dark and quasi-dark resonant modes in microwave metamaterials, Functional materials, Vol. 28, No. 4, pp. 751 - 757, 2021. DOI: 10.15407/fm28.04.751

Books, Chapters in Collective Monographs:
None

Links to Citation Database Profiles:
Scopus: https://www.scopus.com/authid/detail.uri?authorId=57200138306
Web of Science / Publons: https://www.webofscience.com/wos/author/record/ADY-7319-2022
Google Scholar: https://scholar.google.com/citations?user=Tx-AqCAAAAAJ&hl=uk
ORCID: https://orcid.org/0000-0001-9065-2982

ADDITIONAL INFORMATION:

Language Proficiency:

- Professional foreign language (English) at C1 level within the Council of Europe's Common European Framework;
- German: Intermediate (studied at Ukrainian School, German language course);
- Ukrainian: Native.

IT Skills:
Languages: C/C++, JAVA, ANDROID, MATLAB, XML, XSL, CSS, HTML, PHP, JAVA-SCRIPT, ASSEMBLER, PYTHON, KOTLIN
OS: Windows 98/XP/Win7/Win8.1/10/11, Linux (Ubuntu)
Packages Borland Builder C++ 6.0, MathCad 15.0, Matlab 2025, CST Microwave studio 2019, ANSYS HFSS 15.0, Comsol Multiphysics 6.2.

Social and Community Activities:

- Science popularization and participation in exhibitions:
  - 16 December 2023 – Nikolsky Shopping Center
  - 26 March 2024 – Metroshkola (Pobeda station)
  - 6 March 2025 – Zlatopil city, Kharkiv region
  - 9 April 2025 – Samar city, Dnipropetrovsk region
- Volunteer work in restoration projects on the territory of the O. Ya. Usikov Institute for Radio Physics and Electronics, National Academy of Sciences of Ukraine (2022–2025), following damage caused by Russian aggression