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Список научных работ

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Публикации в рецензируемых журналах (зарубежные):


1. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Results on $\beta\beta$ decay with emission of two neutrinos or Majorons in ^{76}Ge from GERDA Phase I, *Eur.Phys.J. C75* (2015) no.9, 416, 2015
2. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Production, characterization and operation of ^{76}Ge enriched BEGe detectors in GERDA, *Eur.Phys.J. C*, 75, 2, 39, 2015
3. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Limit on neutrinoless double beta decay of ^{76}Ge by GERDA, *Physics Procedia*, Изд:Elsevier, 61, 828-837, 2015
4. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Improvement of the energy resolution via an optimized digital signal processing in GERDA Phase I, *Eur.Phys.J. C*, 75, 255, 2015
5. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Results on $\beta\beta$ decay with emission of two neutrinos or Majorons in ^{76}Ge from GERDA Phase I, *Eur.Phys.J. C*, 75, 416, 2015
6. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, $2\nu\beta\beta$ decay of ^{76}Ge into excited states with GERDA phase I, *J. Phys. G: Nucl. Part. Phys.*, 42, 115201, 2015
7. M. Agostini, M. Barnabe-Heider, D. Budjas, C. Cattadori, A. Gangapshev, K. Gusev, M. Heisel, M. Junker, A. Klimenko, A. Lubashevskiy, K. Pelczar, S. Schönert, A. Smolnikov, и др., LArGe: active background suppression using argon scintillation for the Gerda $0\nu\beta\beta$ -experiment, *Eur. Phys. J. C*, Изд:Springer-Verlag / Società Italiana di Fisica, 75, 506, 2015
8. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Flux modulations seen by the muon veto of the Gerda experiment, *Astroparticle Physics*, 84, 29-35, 2016
9. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Limit on the Radiative Neutrinoless Double Electron Capture of ^{36}Ar from GERDA Phase I, *European Physical Journal C76* (12), 2016
10. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Measurement of the double-beta decay half-life and search for the neutrinoless double-beta decay of ^{48}Ca with the NEMO-3 detector, *Phys. Rev. D* 93, 112008, 2016
11. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Measurement of the $2\nu\beta\beta$ decay half-life of ^{150}Nd and a search for $0\nu\beta\beta$ decay processes with the full exposure from the NEMO-3 detector, *Phys.Rev. D94*, 7, 072003, 2016
12. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Limits on uranium and thorium bulk content in Gerda Phase I detectors, *Astroparticle Physics*, 91, 15-21, 2017

13. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Search for Neutrinoless Quadruple- β Decay of Nd-150 with the NEMO-3 Detector, Physical Review Letters 119 (4), July 2017
14. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Study of the GERDA Phase II background spectrum, J.Phys.Conf.Ser. 888 no.1, 012106, 2017
15. A. S. Barabash ...A.Smolnikov,... et al., *SuperNEMO collaboration*, Calorimeter development for the SuperNEMO double beta decay experiment, Nuclear Inst. and Methods in Phys. Res. A, 868, 98–108, 2017
16. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Measurement of the $2\nu\beta\beta$ decay half-life and search for the $0\nu\beta\beta$ decay of ^{116}Cd with the NEMO-3 detector, Physical Review D 95, 012007-2, 2017
17. R. Arnold ...A.Smolnikov,... et al., *SuperNEMO collaboration*, The BiPo-3 detector for the measurement of ultra low natural radioactivities of thin materials, JINST, 12, P06002-P060012, 2017
18. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Active background suppression with the liquid argon scintillation veto of GERDA Phase II, J.Phys.Conf.Ser. 888 no.1, 012238, 2017
19. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, First results of GERDA Phase II and consistency with background mode, J.Phys.Conf.Ser. 798 no.1, 012106, 2017
20. N. Abgrall ...A.Smolnikov,... et al, *LEGEND collaboration*, The large enriched germanium experiment for neutrinoless double beta decay (LEGEND), AIP Conference Proceedings 1894, 020027 (2017), 1894, 020027, 1-8, 2017
21. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Background-free search for neutrinoless double- β decay of Ge-76 with GERDA, *Nature* 544, 47, Изд:Nature Publishing Group, published 6 April 2017
22. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, GERDA results and the future perspectives for the neutrinoless double beta decay search using ^{76}Ge , International Journal of Modern Physics A, Изд:World Scientific Publishing Company, 33, 9, 1843004, 1-35, 2018
23. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Final results on ^{82}Se double beta decay to the ground state of ^{82}Kr from the NEMO-3 experiment, Eur. Phys. J. C, 78, 821, 1-15, 2018
24. A. Lubashevskiy, M. Agostini, D.Budjas, A. Gangapshev, K. Gusev, M. Heisel, A. Klimenko, A. Lazzaro, B. Lehnert, K. Pelczar, S. Schoenert, A. Smolnikov, M. Walter, G. Zuzel, Mitigation of $^{42}\text{Ar}/^{42}\text{K}$ background for the GERDA Phase II experiment, The European Physical Journal C - Particles and Fields, 78, 15, 2018
25. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Improved Limit on Neutrinoless Double- β Decay of ^{76}Ge from GERDA Phase II, Physical Review Letters, 120, 132503, 2018
26. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Upgrade for Phase II of the GERDA Experiment, The European Physical Journal C, 78, 388, 2018

