

2022

1. Yu.Ts. Oganessian, V.K. Utyonkov, A.G. Popeko, D.I. Solovyev, F.Sh. Abdullin, S.N. Dmitriev, D. Ibadullayev, M.G. Itkis, N.D. Kovrizhnykh, D.A. Kuznetsov, O.V. Petrushkin, A.V. Podshibiakin, A.N. Polyakov, R.N. Sagaidak, L. Schlattauer, I.V. Shirokovsky, V.D. Shubin, M.V. Shumeiko, Yu.S. Tsyganov, A.A. Voinov, V.G. Subbotin, V.V. Bekhterev, N.A. Belykh, O.A. Chernyshev, K.B. Gikal, G.N. Ivanov, A.V. Khalkin, V.V. Konstantinov, N.F. Osipov, S.V. Paschenko, A.A. Protasov, V.A. Semin, V.V. Sorokoumov, K.P. Sychev, V.A. Verevchkin, B.I. Yakovlev, S. Antoine, W. Beeckman, P. Jehanno, M.I. Yavor, A.P. Shcherbakov, K.P. Rykaczewski, T.T. King, J.B. Roberto, N.T. Brewer, R.K. Grzywacz, Z.G. Gan, Z.Y. Zhang, M.H. Huang, H.B. Yang.

DGFRS-2 –A gas-filled recoil separator for the Dubna Super Heavy Element Factory.

Nuclear Inst. and Methods in Physics Research, A 1033 (2022) 166640.

2. H. B. Yang, Z. G. Gan, Z. Y. Zhang, M. H. Huang, L. Ma, M. M. Zhang, C. X. Yuan, Y. F. Niu, C. L. Yang, Y. L. Tian, L. Guo, Y. S. Wang, J. G. Wang, H. B. Zhou, X. J. Wen, H. R. Yang, X. H. Zhou, Y. H. Zhang, W. X. Huang, Z. Liu, S. G. Zhou, Z. Z. Ren, H. S. Xu, V. K. Utyonkov, A. A. Voinov, Yu. S. Tsyganov, A. N. Polyakov, and D. I. Solovyev.

New isotope ^{207}Th and odd-even staggering in α -decay energies for nuclei with $Z > 82$ and $N < 126$.

Phys. Rev. C **105**, L051302 (2022).

3. D.I. Solovyev and N.D. Kovrizhnykh.

Simulations of recoil trajectories in Dubna Gas-Filled Recoil Separator 2 by GEANT4 toolkit.

J. Instrum. **17**, P07033 (2022).

4. Yu.Ts. Oganessian, V.K. Utyonkov, D. Ibadullayev, F.Sh. Abdullin, S.N. Dmitriev, M.G. Itkis, A.V. Karpov, N.D. Kovrizhnykh, D.A. Kuznetsov, O.V. Petrushkin, A.V. Podshibiakin, A.N. Polyakov, A.G. Popeko, R.N. Sagaidak, L. Schlattauer, V.D. Shubin, M.V. Shumeiko, D.I. Solovyev, Yu.S. Tsyganov, A.A. Voinov, V.G. Subbotin, A.Yu. Bodrov, A.V. Sabel'nikov, A. Lindner, K.P. Rykaczewski, T.T. King, J.B. Roberto, N.T. Brewer, R.K. Grzywacz, Z.G. Gan, Z.Y. Zhang, M.H. Huang, and H.B. Yang.

Investigation of ^{48}Ca -induced reactions with ^{242}Pu and ^{238}U targets at the JINR Superheavy Element Factory.

Phys. Rev. C **106**, 026412 (2022).

5. Yu. Ts. Oganessian, V. K. Utyonkov, N. D. Kovrizhnykh, F. Sh. Abdullin, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, R. N. Sagaidak, L. Schlattauer, I. V. Shirokovski, V. D. Shubin, M. V. Shumeiko, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, A. Yu. Bodrov, A. V. Sabel'nikov, A. V. Khalkin, V. B. Zlokazov, K. P. Rykaczewski, T. T. King, J. B. Roberto, N. T. Brewer, R. K. Grzywacz, Z. G. Gan, Z. Y. Zhang, M. H. Huang, and H. B. Yang.

First experiment at the Super Heavy Element Factory: High cross section of ^{288}Mc in the $^{243}\text{Am}+^{48}\text{Ca}$ reaction and identification of the new isotope ^{264}Lr .

