



## **Curriculum vitae**

Mukhamejanov Yerzhan, Male, 22.03.2022

### **Personal information:**

Born August 11, 1989 in Kostanay, Kazakhstan. Married, two children. Citizen of Kazakhstan. Home address: 7/1 Yegizbayev str. apt. #103, Almaty, 050046, Kazakhstan, 11 Bogolyubov ave. apt. #45, Dubna, 141986, Russia.

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### **Education and degrees awarded:**

Ph.D. – al-Farabi Kazakh National University; Nuclear Physics; diploma received: 25.04.2017, Control Committee in Education and Science under the Ministry of Education and Science of the Republic of Kazakhstan, 8 Mangilik El str., House of Ministries entrance 11, Astana 010000, Republic of Kazakhstan, tel: +7 7172 742392.

“Study of interaction of charged light particles with  $^{11}\text{B}$  nuclei”. Scientific advisors: Prof. Dr. N. Burtebayev Institute of Nuclear Physics, Kazakhstan, Prof. Ph.D. W.Trzaska University of Jyvaskyla, Finland

M.Sc. – al-Farabi Kazakh National University; Nuclear Physics, June 2012; 71 al-Farabi Ave., Almaty, Republic of Kazakhstan, 050040, tel. +7 727 2211000.

“Study of the nuclear nuclear interactions of cosmic rays using neutron monitor”. Scientific advisor: Candidate of Physical and Mathematical Sciences V.V. Oskomov

B.Sc. – al-Farabi Kazakh National University; Physics, June 2010; 71 al-Farabi Ave., Almaty, Republic of Kazakhstan, 050040, tel. +7 727 2211000.

“Study of the interaction of charged and neutral particles of cosmic rays using neutron monitor”. Scientific advisor: Candidate of Physical and Mathematical Sciences V.V. Oskomov

### **Linguistic skills:**

Kazakh – mother tongue, English – Proficient user (IELTS – 7.5, 13.11.2014, TOEFL – 600, 15.08.2018), Russian – Proficient user, Turkish – Independent user.

**Current position:**

Researcher, Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research, 6 Joliot-Curie St. Dubna, Russia 141980, tel. +7 (496) 216-40-40, 2019-present.

Senior lecturer, al-Farabi Kazakh National University, 71 al-Farabi Ave., Almaty, Republic of Kazakhstan, 050040, tel. +7 727 2211000. 2013-present.

Researcher (part-time), Laboratory of Cosmic Ray Variations, Institute of Experimental and Theoretical Physics, al-Farabi Kazakh National University, 71 al-Farabi Ave., Almaty, Republic of Kazakhstan, 050040, tel. +7 727 3773191. 2009-present.

Senior researcher (part-time), Laboratory of Low Energy Nuclear Reactions, Institute of Nuclear Physics, 1 Ibragimov str., Almaty, 050032, the Republic of Kazakhstan, tel: +7 727 3866800. 2013-present.

**Previous work experience:**

Physics and Mathematics Teacher, Miras International School, 190 Al Farabi st., 050043, Almaty, Kazakhstan. 2011-2013

**Experimental research work at:**

- K-130 cyclotron (Jyväskylä, Finland);
- U-150M cyclotron (Almaty, Kazakhstan);
- UKP-2-1 linear accelerator (Almaty, Kazakhstan);
- DC-60 cyclotron (Astana, Kazakhstan);
- Tien-Shan High Mountain Cosmic Ray Station (Almaty, Kazakhstan);
- U-400 cyclotron (Dubna, Russia)
- Laboratory of Cosmic Ray Variations (Almaty, Kazakhstan);

**Research funding as well as leadership and supervision:**

Took part in the following researches:

- “Study of the Mechanisms of the Sun's Impact on Dynamic Processes in Interplanetary Space, Magnetosphere and the Atmosphere”, Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2009-2011, Principal investigator – V.V. Oskomov);
- “Investigation of geophysical parameters of the natural environment with the help of cosmic rays” Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2012-2014, Principal investigator – V.V. Oskomov);
- “Experimental and theoretical study of the multicluster structure of nuclei on beams of accelerators U-150M and DC-60”, Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2012-2014, Principal investigator – N. Burtebayev);

