

ԱՍԳԼ-ի Հ. ՎԱՐԴԱՊԵՏՅԱՆԻ ԱՆՎԱՆ ՓՈՐՁԱՐԱՐԱԿԱՆ ՖԻԶԻԿԱՅԻ
ԲԱԺԱՆՄՈՒՆՔԻ ԳԻՏԱԿԱՆ ՀՐԱՊԱՐԱԿՈՒՄՆԵՐԻ ՑԱՆԿ

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1. A. Tumasyan et al. (CMS Collaboration), "Search for Higgs Boson Pair Production in the Four b Quark Final State in Proton-Proton Collisions at $s=13$ TeV", *Physical Review Letters*, 129, (2022) 8, 081802.
2. A. Tumasyan et al. (CMS Collaboration), "A portrait of the Higgs boson by the CMS experiment ten years after the discovery", *Nature*, 607 (2022) 7917, 60.
3. A. Tumasyan et al. (CMS Collaboration), "Search for new particles in an extended Higgs sector with four b quarks in the final state at $s=13$ TeV", *Physics Letters B* 835 (2022) 137566.
4. A. Tumasyan et al. (CMS Collaboration), "Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state at $s = 13$ TeV", *Journal of High Energy Physics*, 09 (2022) 088.
5. A. Tumasyan et al. (CMS Collaboration), "Measurement of the Drell-Yan forward-backward asymmetry at high dilepton masses in proton-proton collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 08 (2022) 063.
6. A. Tumasyan et al. (CMS Collaboration), "Nuclear modification of Υ states in pPb collisions at $\sqrt{s} = 5.02$ TeV", *Physics Letters B* 835 (2022) 137397.
7. A. Tumasyan et al. (CMS Collaboration), "Inclusive nonresonant multilepton probes of new phenomena at $s = 13$ TeV", *Physical Review D* 105 (2022) 11, 112007.
8. A. Tumasyan et al. (CMS Collaboration), "Measurement of the Higgs boson width and evidence of its off-shell contributions to ZZ production", *Nature physics* 18 (2022) 11, 1329.
9. A. Tumasyan et al. (CMS Collaboration), "Search for new physics in the lepton plus missing transverse momentum final state in proton-proton collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 07 (2022) 067.
10. A. Tumasyan et al. (CMS Collaboration), "Search for invisible decays of the Higgs boson produced via vector boson fusion in proton-proton collisions at $s=13$ TeV", *Physical Review D* 105 (2022) 9, 092007.
11. A. Tumasyan et al. (CMS Collaboration), "Observation of $B^0 \rightarrow \psi(2s)K_S^0\pi^+\pi^-$ and $B_S^0 \rightarrow \psi(2s)K_S^0$ decays", *The European Physical Journal C* 82 (2022) 499.
12. A. Tumasyan et al. (CMS Collaboration), "Search for resonances decaying to three W bosons in proton-proton collisions at $s = 13$ TeV", *Physical Review Letters*, 129, (2022) 2, 021802.
13. A. Tumasyan et al. (CMS Collaboration), "Identification of hadronic tau lepton decays using a deep neural network", *JINST* 17 (2022) P07023.
14. A. Tumasyan et al. (CMS Collaboration), "Search for charged-lepton flavor violation in top quark production and decay in pp collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 06 (2022) 082.

15. A. Tumasyan et al. (CMS Collaboration), "Precision measurement of the W boson decay branching fractions in proton-proton collisions at $s = 13$ TeV", *Physical Review D* 105 (2022) 7 072008.
16. A. Tumasyan et al. (CMS Collaboration), "Measurement of the inclusive and differential tt cross sections in the dilepton channel and effective field theory interpretation in proton-proton collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 05 (2022) 091.
17. A. Tumasyan et al. (CMS Collaboration), "Search for long-lived heavy neutral leptons with displaced vertices in proton-proton collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 07 (2022) 081.
18. A. Tumasyan et al. (CMS Collaboration), "Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $s = 13$ TeV", *Journal of High Energy Physics*, 05 (2022) 014.
19. A. Tumasyan et al. (CMS Collaboration), "Observation of the Meson in Pb-Pb and pp Collisions at $\sqrt{s_{NN}} = 5.02$ TeV and Measurement of its Nuclear Modification Factor", *Physical Review Letters*, 128, (2022) 25, 252301.