Phys. Rev. C **106**, L031301 (2022).

6. Yu. Ts. Oganessian, V. K. Utyonkov, N. D. Kovrizhnykh, F. Sh. Abdullin, S. N. Dmitriev, A. A. Dzhioev, D. Ibadullayev, M. G. Itkis, A. V. Karpov, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, I. S. Rogov, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, M. V. Shumeiko, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, A. Yu.

Bodrov, A. V. Sabel'nikov, A. V. Khalkin, K. P. Rykaczewski, T. T. King, J. B. Roberto, N. T. Brewer, R. K. Grzywacz, Z. G. Gan, Z. Y. Zhang, M. H. Huang, and H. B. Yang.
New isotope ^{286}Mc produced in the $^{243}\text{Am} + ^{48}\text{Ca}$ reaction
Phys. Rev. C **106**, 064306 (2022).

7. H. B. Yang, Z. G. Gan, Z. Y. Zhang, M. H. Huang, L. Ma, M. M. Zang, C. L. Yang, Y. L. Tian, Y. S. Wang, H. B. Zhou, X. J. Wen, J. G. Wang, Z. Zhao, S. Y. Xu, L. X. Chen, X. Y. Huang, C. X. Yuan, Y. F. Niu, H. R. Yang, W. X. Huang, Z. Liu, X. H. Zhou, Y. H. Zhang, S. G. Zhou, Z. Z. Ren, H. S. Xu, V. K. Utyonkov, A. A. Voinov, Yu. S. Tsyganov, A. N. Polyakov, and D. I. Solovyev.

Examining the impact of α -decay energies on the odd-even staggering in half-lives: α -decay spectroscopy of $^{207}\text{–}^{209}\text{Ac}$.
Phys. Rev. C **106**, 064311 (2022).

2023

8. Yu. Ts. Oganessian, V. K. Utyonkov, D. I. Solovyev, F. Sh. Abdullin, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, N. D. Kovrizhnykh, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, M. V. Shumeiko, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, A. Yu. Bodrov, A. V. Sabel'nikov, K. P. Rykaczewski, T. T. King, J. B. Roberto, N. T. Brewer, R. K. Grzywacz, Z. G. Gan, Z. Y. Zhang, M. H. Huang, H. B. Yang.
Average charge states of heavy ions in rarefied hydrogen.
Nuclear Inst. and Methods in Physics Research, A **1048** (2023) 167978.

9. S. Y. Xu, Z. Y. Zhang, Z. G. Gan, M. H. Huang, L. Ma, J. G. Wang, M. M. Zhang, H. B. Yang, C. L. Yang, Z. Zhao, X. Y. Huang, L. X. Chen, X. J. Wen, H. Zhou, H. Jia, L. N. Sheng, J. Q. Wu, X. L. Peng, Q. Hu, J. Yang, Q. G. Yao, Y. S. Qin, H. H. Yan, Z. Chai, J. C. Zhang, Y. Zhang, Z. Du, H. M. Xie, B. Zhao, G. Z. Sun, F. F. Wang, C. Z. Yuan, X. L. Wu, R. F. Chen, H. B. Zhang, Z. W. Lu, H. R. Yang, X. X. Xu, Y. X. Chen, A. H. Feng, P. Sun, J. K. Xu, Y. He, L. T. Sun, X. H. Zhou, H. S. Xu, V. K. Utyonkov, A. A. Voinov, Yu. S. Tsyganov, A. N. Polyakov, D. I. Solovyev.
A gas-filled recoil separator, SHANS2, at the China Accelerator Facility for Superheavy Elements
Nuclear Inst. and Methods in Physics Research, A **1050** (2023) 168113.

10. D. I. Solovyev, N. D. Kovrizhnykh, G. G. Gulbekyan, N. Y. Kazarinov, K. B. Gikal, V. I. Lisov, K. V. Papenkov.
Simulation of ion optics in a gas-filled solenoid GASSOL.
Nuclear Inst. and Methods in Physics Research, A **1052** (2023) 168263.

