

СПИСОК

**опубликованных научных работ сотрудников ведущей организации
федеральное государственное автономное образовательное учреждение
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1.3.11 – физика полупроводников**

№ п/п	Полное библиографическое наименование публикации
1.	Smirnov A.M., Kremleva A.V., Sharofidinov S.S., Romanov A.E. Misfit stress relaxation in wide bandgap semiconductor heterostructures with trigonal and hexagonal crystal structure//Journal of Applied Physics, 2022, Vol. 131, No. 2, pp. 025301
2.	Zakgeim D., Bauman D.A., Panov D., Spiridonov V., Kremleva A.V., Smirnov A.M., Odnoblyudov M., Romanov A.E., Bougov V.E. Growing of bulk Beta-(Al _x Ga _{1-x}) ₂ O ₃ crystals from the melt by Czochralski method and investigation of their structural and optical properties//Applied Physics Express, 2022, Vol. 15, No. 2, pp. 025501
3.	Semakova A.A., Smirnov A.M., Bazhenov N.L., Mynbaev K.D., Pivovarova A., Chernyaev A.V., Kizhaev S.S., Stoyanov N.D. Spectral and Electrical Properties of LED Heterostructures with InAs-based Active Layer//Semiconductors, 2022, Vol. 55, No. 12, pp. 989-984
4.	Novikov I.I., Nadtochiy A.M., Potapov A.Y., Gladyshev A.G., Kolodeznyi E.S., Rochas S.S., Babichev A.V., Andryushkin V.V., Denisov D.V., Karachinsky L.Y., Egorov A.Y., Bougov V.E. Influence of the doping type on the temperature dependencies of the photoluminescence efficiency of InGaAlAs/InGaAs/InP heterostructures//Journal of Luminescence, 2021, Vol. 239, pp. 118393
5.	Blokhin S., Babichev A., Gladyshev A., Karachinsky L., Novikov I., Blokhin A., Rochas S., Denisov D., Voropaev K., Ionov A., Ledentsov N., Egorov A. Wafer-fused 1300 nm VCSELs with an active region based on superlattice//Electronics Letters, 2021, Vol. 57, No. 18, pp. 697-698
6.	Bauman D.A., Panov D.I., Zakgeim D.A., Spiridonov V.A., Kremleva A.V., Petrenko A.A., Brunkov P.N., Prasolov N.D., Nashchekin A.V., Smirnov A.M., Odnoblyudov M.A., Bougov V.E., Romanov A.E. High-Quality Bulk beta-Ga ₂ O ₃ and beta-(Al _x Ga _{1-x}) ₂ O ₃ Crystals: Growth and Properties//Physica Status Solidi (A) Applications and Materials Science, 2021, Vol. 218, No. 20, pp. 2100335
7.	Bauman D.A., Borodkin A.I., Petrenko A.A., Panov D.I., Kremleva A.V., Spiridonov V.A., Zakgeim D.A., Silnikov M.V., Odnoblyudov M.A., Romanov A.E., Bougov V.E.

	On improving the radiation resistance of gallium oxide for space applications//Acta Astronautica, 2021, Vol. 180, pp. 125-129
8.	Blokhin S.A., Bobrov M.A., Maleev N.A., Donges J., Bremer L., Blokhin A.A., Vasil'Ev A.P., Kuzmenkov A.G., Kolodeznyi E.S., Shchukin V., Ledentsov N.N., Reitzenstein S., Ustinov V.M. Design optimization for bright electrically-driven quantum dot single-photon sources emitting in telecom O-band//Optics express, 2021, Vol. 29, No. 5, pp. 6582-6598
9.	Petrenko A., Rochas S.S., Karachinskii L.Y., Babichev A.V., Novikov I.I., Gladyshev A.G., Kolodeznyi E.S., Kopytov P.E., Bugrov V., Blochin S., Blochin A., Voropaev K.O., Egorov A.Y. Characterization of lasing regimes of 1.3 μ m vertical-cavity surface-emitting lasers based on a short-period InGaAs/InGaAlAs superlattice//Journal of Optical Technology, 2021, Vol. 88, No. 12, pp. 688-691
10.	Kryzhanovskaya N.V., Dragunova A.S., Komarov S., Nadtochiy A.M., Gladyshev A.G., Babichev A.V., Uvarov A.V., Andryushkin V.V., Denisov D.V., Kolodeznyi E.S., Novikov I.I., Karachinsky L.Y., Egorov A.Y. Optical Properties of Three-Dimensional InGaP(As) Islands Formed by Substitution of Fifth-Group Elements//Optics and spectroscopy, 2021, Vol. 129, No. 2, pp. 256-260
11.	Rochas S.S., Novikov I.I., Gladyshev A.G., Kolodeznyi E.S., Babichev A.V., Andryushkin V.V., Nevedomskii V.N., Denisov D.V., Karachinsky L.Y., Egorov A.Y., Bougov V.E. The Influence of the Parameters of a Short-Period InGaAs/InGaAlAs Superlattice on Photoluminescence Efficiency//Technical Physics Letters, 2020, Vol. 46, No. 11, pp. 1128–1131
12.	Gladyshev A.G., Babichev A.V., Andryushkin V.V., Denisov D.V., Nevedomskii V.N., Kolodeznyi E.S., Novikov I.I., Karachinsky L.Y., Egorov A.Y. Studying the Optical and Structural Properties of Three-Dimensional InGaP(As) Islands Formed by Substitution of Elements of the Fifth Group//Technical Physics, 2020, Vol. 65, No. 12, pp. 2047-2050
13.	Zakgeim D.A., Panov D.I., Spiridonov V.A., Kremleva A.V., Smirnov A.M., Bauman D.A., Romanov A.E., Odnoblyudov M.A., Bougov V.E. Volume gallium oxide crystals grown from melt by the Czochralski method in an oxygen-containing atmosphere//Technical Physics Letters, 2020, Vol. 46, No. 11, pp. 1144-1146
14.	Blokhin S.A., Bobrov M.A., Blokhin A.A., Kuzmenkov A.G., Maleev N.A., Ustinov V.M., Kolodeznyi E.S., Rochas S.S., Babichev A.V., Novikov I.I., Gladyshev A.G., Karachinskii L.Y., Denisov D.V., Voropaev K.O., Ionov A.S., Egorov A.Y. Analysis of the Internal Optical Losses of the Vertical-Cavity Surface-Emitting Laser of the Spectral Range of 1.55 μ m Formed by a Plate Sintering Technique//Optics and spectroscopy, 2019, Vol. 127, No. 1, pp. 140-144
15.	Blokhin S.A., Bobrov M.A., Blokhin A.A., Kuz'menkov A.G., Maleev N.A., Ustinov V.M., Kolodeznyi E.S., Rochas S.S., Babichev A.V., Novikov I.I., Gladyshev A.G., Karachinsky L.Y., Denisov D.V., Voropaev K.O., Ionov A.S., Egorov A.Y. Influence of Output Optical Losses on the Dynamic Characteristics of 1.55- μ m Wafer-Fused

Vertical-Cavity Surface-Emitting Lasers//Semiconductors, 2019, Vol. 53, No. 8, pp.
1104-1109

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