20. A. Tumasyan et al. (CMS Collaboration), "Search for high-mass resonances decaying to a jet and a Lorentz-boosted resonance in proton-proton collisions at $s = 13$ TeV", *Physics Letters B* 832 (2021) 137263.
21. A. Tumasyan et al. (CMS Collaboration), "Search for single production of a vector-like T quark decaying to a top quark and a Z boson in the final state with jets and missing transverse momentum at $s = 13$ TeV", *Journal of High Energy Physics*, 05 (2022) 093.
22. A. Tumasyan et al. (CMS Collaboration), "Search for long-lived particles decaying into muon pairs in proton-proton collisions at $s = 13$ TeV collected with a dedicated high-rate data stream", *Journal of High Energy Physics*, 04 (2022) 062.
23. A. Tumasyan et al. (CMS Collaboration), "Search for resonances decaying to three W bosons in the hadronic final state in proton-proton collisions at $s = 13$ TeV", *Physical Review D* 106, (2022) 1, 012002.
24. A. Tumasyan et al. (CMS Collaboration), "Probing Charm Quark Dynamics via Multiparticle Correlations in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV", *Physical Review Letters* 129 (2022) 2, 022001.
25. A. Tumasyan et al. (CMS Collaboration), "Search for resonant production of strongly coupled dark matter in proton-proton collisions at 13 TeV", *Journal of High Energy Physics*, 06 (2022) 156.
26. A. Tumasyan et al. (CMS Collaboration), "Measurement of the production cross section for Z+b jets in proton-proton collisions at $s = 13$ TeV", *Physical Review D* 105, (2022) 9, 092014.
27. A. Tumasyan et al. (CMS Collaboration), "Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $s = 13$ TeV", *Journal of High Energy Physics*, 02 (2022) 169.
28. A. Tumasyan et al. (CMS Collaboration), "Measurement of the inclusive tt production cross section in proton-proton collisions at $s = 5.02$ TeV", *Journal of High Energy Physics*, 04 (2022) 144.
29. A. Tumasyan et al. (CMS Collaboration), "Evidence for WW/WZ vector boson scattering in the decay channel $\ell\nu q\bar{q}$ produced in association with two jets in proton-proton collisions at $s = 13$ TeV", *Physics Letters B* 834 (2022) 137438.

30. A. Tumasyan et al. (CMS Collaboration), “Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 04 (2022) 047.
31. A. Tumasyan et al. (CMS Collaboration), “Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $s = 13$ TeV”, *Journal of High Energy Physics*, 05 (2022) 005.
32. A. Tumasyan et al. (CMS Collaboration), “Measurements of the associated production of a W boson and a charm quark in proton–proton collisions at $s = 8$ TeV”, *European Physical Journal C* 82 (2022) 12, 1094.
33. A. Tumasyan et al. (CMS Collaboration), “Measurement of $W^{\pm}\gamma$ differential cross sections in proton-proton collisions at $s = 13$ TeV and effective field theory constraints”, *Physical Review D* 105, (2022) 5, 052003.
34. A. Tumasyan et al. (CMS Collaboration), “Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $s = 13$ TeV”, *Journal of High Energy Physics*, 04 (2022) 087.
35. A. Tumasyan et al. (CMS Collaboration), “Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $s = 13$ TeV”, *Journal of High Energy Physics*, 04 (2022) 048.
36. A. Tumasyan et al. (CMS Collaboration), “Addendum to: Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 02 (2022) 142.
37. A. Tumasyan et al. (CMS Collaboration), “Strategies and performance of the CMS silicon tracker alignment during LHC Run 2”, *Nuclear Instruments & Methods A* 1037 (2022) 166795.
38. A. Tumasyan et al. (CMS Collaboration), “Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 04 (2022) 091.
39. A. Tumasyan et al. (CMS Collaboration), “Study of dijet events with large rapidity separation in proton-proton collisions at $s = 2.76$ TeV”, *Journal of High Energy Physics*, 03 (2022) 189.