11. D. I. Solovyev, N. D. Kovrizhnykh, V. K. Utyonkov, Yu. Ts. Oganessian, F. Sh. Abdullin, A. A. Voinov, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, M. V. Shumeiko, and Yu. S. Tsyganov.
Simulated and experimental characteristics of a gas-filled recoil separator DGFRS-2,
Bulletin of the Russian Academy of Sciences: Physics, Vol. 87, No 8, pp. 1253-1259, 2023.
<https://doi.org/10.3103/S1062873823702891>

12. Yu. Ts. Oganessian, V. K. Utyonkov, M. V. Shumeiko, F. Sh. Abdullin, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, N. D. Kovrizhnykh, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, I. S. Rogov, R. N. Sagaidak, L. Schlattauer, V. D.

Shubin, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, N. S. Bublikova, M. G. Voronyuk, A. V. Sabelnikov, A. Yu. Bodrov, Z. G. Gan, Z. Y. Zhang, M. H. Huang, and H. B. Yang.

New isotope ^{276}Ds and its decay products ^{272}Hs and ^{268}Sg from the $^{232}\text{Th} + ^{48}\text{Ca}$ reaction.
Phys. Rev. C **108**, 024611 (2023).

13. E. K. Koshurnikov, K. B. Gikal, G. G. Gulbekyan, S. Cuneo, V. Yu. Okhrimenko, D. I. Solovyov, and D. Torazza.

Magnetic System of the Gas-Filled Separator GASSOL for Studying Properties of Superheavy Elements.

Physics of Particles and Nuclei, 2023, Vol. 54, No. 4, pp. 776–787.

14. N. D. Kovrizhnykh, Yu. Ts. Oganessian, V. K. Utyonkov, F. Sh. Abdullin, S. N. Dmitriev, A. A. Dzhiyev, D. Ibadullayev, M. G. Itkis, A. V. Karpov, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, I. S. Rogov, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, M. V. Shumeiko, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, A. Yu. Bodrov, A. V. Sabel'nikov, and A. V. Khalkin.

First Experiment at the Super Heavy Element Factory: New Data from the $^{243}\text{Am} + ^{48}\text{Ca}$ Reaction.

Bulletin of the Russian Academy of Sciences: Physics, 2023, Vol. 87, No. 8, pp. 1098–1104.

15. КОВРИЖНЫХ Н.Д., ОГАНЕСЯН Ю.Ц., УТЕНКОВ В.К., АБДУЛЛИН Ф.Ш., ДМИТРИЕВ С.Н., ДЖИОЕВ А.А., ИБАДУЛЛАЕВ Д. ИТКИС М.Г., КАРПОВ А.В., КУЗНЕЦОВ Д.А., ПЕТРУШКИН О.В., ПОДШИБЯКИН А.В., ПОЛЯКОВ А.Н., ПОПЕКО А.Г., РОГОВ И.С., САГАЙДАК Р.Н., ШЛАТТАУЭР Л., ШУБИН В.Д., ШУМЕЙКО М.В., СОЛОВЬЕВ Д.И., ЦЫГАНОВ Ю.С., ВОИНОВ А.А., СУББОТИН В.Г., БОДРОВ А.Ю., САБЕЛЬНИКОВ А.В., ХАЛКИН А.В., ПЕРВЫЙ ЭКСПЕРИМЕНТ НА ФАБРИКЕ СВЕРХТЯЖЕЛЫХ ЭЛЕМЕНТОВ: НОВЫЕ ДАННЫЕ В РЕАКЦИИ $^{243}\text{AM} + ^{48}\text{CA}$, ИЗВЕСТИЯ РОССИЙСКОЙ АКАДЕМИИ НАУК. СЕРИЯ ФИЗИЧЕСКАЯ 87, 1077-1083 (2023).

16. D. Ibadullayev, V. K. Utyonkov, Yu. Ts. Oganessian, F. Sh. Abdullin, S. N. Dmitriev, M. G. Itkis, A. V. Karpov, N. D. Kovrizhnykh, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, M. V. Shumeiko, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, A. Yu. Bodrov, A. V. Sabel'nikov, Sh. G. Giniyatova, and K. A. Kuterbekov.

Study of the $^{242}\text{Pu} + ^{48}\text{Ca}$ Reaction at Super Heavy Element Factory.

Bulletin of the Russian Academy of Sciences: Physics, 2023, Vol. 87, No. 8, pp. 1118–1122.

