

Список публикаций ведущей организации:

1. All-epitaxial Al/AlGaIn/GaN low-barrier Schottky diodes / Vostokov N.V., Drozdov M.N., Kraev S.A., Lobanov D.N., Novikov A.V., Yunin P.A. *Applied Physics Letters*, **121**, 23, 233507 (2022).  
doi: 10.1063/5.0131031
2. Plasma-assisted molecular beam epitaxy of In-rich InGaIn: Growth optimization for near-IR lasing / Kudryavtsev K.E., Lobanov D.N., Krasilnikova L.V., Yablonskiy A.N., Yunin P.A., Skorokhodov E.V., Kalinnikov M.A., Novikov A.V., Andreev B.A., Krasilnik Z.F. *ECS Journal of Solid State Science and Technology*, **11**, 1, 014003 (2022).  
doi: 10.1149/2162-8777/ac4d80
3. Near-infrared stimulated emission from indium-rich InGaIn layers grown by plasma-assisted MBE / Lobanov D.N., Kudryavtsev K.E., Kalinnikov M.I., Krasilnikova L.V., Yunin P.A., Skorokhodov E.V., Shaleev M.V., Novikov A.V., Andreev B.A., Krasilnik Z.F. *Applied Physics Letters*, **118**, 151902 (2021). doi: 10.1063/5.0047674.
4. Kinetics of the luminescence response of self-assembled Ge(Si) nanoislands embedded in two-dimensional photonic crystals / Yablonskiy A.N., Novikov A.V., Stepikhova M.V., Sergeev S.M., Baidakova N.A., Shaleev M.V., Krasilnik Z.F. *Semiconductors*, **54**, 1352–1359 (2020).  
doi: 10.1134/s1063782620100334.
5. Emission properties of heavily doped epitaxial indium-nitride layers / Andreev B.A., Lobanov D.N., Krasil'nikova L.V., Bushuykin P.A., Yablonskiy A.N., Novikov A.V., Davydov V.Yu., Yunin P.A., Kalinnikov M.I., Skorokhodov E.V., Krasil'nik Z.F. *Semiconductors*, **53**, 1357–1362 (2019). doi: 10.1134/s1063782619100038.
6. Towards the indium nitride laser: obtaining infrared stimulated emission from planar monocrystalline InN structures / Andreev B.A., Kudryavtsev K.E., Yablonskiy A.N., Lobanov D.N., Bushuykin P.A., Krasilnikova L.V., Skorokhodov E.V., Yunin P.A., Novikov A.V., Davydov V.Yu., Krasilnik Z.F. *Scientific Reports*, **8**, 9454 (2018)  
doi: 10.1038/s41598-018-27911-2
7. Visible emission from a dense biexciton gas in SiGe/Si quantum wells under external anisotropic strain / Nikolaev S.N., Krivobok V.S., Bagaev V.S.,

- Onishchenko E.E., Novikov A.V., Shaleev M.V. *JETP Letters*, **107**, 6, 358–363 (2018). doi: 10.1134/s0021364018060097
8. Specific features of the photoexcitation spectra of epitaxial InN layers grown by molecular-beam epitaxy with the plasma activation of nitrogen / Bushuykin P.A., Novikov A.V., Andreev B.A., Lobanov D.N., Yunin P.A., Skorokhodov E.V., Krasil'nikova L.V., Demidov E.V., Savchenko G.M., Davydov V.Yu. *Semiconductors*, **51**, 1537–1541 (2017) doi: 10.1134/S1063782617120041
  9. Monolithically integrated InGaAs/GaAs/AlGaAs quantum well laser grown by MOCVD on exact Ge/Si(001) substrate / Aleshkin V.Ya., Baidus N.V., Dubinov A.A., Fefelov A.G., Krasilnik Z.F., Kudryavtsev K.E., Nekorkin S.M., Novikov A.V., Pavlov D.A., Samartsev I.V., Skorokhodov E.V., Shaleev M.V., Sushkov A.A., Yablonskiy A.N., Yunin P.A., Yurasov D.V. *Applied Physics Letters*, **109**, 6, 061111 (2016) doi: 10.1063/1.4961059
  10. The exciton excitations and relaxation processes in low-dimensional semiconductor heterostructures with quantum wells / Aleshkin V.Ya., Gavrilenko L.V., Gaponova D.M., Krasil'nik Z.F., Kryzhkov D.I. *Semiconductors*, **50**, 12, 1691–1695 (2016) doi:10.1134/s1063782616120034
  11. Excitation spectra of photoluminescence and its kinetics in structures with self-assembled Ge:Si nanoislands / Yablonskiy A.N., Baidakova N.A., Novikov A.V., Lobanov D.N., Shaleev M.V. *Semiconductors*, **49**, 1410–1414 (2015) doi: 10.1134/s106378261511024x
  12. Excitonic luminescence of SiGe/Si quantum wells  $\delta$ -doped with boron / Bagaev V.S., Krivobok V.S., Nikolaev S.N., Novikov A.V., Onishchenko E.E., Pruchkina A.A. *Journal of Applied Physics*, **117**, 185705 (2015). doi: 10.1063/1.4921103.