40. A. Tumasyan et al. (CMS Collaboration), “Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 02 (2022) 107.
41. A. Tumasyan et al. (CMS Collaboration), “A new calibration method for charm jet identification validated with proton-proton collision events at $s = 13$ TeV”, *JINST* 17 (2022), 03, P03014.
42. A. Tumasyan et al. (CMS Collaboration), “Search for Flavor-Changing Neutral Current Interactions of the Top Quark and Higgs Boson in Final States with Two Photons in Proton-Proton Collisions at $s = 13$ TeV”, *Physical Review Letters* 129 (2022) 3, 032001.
43. A. Tumasyan et al. (CMS Collaboration), “Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton–proton collisions at $s = 13$ TeV”, *European Physical Journal C* 82 (2022) 2, 153.
44. A. Tumasyan et al. (CMS Collaboration), “Search for long-lived particles produced in association with a Z boson in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 03 (2022) 160.

45. A. Tumasyan et al. (CMS Collaboration), “Measurement of the inclusive and differential WZ production cross sections, polarization angles, and triple gauge couplings in pp collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 07 (2022) 032.
46. A. Tumasyan et al. (CMS Collaboration), “First Search for Exclusive Diphoton Production at High Mass with Tagged Protons in Proton-Proton Collisions at $s = 13$ TeV”, *Physical Review Letters* 129 (2022) 1, 011801.
47. A. Tumasyan et al. (CMS Collaboration), “Search for long-lived particles decaying to leptons with large impact parameter in proton–proton collisions at $s = 13$ TeV”, *European Physical Journal C* 82 (2022) 2, 153.
48. A. Tumasyan et al. (CMS Collaboration), “Measurement of double-parton scattering in inclusive production of four jets with low transverse momentum in proton-proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 01 (2022) 177.
49. A. Tumasyan et al. (CMS Collaboration), “Search for heavy resonances decaying to $Z(\nu\nu)V(qq')$ in proton-proton collisions at $s = 13$ TeV”, *Physical Review D* 106, (2022) 1, 012004.
50. A. Tumasyan et al. (CMS Collaboration), “Search for heavy resonances decaying to WW, WZ, or WH boson pairs in the lepton plus merged jet final state in proton-proton collisions at $s = 13$ TeV”, *Physical Review D* 105, (2022) 3, 032008.
51. A. Tumasyan et al. (CMS Collaboration), “Study of quark and gluon jet substructure in Z+jet and dijet events from pp collisions”, *Journal of High Energy Physics*, 01 (2022) 188.
52. A. Tumasyan et al. (CMS Collaboration), “Observation of B_s^0 mesons and measurement of the B_s^0/B^+ yield ratio in PbPb collisions at Image 1 TeV”, *Physics Letters B* 829 (2022) 137062.
53. A. Tumasyan et al. (CMS Collaboration), “Measurement of the inclusive and differential Higgs boson production cross sections in the decay mode to a pair of τ leptons in pp collisions at $s = 13$ TeV”, *Physical Review Letters* 128 (2022) 8, 081805.
54. A. Tumasyan et al. (CMS Collaboration), “Search for electroweak production of charginos and neutralinos in proton–proton collisions at $s = 13$ TeV”, *Journal of High Energy Physics*, 04 (2022) 147.
55. A. Tumasyan et al. (CMS Collaboration), “Fragmentation of jets containing a prompt J/ψ meson in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV”, *Physics Letters B* 825 (2022) 136842.
56. A. Tumasyan et al. (CMS Collaboration), “Search for $W\gamma$ resonances in proton-proton collisions at $s = 13$ TeV using hadronic decays of Lorentz-boosted W bosons”, *Physics Letters B* 826 (2022) 136888.
57. A. Tumasyan et al. (CMS Collaboration), “Search for strongly interacting massive particles generating trackless jets in proton–proton collisions at $s = 13$ TeV”, *European Physical Journal C* 82 (2022) 3, 213.
58. A. Sirunyan et al. (CMS Collaboration), “Using Z Boson Events to Study Parton-Medium Interactions in Pb-Pb Collisions”, *Physical Review Letters* 128 (2022) 12, 122301.
59. A. Sirunyan et al. (CMS Collaboration), “Evidence for X(3872) in Pb-Pb Collisions and Studies of its Prompt Production at $\sqrt{s_{NN}} = 5.02$ TeV”, *Physical Review Letters* 128 (2022) 3, 032001.
60. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurement of Prompt D^0 , Λ_c , and Σ_c Production in Proton-Proton Collisions at 13 TeV”, *Physical Review Letters* 128 (2022) 1, 012001.

61. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Charm-quark fragmentation fractions and production cross section at midrapidity in pp collisions at the LHC”, *Physical Review D* 127, (2022) 1, L011103.
62. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Multiplicity dependence of charged-particle jet production in pp collisions at $\sqrt{s}=13$ TeV”, *The European Physical Journal C* 82 (2022) 6, 514.
63. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “First study of the two-body scattering involving charm hadrons”, *Physical Review D* 106, (2022) 5, 052010.
64. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Forward rapidity J/ψ production as a function of charged-particle multiplicity in pp collisions at $\sqrt{s} = 5.02$ and 13 TeV”, *Journal of High Energy Physics*, 015 (2022) 6.
65. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Neutral to charged kaon yield fluctuations in Pb – Pb collisions at 2.76 TeV”, *Physics Letters B* 832 (2022) 137242.
66. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 5.02$ TeV”, *The European Physical Journal C* 82 (2022) 4, 289.
67. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Observation of a multiplicity dependence in the pT-differential charm baryon-to-meson ratios in proton–proton collisions at 13 TeV”, *Physics Letters B* 829 (2022) 137065.
68. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “ K^0_S and K^{\pm} femtoscopy in pp collisions at and 13 TeV”, *Physics Letters B* 833 (2022) 137335.
69. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Characterizing the initial conditions of heavy-ion collisions at the LHC with mean transverse momentum and anisotropic flow correlations”, *Physics Letters B* 834 (2022) 137393.
70. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Investigating charm production and fragmentation via azimuthal correlations of prompt D mesons with charged particles in pp collisions at $\sqrt{s} = 13$ TeV”, *The European Physical Journal C* 82 (2022) 4, 335.
71. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurement of prompt D_s^+ meson production and azimuthal anisotropy in Pb–Pb collisions at 5.02 TeV”, *Physics Letters B* 827 (2022) 136986.
72. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Prompt D_0 , D^+ , and D^{*+} production in Pb–Pb collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV”, *Journal of High Energy Physics*, 1 (2022) 174.
73. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “General balance functions of identified charged hadron pairs of (π, K, p) in Pb–Pb collisions at 2.76 TeV”, *Physics Letters B* 833 (2022) 137338.
74. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurement of inclusive charged-particle b-jet production in pp and p-Pb collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV”, *Journal of High Energy Physics*, 1 (2022) 178.
75. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 13$ TeV”, *Journal of High Energy Physics* 1 (2022) 106.

76. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Prompt and non-prompt J/ψ production cross sections at midrapidity in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV”, *Journal of High Energy Physics* 3 (2022) 190.
77. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurement of the Groomed Jet Radius and Momentum Splitting Fraction in and Pb-Pb Collisions at 5.02 TeV”, *Physical Review Letters* 128 (2022), 102001.
78. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurements of the groomed and ungroomed jet angularities in pp collisions at $\sqrt{s} = 5.02$ TeV”, *Journal of High Energy Physics* 061 (2022) 5.
79. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Polarization of Lambda and Lambda-bar Hyperons along the Beam Direction in Pb-Pb Collisions at 5.02 TeV”, *Physical Review Letters* 128 (2022), 17, 172005.
80. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Hypertriton Production in p-Pb Collisions at 5.02 TeV”, *Physical Review Letters* 128 (2022), 25, 252003.
81. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Study of very forward energy and its correlation with particle production at midrapidity in pp and p-Pb collisions at the LHC”, *Journal of High Energy Physics* 086 (2022) 8.
82. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Production of $K^*(890)^0$ and $\phi(1020)$ in pp and Pb-Pb collisions at 5.02 TeV”, *Physical Review C* 106 (2022), 3, 034907.
83. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Direct observation of the dead-cone effect in quantum chromodynamics”, *Nature* 605 (7910), (2022) 440.
84. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Investigating the role of strangeness in baryon-antibaryon annihilation at the LHC”, *Physics Letters B* 829 (2022) 137060.
85. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Production of Λ and K_s^0 in jets in p-Pb collisions at 5.02 TeV and pp collisions at 7 TeV”, *Physics Letters B* 827 (2022) 136984.
86. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Exploring the $N\Lambda$ - $N\Sigma$ coupled system with high precision correlation techniques at the LHC”, *Physics Letters B* 833 (2022) 137272.
87. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Nuclear modification factor of light neutral-meson spectra up to high transverse momentum in p-Pb collisions at 8.16 TeV”, *Physics Letters B* 827 (2022) 136943.
88. S. Acharya, D. Adamová, A. Adler, et al. (ALICE Collaboration), “Measurement of $K^*(892)_{\pm}$ production in inelastic pp collisions at the LHC”, *Physics Letters B* 828 (2022) 137013.
89. A. Georges, ... , T. Mkrtychyan et al., “Two-particle Bose-Einstein correlations in pp collisions at $\sqrt{s}=13$ TeV measured with the ATLAS detector at the LHC”, *The European Physical Journal C* 82 (2022) 608.
90. M. E. Christy, T. Gautam, L. Ou et al., (Jefferson Lab Hall A Collaboration), “Form Factors and Two-Photon Exchange in High-Energy Elastic Electron-Proton Scattering”, *Physical Review Letters* 128 (2022), 10, 102002.
91. D. Abrams et al., (Jefferson Lab Hall A Tritium Collaboration), “Jefferson Lab MARATHON Tritium/Helium-3 Deuteron Inelastic Scattering Experiment”, *Physical Review Letters* 128 (2022), 13, 132003.

92. D. Adhikari et al., PREX and CREX Collaborations, "New Measurements of the Beam-Normal Single Spin Asymmetry in Elastic Electron Scattering over a Range of Spin-0 Nuclei", *Physical Review Letters* 128 (2022), 14, 14.
93. F. Georges et al., "Deeply Virtual Compton Scattering Cross Section at High Bjorken", Jefferson Lab Hall A Collaboration, *Physical Review Letters* 128 (2022), 25, 252002.
94. D. Ruth et al., (Jefferson Lab Hall A Ag2p Collaboration), "Proton spin structure and generalized polarizabilities in the strong quantum chromodynamics regime", *Nature Phys*, 18 (2022), 1441.
95. D. Adhikari et al., (CREX Collaboration), "Precision Determination of the Neutral Weak Form Factor of ^{48}Ca .", *Physical Review Letters* 129 2022, 4, 042501.
96. S. Iqbal et al., (Jefferson Lab Hall A Collaboration), "Probing for high-momentum protons in ^4He via the $4\text{He}(e,e'p)X4\text{He}(e,e'p)X$ reactions", *Physical Review C* 105 (2022), 6, 064003.
97. S. Li, R. Cruz-Torres, N. Santiesteban, et al., "Revealing the short-range structure of the mirror nuclei ^3H and ^3He .", *Nature* 609, (2022), 7925, 41.
98. S. Diehl, A. Kim, G. Angelini et al., (CLAS Collaboration), "Multidimensional, High Precision Measurements of Beam Single Spin Asymmetries in Semi-inclusive π^+ Electroproduction off Protons in the Valence Region", *Physical Review Letters* 128 (2022), 6, 062005.
99. N. Zachariou, E. Munevar, B. L. Berman et al., (CLAS Collaboration), "Beam-spin asymmetry Σ for Σ^- hyperon photoproduction off the neutron", *Physics Letters B* 827, (2022), 136985.
100. S. Moran, R. Dupre, H. Hakobyan et al., (CLAS Collaboration), "Measurement of charged-pion production in deep-inelastic scattering off nuclei with the CLAS detector", *Physical Review C*, 105, (2022), 1, 015201.
101. E. L. Isupov, V. D. Burkert, A. A. Golubenko et al., (CLAS Collaboration), "Polarized structure function σ_{LT} from π^0p electroproduction data in the resonance region at $0.4 \text{ GeV}^2 < Q^2 < 1.0 \text{ GeV}^2$ " *Physical Review C*, 105, (2022), 2, L022201.