- “Experimental and theoretical study of excited halo states of neutron rich nuclei  $^9\text{Be}$ ,  $^{11}\text{B}$ ,  $^{13,15}\text{C}$ ,  $^{15}\text{N}$ ” Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2012-2014, Principal investigator – N. Burtebayev);
- “Development of complex scientific research in the field of physics, chemistry and advanced technologies based on the heavy ion accelerator DC-60”, Republican Budget Program 036: Development of Nuclear and Energy Projects (2015-2017, Principal investigator – N. Burtebayev)
- “Study of excited halo-states of neutron-excess nuclei  $^9\text{Be}$ ,  $^{11}\text{B}$ ,  $^{13}\text{C}$  in interaction with deuterons”, Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2015-2017, Principal investigator – N. Burtebayev);
- “Study of radiative capture and peripheral nuclear reactions of proton transfer at energies near the Coulomb barrier induced by heavy ions for astrophysical and thermonuclear applications” Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2018-2020, Principal investigator – N. Burtebayev)
- “Development of the complex scientific research activities in nuclear and radiation physics based on the Kazakhstan’s accelerator facilities” Program targeted funding by Ministry of Energy of the Republic of Kazakhstan (2018-2020, Principal investigator – N. Burtebayev);
- “Fundamental and applied studies in related fields of physics of terrestrial, near-earth and atmospheric processes and their practical application” Program targeted funding by Ministry of Education and Science of the Republic of Kazakhstan (2018-2020, Principal investigator – N.O. Saduyev);
- Measurement of neutron flux from WWR-K reactor using large area neutron detectors for assessing the environmental influence Grant by the Ministry of Education and Science of the Republic of Kazakhstan (2020-2022, Principal investigator – Y.S. Mukhamejanov);
- “Development of the complex scientific research activities in nuclear and radiation physics based on the Kazakhstan’s accelerator facilities” Program targeted funding by Ministry of Energy of the Republic of Kazakhstan (2021-2023, Principal investigator – N. Burtebayev);
- “Applied research on the basis of a nuclear reactor in the field of radioactive waste management, production of radioisotopes and radiation materials science” Program targeted funding by Ministry of Education and Science of the Republic of Kazakhstan (2021-2023, Principal investigator – T.K. Zholdybayev);

### **Presentations at major conferences and meetings:**

- “Modern achievements of physics and fundamental physical education” (Almaty, Kazakhstan, October 2013). Elastic scattering of  $^4\text{He}$  on  $^{11}\text{B}$  at energies 29, 40 and 50.5 MeV;
- “Fourth Asian Nuclear Reaction Database Development Workshop” (Almaty, Kazakhstan, October 2013). Study of elastic and inelastic scattering of  $^4\text{He}$  from  $^{11}\text{B}$  at energies 29, 40 and 50.5 MeV;

- “Eurasian Conference Nuclear science and its application” (Baku, Azerbaijan, October 2014). Study of  ${}^9\text{Be}({}^3\text{He},d){}^{10}\text{B}$  reaction;
- Nuclear Physics in Astrophysics (York, UK, May 2015). Study of elastic and inelastic scattering of alpha particles from  ${}^{11}\text{B}$  nuclei in the energy range of 29-54 MeV;
- “NUCLEUS 2015” (Saint-Petersburg, Russia, June 2015). Elastic and inelastic scattering of deuterons from  ${}^{11}\text{B}$  nuclei;
- “NUCLEUS 2015” (Saint-Petersburg, Russia, June 2015). Experimental and theoretical investigation of scattering of alpha particles from  ${}^{13}\text{C}$  nuclei;
- International scientific forum “Nuclear science and technologies” (Almaty, Kazakhstan, September 2017). Study of elastic and inelastic scattering of deuterons from  ${}^9\text{Be}$  nuclei;
- “6<sup>th</sup> International Workshop of Nuclear Physics, Nuclear Astrophysics and Cosmic Rays” (Almaty, Kazakhstan, April 2019). Elastic and inelastic scattering of 29 MeV  $\alpha$ -particles from  ${}^9\text{Be}$  nuclei
- XXXVI Mazurian Lakes Conference on Physics Piaski, Poland, September 1 – 7, 2019. Development of an automated system for the determination of the snow water equivalent and soil moisture by the neutron component of cosmic rays
- XXXVI Mazurian Lakes Conference on Physics Piaski, Poland, September 1 – 7, 2019. Investigation of (p, xp) and (p,  $\alpha$ ) reactions of 30-MeV protons with the  ${}^{103}\text{Rh}$  nucleus
- XXXVI Mazurian Lakes Conference on Physics Piaski, Poland, September 1 – 7, 2019. Study of elastic and inelastic scattering of deuterons by  ${}^9\text{Be}$  at energy  $E = 14.5$  MeV
- III International Scientific Forum «Nuclear Science and Technologies», Almaty, Republic of Kazakhstan, 20-24 September, 2021. Study of fission of  ${}^{178}\text{Pt}$  and  ${}^{180,182}\text{Hg}$  formed in the reactions with heavy ions at energies around the Coulomb barrier.

