

**Ведущая организация:**

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**Список работ по теме диссертации:**

- 1) Kirill A.Bokai, Viktor O.Shevlev, Dmitry Marchenko, Anna A.Makarova, Vladimir Yu.Mikhailovskii, Alexei A.Zakharov, Oleg Yu.Vilkov, Maxim Krivenkov, Denis V.Vyalikh, Dmitry Yu.Usachov. Visualization of graphene grain boundaries through oxygen intercalation.  
Applied Surface Science, 2021, 565, 150476  
doi:10.1016/j.apsusc.2021.150476
- 2) Boris V. Senkovskiy, Alexey V. Nenashev, Seyed K. Alavi et al. Tunneling current modulation in atomically precise graphene nanoribbon heterojunctions. Nature Communications, 2021, 12, 2542.  
doi:10.1038/s41467-021-22774-0
- 3) Alina I. Inozemtseva, Victor A. Vizgalov, Olesya O. Kapitanova, Gennady Panin, Juan J. Velasco Vélez, Daniil M. Itkis, Dmitry Yu. Usachov, Lada V. Yashina. In Situ XPS Studies of Solid Electrolyte Electroreduction Through Graphene Electrode. J. Electrochem. Soc., 2020, 167, 11053.  
doi:10.1149/1945-7111/aba370
- 4) Oleg Yu. Vilkov, Eugene E. Krasovskii, Alexander V. Fedorov, Artem G. Rybkin, Alexander M. Shikin, Clemens Laubschat, Jorge Budagosky, Denis V. Vyalikh, Dmitry Yu. Usachov. Angle-resolved secondary photoelectron emission from graphene interfaces Phys. Rev. B, 2019, 99, 195421.  
doi:10.1103/PhysRevB.99.195421
- 5) Dmitry Yu. Usachov, Alexander V. Fedorov, Anatoly E. Petukhov, Oleg Yu. Vilkov, Artem G. Rybkin, Mikhail M. Otrokov, Andres Arnau, Evgeni V. Chulkov, Lada V. Yashina, Mani Farjam, Vera K. Adamchuk, Boris V. Senkovskiy, Clemens Laubschat, Denis V. Vyalikh. Epitaxial B-Graphene: Large-Scale Growth and Atomic Structure // ACS Nano. — 2015. — Vol. 9. — Pp. 7314–7322.
- 6) Dmitry Usachov, Alexander Fedorov, Mikhail M. Otrokov, Alla Chikina, Oleg Vilkov, Anatoly Petukhov, Artem G. Rybkin, Yury M. Koroteev, Evgeni V. Chulkov, Vera K. Adamchuk, Alexander Gruneis, Clemens Laubschat, Denis V. Vyalikh. Observation of Single-Spin Dirac Fermions at the Graphene/Ferromagnet Interface // Nano Lett. — 2015. — Vol. 15. — Pp. 2396–2401.
- 7) Д. Ю. Усачёв, А. В. Фёдоров, О. Ю. Вилков, А. В. Ерофеевская, А. С. Вопилов, В. К. Адамчук, Д. В. Вяльых. Формирование и легирование литием графена на поверхности силицида кобальта // ФТТ. — 2015. — Т. 57. — С. 1024–1030.

- 8) Elmar Yu. Kataev, Daniil M. Itkis, Alexander V. Fedorov, Boris V. Senkovskiy, Dmitry Yu. Usachov, Nikolay I. Verbitskiy, Alexander Grueneis, Alxei Barinov, Daria Yu. Tsukanova, Andrey A. Volykhov, Kirill V Mironovich, Victor A. Krivchenko, Maksim G. Rybin, Elena D. Obraztsova, Clemens Laubschat, Denis V. Vyalykh, Lada V. Yashina. Oxygen Reduction by Lithiated Graphene and Graphene-Based Materials // ACS Nano. — 2015. — Vol. 9. — Pp. 320–326.
- 9) A. Fedorov, C. S. Praveen, N. I. Verbitskiy, D. Haberer, D. Usachov, D. V. Vyalykh, A. Nefedov, C. Woll, L. Petaccia, S. Piccinin, H. Sachdev, M. Knupfer, B. Buchner, S. Fabris, A. Gruneis. Efficient gating of epitaxial boron nitride monolayers by substrate functionalization // Phys. Rev. B. — 2015. — Vol. 92. — P. 125440.
- 10) I. I. Klimovskikh, O. Vilkov, D. Yu. Usachov, A. G. Rybkin, S. S. Tsirkin, M. V. Filianina, K. Bokai, E. V. Chulkov, A. M. Shikin. Variation of the character of spin-orbit interaction by Pt intercalation underneath graphene on Ir(111) // Phys. Rev. B. — 2015. — Vol. 92. — P. 165402.