

Список публикаций ведущей организации – СПбАУ РАН им. Ж.И. Алфёрова

1. Khrebtov A. I. et al. Light quenching of photoluminescence in hybrid films of InP/InAsP/InP nanowires and CdSe/ZnS colloidal quantum dots //Optical Materials. – 2022. – Т. 127. – С. 112277.
2. Zhukov A. E. et al. Increase in the Efficiency of a Tandem Semiconductor Laser–Optical Amplifier Based on Self-Organizing Quantum Dots //Semiconductors. – 2022. – С. 1-6.
3. Zhukov A. E. et al. Saturation Power of a Semiconductor Optical Amplifier Based on Self-Organized Quantum Dots //Semiconductors. – 2021. – Т. 55. – №. 1. – С. S67-S71.
4. Kulagina A. S., Danilov V. V., Shilov V. B. Water-Soluble InP/ZnS QDs as Dibutyl Phthalate Markers. The Influence of Alcohol on the Solubility of Phthalates //Optics and Spectroscopy. – 2021. – Т. 129. – №. 12. – С. 1341-1345.
5. Sali R. A. et al. Comparative Analysis of the Optical and Physical Properties of InAs and In_{0.8}Ga_{0.2}As Quantum Dots and Solar Cells Based on them //Semiconductors. – 2020. – Т. 54. – №. 10. – С. 1267-1275.
6. Vlasov A. S. et al. Selective epitaxy of InP/GaInP quantum dots using SiO₂ mask //AIP Conference Proceedings. – AIP Publishing LLC, 2020. – Т. 2300. – №. 1. – С. 020130.
7. Leandro L. et al. Resonant excitation of nanowire quantum dots //npj Quantum Information. – 2020. – Т. 6. – №. 1. – С. 1-5.
8. Sali R. A. et al. Comparative Analysis of the Optical and Physical Properties of InAs and In_{0.8}Ga_{0.2}As Quantum Dots and Solar Cells Based on them //Semiconductors. – 2020. – Т. 54. – №. 10. – С. 1267-1275.
9. Zhukov A. E. et al. Lasing of injection microdisks with InAs/InGaAs/GaAs quantum dots transferred to silicon //Technical Physics Letters. – 2020. – Т. 46. – №. 8. – С. 783-786.
10. Moiseev E. I. et al. Comparative analysis of injection microdisk lasers based on InGaAsN quantum wells and InAs/InGaAs quantum dots //Semiconductors. – 2020. – Т. 54. – №. 2. – С. 263-267.
11. Dragunova A. S. et al. Investigation of optical properties of In (Ga) As/GaAs mesa structures with active region based on quantum wells, quantum dots, and quantum well-dots //Journal of Physics: Conference Series. – IOP Publishing, 2019. – Т. 1410. – №. 1. – С. 012157.
12. Fetisova M. V. et al. The Use of Microdisk Lasers Based on InAs/InGaAs Quantum Dots in Biodetection //Technical Physics Letters. – 2019. – Т. 45. – №. 12. – С. 1178-1181.
13. Rautert J. et al. Anisotropic exchange splitting of excitons affected by Γ X mixing in (In, Al) As/AlAs quantum dots: Microphotoluminescence and macrophotoluminescence measurements //Physical Review B. – 2019. – Т. 100. – №. 20. – С. 205303.
14. Leandro L. et al. Nanowire quantum dots tuned to atomic resonances //Nano letters. – 2018. – Т. 18. – №. 11. – С. 7217-7221.
15. Bairamov B. H. et al. Coherent Electron Transport in Metamaterials of Integrated Semiconductor Quantum Dots and Biomolecules for Medical Imaging Applications //2018 12th International Congress on Artificial Materials for Novel Wave Phenomena (Metamaterials). – IEEE, 2018. – С. 040-042.
16. Maximov M. V. et al. Effect of Epitaxial-Structure Design and Growth Parameters on the Characteristics of Metamorphic Lasers of the 1.46- μ m Optical Range Based on Quantum Dots Grown on GaAs Substrates //Semiconductors. – 2018. – Т. 52. – №. 10. – С. 1311-1316.
17. Kryzhanovskaya N. V. et al. Lasing in compact injection microdisks with InAs/InGaAs quantum dots //2018 International Conference Laser Optics (ICLO). – IEEE, 2018. – С. 129-129.
18. Sali R. A. et al. In_{0.8}Ga_{0.2}As Quantum Dots for GaAs Solar Cells: Metal-Organic Vapor-Phase Epitaxy Growth Peculiarities and Properties //Semiconductors. – 2018. – Т. 52. – №. 7. – С. 870-876.
19. Sali R. A. et al. The investigation of InGaAs quantum dot growth peculiarities for GaAs intermediate band solar cells //Journal of Physics: Conference Series. – IOP Publishing, 2018. – Т. 1038. – №. 1. – С. 012110.
20. Kosarev I. S. et al. Investigation of multimodality effect in quantum dots InGaAs/GaAs grown by MOVPE //Journal of Physics: Conference Series. – IOP Publishing, 2018. – Т. 1038. – №. 1. – С. 012082.
21. Mao G. et al. Room temperature observation of optical modes in transferred rolled-up InGaAs/GaAs quantum dot microtube with AlGaAs confining layers //Materials Science in Semiconductor Processing. – 2018. – Т. 79. – С. 20-23.