Curriculum vitae

PERSONAL INFORMATION

First Name, Surname Oleg Olikh
Date of Birth 1974-06-05
Citizenship Ukraine

E-mail olegolikh@knu.ua Mobile Telephone +380673169020 Scopus ID 6506623724

EDUCATION

1996-2000 Post-graduate course at the general physics department in Taras

Shevchenko National University of Kyiv

1991-1996 Physics faculty of Taras Shevchenko University of Kyiv, master in

solid state physics (diploma ЛТ BE №001760, 28.06.1996)

ACADEMIC DEGREE, ACADEMIC RANK

2022 Academic rank of professor at the general physics department

Doctor of Science Degree (Dr. Hab., Physics and Mathematics), solid-

state physics specialty, thesis «Acoustically and radiation induced phenomena in surface barrier silicon and gallium arsenide structures»

Academic rank of associate professor at the general physics department

2001 Ph.D. Degree (Physics and Mathematics), solid-state physics specialty,

thesis «Investigation of acousto-photo-electric interaction in GaAs and

Si semiconductor structures»

WORK EXPERIENCE

2021 - Present Professor at the general physics department,

Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

2002 - 2021 Associate professor at the general physics department,

Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

1998-2002 Assistant at the general physics department

Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

AWARDS AND HONORS

I. Puluj Prize of the National Academy of Sciences of Ukraine for the

implementation of controlled acoustic field influence on processes of defect

reordering in semiconductors and surface barrier structures

GRANTS AND PROJECTS

1997-2000 researcher in project of Ministry of Education and Science of Ukraine "Study

of physical properties of emission phenomena in heterogeneous materials"

(No 97017)

2001-2005 researcher in project of Ministry of Education and Science of Ukraine

«Theoretical and experimental study of physical properties of heterogeneous systems based on materials of acousto-optoelectronics and microelectronics»

(No 01БΦ051–09)

2006-2010 researcher in project of Ministry of Education and Science of Ukraine

«Experimental and theoretical study of the structure and physical properties of low-dimensional systems based on semiconductor structures, various

modifications of carbon, and composites» (No 0106U006390)

2006-2008 researcher in project of Science & Technology Center in Ukraine "Research

and development of methods for opto-acoustic monitoring of materials"

(№3555)

2011-2015

researcher in project of Ministry of Education and Science of Ukraine «Fundamental research in the field of condensed matter and elementary particles, astronomy, and materials science for the creation of the foundations of advanced technologies» (No 0111U004954)

2016-2018

researcher in project of Ministry of Education and Science of Ukraine «Formation and physical properties of nanoscale composite materials and functional surface layers based on carbon, semiconductor, and dielectric components» (No 0116U004781)

2019-2021

researcher in project of Ministry of Education and Science of Ukraine «Development of physical principles for the functionalization of nanostructured materials based on carbon, semiconductor heterostructures, and porous silicon» (No 0119U100303)

2020-2021

leader of the project of National Research Foundation of Ukraine «Development of physical base of both acoustically controlled modification and machine learning-oriented characterization for silicon solar cells» (No 2020.02/0036)

2022-...

researcher in project of Ministry of Education and Science of Ukraine «Physico-chemical properties of nanostructured carbon-containing and semiconductor thin-film structures for the needs of renewable-hydrogen energy» (No 0122U001953)

LANGUAGES

Ukrainian - C2, English – B2.

SCIENTIFIC ACTIVITY

Number of Scientific Papers 89

Main Stream of Research

Field of knowledge "Nature Sciences"

- the ultrasound effect on materials;
- defect engineering in semiconductor structures;
- using of ultrasound methods to determine the semiconductor structure parameters;

acousto-stimulated dynamic phenomena in semiconductor barrier structures

(2021-2022)

- Papers in Q1 and Q2 Journals 1. Olikh O., Lytvyn P. «Defect engineering using microwave processing in SiC and GaAs», Semiconductor Science and Technology, 2022. vol.37. 075006. is.7. https://doi.org/10.1088/1361-6641/ac6f17
 - 2. Olikh O., Kostylyov V., Vlasiuk V., Korkishko R., Chupryna R. «Intensification of iron-boron complex association in silicon solar cells under acoustic wave action», Journal of Materials Science: Materials in Electronics, 2022, vol.33, is.13, P. 13133-13142, https://doi.org/10.1007/s10854-022-08252-3
 - 3. Olikh O., Lozitsky O., Zavhorodnii O. «Estimation for iron contamination in Si solar cell by ideality factor: Deep neural network approach», Progress in Photovoltaics: Research and p. 648-660: Applications, vol.30, 2022. is.6. https://doi.org/10.1002/pip.3539
 - 4. Olikh O., Kostylyov V., Vlasiuk V., Korkishko R., Olikh Ya., Chupryna R. «Features of FeB pair light-induced dissociation and repair in silicon n+-p-p+ structures under ultrasound loading», Journal of Applied Physics, 2021, vol.130, is.23, 235703; https://doi.org/10.1063/5.0073135