

Poster session of young scientists of Ioffe Institute

Tuesday, October 30, 2018, 16:40 – 18:40

P01. Properties of Alfvén waves and ion cyclotron emission in ohmic and NBI plasmas in the TUMAN-3M tokamak

G.I. Abdullina, L.G. Askinazi, I.M. Balachenkov, A.A. Belokurov, M.D. Blekhshtein, V.A. Kornev, S.V. Krikunov, S.V. Lebedev, D.V. Razumenko, A.I. Smirnov, A.S. Tukachinsky, N.A. Zhubr

P02. Experiments with the increased toroidal magnetic field and plasma current in Globus-M

N.N. Bakharev, F.V. Chernyshev, V.K. Gusev, N.A. Khromov, E.O. Kiselev, G.S. Kurskiev, A.D. Melnik, V.B. Minaev, I.V. Miroshnikov, M.I. Patrov, Yu.V. Petrov, N.V. Sakharov, P.B. Shchegolev, A.D. Sladkomedova, V.V. Solokha, A.Yu. Telnova, V.A. Tokarev, S.Yu. Tolstyakov

P03. Thermal energy confinement time scaling with I_p and B_T in Globus-M H-mode

E.O. Kiselev, M.I. Patrov, G.S. Kurskiev, N.N. Bakharev, V.K. Gusev, A.Yu. Telnova, N.A. Khromov, I.V. Miroshnikov, Yu.V. Petrov, N.V. Sakharov, V.B. Minaev, A.D. Sladkomedova, P.B. Shchegolev, V.V. Solokha, V.A. Tokarev, S.Yu. Tolstyakov

P04. New powerful ion source for Globus-M2 spherical tokamak injector

P.B. Shchegolev, A.Yu. Telnova, V.B. Minaev, N.N. Bakharev, V.K. Gusev, E.O. Kiselev, G.S. Kurskiev, A.A. Panasenkov, G.N. Tilinin

P05. The safety factor effect on the transport in the Globus-M spherical tokamak

A.Yu. Telnova, G.S. Kurskiev, N.N. Bakharev, V.K. Gusev, E.O. Kiselev, N.A. Khromov, V.B. Minaev, I.V. Miroshnikov, M.I. Patrov, Yu.V. Petrov, N.V. Sakharov, A.D. Sladkomedova, P.B. Shchegolev, V.V. Solokha, V.A. Tokarev, S.Yu. Tolstyakov

P06. Study of lower hybrid current drive in tokamaks FT-2 and Globus-M2

A.N. Saveliev, E.Z. Gusakov, N.V. Teplova

P07. An analytic description of two components of the donor-acceptor luminescence spectrum

N.A. Bogoslovskiy, P.V. Petrov, Yu.L. Ivanov, K.D. Tsendin, N.S. Averkiev

P08. Different regimes on the topological Hall effect

K.S. Denisov, I.V. Rozhansky, N.S. Averkiev

P09. Numerical study of phenomena related to cavitation in compressible liquid

U. Iben, A.V. Makhnov, N.V. Petrov, A.A. Schmidt

P10. Exciton-plasmon interaction in the system of InAs quantum dots and metal nanoparticles

A.N. Kosarev, A.A. Kondikov, V.V. Chaldyshev, T.A. Vartanyan, N. Toropov, I. Gladskikh, P. Gladskikh, V.N. Nevedomskii, N.A. Bert, I. Akimov, M. Salewski, M. Bayer, V.V. Preobrazhenskiy, M.A. Putyato, B.R. Semyagin

P11. Effects of spatial dispersion in symmetric and asymmetric semiconductor quantum wells

L.V. Kotova, A.V. Platonov, V.N. Kats, V.P. Kochereshko, S.V. Sorokin, S.V. Ivanov, R. André, and L.E. Golub

P12. MOCVD of Quantum-Dimensional Nanoheterostructures

R.V. Levin, A.E. Marichev, A.B. Gordeeva, B.V. Pushnyi

P13. Resonant energy transfer in quantum systems: quantum dot molecule and nanocomposites involving nanoporous silicon

D.M. Samosvat, O.P. Chikalova-Luzina, V.M. Vyatkin, G.G. Zegrya

P14. Metamaterial for difference frequency generation in THz range

G.M. Savchenko, N.S. Averkiev, G.S. Sokolovskii

P15. Electroluminescence and carrier lifetime in InAsSb-based heterostructures

A.A. Semakova, K.D. Mynbaev, N.L. Bazhenov

P16. Non-radiative coupled deep DAP recombination in nitride MQW and related phenomena

E.I. Shabunina, A. Nikolaev, A.V. Sakharov, V.N. Petrov, E. Guchina and N.M. Shmidt

