



Name	Oleksii Nikolaev
Position, Department/Faculty	Professor, Department of Higher Mathematics and System Analysis / Faculty of Rocket and Space Engineering
Academic Degree, Academic Title	Doctor of Physical and Mathematical Sciences, Professor
Email:	a.nikolaev@khai.edu
Scopus Author ID:	7202396672
Web of Science ResearcherID:	[ID]
ORCID iD:	0000-0002-7351-1392
Google Scholar:	http://scholar.google.com/citations?user=lfUudl4AAAAJ&hl=ru
ResearchGate:	[посилання]

EDUCATION:

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

Mathematician, Kharkiv State University [01/09/1972 – 30/06/1977]

Postgraduate/Doctoral studies:

Postgraduate study, Kharkiv Aviation Institute [16/12/1979 – 15/12/1982]

Doctoral program, Kharkiv Aviation Institute [01/03/1990 – 28/02/1993]

Candidate of Physical and Mathematical Sciences, Academic Council of Dnipropetrovsk State University [15/05/1985]

Associate Professor

Ministry of Education and Science of Ukraine [26/12/1996]

Doctor of Physical and Mathematical Sciences, Academic Council of Dnipropetrovsk State University [12/06/1997]

Professor

Ministry of Education and Science of Ukraine [03/05/2001]

Additional training, certification programs:

text

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Professor of the Department of Higher Mathematics and System Analysis [01/09/2023 – Current],

Head of the Department of Higher Mathematics and Systems Analysis [01/07/2014 – 31/08/2023]

Head of the Department of Higher Mathematics [01/07/1998 – 30/06/2014]

Dean of the Faculty of Rocket and Space Engineering [01/07/2003 – 01/03/2015]

Teaching Experience:

Teacher of the Department of Higher Mathematics and Systems Analysis [01/07/2014 – Current]
Teacher of the Department of Higher Mathematics [16/12/1982 – 30/06/2014]

Experience in International or National Projects:

Head of Research Projects, Ministry of Education and Science of Ukraine [2009 – 2014]

RESEARCH ACTIVITIES:

Main Research Areas:

Boundary value problems for partial differential equations, mathematical modeling, optimal control theory, system analysis, theory of harmonic functions, theory of special functions

Number of Publications (Scopus, WoS, others):

More than 110 scientific articles in leading scientific journals and collections in Ukraine and abroad, 14 articles indexed in Scopus

Monographs, Textbooks:

Co-author of 2 monographs, author of 4 textbooks in the fields of algebra and geometry, differential equations, functional analysis

Participation in Scientific Conferences:

Co-author of 80 reports at international scientific conferences in Ukraine and abroad

TEACHING ACTIVITIES:

Courses Taught:

Algebra and geometry, Differential equations, Functional analysis, Equations of mathematical physics, Optimal control theory, System identification

Author Courses, Academic Programs: text

Methodological Materials, Textbooks:

Author and co-author of 50 teaching aids on various areas of mathematics

GRANTS AND PROJECTS:

Participation in International and National Projects: text

Grants, Scholarships, Academic Mobility Programs: text

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

Honored Worker of Education of Ukraine [26/05/2005]

Distinctions, Awards, Prizes:

Gratitude from the Ministry of Education and Science of Ukraine [2019]
Honorary Diploma of the Kharkiv City Council [2005, 2015]
Laureate of the State Prize of Ukraine in the field of education [14/10/2013]
Jubilee Medal "100 Years of M.K. Yangel" [2011]
First place in the regional competition "Higher School of Kharkiv Region - Best Names" in the nomination "Teacher of Fundamental Disciplines" [2003]

Membership in Professional Associations:

Ukrainian Scientific and Educational IT Society

INTERNATIONAL ACTIVITIES:

Internships:

text

Cooperation with Foreign Universities:

text

Teaching/Lecturing Abroad:

text

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

Nikolaev O., Skitska M. (2024) The method of determining optimal control of the thermoelastic state of piece-homogeneous body using a stationary temperature field. *Radioelectronic and Computer Systems*. 2(110), 98-119. <https://doi.org/10.32620/reks.2024.2.09>

