

Ведущая организация — федеральное государственное автономное образовательное учреждение высшего образования «Санкт-Петербургский политехнический университет Петра Великого» (ФГАОУ ВО "СПбПУ")

Список работ по теме диссертации:

1. Быков Н.Ю., Горбачёв Ю.Е. Прямое статистическое моделирование процессов роста кластеров на базе классической теории нуклеации с поправкой на размер Физико-химическая кинетика в газовой динамике Т.53, N 2, С. 291-300 (2015)
2. Bykov N.Yu., Y. E. Gorbachev Comparative Analysis of Condensation Models within DSMC, AIP Conference Proceedings; CИИА; AIP Conf. Proc. V/1628, 139 (2014)
3. N.Y. Bykov, D.V. Leshchev Collision Models of Monomer-Cluster and Cluster-Cluster Interaction for the Direct Simulation Monte Carlo Method Fullerenes, Nanotubes, and Carbon Nanostructures 2010, V. 19, N 1-2, p. 109-113
4. V.M. Shabaev, I.I. Tupitsyn, V.A. Yerokhin, *QEDMOD: Fortran program for calculating the model Lamb-shift operator*, Comp. Phys. Comm. **189**, 175-181 (2015), doi:10.1016/j.cpc.2014.12.002.
5. V. A. Yerokhin, A. Surzhykov, and S. Fritzsche, Relativistic calculations of double K-shell-photoionization cross sections for neutral medium-Z atoms, Phys. Rev. A **90**, 063422 (2014).
6. D. Jakubassa-Amundsen, R. Müller, A. Surzhykov, V. Yerokhin, *Relativistic theory for radiative forward electron emission in heavy ion-atom encounters*, Eur. Phys. J. D **68**, 367 (2014).
7. R. A. Müller, V. A. Yerokhin, and A. Surzhykov, *Polarization of atomic bremsstrahlung in coincidence studies*, Phys. Rev. A **90**, 032707-1 -- 032707-7 (2014).
8. V. A. Yerokhin, A. Surzhykov, and S. Fritzsche, Relativistic configuration-interaction calculation of  $K\alpha$  transition energies in berylliumlike iron, Phys. Rev. A **90**, 022509-1 -- 022509-6 (2014).
9. P.-M. Hillenbrand, S. Hagmann, D. Atanasov, D. Banas, K.-H. Blumenhagen, C. Brandau, W. Chen, E. De Filippo, A. Gumberidze, D. L. Guo, D. H. Jakubassa-Amundsen, O. Kovtun, C. Kozhuharov, M. Lestinsky, Yu. A. Litvinov, A. Müller, R. A. Müller, H. Rothard, S. Schippers, M. S. Schöffler, U. Spillmann, A. Surzhykov, S. Trotsenko, N. Winckler, X. L. Yan, V. A. Yerokhin, X. L. Zhu, Th. Stöhlker, *Radiative-electron-capture-to-continuum cusp in  $U^{88+}+N_2$  collisions and the high-energy endpoint of electron-nucleus bremsstrahlung*, Phys. Rev. A **90**, 022707-1 -- 022707-13 (2014).
10. K. Pachucki, M. Puchalski, and V.A. Yerokhin, Extended Gaussian quadratures for functions with an end-point singularity of logarithmic type, Comp. Phys. Comm. **185**, 2913-2919 (2014).
11. S. Tashenov, T. Bäck, R. Barday, B. Cederwall, J. Enders, A. Khaplanov, Yu. Fritzsche, A. Surzhykov, V. A. Yerokhin and D. Jakubassa-Amundsen, *Electron polarimetry with bremsstrahlung*, J. Phys.: Conf. Ser. **488**, 012057 (2014) (6 pages).
12. G. Weber, K.-H. Blumenhagen, H. Brauning, H. Ding, S. Fritzsche, S. Hess, R. Martin, U. Spillmann, A. Surzhykov, S. Trotsenko, D. F. A. Winters, V. A. Yerokhin, and Th. Stöhlker, *Compton polarimetry using double-sided segmented x-ray detectors*, J. Phys.: Conf. Ser. **583**, 012041 (2015); doi:10.1088/1742-6596/583/1/012041.
13. V. A. Yerokhin, A. Surzhykov, and S. Fritzsche, Relativistic calculations of double K-shell-photoionization cross sections for neutral medium-Z atoms, Phys. Rev. A **90**, 063422 (2014).

14. D. Jakubaša-Amundsen, R. Müller, A. Surzhykov, V. Yerokhin, *Relativistic theory for radiative forward electron emission in heavy ion-atom encounters*, Eur. Phys. J. D **68**, 367 (2014).
15. R. A. Müller, V. A. Yerokhin, and A. Surzhykov, *Polarization of atomic bremsstrahlung in coincidence studies*, Phys. Rev. A **90**, 032707-1 -- 032707-7 (2014).
16. V. A. Yerokhin, A. Surzhykov, and S. Fritzsche, *Relativistic configuration-interaction calculation of  $K\alpha$  transition energies in berylliumlike iron*, Phys. Rev. A **90**, 022509-1 -- 022509-6 (2014).
17. P.-M. Hillenbrand, S. Hagmann, D. Atanasov, D. Banas, K.-H. Blumenhagen, C. Brandau, W. Chen, E. De Filippo, A. Gumberidze, D. L. Guo, D. H. Jakubassa-Amundsen, O. Kovtun, C. Kozhuharov, M. Lestinsky, Yu. A. Litvinov, A. Müller, R. A. Müller, H. Rothard, S. Schippers, M. S. Schöffler, U. Spillmann, A. Surzhykov, S. Trotsenko, N. Winckler, X. L. Yan, V. A. Yerokhin, X. L. Zhu, Th. Stöhlker, *Radiative-electron-capture-to-continuum cusp in  $U^{88+}+N_2$  collisions and the high-energy endpoint of electron-nucleus bremsstrahlung*, Phys. Rev. A **90**, 022707-1 -- 022707-13 (2014).
18. K. Pachucki, M. Puchalski, and V.A. Yerokhin, *Extended Gaussian quadratures for functions with an end-point singularity of logarithmic type*, Comp. Phys. Comm. **185**, 2913-2919 (2014).
19. S. Tashenov, T. Bäck, R. Barday, B. Cederwall, J. Enders, A. Khaplanov, Yu. Fritzsche, A. Surzhykov, V. A. Yerokhin and D. Jakubassa-Amundsen, *Electron polarimetry with bremsstrahlung*, J. Phys.: Conf. Ser. **488**, 012057 (2014) (6 pages).