

## Ֆիզիկայի գիտահետազոտական ինստիտուտ

Առաջադեմ ֆունկցիոնալ մատերիալների լաբորատորիա  
Լաբորատորիայի վարիչ

## Լեզուների իմացություն

English Русский

## Հրատարակումներ

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### **Topographically-guided van der Waals epitaxy: Selective growth of AlN nanowalls on h-BN step edges**

Albert M. Dautov, Vladimir G. Dubrovskii, Talgat Shugabaev, Vera V. Lendyashova, Konstantin P. Kotlyar, Alexey Kuznetsov, Prokhor A. Alekseev, Mikhail E. Popov, Igor V. Shtrom, Adilet Toksumakov, Davit Ghazaryan, Alesya V. Parfeneva, Aleksey V. Arsenin, Alexey D. Bolshakov, George E. Cirilin, Vladislav O. Gridchin  
Materials Science in Semiconductor Processing 2026 110293

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### **Inelastic resonant tunnelling through adjacent localised electronic states in van der Waals heterostructures**

E. E. Vdovin, K. Kapralov, Yu. N. Khanin, A. Margaryan, K. Watanabe, T. Taniguchi, C. Yang, S. V. Morozov, D. A. Svintsov, K. S. Novoselov, D. A. Ghazaryan  
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Liudmila A. Bereznikova, Ivan A. Kruglov, Georgy A. Ermolaev, Ivan Trofimov, Congwei Xie, Arslan Mazitov, Gleb Tselikov, Anton Minnekhanov, Alexey P. Tsapenko, Maxim Povolotsky, Davit A. Ghazaryan, Aleksey V. Arsenin, Valentyn S. Volkov, Kostya S. Novoselov  
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A. Slavich, G. Ermolaev, I. Zavidovskiy, D. Grudinin, M. Tatmyshevskiy, A. Toksumakov, A. Syuy, A. Vyshnevyy, D. Yakubovsky, S. Novikov, D. Ghazaryan, A. Arsenin, V. Volkov  
Bulletin of the Russian Academy of Sciences: Physics 2025 S433 - S438

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### **In-Plane Directional MoS2 Emitter Employing Dielectric Nanowire Cavity**

Alexey Kuznetsov, Maria Aleksandrovna Anikina, Adilet Nurlanbekovich Toksumakov, Artem Nikolaevich Abramov, Vyacheslav Vsevolodovich Dremov, Eseniya Zavyalova, Valeriy Mikhailovich Kondratev, Vladimir Victorovich Federov, Ivan Sergeevich Mukhin, Vasily Kravtsov,

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Saroj Poudyal, Prahalad Kanti Barman, Rabindra Biswas, Konstantin Kravtsov, Bubunu Biswal,  
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Advanced Optical Materials 2025 2403265

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**Germanium disulfide as an alternative high refractive index and transparent material for UV-visible nanophotonics**

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Gleb I. Tselikov, Ilia M. Fradkin, Kirill V. Voronin, Maksim R. Povolotskiy, Olga G. Matveeva,  
Alexander V. Syuy, Dmitry I. Yakubovsky, Dmitry M. Tsybarenko, Ivan Kruglov, Davit A. Ghazaryan,  
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M. Zhezhu, A. Vasil'ev, H. Parsamyan, T. Abrahamyan, G. Baghdasaryan, S. Gyozyalyan, D. Ghazaryan,  
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Results in Physics 2025 108351

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Optics and Laser Technology 2025 113628

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Albert Dautov, Talgat Shugabaev, Alexey Kuznetsov, Konstantin Kotlyar, Davit Ghazaryan,  
Adilet Toksumakov, Alexey Bolshakov, Alesya Parfeneva, George Cirlin, Vladislav Gridchin  
International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices, EDM  
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Y. Melikyan, H. Gharagulyan, A. Vasil'ev, V. Hayrapetyan, M. Zhezhu, A. Simonyan, D.A. Ghazaryan, M.S. Torosyan, A. kharatyan, J. Michalicka, M. Yerosyan  
Colloids and Interface Science Communications 2024 100766-7

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Aleksandr S Slavich, Georgy A Ermolaev, Mikhail K Tatmyshevskiy, Adilet N Toksumakov, Olga G Matveeva, Dmitriy V Grudin, Kirill V Voronin, Arslan Mazitov, Konstantin V Kravtsov, Alexander V Syuy, Dmitry M Tsymbarenko, Mikhail S Mironov, Sergey M Novikov, Ivan Kruglov, Davit A Ghazaryan, Andrey A Vyshnevyy, Aleksey V Arsenin, Valentyn S Volkov, Kostya S Novoselov  
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Laser and Photonics Reviews 2024 2301113

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Applied Physics Letters 2024 041702

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A. Vasil'ev, Y. Melikyan, M. Zhezhu, V. Hayrapetyan, M.S. Torosyan, D.A. Ghazaryan, M. Yerosyan, H. Gharagulyan

Materials Research Bulletin 2024 113036

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H. Gharagulyan, Y. Melikyan, V. Hayrapetyan, Kh. Kirakosyan, D.A. Ghazaryan, M. Yerosyan

Materials Science and Engineering: B 2023 116564

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Bulletin of the Russian Academy of Sciences: Physics 2023 S453-S457

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Optica 2023 53-61

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MA Anikina, A Kuznetsov, AN Toksumakov, VV Dremov, DA Ghazaryan, VV Fedorov, AV Arsenin, VS Volkov, AD Bolshakov  
St. Petersburg State Polytechnical University Journal: Physics and Mathematics 2023 3.2

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IEEE Photonics Journal 2022 182243

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Davit A. Ghazaryan, Abhishek Misra, Evgenii E. Vdovin,, Kenji Watanabe, Takashi Taniguchi, Sergei V. Morozov, Artem Mishchenko, Kostya S. Novoselov  
Applied Physics Letters 2021 183106

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M. V. Grigoriev, D. A. Ghazaryan, E. E. Vdovin, Yu. N. Khanin, S. V. Morozov, K. S. Novoselov  
Физика и техника полупроводников (Semiconductors) 2020 291-296

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Davit Ghazaryan, Kostya S. Novoselov, Artem Mishchenko

Applied Physics Letters 2019 123104

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Shailla Afroj, Nazmul Karim, Zihao Wang, Sirui Tan, Pei He, Matthew Holwill, Davit Ghazaryan,

Anura Fernando, Kostya S. Novoselov

ACS Nano 2019 3847-3857

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S. Pezzini, S. Wiedmann, A. Mishchenko, M. Holwill, R. Gorbachev, D. Ghazaryan, K.S. Novoselov,

U. Zeitler

Physical Review B 2019 045440

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L. Avanesyan, A. Vasil'ev, M. Zhezhu, H. Parsamyan, G. Baghdasaryan, M. Sargsyan, D. A. Ghazaryan,

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**Terahertz Response of Liquid Crystalline GO and rGO Thin Films**

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