

Sergey Porsev is the author (co-author) of 110 scientific works.

Below is the list of the publications for 2016-2020 years:

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- [1] K. Zhang, D. Studer, F. Weber, V. M. Gadelshin, N. Kneip, S. Raeder, D. Budker, K. Wendt, T. Kieck, S. G. Porsev, C. Cheung, M. S. Safronova, and M. G. Kozlov, “Detection of missing low-lying atomic states in actinium,” *Phys. Rev. Lett.* **125**, 073001 (2020).
- [2] S. G. Porsev, U. I. Safronova, M. S. Safronova, P. O. Schmidt, A. I. Bondarev, M. G. Kozlov, and I. I. Tupitsyn, “Optical clocks based on the Cf^{15+} and Cf^{17+} ions,” *Phys. Rev. A* **102**, 012802 (2020).
- [3] S. G. Porsev and M. S. Safronova, “Calculation of higher-order corrections to the light shift of the $5s^2\ ^1S_0 - 5s5p\ ^3P_0$ clock transition in Cd,” *Phys. Rev. A* **102**, 012811 (2020).
- [4] A. Heinz, A. J. Park, N. Šantić, J. Trautmann, S. G. Porsev, M. S. Safronova, I. Bloch, and S. Blatt, “State-dependent optical lattices for the strontium optical qubit,” *Phys. Rev. Lett.* **124**, 203201 (2020).
- [5] S. Kühn, C. Shah, J. R. Crespo López-Urrutia, K. Fujii, R. Steinbrügge, J. Stierhof, M. Togawa, Z. Harman, N. S. Oreshkina, C. Cheung, M. G. Kozlov, S. G. Porsev, M. S. Safronova, J. C. Berengut, M. Rosner, M. Bissinger, R. Ballhausen, N. Hell, S. Park, M. Chung, M. Hoesch, J. Seltmann, A. S. Surzhykov, V. A. Yerokhin, J. Wilms, F. S. Porter, T. Stöhlker, C. H. Keitel, T. Pfeifer, G. V. Brown, M. A. Leutenegger, and S. Bernitt, “High-resolution photo-excitation measurements exacerbate the long-standing Fe XVII emission problem,” *Phys. Rev. Lett.* **124**, 225001 (2020).
- [6] C. Cheung, M. S. Safronova, S. G. Porsev, M. G. Kozlov, I. I. Tupitsyn, and A. I. Bondarev, “Accurate prediction of clock transitions in a highly charged ion with complex electronic structure,” *Phys. Rev. Lett.* **124**, 163001 (2020).
- [7] M. Fan, C. A. Holliman, S. G. Porsev, M. S. Safronova, and A. M. Jayich, “Measurement of the $7p\ ^2P_{3/2}$ state branching fractions in Ra^+ ,” *Phys. Rev. A* **100**, 062504 (2019).
- [8] D. L. Maser, E. Hoenig, B.-Y Wang, P. M. Rupasinghe, S. G. Porsev, M. S. Safronova, and P. K. Majumder, “High-precision measurement and ab initio calculation of the $6s^26p^2\ ^3P_0 - ^3P_2$ electric quadrupole transition amplitude in ^{208}Pb ,” *Phys. Rev. A* **100**, 052506 (2019).

