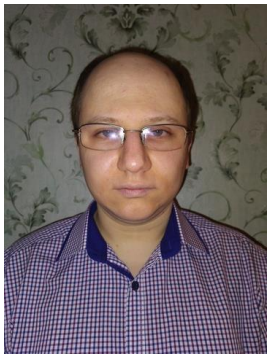
CURRICULUM VITAE



Hermash Kostiantyn

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Junior Researcher, Department of the Theory of Condensed State of Matter,
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Education (degrees, dates, universities)

2012 – Bachelor of Applied Physics	V. N. Karazin Kharkiv National University, Ukraine (Faculty of Physics and Technology), Ukraine
2014 – Master of Applied Physics	V. N. Karazin Kharkiv National University, Ukraine (Faculty of Physics and Technology), Ukraine
2019 – Ph.D (Candidate of physical and mathematical sciences)	Institute for Single Crystals of NAS of Ukraine (Specialty: 01.04.02 – Theoretical Physics), Kharkiv, Ukraine

Career/Employment (*employers, positions and dates)*

2014	Engineer of the 1st category	Institute for Single Crystals of NAS of Ukraine, Kharkiv, Ukraine
2014–2017	PhD Student	Institute for Single Crystals of NAS of Ukraine, Kharkiv, Ukraine
2017–2020	Acting Junior Researcher	Institute for Single Crystals of NAS of Ukraine, Kharkiv, Ukraine
2020–present	Junior Researcher	Institute for Single Crystals of NAS of Ukraine, Kharkiv, Ukraine

Main field of activity and current research interest

Graphene, electron-hole pairing, counterflow superconductivity, double layer graphene systems, topological insulators, surface plasmons, non-linear electromagnetic properties, collective modes.

Scholarships, grants

1. Scholarship of the National Academy of Sciences of Ukraine for young scientists (2018–2020);
2. Co-performer of the project "Plasmons in optically nonlinear graphene nanostructures with strong electronic correlations" of the State Fund for Fundamental Research No. Ф76 / 33683 (2017–2018).

Publications

5 articles; Scopus *h*-index: **2**;
https://scholar.google.com/citations?user=qDFyg2EAAAAJ&hl=uk;
https://www.scopus.com/authid/detail.uri?authorId=55639483900;
https://www.mendeley.com/authors/55639483900;
https://orcid.org/0000-0003-3996-6606.

Selected recent publications:

1. Germash K. V., Fil D. V. Electron-hole pairing in topological insulator heterostructures in the quantum Hall state. *Phys. Rev. B.* 2013. Vol. 87, Iss. 11. P. 115313(1–8). DOI: https://doi.org/10.1103/PhysRevB.87.115313 .

2. Germash K. V., Fil D. V. Diamagnetism and suppression of screening as hallmarks of electron-hole pairing in a double layer graphene system. *Phys. Rev. B.* 2015. Vol. 91, Iss. 11. P. 115442(1–10). DOI: https://doi.org/10.1103/PhysRevB.91.115442 .

3. Germash K. V., Fil D. V. Electromagnetic properties of a double-layer graphene system with electron-hole pairing. *Phys. Rev. B.* 2016. Vol. 93, Iss. 20. P. 205436(1–12). DOI: https://doi.org/10.1103/PhysRevB.93.205436 .

4. Germash K. V., Fil D. V. Strong enhancement of third-harmonic generation in a double layer graphene system caused by electron-hole pairing. *EPL.* 2017. Vol. 118, No. 6. P. 67008(1–7). DOI: https://doi.org/10.1209/0295-5075/118/67008 .

5. Germash K. V., Fil D. V. Anderson–Bogoliubov and Carlson–Goldman modes in counterflow superconductors: case study of a double monolayer graphene. *Phys. Rev. B.* 2019. Vol. 99, Iss. 12. P. 125412(1–12). DOI: https://doi.org/10.1103/PhysRevB.99.125412 .