Nikolaev O., Holovchenko O., Savchenko N. (2022) Green's functions of the first and second boundary value problems for the Laplace equation in the nonclassical domain. *Radioelectronic and Computer Systems*. 4(104), 30-49. <https://doi.org/10.32620/reks.2022.4.03>

Nikolaev A.G., Tanchik E.A. (2016) Stresses in an elastic cylinder with cylindrical cavities forming a hexagonal structure / *Journal of Applied Mechanics and Technical Physics*. –, Vol. 57, No. 6. – Pp. 1141-1149. <https://doi.org/10.1134/S0021894416060237>

Nikolaev O.G., Tanchik E.A. (2016) Stresses in an infinite circular cylinder with four cylindrical cavities. *Journal of Mathematical Sciences*. 217(3), 299-311. <https://doi.org/10.1007/s10958-016-2974-z>

Nikolaev A.G., Tanchik E.A. (2016) Model of the stress state of a unidirectional composite with cylindrical fibers forming a tetragonal structure. *Mechanics of Composite Materials*. 52 (2), 177-188. <https://doi.org/10.1007/s11029-016-9571-6>

Nikolaev A.G., Tanchik E.A. (2015) The First Boundary-Value Problem of the Elasticity Theory for a Cylinder with N Cylindrical Cavities / *Numerical Analysis and Applications*. 8 (2), 1-12. <https://doi.org/10.1134/S1995423915020068>

Nikolaev A. G., Scherbakova Y. A. (2010) Apparatus and applications of generalized Fourier method for transversally isotropic bodies bounded by surface and paraboloid of rotation. *Journal of Mathematical Sciences*. 171 (5), 620-631. <https://doi.org/10.1007/s10958-0100162-0>

Nikolaev A. G., Kurennov S. S. (2004) Nonaxisymmetric contact problem of thermoelasticity for a half-space with fixed rigid spherical inclusion. *Journal of Engineering Physics and Thermophysics*. 77 (1), 137-141. <https://doi.org/10.1023/B:JOEP.0000020741.03468.6e>

Denisova T.V.; Nikolaev A.G. (1998) Action of smooth stamps on an elastic halfspace. *International Applied Mechanics*. 34 (2), 26-31. EID: 2-s2.0-27644584483

Nikolaev A.G. (1994) Circular stamp on a transversely isotropic half space with a spheroidal cavity with the presence of adhesion. *International Applied Mechanics*. 30 (8), 48-53. <https://doi.org/10.1007/BF00847232>

Nikolayev A.G., Protsenko V.S. (1990) First and second fundamental axisymmetric problems of elasticity theory for doubly-connected domains bounded by the surfaces of a sphere and a spheroid. *Journal of Applied Mathematics and Mechanics*. 54 (1), 51-59. [https://doi.org/10.1016/0021-8928\(90\)90087-Q](https://doi.org/10.1016/0021-8928(90)90087-Q)

Books, Chapters in Collective Monographs:

Nikolaev O. G. (2021) *Functional analysis: textbook*. Kharkiv: National Aerospace University "Kharkiv Aviation Institute". 216 p.

Nikolaev O. G. (2020) *Differential equations: textbook*. In 2 books. Book 2. Kharkiv: National Aerospace University "Kharkiv Aviation Institute". 304 p.

Nikolaev O. G. (2019) *Differential equations: textbook*. In 2 books. Book 1. Kharkiv: National Aerospace University "Kharkiv Aviation Institute". 232 p.

Nikolaev O.G. (2017) *Algebra and Geometry: Textbook*. National Aerospace University "Kharkiv Aviation Institute". 368 p.

Nikolaev A.G., Tanchik E.A. (2014) *Elastic mechanics of multicomponent bodies*. Monograph. Kharkiv: National Aerospace University "Kharkiv Aviation Institute". 272 p.

Nikolaev A.G., Protsenko V.S. (2011) *Generalized Fourier method in spatial problems of the theory of elasticity*. Monograph. Kharkiv: National Aerospace University "Kharkiv Aviation Institute". 344 p.

Links to Citation Database Profiles:

text

ADDITIONAL INFORMATION:

Language Proficiency:

text

IT Skills:

Programming in Fortran and in the Wolfram «Mathematica package», MS Office, Zoom, Google Meet

Social and Community Activities:

Member of the editorial board of the scientific journal "Radioelectronic and Computer Systems"