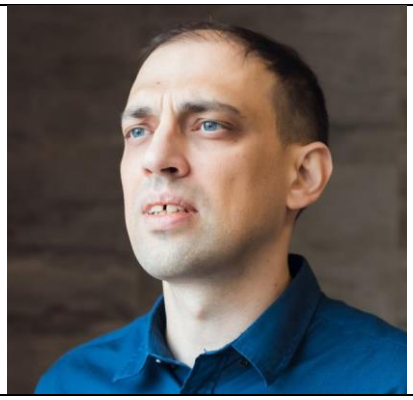	GLAZOV, Dmitry A. Leading Researcher PhD
Research interests	✓ Quantum electrodynamics of atomic systems ✓ Development of new methods in relativistic atomic theory ✓ Zeeman splitting in highly charged ions: g factor and nonlinear effects ✓ Hyperfine structure of highly charged ions ✓ Determination of fundamental constants ✓ Atoms and molecules in strong fields ✓ Heavy molecular ions
List of the supervisor's research projects (participation/supervision)	✓ g-factor and hyperfine splitting of excited states in few-electron atomic and molecular ions ✓ Spectra of few-electron atomic and molecular ions in strong magnetic field ✓ Three-photon contributions to the spectra of few-electron ions ✓ Rigorous bound-state QED calculations in molecules ✓ Twisted electron propagation in solenoids with imperfections ✓ Gravitational effects in atomic systems
List of potential thesis topics	✓ Recursive perturbation theory for bound electrons ✓ One- and two-loop QED diagrams for bound electrons ✓ Dirac equation in curved space-time
Publications in the last five years	31
Key publications	1. M.G. Kozlov, A.V. Oleynichenko, D. Budker, D.A. Glazov, Y.V. Lomachuk, V.M. Shabaev, A.V. Titov, I.I. Tupitsyn, and A.V. Volotka, Excitation of the 229-Th nucleus by a hole in the inner electronic shells, Phys. Rev. A 109, 042806 (2024) 2. D.V. Zinenko, D.A. Glazov, V.P. Kosheleva, A.V. Volotka, and S. Fritzsche, Electron correlation effects on the g factor of lithiumlike ions, Phys. Rev. A 107, 032815 (2023) 3. V.M. Shabaev, D.A. Glazov, A.M. Ryzhkov, C. Brandau, G. Plunien, W. Quint, A.M. Volchkova, and D.V. Zinenko, Ground-State g Factor of Highly Charged 229Th Ions: An Access to the M1 Transition Probability between the Isomeric and Ground Nuclear States, Phys. Rev. Lett. 128, 043001 (2022) 4. V.P. Kosheleva, A.V. Volotka, D.A. Glazov, D.V. Zinenko, and S. Fritzsche, g Factor of Lithiumlike Silicon and Calcium: Resolving the Disagreement between Theory and Experiment, Phys. Rev. Lett. 128, 103001 (2022) 5. A.V. Malyshev, D.A. Glazov, Y.S. Kozhedub, I.S. Anisimova, M.Y. Kaygorodov, V.M. Shabaev, and I.I. Tupitsyn, Ab initio Calculations of Energy Levels in Be-Like Xenon: Strong

	Interference between Electron-Correlation and QED Effects, Phys. Rev. Lett. 126, 183001 (2021)
Key IPs	1. Recursive perturbation theory in relativistic calculations for highly charged ions [Glazov et al., Phys. Rev. Lett. 123, 173001 (2019); Malyshev et al., Phys. Rev. A 99, 010501(R) (2019); Kozhedub et al., Phys. Rev. A 100, 062506 (2019); Kosheleva et al., Phys. Rev. Research 2, 013364 (2020); Malyshev et al., Phys. Rev. A 101, 052506 (2020); Malyshev et al., Phys. Rev. Lett. 126, 183001 (2021)] 2. High-precision QED g-factor calculations of lithiumlike and boronlike ions [Arapoglou et al., Phys. Rev. Lett. 122, 253001 (2019); Glazov et al., Phys. Rev. Lett. 123, 173001 (2019); Agababaev et al., X-Ray Spectrom. 49, 143 (2020); Shabaev et al., Phys. Rev. Lett. 128, 043001 (2022); Kosheleva et al., Phys. Rev. Lett. 128, 103001 (2022); Zinenko et al., Phys. Rev. A 107, 032815 (2023); Glazov et al., Atoms 11, 119 (2023)] 3. Nuclear recoil effect for the g-factor of lithiumlike and boronlike ions [Glazov et al., Phys. Rev. A 101, 012515 (2020); Malyshev et al., Phys. Rev. A 101, 012513 (2020); Malyshev et al., Opt. Spectrosc. 128, 297 (2020)] 4. Hyperfine splitting of lithiumlike and boronlike ions [Glazov et al., Phys. Rev. A 99, 062503 (2019); Kosheleva et al., Phys. Rev. Research 2, 013364 (2020)] 5. Solution of the two-center Dirac equation within the finite-basis-set method: spectra of heavy quasimolecules [Kotov et al., X-Ray Spectrom. 49, 110 (2020); Kotov et al., Atoms 9, 44 (2021); Kotov et al., Atoms 10, 145 (2022)] and light molecular ions [Anikin et al., J. Chem. Phys. 159, 214304 (2023); Solovyev et al., Phys. Scr. 99, 045401 (2024)] 6. Formulae derivation method for the many-electron bound-state QED contributions via the redefined vacuum [Soguel et al., Phys. Rev. A 103, 042818 (2021); Soguel et al., Symmetry 13, 1014 (2021)] 7. Development of the calculational methods within the relativistic atomic theory for superheavy elements and their compounds [Tupitsyn et al., Opt. Spectrosc. 129, 1038 (2021); Tupitsyn et al., Opt. Spectrosc. 130, 824 (2022); Malyshev et al., Phys. Rev. A 106, 012806 (2022); Anisimova et al., Phys. Rev. A 106, 062823 (2022); Kotov et al., ChemPhysChem 24, e202200680 (2023); Tupitsyn et al., Opt. Spectrosc. 131, 920 (2023)]
Supervisor's specific requirements	✓ Knowledge of quantum mechanics ✓ English - upper-intermediate
Code of the subject area of the PhD program	1.3.3 Theoretical Physics