### **Currently supervising 1 PhD student:**

- Aliya Bactoraz (2<sup>nd</sup> year) – Chronotron technique in the studies of extended air showers.

### **Undergraduate students supervised:**

- Alisher Aitbayev (2020) – A technique for measuring thermal neutron fluxes using a SNM-18 detector.
- Azizkhan Satibekov (2020) – A technique for measuring thermal neutron fluxes using a SNM-15 detector.
- Aizhan Medeubayeva (2020) – Study of scattering processes of deuterons by  ${}^{10}\text{B}$  nuclei.
- Aidana Stvayeva (2020) – Study of scattering processes of  $\alpha$ - particles by  ${}^{10}\text{B}$  nuclei.

### **Graduate students supervised:**

- Tansholpan Mamak (2019) – Investigation of elastic and inelastic scattering of  $\alpha$ -particles on  $^{11}\text{B}$  nuclei at low energies
- Zhaniya Kuanyshova (2020) – Measurement of thermal neutron flux from VVR-K reactor with graphite moderator.
- Romazan Khojayev (2020) – Study of nuclear reactions on  $^{11}\text{B}$  nuclei induced by  $\alpha$ -particles.
- Nurzhainat Sattarova (2020) – Measurement of thermal neutron flux from VVR-K reactor with polyethylene moderator.
- Nurzhan Utegenov (2020) – Development of electronics for neutron detector.

### **Organizational experience:**

- Neutrinos and Dark Matter in Nuclear Physics Conference June 1-5, 2015, Jyväskylä, Finland. Member of local organizing committee
- International Scientific Forum “Nuclear Science and Technology” dedicated to the 60th anniversary of the Institute of Nuclear Physics. Almaty, Kazakhstan, September 12-15, 2017. Member of local organizing committee
- ISTC-CERN-JINR Summer School on High Energy and Accelerator Physics, Almaty, Kazakhstan August 26-30, 2019. Summer School secretary
- III International Scientific Forum «Nuclear Science and Technologies» dedicated to the 30th anniversary of the INDEPENDENCE OF THE REPUBLIC OF KAZAKHSTAN, Almaty, Republic of Kazakhstan, 20-24 September, 2021. Member of local organizing committee
- 5th ISTC-CERN-JINR-Kazakhstan Summer School on High Energy Physics, Accelerator Technology, Nuclear and radiation physics, Nuclear medicine. Almaty, Republic of Kazakhstan, 20-24 September, 2021. Member of local organizing committee

### **Scientific and societal impact of research:**

Over 70 publications. Scopus Author ID: 57200406677

List of most important publications:

- 1 Burtebayev N., Dyachkov V.V., Yushkov A.V., Baktybayev M.K., Duisebayev B.A., Zholdybayev T.K., and Muhamedzhanov E. Measuring diffraction angular distributions on  $^{59}\text{Co}$ ,  $^{197}\text{Au}$ , and  $^{209}\text{Bi}$  nuclei at an alpha particle energy of 29 MeV // Bulletin of the Russian Academy of Sciences. Physics. – 2015. – Vol.79. – P.852-855
- 2 Demyanova A.S., Ogloblin A.A., Danilov A.N., Dmitriev S.V., Starostin V.I., Goncharov S.A., Belyaeva T.L., Trzaska W., Maslov V.A., Sobolev Yu.G., Burtebaev N., Mukhamedzhanov E., Slusarenko L.I. and Pavlenko Yu.N. // Neutron halo in the exotic first excited state of  $^9\text{Be}$  // JETP Letters. – 2015. – Vol.102, №7. – P.413-416
- 3 Burtebayev N., Kerimkulov Zh.K., Mukhamejanov Y.S., Alimov D.K., Demyanova A.S., Danilov A.N. Study of scattering of alpha particles from  $^{11}\text{B}$  nuclei at 50 and 65 MeV // Reports of the National Academy of Sciences of the Republic of Kazakhstan. – 2016. – Vol.5, №.309. – P.20-25

