

## Список работ ведущей организации ИЛФ СО РАН за 2020-2016 годы

1. I. F. Shaikhislamov, M. L. Khodachenko, H. Lammer, A.G. Berezutsky, I.B. Mirosnichenko, and M.S. Rumenskikh, “Three-dimensional modelling of absorption by various species for hot Jupiter HD 209458b”. *Monthly Notices of the Royal Astronomical Society*, 2020. 491(3): 3435.
2. A.G. Berezutsky, V.N. Tishchenko, Y.P. Zakharov, I.B. Mirosnichenko, I.F. Shaikhislamov, “Generation of torsional Alfvén and slow magnetosonic waves by periodic bunches of laser plasma in a magnetised background”. *Quantum Electronics*. 2019. Vol.49, iss. 2. P. 178-180. DOI: 10.1070/QEL16873.
3. M.L. Khodachenko, I.F. Shaikhislamov, H.Lammer, A.G. Berezutsky, I.B. Mirosnichenko, M.S. Rumenskikh, K.G. Kislyakova, N.K. Dwivedi, “Global 3D hydrodynamic modeling of In-transit Ly $\alpha$  absorption of GJ 436b”. *The Astrophysical Journal*. 2019, Vol. 885, № 1. Art. 67 (20 p.). DOI: 10.3847/1538-4357/ab46a4.
4. A.G. Berezutsky, I.F. Shaikhislamov, I.B. Mirosnichenko, M.S. Rumenskikh, M.L. Khodachenko, “Interaction of the expanding atmosphere with the stellar wind around gliese 436b”. *Solar System Research*. 2019. Vol. 53, iss. 2. P. 138–145. DOI: 10.1134/S0038094619020011.
5. N.K. Dwivedi, I.F. Shaikhislamov, L.Fossati, H. Lammer, I.B. Mirosnichenko, C.P. Johnstone [et al.], “Modelling atmospheric escape and Mg II near-ultraviolet absorption of the highly irradiated hot Jupiter WASP-12b”. *Monthly Notices of the Royal Astronomical Society*. 2019. Vol. 487, iss. 3. P. 4208–4220. DOI: 10.1093/mnras/stz1345.
6. I.F. Shaikhislamov, A.A. Chibrarov [et al.], “New type of large-scale experiments for laboratory astrophysics with collimated jets of laser plasma in a transverse magnetic field”. *Quantum Electronics*. 2019. Vol. 49, iss. 2. P. 181-186. DOI: 10.1070/QEL16884.
7. K.G. Kislyakova, M. Holmstrom, P. Odert, H. Lammer, N.V. Erkaev, M.L. Khodachenko, I.F. Shaikhislamov, E. Dorfi, M. Guedel, “Transit Lyman-alpha signatures of terrestrial planets in the habitable zones of M dwarfs”. *Astronomy & Astrophysics*. 2019. Vol. 623. A131 (17 p.). DOI: 10.1051/0004-6361/201833941.
8. I. F. Shaikhislamov, M. L. Khodachenko, H. Lammer, L. Fossati, N. Dwivedi, M. Güdel, K. G. Kislyakova, C.P. Johnstone, A.G. Berezutsky, I. B. Mirosnichenko, V. G. Posukh, N.V. Erkaev, and V. A. Ivanov, “Modeling of absorption by heavy minor species for the hot Jupiter HD 209458b”. *The Astrophysical Journal*. 2018. Vol. 866. Art. 47 (13 p.). DOI: 10.3847/1538-4357/aadf39.
9. J.L. Ballester, I.I. Alexeev, M. Collados, T. Downes, R.F. Pfaff, H. Gilbert, M.L. Khodachenko, E. Khomenko, I.F. Shaikhislamov, R. Soler, E. Vazquez-Semadeni, T. Zaqarashvili, “Partially ionized plasmas in astrophysics”. *Space Science Reviews*. 2018. Vol. 214, iss. 2. Art. 58 (149 p.). DOI: 10.1007/s11214-018-0485-6.
10. I. F. Shaikhislamov, M. L. Khodachenko, H. Lammer, I. B. Mirosnichenko [et al.], “3D Aeronomy modelling of close-in exoplanets”. *Monthly Notices of the Royal Astronomical Society*. 2018. Vol. 481, iss. 4. P. 5315–5323. - DOI: 10.1093/mnras/sty2652.
11. M.L. Khodachenko, I.F. Shaikhislamov, H. Lammer, K.G. Kislyakova, L. Fossati, C.P. Johnstone, O.V. Arkhypov, A.G. Berezutsky, I.B. Mirosnichenko, V.G. Posukh, “Lyman-alpha absorption at transits of HD 209458b: A comparative study of various mechanisms under different conditions”. *Astrophysical Journal*, 2017. Vol. 847, № 2. Art. 126 (13 p.). - DOI: 10.3847/1538-4357/aa88ad.

12. N.V. Erkaev, P. Odert, H. Lammer, K. G. Kislyakova, L. Fossati, A.G. Mezentsev, C.P. Johnstone, D.I. Kubyshkina, I.F. Shaikhislamov, M.L. Khodachenko, “Effect of stellar wind induced magnetic fields on planetary obstacles of non-magnetized hot Jupiters”. *Monthly Notices of the Royal Astronomical Society*. 2017. Vol. 470, iss. 4. P. 4330–4336. DOI: 10.1093/mnras/stx1471.
13. C. Weber, H. Lammer, I. F. Shaikhislamov, J. M. Chadney, M. L. Khodachenko, Griesmeier J-M, H. O. Rucker, C. Vocks, W. Macher, P. Odert, and K. G. Kislyakova, “How expanded ionospheres of hot Jupiters can prevent escape of radio emission generated by the cyclotron maser instability”. *Monthly Notices of the Royal Astronomical Society*. 2017. Vol. 469, P. 3505–3517.
14. I. F. Shaikhislamov, V. G. Posukh, A. V. Melekhov, E. L. Boyarintsev, Y. P. Zakharov, P. A. Prokopov, A. G. Ponomarenko, ‘Laboratory simulation of energetic flows of magnetospheric planetary plasma’. *Journal of Physics: Conference Series*. 2017. Vol. 793. Art. 012025 (4 p.). - DOI: 10.1088/1742-6596/793/1/012025.
15. I. F. Shaikhislamov, M. L. Khodachenko, H. Lammer, K. G. Kislyakova, L. Fossati, C. P. Johnstone, P. A. Prokopov, A. G. Berezutsky, Yu P. Zakharov, and V. G. Posukh, “Two regimes of interaction of a hot jupiter’s escaping atmosphere with the stellar wind and generation of energized atomic hydrogen corona”. *Astrophysical Journal*. 2016. Vol. 832(2): P. 1–4 .