



Sergey Ivanovich Sidorchuk,
Doctor of Sciences (Phys. and Math.)

Date and place of birth:

18 January, 1961, Leningrad, USSR.

Education and degrees:

- 1984 Moscow Engineering Physical Institute, Faculty of Theoretical and Experimental Physics.
- 2004 Candidate of Physics and Mathematics: “Experimental study of the hydrogen isotopes $^4,5,7\text{H}$ in reactions with the beams of ^3H and ^8He ”
- 2017 Doctor of Sciences (Phys. and Math.): “Study of the structure of heavy helium isotopes in the transfer and knockout reactions”.

Professional career:

- 1984 – 2007 Probation researcher, junior researcher, researcher, senior researcher, FLNR, JINR.
- 2007 – 2015 Scientific secretary of FLNR.
- 2015 - 2020 Deputy Director of FLNR.
- Since 2020 FLNR JINR Director

Scientific and organization activity:

- Since 2013 Member of the editorial board of PEPAN Letters.
- 2013 - 2020 Member of the Organizing Committee of the International Simposium on Nuclear Electronics and Computing.
- Since 2015 Member of the JINR Science & Technology Council.
- 2017 - 2021 Member of PAC of the Heavy Ion Laboratory of the Warsaw University.
- Since 2018 Member of the International Advisory Committee of the International Conference on Nuclear Structure and Dynamics.
- Since 2019 Member of the Scientific Qualification Commission at FLNR, JINR.

Scientific activity:

- Technique of studies with secondary beams of radioactive nuclei.
- Mechanisms of nuclear reactions.
- Structure of light exotic nuclei near the drip-lines.
- Correlation studies of nuclear systems beyond the neutron stability border.

Educational activity:

- Associate professor, Voronezh State University.
- Supervision of diploma works.

Scientific publications:

Coauthor of more than 160 scientific papers.

Awards and prizes:

- 7 JINR Prizes (1996 - 2018);
- Medal “Veteran of Atomic Power Engineering and Industry” (2017),
- Honorary title “Honorary Worker of Science and High Technologies of the Russian Federation” (2024)

Publications (2020-2024):