- 4 Burtebayev N., Alimov D.K., Boztosun I., Kerimkulov Zh., Nassurlla M., Mukhamejanov Y.S., Yushkov A.V., Sakhiev S.K., Janseitov D.M., Bahtibayev A.N., Pattaev A., Hamada Sh. Investigation of interaction processes of  $^3\text{He}$  with  $^{14}\text{N}$  nuclei at 50 and 60 MeV // International journal of mathematics and physics. - 2016. №1 (7). - P.69-72.
- 5 Burtebayev N., Kerimkulov Zh.K., Amangeldi N., Alimov D.K., Yushkov A.V., Mukhamejanov Y.S., Janseitov D.M., Mauey B., Aymaganbetov A., Zhagypar K., Pattaev A. Study of elastic scattering of  $^{14}\text{N}$  ions on  $^{16}\text{O}$  at energies near the coulomb barrier // NEWS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN-SERIES PHYSICO-MATHEMATICAL. – 2016. - Vol. 3, No. 307. - P. 170-176.
- 6 Demyanova A.S., Danilov A.N., Burtebayev N., Janseitov D.M., Kerimkulov Zh., Alimov D.K., Mukhamejanov Y.S. Exotic states of  $^{13}\text{C}$  nuclei with abnormal radii // NEWS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN-SERIES PHYSICO-MATHEMATICAL. – 2016. - Vol. 6, No. 310. - P. 17-20.
- 7 Burtebayev N., Kerimkulov Zh.K. , Amangeldi N., Alimov D.K., Mukhamejanov Y.S., Janseitov D.M., Mauey B., Aymaganbetov A., Kurakhmedov A., Bekbaev S.M., Madiyarova A.Zh. Study of elastic scattering of  $^{14}\text{N}$  ions from  $^{16}\text{O}$  at energies 17,5 and 41 MeV // NEWS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN-SERIES PHYSICO-MATHEMATICAL. – 2016. - Vol. 6, No. 310. - P. 109-114.
- 8 Burtebayev N., Mukhamejanov Y.S., Kerimkulov Zh.K., Alimov D.K., Janseitov D.M., Trzaska W.H. Comparative analysis of elastic and inelastic scattering of d and  $\alpha$ -particles from  $^{11}\text{B}$  // International Journal of Mathematics and Physics. 2016. – Vol.7, №.2. – P. 77-86
- 9 Belyaeva T.L., Goncharov S.A., Demyanova A.S., Ogloblin A.A., Danilov A.N., Maslov V.A., Sobolev Yu.A., Trzaska W., Khlebnikov S.V., Tyurin G.P., Burtebaev N., Janseitov D., and Mukhamejanov E. Asymptotic normalization coefficients and halo radii of  $^{12}\text{B}$  in the excited states // EPJ Web of Conferences 165, 01004 (2017)
- 10 Oskomov V., Sedov A., Saduyev N., Kalikulov O., Kenzhina I., Tautaev E., Mukhamejanov Y., Dyachkov V. and Utey Sh. Data collection system for a wide range of gas-discharge proportional neutron counters // Journal of Physics: Conf. Series 936 (2017) 012047
- 11 Burtebayev N., Kerimkulov Zh., Bakhtybayev M., Hamada Sh., Mukhamejanov Y., Nassurlla M., Alimov D., Morzabayev A., Janseitov D., Trzaska W. Investigation of the elastic and inelastic scattering of  $^4\text{He}$  from  $^{11}\text{B}$  in the energy range 29-50.5 MeV // Journal of Physics: Conf. Series 940 (2018) 012034 doi :10.1088/1742-6596/940/1/012034
- 12 Nassrulla Burtebayev, Daniyar Janseitov, Zhambul Kerimkulov, Alla Demyanova, Andrei Danilov, Dilshod Alimov and Yerzhan Mukhamejanov Investigation of  $\alpha$ -particle scattering from  $^{13}\text{C}$  at 29 MeV // Journal of Physics: Conf. Series 940 (2018) 012033. doi :10.1088/1742-6596/940/1/012033

