## List of Publications in Peer-Reviewed Journals

1. Predicting quasibound states of negative ions, M. S. Safronova, C. Cheung, M. G. Kozlov, S. E. Spielman, N. D. Gibson, C. W. Walter, arXiv:2010.02489, submitted to Phys. Rev. Lett. (2020).

2. Precision measurement of the $^3D_1$ and $^3D_2$ quadrupole moments in $Lu^+$, R. Kaewuam, T. R. Tan, Zhiqiang Zhang, K. J. Arnold, M. S. Safronova, M. D. Barrett, Phys. Rev. A, in press (2020).

3. Hyperfine-mediated effects in a Lu+ optical clock, Zhiqiang Zhang, K. J. Arnold, R. Kaewuam, M. S. Safronova, M. D. Barrett, arxiv:2009.02889, submitted to Phys. Rev. A (2020).

4. Detection of missing low-lying atomic states in actinium, Ke Zhang, Dominik Studer, Felix Weber, Vadim M. Gadelshin, Nina Kneip, Sebastian Raeder, Dmitry Budker, Klaus Wendt, Tom Kieck, Sergey G. Porsev, Charles Cheung, Marianna S. Safronova, Mikhail G. Kozlov, Phys. Rev. Lett. 125, 073001 (2020).

5. Mass spectrometry for future atomic clocks, Marianna S. Safronova, Nature 581, 35 (2020).

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7. State-dependent optical lattices for the strontium optical qubit, A. Heinz, A. J. Park, N. Šantic, J. Trautmann, S. G. Porsev, M. S. Safronova, I. Bloch, and S. Blatt, Phys. Rev. Lett. 124, 203201 (2020).

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10. Calculation of higher-order corrections to the light shift of the $5s^2\ ^1S_0$ - $5s5p\ ^3P_0$ clock transition in Cd, S. G. Porsev and M. S. Safronova, Phys. Rev. A 102, 012811 (2020).

11. High-resolution photo-excitation measurements exacerbate the long-standing Fe XVII emission problem, Steffen Kühn et al., Phys. Rev. Lett. 124, 225001 (2020).

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13. Branching fractions for $P_{3/2}$ decays in $Ba^+$, Zhiqiang Zhang, K. J. Arnold, S. R. Chanu, R. Kaewuam, M. S. Safronova, M. D. Barrett, Phys. Rev. A 101, 062515 (2020).

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