- [9] C. Sanner, N. Huntemann, R. Lange, Chr. Tamm, E. Peik, M. S. Safronova, and S. G. Porsev, “Optical clock comparison for Lorentz symmetry testing,” *Nature* **567**, 204 (2019).
- [10] K. J. Arnold, R. Kaewuam, T. R. Tan, S. G. Porsev, M. S. Safronova, and M. D. Barrett, “Dynamic polarizability measurements in $^{176}\text{Lu}^+$,” *Phys. Rev. A* **99**, 012510 (2019).
- [11] S. G. Porsev, M. S. Safronova, U. I. Safronova, V. A. Dzuba, and V. V. Flambaum, “Nobelium energy levels and hyperfine structure constants,” *Phys. Rev. A* **98**, 052512 (2018).
- [12] A. Cooper, J. P. Covey, I. S. Madjarov, S. G. Porsev, M. S. Safronova, and M. Endres, “Alkaline earth atoms in optical tweezers,” *Phys. Rev. X* **8**, 041055 (2018).
- [13] M. S. Safronova, S. G. Porsev, M. G. Kozlov, J. Thielking, M. V. Okhapkin, P. Głowacki, D. M. Meier, and E. Peik, “Nuclear charge radii of ^{229}Th from isotope and isomer shifts,” *Phys. Rev. Lett.* **121**, 213001 (2018).
- [14] S. G. Porsev, U. I. Safronova, and M. S. Safronova, “Clock-related properties of Lu^+ ,” *Phys. Rev. A* **98**, 022509 (2018).
- [15] S. Raeder, D. Ackermann, H. Backe, R. Beerwerth, J. C. Berengut, M. Block, A. Borschevsky, B. Cheal, P. Chhetri, Ch. E. Düllmann, V. A. Dzuba, E. Eliav, J. Even, R. Ferrer, V. V. Flambaum, S. Fritzsche, F. Giacoppo, S. Götz, F. P. Heßberger, M. Huyse, U. Kaldor, O. Kaleja, J. Khuyagbaatar, P. Kunz, M. Laatiaoui, F. Lautenschläger, W. Lauth, A. K. Mistry, E. Minaya Ramirez, W. Nazarewicz, S. G. Porsev, M. S. Safronova, U. I. Safronova, B. Schuetrumpf, P. Van Duppen, T. Walther, C. Wraith, and A. Yakushev, “Probing sizes and shapes of nobelium isotopes by laser spectroscopy,” *Phys. Rev. Lett.* **120**, 232503 (2018).
- [16] M. S. Safronova, S. G. Porsev, C. Sanner, and J. Ye, “Two clock transitions in neutral Yb for the highest sensitivity to variations of the fine-structure constant,” *Phys. Rev. Lett.* **120**, 173001 (2018).
- [17] R. Shaniv, R. Ozeri, M. S. Safronova, S. G. Porsev, V. A. Dzuba, V. V. Flambaum, and H. Häffner, “New ideas for tests of Lorentz invariance with atomic systems,” *Phys. Rev. Lett.* **120**, 103202 (2018).
- [18] S. G. Porsev, U. I. Safronova, M. S. Safronova, and M. G. Kozlov, “Multipolar polarizabilities and hyperpolarizabilities in the Sr optical lattice clock,” *Phys. Rev. Lett.* **120**, 063204 (2018).
- [19] M. S. Safronova, U. I. Safronova, S. G. Porsev, M. G. Kozlov, and Yu. Ralchenko, “Relativistic all-order many-body calculation of energies, wavelengths, and $M1$ and $E2$ transition rates for the $3d^n$ configurations in tungsten ions,” *Phys. Rev. A* **97**, 012502 (2018).

- [20] S. G. Porsev, U. I. Safronova, and M. S. Safronova, “Theoretical study of the g-factor and lifetime of the $6s6p\ ^3P_0$ state of mercury,” *Phys. Rev. A* **96**, 012509 (2017).
- [21] M. G. Kozlov, M. S. Safronova, S. G. Porsev, and I. I. Tupitsyn, “Effective three-particle forces in polyvalent atoms,” *Phys. Rev. A* **94**, 032512 (2016).
- [22] E. Paez, K. J. Arnold, E. Hagiyevev, S. G. Porsev, V. A. Dzuba, U. I. Safronova, M. S. Safronova, and M. D. Barrett, “Atomic properties of Lu^+ ,” *Phys. Rev. A* **93**, 042112 (2016).
- [23] V. V. Flambaum, S. G. Porsev, and M. S. Safronova, “Energy shift due to anisotropic black-body radiation,” *Phys. Rev. A* **93**, 022508 (2016).
- [24] S. G. Porsev, M. G. Kozlov, M. S. Safronova, and I. I. Tupitsyn, “A development of the CI + all-order method and application to the parity-nonconserving amplitude and other properties of Pb,” *Phys. Rev. A* **93**, 012501 (2016).
- [25] V. A. Dzuba, V. V. Flambaum, M. S. Safronova, S. G. Porsev, T. Pruttivarasin, M. A. Hohensee, and H. Häffner, “Strongly enhanced effects of Lorentz symmetry violation in entangled Yb^+ ions,” *Nature Phys.* **12**, 465 (2016).