17. ИБАДУЛЛАЕВ Д., УТЕНКОВ В.К., ОГАНЕСЯН Ю.Ц., АБДУЛЛИН Ф.Ш., ДМИТРИЕВ С.Н., ИТКИС М.Г., КАРПОВ А.В., КОВРИЖНЫХ Н.Д., КУЗНЕЦОВ Д.А., ПЕТРУШКИН О.В., ПОДШИБЯКИН А.В., ПОЛЯКОВ А.Н., ПОПЕКО А.Г., САГАЙДАК Р.Н., ШЛАТТАУЭР Л., ШУБИН В.Д., ШУМЕЙКО М.В., СОЛОВЬЕВ Д.И., ЦЫГАНОВ Ю.С., ВОИНОВ А.А., СУББОТИН В.Г., БОДРОВ А.Ю., САБЕЛЬНИКОВ А.В., ГИНИЯТОВА Ш.Г., КУТЕРБЕКОВ К.А., ИССЛЕДОВАНИЕ РЕАКЦИИ $^{242}\text{PU} + ^{48}\text{CA}$ НА ФАБРИКЕ СВЕРХТЯЖЕЛЫХ ЭЛЕМЕНТОВ, ИЗВЕСТИЯ РОССИЙСКОЙ АКАДЕМИИ НАУК. СЕРИЯ ФИЗИЧЕСКАЯ 87, 1099-1103 (2023).

2024

18. Dastan Ibadullayev, Vladimir K. Utyonkov, Yury Ts. Oganessian, Farid Sh. Abdullin, Sergey N. Dmitriev, Mikhail G. Itkis, Alexander V. Karpov, Nikita D. Kovrizhnykh, Dmitriy A. Kuznetsov, Oleg V. Petrushkin¹, Alexander V. Podshibiakin, Alexander N. Polyakov, Andrey G. Popeko, Roman N. Sagaidak, Leo Schlattauer, Vladimir D. Shubin, Maxim V. Shumeiko, Dmitriy I. Solovyev, Yury S. Tsyganov, Alexey A. Voinov, Vladimir G. Subbotin, Alexander Yu. Bodrov, Alexey V. Sabel'nikov, Antonin Lindner, Krzysztof P. Rykaczewski, Thomas T. King, James B. Roberto, Nathan T. Brewer, Robert K. Grzywacz, Zaiguo Gan, Zhiyuan Zhang, Minghui Huang, Huabin Yang.

Improved Data for Isotopes in the Decay Chain of Super Heavy Nucleus ^{283}Cn .

The IV International Scientific Forum "Nuclear Science and Technologies"

AIP Conf. Proc. 3020, 020004 (2024).

<https://doi.org/10.1063/5.0193199>

Published by AIP Publishing. 978-0-7354-4823-0/\$30.00

19. Yu. Ts. Oganessian, V. K. Utyonkov, M. V. Shumeiko, F. Sh. Abdullin, G. G. Adamian, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, N. D. Kovrizhnykh, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, I. S. Rogov, R. N. Sagaidak, L. Schlattauer, V. D. Shubin, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, V. G. Subbotin, N. S. Bublikova, M. G. Voronyuk, A. V. Sabelnikov, A. Yu. Bodrov, N. V. Aksenov, A. V. Khalkin, Z. G. Gan, Z. Y. Zhang, M. H. Huang, and H. B. Yang.

Synthesis and decay properties of isotopes of element 110: ^{273}Ds and ^{275}Ds .

Phys. Rev. C **109**, 054307 (2024).

20. R. N. Sagaidak, V. K. Utyonkov, F. Sh. Abdullin, S. N. Dmitriev, D. Ibadullayev, M. G. Itkis, N. D. Kovrizhnykh, D. A. Kuznetsov, O. V. Petrushkin, A. V. Podshibiakin, A. N. Polyakov, A. G. Popeko, V. D. Shubin, M. V. Shumeiko, D. I. Solovyev, Yu. S. Tsyganov, A. A. Voinov, N. S. Bublikova, M. G. Voronyuk, A. V. Sabelnikov, A. Yu. Bodrov, Z. G. Gan, Z. Y. Zhang, M. H. Huang, H. B. Yang, and X. Y. Huang.

Production of Th nuclei in the $^{48}\text{Ca} + ^{170}\text{Yb}$ and $^{54}\text{Cr} + ^{164}\text{Dy}$ reactions.

Phys. Rev. C **110**, 044609 (2024).