## Curriculum vitae

## PERSONAL INFORMATION

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

olegolikg@knu.ua E-mail Mobile Telephone +380673169020

**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

Doctor of Science Degree (Dr. Hab., Physics and Mathematics), solid 2018

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

2004 Academic rank of associate professor at the general physics department

2001 PhD 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)

Associate professor at the general physics department, 2002 - 2021

Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

Assistant at the general physics department 1998-2002

Taras Shevchenko National University of Kyiv, Kyiv (Ukraine)

AWARDS AND HONORS

2021 I. Pului Prize of the National Academy of Sciences of Ukraine

LANGUAGES Ukrainian - C2, Russian - C2, English - B2.

SCIENTIFIC ACTIVITY

Number of Scientific Papers 85

Main Stream of Research Field of knowledge "Nature Sciences"

- the ultrasound effect on materials;

- using of ultrasound methods to determine the semiconductor structure

parameters;

acousto-stimulated dynamic phenomena in semiconductor barrier

structures

(2013-2022)

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. is.7. 075006, 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 Applications, 2022, vol.30, is.6, p. 648-660; 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
- 5. Olikh Ya. M., Tymochko M. D., <u>Olikh O.Ya.</u> «Mechanisms of two-stage conductivity relaxation in CdTe:Cl with ultrasound», Journal of Electronic Materials, 2020, vol.49, is.8, P. 4524-4530; https://doi.org/10.1007/s11664-020-08179-7
- 6. Gorb A.M., Korotchenkov O.A., <u>Olikh O.Ya.</u>, Podolian A.O., Chupryna R.G. «Influence of γ-irradiation and ultrasound treatment on current mechanism in Au-SiO<sub>2</sub>-Si structure», Solid State Electronics, 2020, vol.165, 107712; https://doi.org/10.1016/j.sse.2019.107712
- 7. Olikh O.Ya. «Relationship between the ideality factor and the iron concentration in silicon solar cells», Superlattices and Microstructures, 2019, vol.136, 106309; https://doi.org/10.1016/j.spmi.2019.106309
- 8. Olikh Ya. M., Tymochko M. D., <u>Olikh O.Ya.</u>, Shenderovsky V. A. «Clusters of point defects near dislocations as a tool to control CdZnTe electrical parameters by ultrasound», Journal of Electronic Materials, 2018, vol.47, is.8, P. 4370-4378; https://doi.org/10.1007/s11664-018-6332-4
- 9. <u>Olikh O.Ya.</u> «Acoustically driven degradation in single crystalline silicon solar cell», Superlattices and Microstructures, 2018, vol.117, p. 173-188; https://doi.org/10.1016/j.spmi.2018.03.027
- 10. Olikh O.Ya., Gorb A.M., Chupryna R.G., Pristay-Fenenkov O.V. «Acousto-defect interaction in irradiated and non-irradiated silicon n<sup>+</sup>–p structures», Journal of Applied Physics, 2018, vol.123, is.16, 161573; https://doi.org/10.1063/1.5001123
- 11. Olikh O.Ya., Voytenko K.V. «On the mechanism of ultrasonic loading effect in silicon-based Schottky diodes», Ultrasonics, 2016, vol.66, p. 1-3; https://doi.org/10.1016/j.ultras.2015.12.001
- 12. <u>Olikh O.Ya.</u> «Review and test of methods for determination of the Schottky diode parameters», Journal of Applied Physics, 2015, vol.118, is.2, 024502; https://doi.org/10.1063/1.4926420
- 13. Olikh O.Ya., Voytenko K.V., Burbelo R.M. «Ultrasound influence on I–V–T characteristics of silicon Schottky barrier structure», Journal of Applied Physics, 2015, vol.117, is.4, 044505; https://doi.org/10.1063/1.4906844
- 14. Olikh O.Ya. «Reversible influence of ultrasound on *γ*-irradiated Mo/*n*-Si Schottky barrier structure», Ultrasonics, 2015, vol.56, p. 545-550; https://doi.org/10.1016/j.ultras.2014.10.008
- 15. <u>Olikh O.Ya.</u> «Non-<u>Monotonic</u> γ-Ray Influence on Mo/n-Si Schottky Barrier Structure Properties», IEEE Transactions on Nuclear Science, 2013, vol.60, is.1, part 2, p.394-401; https://doi.org/10.1109/TNS.2012.2234137