- 13 Alimov D., Burtebayev N., Boztosun I., Kerimkulov Z., Burtebayeva J., Karakoc M., Mukhamejanov Y., Janseitov D., Bahtibayev A., Pattayev A. and Hamada Sh. Investigation of interaction processes of light nuclei with  $^{14}\text{N}$  // Journal of Physics: Conf. Series 940 (2018) 012029. doi:10.1088/1742-6596/940/1/012029
- 14 Burtebayev N., Janseitov D.M., Kerimkulov Zh.K., Mukhamejanov Y.S., Nassurlla M. Investigation of exotic states of  $^{13}\text{C}$  at low energy // International Journal of Modern Physics E. - Vol. 27, No. 3 (2018) 1850025. DOI: 10.1142/S0218301318500258
- 15 Danilov A., Demyanova A., Ogloblin A., Belyaeva T., Goncharov S., Sukhorukov R., Maslov V., Sobolev Y, Trzaska W., Khlebnikov S., Tyurin G., Burtebaev N., Janseitov D., Mukhamejanov E., and Gurov Y. Neutron halos in excited states of  $^{12}\text{B}$  // The 3rd International Conference on Particle Physics and Astrophysics, KnE Energy & Physics, pages 83–88. DOI 10.18502/ken.v3i1.1727
- 16 Burtebayev N., Kerimkulov Zh.K., Alimov D.K., Otarbayeva A.M., Mukhamejanov Y.S., Janseitov D.M. Study of elastic scattering of deuterons from Li-6 at energy 18 MeV // NEWS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN-SERIES PHYSICO-MATHEMATICAL. 2018. - Vol. 1, No. 311. - P. 5-12.
- 17 Belyaeva T.L ., Goncharov S.A., Demyanova A.S., Ogloblin A.A. Danilov A.N. Maslov V.A. Sobolev Y.G., Trzaska W, Khlebnikov S.V., Tyurin G.P., Burtebaev N. Janseitov D., Mukhamejanov E. Neutron halos in the excited states of B-12 // PHYSICAL REVIEW C. - Vol. 96, No. 3 (2018) 034602. DOI: 10.1103/PhysRevC.98.034602
- 18 Burtebayev, N., Janseitov, D.M., Kerimkulov, Z., Mukhamejanov, Y., Nassurlla, M., Valiolda, D.S., Demyanova, A.S., Danilov, A.N., Starostin, V. The cluster states in light nuclei // (2018) EPJ Web of Conferences, 194, № 06003, DOI: 10.1051/epjconf/201819406003
- 19 Shinbulatov, S.K., Saduev, N.O., Kalikulov, O.A., Mukhamejanov, Y.S., Utey, Sh., Zhumabayev, A.I., Yerezhep, N.O., Beznosko, D., Jhanceitova, J.K., Nam, R.A., Piskal, V.V., Stepanov, A.V., Vildanova, L.I., Zhukov, V.V., Cherdyntceva, K.V., Denisova, V.G., Kanevskay, E., Nesterova, N.M., Puchkov, V.S., Pyatovsky, S.E., Ryabov, V.A., Schepetov, A.L., Smirnova, M.D., Shaulov, S.B. Study of the angular spectra of HADRONS in X-RAY emulsion chamber // (2019) Proceedings of Science, 358
- 20 Burtebayev, N., Janseitov, D., Kerimkulov, Z., Nassurlla, M., Mukhamejanov, Y., Alimov, D. Investigation of the excited states of  $^{11}\text{B}$  in interactions with alpha particles // (2019) AIP Conference Proceedings, 2163, № 070001
- 21 Nassurlla, M., Burtebayev, N., Janseitov, D.M., Kerimkulov, Z., Alimov, D., Morzabayev, A.K., Talpakova, K., Mukhamejanov, Y., Galanina, L.I., Demyanova, A.S., Danilov, A.N., Starastsin, V. Study of elastic and inelastic

scattering of deuterons by  $^9\text{Be}$  at energy  $E = 14.5 \text{ MeV}$  // (2020) Acta Physica Polonica B, 51 (3), pp. 751-756.