P17. Resonant optical properties of AsSb-AlGaAs metamaterials

V.I. Ushanov, V.V. Chaldyshev, N.A. Bert, V.N. Nevedomsky, N.D. Il'inskaya, N.M. Lebedeva, V.V. Preobrazhenskii, M.A. Putyato, B.R. Semyagin

P18. Spin colour centres in SiC as a the basic material for sensors and quantum systems the future at ambient conditions

A.N. Anisimov, V.A. Soltamov, P. Baranov, G. Astakhov and V. Dyakonov

P19. Comparison of the Effects of Electron and Proton Irradiation of Devices based on 4H-SiC and Si

K.S. Davydovskaya, A.A. Lebedev, A.M. Strel'chuk, A.N. Yakimenko, and V.V. Kozlovski

P20. Picosecond-range high-voltage avalanche switching of bulk semiconductors

N.I. Podolska, V.I. Brylevskiy, I.A. Smirnova, Yu.A. Zharova, P.B. Rodin, I.V. Grekhov

P21. Transition between Passive Mode-Locking and Q-switching in Quantum Dot lasers with $\lambda=1.06 \mu\text{m}$

M.S. Buyalo, I.M. Gadzhiev, V.N. Nevedomskij, A.A. Usikova, N.D. Il'inskaya, E.L. Portnoi

P22. Novel In(As,Sb)/In(Ga,Al)As/GaAs QW heterostructures for efficient mid-IR emitters: breaking the "3 μm barrier"

M.Yu. Chernov, V.A. Solov'ev, O.S. Komkov, D.D. Firsov, and S.V. Ivanov

P23. Mode-locked two-sectional shallow InGaAs QW laser

I.M. Gadzhiev, M.S. Buyalo, A.S. Payusov, I.O. Bakshaev, A.V. Luteckij, Yu.M. Zadiranov, E.L. Portnoi

P24. New approaches to the development of integrated optical pulse sources based on semiconductor heterostructures

A.A. Podoskin, O.S. Soboleva, D.A. Nikolaev, A.D. Bondarev, A.Y. Leshko, D.N. Romanovich, S.O. Slipchenko, N.A. Pikhtin

P25. Supercavity modes in photonic structures

M.V. Rybin

P26. Optical Power Saturation Mechanisms in High-Power GaAs-based Laser Diodes

D.A. Veselov, Yu.K. Bobretsova, A.V. Lyutetskiy, K.V. Bakhvalov, V.V. Zolotarev, Z.N. Sokolova, S.O. Slipchenko, N.A. Pikhtin

P27. Optoelectronic pair "Fresnel lens - MJ SC": optimization of parameters for high-efficiency photovoltaic modules

P.V. Pokrovskiy, S.A. Levina, E.D. Filimonov, M.Z. Shvarts

P28. Ultrafast strain engineering in VO₂ nanohillocks with insulator-to-metal phase transition

Ia.A. Mogunov, A.E. Fedianin, F. Fernández, S. Lysenko, A.J. Kent, A.V. Scherbakov, A.M. Kalashnikova, A.V. Akimov

P29. Dielectric properties, specific heat and temperature evolution of domain structure in Na_{1/2}Bi_{1/2}TiO₃:Eu single crystals

A.D. Polushina, N.K. Derets, P.P. Syrnikov, V.G. Zaleskii, S.G. Lushnikov

P30. Synthesis of graphene derivatives with the intended chemical composition for electrochemical and biosensing applications

M.K. Rabchinskij, A.T. Dideikin, M.V. Baidakova, V.V. Shnitov, D.A. Kirilenko, S.V. Koniakhin, S.I. Pavlov, P.N. Brunkov and A.Ya. Vul'

P31. Aluminum and gallium nuclei as microscopic probes for pulsed ENDOR diagnostics in garnet ceramics doped with paramagnetic ions

Yu.A. Uspenskaya, E.V. Edinach, R.A. Babunts, S.B. Orlinskii

P32. Thermoelectric properties of topologically nontrivial semimetallic compounds, based on CoSi and its solid solutions with FeSi and NiSi

S.V. Novikov, D.A. Pshenay-Severin, A.T. Burkov, Yu.V. Ivanov

P33. Spin waves and currents generated by elastic waves in ferromagnetic heterostructures

A.V. Azovtsev, N.A. Pertsev

P34. Intercalation synthesis of ferromagnetic silicides under graphene

G.S. Grebenyuk, E.Yu. Lobanova, I.I. Pronin

P35. Ultrafast laser-induced control of perpendicular magnetic anisotropy in a magnetic tunnel junction structure

L.A. Shelukhin, A.M. Kalashnikova, A.V. Azovtsev, K.A. Maximov, R.R. Gareev, V. Zbarsky, M. Münzenberg, and N.A. Pertsev