

Ведущая организация: ФГБУ ВОН «Санкт-Петербургский Национальный Исследовательский Академический Университет имени Ж.И. Алфёрова РАН», г. Санкт-Петербург.  
Почтовый адрес: 194021, Санкт-Петербург, ул. Хлопина, 8  
Телефон: +7 (812) 297-21-45  
Факс: +7 (812) 297-21-45  
E-mail: [office@spbau.ru](mailto:office@spbau.ru)  
Официальный сайт: <https://spbau.ru>

- [1] Gridchin V. O. Electrical properties of InGaN nanostructures with branched morphology synthesized via MBE on p-type Si (111) / V. O. Gridchin, K P Kotlyar, R. R. Reznik, B. R. Borodin, D. A. Kudryashov, P. A. Alekseev, G E Cirlin // J. Phys. Conf. Ser. - 2020. – Vol. 1695. – №. 1. – P. 012030.
- [2] Fominykh N. A. Preparation of Si substrates for monolithic integration of III– V quantum dots by selective MBE growth / N. A. Fominykh, M. S. Sobolev, I. V. Ilkiv, D. V. Mokhov, T. N. Berezovskaya, A. D. Bouravleuv // J. Phys. Conf. Ser. – 2020. – Vol. 1695. – №. 1. – P. 012006.
- [3] Sapunov G. A. Epitaxial synthesis of single-domain gallium phosphide on silicon / G. A. Sapunov, O. Yu. Koval, V. V. Fedorov, A. D. Bolshakov // J. Phys. Conf. Ser. – 2020. – Vol. 1697. – №. 1. – P. 012127.
- [4] Sapunov G. A. Synthesis and Optical Characterization of GaAs Epitaxial Nanoparticles on Silicon / G. A. Sapunov, V. V. Fedorov, O. Yu. Koval, V. A. Sharov, L. N. Dvoretckaia, I. S. Mukhin, A. D. Bolshakov // Cryst. Growth Des. – 2019. – Vol. 20. – №. 1. – P. 300-306.
- [5] Timoshnev S. N. Electronic Structure of SiN Layers on Si (111) and SiC/Si (111) Substrates / S. N. Timoshnev, A. M. Mizerov, M. N. Lapushkin, S. A. Kukushkin. A. D. Bouravleuv // Semiconductors. – 2019. – Vol. 53. – №. 14. – P. 1935-1938.
- [6] Bolshakov A. D. Effective Suppression of Antiphase Domains in GaP (N)/GaP Heterostructures on Si (001) / A. D. Bolshakov, V. V. Fedorov, O. Yu. Koval, G. A. Sapunov, M. S. Sobolev, E. V. Pirogov, D. A. Kirilenko, A. M. Mozharov, I. S. Mukhin // Cryst. Growth Des. – 2019. – Vol. 19. – №. 8. – P. 4510-4520.
- [7] Bolshakov A. D. Growth and characterization of GaP/GaPAs nanowire heterostructures with controllable composition / A. D. Bolshakov, V. V. Fedorov, N. V. Sibirev, M. V. Fetisova, E. I. Moiseev, N. V. Kryzhanovskaya, O. Yu. Koval, E. V. Ubyivovk, A. M. Mozharov, G. E. Cirlin, I. S. Mukhin // phys. status solidi – R. – 2019. – Vol. 13. – №. 11. – P. 1900350.
- [8] Bolshakov A. D. Effects of the surface preparation and buffer layer on the morphology, electronic and optical properties of the GaN nanowires on Si / A. D. Bolshakov, V. V. Fedorov, K. Yu. Shugurov, A. M. Mozharov, G. A. Sapunov, I. V. Shtrom, M. S. Mukhin, A. V. Uvarov, G. E. Cirlin, I. S. Mukhin // Nanotechnology. – 2019. – Vol. 30. – №. 39. – P. 395602.
- [9] Alekseev P. A. Electrical properties of GaAs nanowires grown on Graphene/SiC hybrid substrates / P. A. Alekseev, M. S. Dunaevskiy, A. O. Mikhailov, S. P. Lebedev, A. A. Lebedev, I. V. Ilkiv, A. I. Khrebtov, A. D. Bouravleuv, G. E. Cirlin // Semiconductors. – 2018. – Vol. 52. – №. 12. – P. 1611-1615.
- [10] Fedorov V. V. Self-Catalyzed MBE-Grown GaP Nanowires on Si (111): V/III Ratio Effects on the Morphology and Crystal Phase Switching / V. V. Fedorov, A. D. Bolshakov, L. N. Dvoretckaia, G. A. Sapunov, D. A. Kirilenko, A. M. Mozharov, K. Yu. Shugurov, V. A. Shkoldin, G. E. Cirlin, I. S. Mukhin // Semiconductors. – 2018. – Vol. 52. – №. 16. – P. 2092-2095.
- [11] Reznik R. R. Coherent Growth of InP/InAsP/InP Nanowires on a Si (111) Surface by Molecular-Beam Epitaxy / R. R. Reznik, G. E. Cirlin, I. V. Shtrom, A. I. Khrebtov, I. P. Soshnikov, N. V. Kryzhanovskaya, E. I. Moiseev, A. E. Zhukov // Tech. Phys. Lett. – 2018. – Vol. 44. – №. 2. – P. 112-114.
- [12] Reznik R. R. MBE growth of ultrathin III–V nanowires on a highly mismatched SiC/Si (111) substrate / R. R. Reznik, K. P. Kotlyar, I. V. Shtrom, I. P. Soshnikov, S. A. Kukushkin, A. V. Osipov, G. E. Cirlin // Semiconductors. – 2017. – Vol. 51. – №. 11. – P. 1472-1476.