22 Saduyev, N.O., Kalikulov, O.A., Sedov, A.N., Mukhamejanov, Y.S., Oskomov, V.V., Shinbulatov, S.K., Yerezhep, N.O., Zhumabayev, A.I., Utey, S.B., Baktoraz, A.Y. Development of an automated system for the determination of the snow water equivalent and soil moisture by the neutron component of cosmic rays // (2020) Acta Physica Polonica B, 51 (3), pp. 887-892. DOI: 10.5506/APhysPolB.51.887

23 Mukhamejanov, Y., Alieva, G., Alimov, D., Kabdrakhimova, G.D., Nassurlla, M., Saduyev, N., Sadykov, B.M., Zholdybayev, T.K., Ismailov, K.M., Kucuk, Y. Investigation of  $(p, xp)$  and  $(p, x\alpha)$  reactions of 30-MeV protons with the  $^{103}\text{Rh}$  nucleus // (2020) Acta Physica Polonica B, 51 (3), pp. 783-788. DOI: 10.5506/APhysPolB.51.783

24 Kumar, D., Kozulin, E.M., Cheralu, M., Knyazheva, G.N., Itkis, I.M., Itkis, M.G., Novikov, K.V., Bogachev, A.A., Kozulina, N.I., Diatlov, I.N., Pchelintsev, I.V., Vorobiev, I.V., Banerjee, T., Mukhamejanov, Y.S., Pan, A.N., Saiko, V.V., Singh, P.P., Sahoo, R.N., Andreyev, A.N., Filipescu, D.M., Maiti, M., Prajapat, R., Kumar, R. Study of Mass-Asymmetric Fission of  $^{180,190}\text{Hg}$  Formed in the  $^{36}\text{Ar}+^{144,154}\text{Sm}$  Reactions // (2020) Bulletin of the Russian Academy of Sciences: Physics, 84 (8), pp. 1001-1006. DOI: 10.3103/S1062873820080213

25 Cheralu, M., Mukhamejanov, Y.S., Kozulin, E.M., Knyazheva, G.N., Itkis, I.M., Banerjee, T., Diatlov, I.N., Kumar, D., Kozulina, N.I., Novikov, K.V., Pan, A.N., Pchelintsev, I.V., Tikhomirov, R.S., Vorobiev, I.V., Maiti, M., Prajapat, R., Kumar, R., Sarkar, G., Trzaska, W.H., Singh, P.P., Sahoo, R.N., Vardaci, E., Andreev, A., Mitu, A., Harca, I. FISSION OF 182,183Hg NUCLEI AT ENERGIES AROUND THE COLOUMB BARRIER (2021) Acta Physica Polonica B, Proceedings Supplement, 14 (4), pp. 741-748. DOI: 10.5506/APHYSPOLBSUPP.14.741

26 Bogachev, A.A., Kozulin, E.M., Knyazheva, G.N., Itkis, I.M., Itkis, M.G., Novikov, K.V., Kumar, D., Banerjee, T., Diatlov, I.N., Cheralu, M., Kirakosyan, V.V., Mukhamejanov, Y.S., Pan, A.N., Pchelintsev, I.V., Tikhomirov, R.S., Vorobiev, I.V., Maiti, M., Prajapat, R., Kumar, R., Sarkar, G., Trzaska, W.H., Andreyev, A.N., Harca, I.M., Vardaci, E. Asymmetric and symmetric fission of excited nuclei of Hg 180,190 and Pb 184,192,202 formed in the reactions with Ar 36 and Ca 40,48 ions (2021) Physical Review C, 104 (2), 024623, DOI: 10.1103/PhysRevC.104.024623

27 Kozulin, E.M., Knyazheva, G.N., Itkis, I.M., Itkis, M.G., Mukhamejanov, Y.S., Bogachev, A.A., Novikov, K.V., Kirakosyan, V.V., Kumar, D., Banerjee, T., Cheralu, M., Maiti, M., Prajapat, R., Kumar, R., Sarkar, G.,



Trzaska, W.H., Andreyev, A.N., Harca, I.M., Mitu, A., Vardaci, E. Fission of  $^{180,182,183}\text{Hg}^*$  and  $^{178}\text{Pt}^*$  nuclei at intermediate excitation energies (2022) *Physical Review C*, 105 (1), 014607, . DOI: 10.1103/PhysRevC.105.014607

28 Kozulin, E.M., Knyazheva, G.N., Bogachev, A.A., Saiko, V.V., Karpov, A.V., Itkis, I.M., Novikov, K.V., Mukhamejanov, Y.S., Pchelintsev, I.V., Vorobiev, I.V., Banerjee, T., Cheralu, M., Singh, P.P. Experimental study of fast fission and quasifission in the  $\text{Ca } 40 + \text{Pb } 208$  reaction leading to the formation of the transfermium nucleus No 248 (2022) *Physical Review C*, 105 (2), 024617, DOI: 10.1103/PhysRevC.105.024617