27. A.A.Smolnikov, GERDA Searches for $0\nu\beta\beta$ and other $\beta\beta$ Decay Modes of ^{76}Ge , AIP Conference Proceedings, 2165, 020024, 1-4, 2019
28. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Probing Majorana neutrinos with double- β decay, *Science*, Изд:American Association for the Advancement of Science, 365, 1445-1448, 2019
29. R. Arnold ...A.Smolnikov,... et al., *NEMO collaboration*, Detailed studies of ^{100}Mo two-neutrino double beta decay in NEMO-3, *European Physical Journal C - Particles and Fields*, 79, 440, 2019
30. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Characterization of 30 ^{76}Ge enriched Broad Energy Ge detectors for GERDA Phase II GERDA, *Eur. Phys. J. C*, 79, 978, 1-24, 2019
32. A. V. Rakhimov, A.S. Barabash, ...A.Smolnikov,... et al., Development of methods for the preparation of radiopure ^{82}Se sources for the SuperNEMO neutrinoless double-beta decay experiment, *Radiochimica Acta*, 108, 2, 87-97, 2020
- Статьи в научных сборниках и периодических изданиях:**
34. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Search of Neutrinoless Double Beta Decay with the GERDA Experiment, *Nuclear and Particle Physics Proceedings*, Изд:Elsevier, Elsevier, 273-275, 1876–1882, 2016
35. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, GERDA Phase II: search for neutrinoless double beta decay, *Proceedings of Science PoS(EPS-HEP2017)150*, July 2017
36. A.A.Smolnikov, Fifty years of searching for neutrinoless double beta decay with Ge detectors *Proceedings of the International Conference "History of the Neutrino"*, Paris, France, September 5-7, 2018, Published by APC, France, 1, 1, 521-525, 2019
37. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, New data release of GERDA Phase II: search for $0\nu\beta\beta$ decay of ^{76}Ge , Published in *The 3rd International Conference on Particle Physics and Astrophysics, КнЕ Energy & Physics*, pages 201–209, (2018), DOI: 10.18502/ken.v3i1
- Материалы научных мероприятий (международные, приглашенный доклад):**
38. MEDEX 19, Прага, Чехия, May 31-June 6, 2019
A.Smolnikov, GERDA searches for $0\nu\beta\beta$ and other $0\nu\beta\beta$ decay modes of ^{76}Ge , 1-5, AIP, AIP Conference Proceedings, 2165, 020024, 2019
- Электронные публикации:**
39. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Results on $0\nu\beta\beta$ decay with emission of two neutrinos or Majorons in ^{76}Ge from GERDA Phase I
arXiv:1501.02345, 2015
40. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Searching for neutrinoless double beta decay with GERDA
arXiv:1710.07776v1 [nucl-ex] 21 Oct 2017, 2017

41. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Improved limit on neutrinoless double beta decay of ^{76}Ge from Gerda Phase II, arXiv:1803.11100v1 [nucl-ex] 29 Mar 2018, 2018

42. M.Agostini, ..., A.Smolnikov, ..., et al., *GERDA collaboration*, Modeling of Gerda Phase II data, arXiv:1909.02522v2 [nucl-ex] 18 Oct 2019, 2019



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