1. G. Kaminski, B. Zalewski, S.G. Belogurov, A.A. Bezbakh, D. Biare, V. Chudoba, A.S. Fomichev, E.M. Gazeeva, M.S. Golovkov, A.V. Gorshkov, L.V. Grigorenko, D.A. Kostyleva, S.A. Krupko, I.A. Muzalevsky, E.Yu. Nikolskii, Yu.L. Parfenova, P. Plucinski, A.M. Quynh, A. Serikov, S.I. Sidorchuk, R.S. Slepnev, P.G. Sharov, P. Szymkiewicz, A. Swiercz, S.V. Stepantsov, G.M. Ter-Akopian, R. Wolski, “*Status of the new fragment separator ACCULINNA-2 and first Experiments*”, Nucl. Instrum. Methods Phys. Res. B **463** (2020) 504-507.
2. A.A. Bezbakh, V. Chudoba, A.V. Gorshkov, S.A. Krupko, S.G. Belogurov, D. Biare, A.S. Fomichev, E.M. Gazeeva, L.V. Grigorenko, G.Kaminski, O. Kiselev, D.A. Kostyleva, I. Mukha, I.A. Muzalevskii, E.Yu. Nikolskii, Yu.L. Parfenova, A.M. Quynh, A. Serikov, S.I. Sidorchuk, P.G. Sharov, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, P. Szymkiewicz, G.M. Ter-Akopian, R. Wolski, B. Zalewski, M.V. Zhukov, “*Evidence for the first excited state of ${}^7\text{H}$* ”, Physical Review Letters **124** (2020) 022502.
3. I.A. Muzalevskii, V. Chudoba, S.G. Belogurov, A.A. Bezbakh, D. Biare, A.S. Fomichev, S.A. Krupko, E.M. Gazeeva, M.S. Golovkov, A.V. Gorshkov, L.V. Grigorenko, G. Kaminski, O. Kiselev, D.A. Kostyleva, M.Yu. Kozlov, B. Mauryey, I. Mukha, E.Yu. Nikolskii, Yu.L. Parfenova, W. Piatek, A.M. Quynh, V.N. Schetinin, A. Serikov, S.I. Sidorchuk, P.G. Sharov, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, P. Szymkiewicz, G.M. Ter-Akopian, R. Wolski, B. Zalewski, “*Detection of the Low Energy Recoil ${}^3\text{He}$ in the Reaction ${}^2\text{H}({}^8\text{He}, {}^3\text{He}){}^7\text{H}$* ”, Bulletin of the Russian Academy of Sciences: Physics, **84** (2020) 500-504.
4. G.M. Ter-Akopian, Yu.Ts. Oganessian, A.A. Bezbakh, A.S. Fomichev, M.S. Golovkov, A.V. Gorshkov, S.A. Krupko, E.Yu. Nikolskii, S.I. Sidorchuk, S.V. Stepantsov, R. Wolski. “*Radioactive ion beams for the fission study of heavy neutron-rich nuclei*”, Physics of Atomic Nuclei, Vol. **83** (2020) 497-502.
5. A. A. Bezbakh, S. G. Belogurov, D. Biare, V. Chudoba, A. S. Fomichev, E. M. Gazeeva, M. S. Golovkov, A. V. Gorshkov, G. Kaminski, S. A. Krupko, B. Mauryey, I. A. Muzalevskii, E. Yu. Nikolskii, Yu. L. Parfenova, W. Piatek, A. M. Quynh, A. Serikov, S. I. Sidorchuk, P. G. Sharov, R. S. Slepnev, S. V. Stepantsov, A. Swiercz, P. Szymkiewicz, G. M. Ter-Akopian, R. Wolski, B. Zalewski, “*Study of ${}^{10}\text{Li}$ low energy spectrum in the ${}^2\text{H}({}^9\text{Li}, p)$ reaction*”, Bulletin of the Russian Academy of Sciences: Physics, **84** (2020) 491-494.
6. I.A. Muzalevskii, A.A. Bezbakh, E.Yu. Nikolskii, V. Chudoba, S.A. Krupko, S.G. Belogurov, D. Biare, A.S. Fomichev, E.M. Gazeeva, A.V. Gorshkov, L.V. Grigorenko, G. Kaminski, O. Kiselev, D.A. Kostyleva, M.Yu. Kozlov, B. Mauryey, I. Mukha, Yu.L. Parfenova, W. Piatek, A.M. Quynh, V.N. Schetinin, A. Serikov, S.I. Sidorchuk, P.G. Sharov, N.B. Shulgina, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, P. Szymkiewicz, G.M. Ter-Akopian, R. Wolski, B. Zalewski, M.V. Zhukov, “*Resonant states in ${}^7\text{H}$. Experimental studies in the ${}^2\text{H}({}^8\text{He}, {}^3\text{He})$ reaction*”, Physical Review C **103** (2021) 044313.
7. E.Yu. Nikolskii, I.A. Muzalevskii, A.A. Bezbakh, V. Chudoba, S.A. Krupko, S.G. Belogurov, D. Biare, A.S. Fomichev, E.M. Gazeeva, A.V. Gorshkov, L.V. Grigorenko, G.

