

Зеленер Б.Б., Бобров А.А., Вильшанская Е.В., Галстян К.П., Саакян С.А., Саутенков В.А.
**ЭФФЕКТ КОГЕРЕНТНОГО ПЛЕНЕНИЯ НАСЕЛЕННОСТИ В СПЕКТРЕ ФЛЮОРЕСЦЕНЦИИ
ИОНОВ СТАЦИОНАРНОЙ УЛЬТРАХОЛОДНОЙ ПЛАЗМЫ**

- [1] Creation of an Ultracold Neutral Plasma / Killian T. C., Kulin S., Bergeson S. D., Orozco L. A., Orzel C. and Rolston S. L. // Phys. Rev. Lett. — 1999. — Dec. — Vol. 83, no. 23. — P. 4776–79. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevLett.83.4776>.
- [2] Exploring the crossover between high-energy-density plasma and ultracold neutral plasma physics / Bergeson Scott D., Baalrud Scott D., Ellison C. Leland, Grant Edward, Graziani Frank R., Killian Thomas C., Murillo Michael S., Roberts Jacob L. and Stanton Liam G. // Physics of Plasmas. — 2019. — Окт. — Vol. 26, no. 10. — P. 100501. — online; accessed: <https://pubs.aip.org/pop/article/26/10/100501/264042/Exploring-the-crossover-between-high-energy>.
- [3] Killian Thomas C. Ultracold Neutral Plasmas // Science. — 2007. — May. — Vol. 316, no. 5825. — P. 705–08. — online; accessed: <https://www.science.org/doi/10.1126/science.1130556>.
- [4] Lyon M, Rolston S L. Ultracold neutral plasmas // Rep. Prog. Phys. — 2017. — Jan. — Vol. 80, no. 1. — P. 017001. — Access mode: <https://iopscience.iop.org/article/10.1088/0034-4885/80/1/017001>.
- [5] Thermodynamics and correlation functions of an ultracold nonideal Rydberg plasma / Bonitz M., Zelener B. B., Zelener B. V., Manykin E. A., Filinov V. S. and Fortov V. E. // J. Exp. Theor. Phys. — 2004. — Apr. — Vol. 98, no. 4. — P. 719–27. — online; accessed: <http://link.springer.com/10.1134/1.1757672>.
- [6] Pohl T., Pattard T., Rost J. M. Coulomb Crystallization in Expanding Laser-Cooled Neutral Plasmas // Phys. Rev. Lett. — 2004. — Apr. — Vol. 92, no. 15. — P. 155003. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevLett.92.155003>.
- [7] Conductivity and diffusion coefficients in fully ionized strongly coupled plasma: Method of molecular dynamics / Bobrov A. A., Bunkov A. M., Bronin S. Y., Klyarfeld A. B., Zelener B. B. and Zelener B. V. // Physics of Plasmas. — 2019. — Aug. — Vol. 26, no. 8. — P. 082102. — online; accessed: <https://pubs.aip.org/pop/article/26/8/082102/631838/Conductivity-and-diffusion-coefficients-in-fully>.
- [8] Transmission Microscopy with Nanometer Resolution Using a Deterministic Single Ion Source / Jacob Georg, Groot-Berning Karin, Wolf Sebastian, Ulm Stefan, Couturier Luc, Dawkins Samuel T., Poschinger Ulrich G., Schmidt-Kaler Ferdinand and Singer Kilian // Phys. Rev. Lett. — 2016. — July. — Vol. 117, no. 4. — P. 043001. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevLett.117.043001>.
- [9] Langin Thomas K., Gorman Grant M., Killian Thomas C. Laser cooling of ions in a neutral plasma // Science. — 2019. — Jan. — Vol. 363, no. 6422. — P. 61–4. — online; accessed: <https://www.science.org/doi/10.1126/science.aat3158>.
- [10] Magnetic Confinement of an Ultracold Neutral Plasma / Gorman G.M., Warrens M.K., Bradshaw S.J. and Killian T.C. // Phys. Rev. Lett. — 2021. — Feb. — Vol. 126, no. 8. — P. 085002. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevLett.126.085002>.
- [11] Hu J.S. et al. New Steady-State Quiescent High-Confinement Plasma in an Experimental Advanced Superconducting Tokamak // Phys. Rev. Lett. — 2015. — Feb. — Vol. 114, no. 5. — P. 055001. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevLett.114.055001>.
- [12] Pontius D. H., Hill T. W., Rassbach M. E. Steady state plasma transport in a corotation-dominated magnetosphere // Geophys. Res. Lett. — 1986. — Nov. — Vol. 13, no. 11. — P. 1097–100. — online; accessed: <http://doi.wiley.com/10.1029/GL013i011p01097>.
- [13] Steady-State Ultracold Plasma / Zelener B B, Vilshanskaya E V, Morozov N V, Saakyan S A, Bobrov A A, and Zelener B V. — 2022. — 2212.04389.
- [14] Gray HR, Whitley RM, Stroud CR. Coherent trapping of atomic populations // Optics letters. — 1978. — Vol. 3, no. 6. — P. 218–20.
- [15] Isotope shifts of natural Sr + measured by laser fluorescence in a sympathetically cooled Coulomb crystal / Dubost B., Dubessy R., Szymanski B., Guibal S., Likforman J.-P. and Guidoni L. // Phys. Rev. A. — 2014. — Mar. — Vol. 89, no. 3. — P. 032504. — online; accessed: <https://link.aps.org/doi/10.1103/PhysRevA.89.032504>.
- [16] Stenholm Stig. Foundations of laser spectroscopy. — Courier Corporation, 2012.
- [17] Johansson J Robert, Nation Paul D, Nori Franco. QuTiP: An open-source Python framework for the dynamics of open quantum systems // Computer Physics Communications. — 2012. — Vol. 183, no. 8. — P. 1760–72.