- Kaminski, O. Kiselev, D.A. Kostyleva, M.Yu. Kozlov, B. Mauey, I. Mukha, Yu.L. Parfenova, W. Piatek, A.M. Quynh, V.N. Schetinin, A. Serikov, S.I. Sidorchuk, P.G. Sharov, N.B. Shulgina, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, P. Szymkiewicz, G.M. Ter-Akopian, R. Wolski, B. Zalewski, M.V. Zhukov, “ ${}^6\text{H}$ states studied in the ${}^2\text{H}({}^8\text{He}, {}^4\text{He})$ reaction and evidence of an extremely correlated character of the ${}^5\text{H}$ ground state”, *Physical Review C* **105** (2022) 064605.
8. E.Yu. Nikolskii, I.A. Muzalevskii, S.A. Krupko, A.A. Bezbakh, V. Chudoba, S.G. Belogurov, D. Biare, A.S. Fomichev, E.M. Gazeeva, A.V. Gorshkov, L.V. Grigorenko, G. Kaminski, M. Khirk, O. Kiselev, D.A. Kostyleva, M.Yu. Kozlov, B. Mauey, I. Mukha, Yu.L. Parfenova, A.M. Quynh, V.N. Schetinin, A. Serikov, S.I. Sidorchuk, P.G. Sharov, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, G.M. Ter-Akopian, R. Wolski, M.V. Zhukov, “*Study of proton and deuteron pickup reactions ($d, {}^3\text{He}$), ($d, {}^4\text{He}$) with ${}^8\text{He}$ and ${}^{10}\text{Be}$ radioactive beams at ACCULINNA-2 fragment separator*”, *Nuclear Instruments and Methods in Physics Research B* **541** (2023) 121–125.
 9. E.Yu. Nikolskii, S.A. Krupko, I.A. Muzalevskii, A.A. Bezbakh, R. Wolski, C. Yuan, S.G. Belogurov, D. Biare, V. Chudoba, A.S. Fomichev, E.M. Gazeeva, M.S. Golovkov, A.V. Gorshkov, L.V. Grigorenko, G. Kaminski, M. Khirk, O. Kiselev, D.A. Kostyleva, B. Mauey, I. Mukha, Yu.L. Parfenova, A.M. Quynh, S.I. Sidorchuk, P.G. Sharov, N.B. Shulgina, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, G.M. Ter-Akopian, “*Study of proton and deuteron pickup reactions ${}^2\text{H}(d, {}^3\text{He}){}^9\text{Li}$ and ${}^2\text{H}(d, {}^4\text{He}){}^8\text{Li}$ with 44 AMeV ${}^{10}\text{Be}$ radioactive beam at ACCULINNA-2 fragment separator*”, *Physics of Atomic Nuclei*, Vol. **87** (2024) 1.
 10. A.A. Bezbakh, M.S. Golovkov, A.S. Denikin, R.Wolski, S.G. Belogurov, D. Biare, V. Chudoba, A.S. Fomichev, E.M. Gazeeva, A.V. Gorshkov, G. Kaminski, B.R. Khamidullin, M. Khirk, S.A. Krupko, B. Mauey, I.A. Muzalevskii, W. Piatek, A.M. Quynh, S.I. Sidorchuk, R.S. Slepnev, A. Swiercz, G.M. Ter-Akopian, B. Zalewski, “*Properties of the ${}^7\text{He}$ ground state studied by the ${}^6\text{He}(d, p){}^7\text{He}$ reaction*”, *Int. Journal of Modern Physics E* (2024) 2450002.
 11. I.A. Muzalevskii, N.B. Shulgina, A.A. Bezbakh, V Chudoba, S.A. Krupko, S.G. Belogurov, D. Biare, I.A. Egorova, A.S. Fomichev, E.M. Gazeeva, A.V. Gorshkov, L.V. Grigorenko, G. Kaminski, M. Khirk, O. Kiselev, D.A. Kostyleva, M.Y. Kozlov, B. Mauey, I. Mukha, E.Yu. Nikolskii, Yu.L. Parfenova, W. Piatek, A.M. Quynh, V.N. Schetinin, A. Serikov, S.I. Sidorchuk, P.G. Sharov, R.S. Slepnev, S.V. Stepantsov, A. Swiercz, P. Szymkiewicz, G.M. Ter-Akopian, B. Zalewski, “*Population of tetra-neutron continuum in reactions of ${}^8\text{He}$ on deuterium*”, *Phys. Rev. C.*, accepted on December 5, 2024.