102. D. S. Carman, A. D'Angelo, L. Lanza et al., (CLAS Collaboration), "Beam-recoil transferred polarization in electroproduction in the nucleon resonance region with CLAS12", *Physical Review C*, 105, (2022), 6, 065201.
103. S. J. Paul, S. Morán, M. Arratia et al., (CLAS Collaboration), "Observation of Azimuth-Dependent Suppression of Hadron Pairs in Electron Scattering off Nuclei", *Physical Review Letters* 129 (2022), 18, 182501.
104. D. Androic, D.S. Armstrong, K. Bartlett et al., "Distribution Radius from a Parity-Violating Electron Scattering Measurement.", *Physical Review Letters* 128 (2022), 132501.
105. R. A. Khalek, A. Accardi, J. Adam, D. Adamiak et al., "Science requirements and detector concepts for the electron-ion collider: EIC yellow report", *Nuclear Physics A* 1026, (2022), 122447.
106. R. Li, N. Sparveris, H. Atac et al., "Measured proton electromagnetic structure deviates from theoretical predictions", *Nature* 611 (2022), 7935, 265.
107. S. Adhikari, C. S. Akondi, M. Albrecht et al., "Measurement of Spin Density Matrix Elements in $\Lambda(1520)$ Photoproduction at 8.2 GeV to 8.8 GeV", *Physical Review C* 105 (2022) 3, 035201.

108. S. Adhikari, C. S. Akondi, M. Albrecht et al., “Search for photoproduction of axion-like particles at GlueX”, *Physical Review D* 105 (2022) 5, 052007.
109. J. Adam, L. Adamczyk, N. Agrawal et al., ATHENA Collaboration, “ATHENA detector proposal — a totally hermetic electron nucleus apparatus proposed for IP6 at the Electron-Ion Collider”, *JINST* 17 (2022) 10, P10019.
110. C. Fanelli, Z. Papandreou, K. Suresh et al., “AI-assisted Optimization of the ECCE Tracking System at the Electron Ion Collider”, *Nucl. Instrum. Meth. A* 1047, (2023), 167748.
111. J. C. Bernauer, C.T. Dean, C. Fanelli et al., “Scientific computing plan for the ECCE detector at the Electron ion Collider”, *Nucl. Instrum. Meth. A* 1047, (2023), 167859.
112. I. Abt, R. Aggarwal, ..., H. Zohrabyan et al. (H1 and ZEUS collaborations), “Impact of jet-production data on the next-to-next-to-leading-order determination of HERAPDF2.0 parton distributions”, *The European Physical Journal C* 82 (2022) 3, 243.
113. V. Andreev, M. Aratia, , ..., H. Zohrabyan et al. (H1 collaboration), “Measurement of lepton-jet correlation in deep-inelastic scattering with the H1 detector using machine learning for unfolding”, *Physical Review Letters* 128 (2022) 13, 132002.
114. F. Aharonian, F. Ait Benkhali, E. O. Anguner, ... V.Sahakian et al. (The H.E.S.S. Collaboration), “Evidence for gamma-ray emission from the Kepler supernova remnant from deep H.E.S.S. observations”, *Astronomy and Astrophysics*, 662, A65 (2022).
115. H. Abe, S. Abe, V. A. Acciari et al. (The MAGIC Collaboration), H. Abdalla, F. Aharonian, F. Ait Benkhali,..., V.Sahakian et al. (The H.E.S.S. Collaboration), A. Acharyya, C. B. Adams, P. Batista et al. (The VERITAS Collaboration), “Gamma-ray observations of MAXI J1820+070 during the 2018 outburst”, *Monthly Notices of the Royal Astronomical Society*, 517, 4, 4736–4751 (2022).
116. H. Abdalla, F. Aharonian, F. Ait Benkhali, ... V.Sahakian et al. (The H.E.S.S. Collaboration), “Search for dark matter annihilation signals in the H.E.S.S. Inner Galaxy Survey”, *Physical Review Letters*, 129, 111101 (2022).
117. F.Aharonian, F.Ait Benkhal, E.O.Anguner, ...,V.Sahakian et al (The H.E.S.S. collaboration), “Time-resolved hadronic particle acceleration in the recurrent nova RS Ophiuchi.” *Science*, 376, 77 (2022).
118. F.Aharonian, H.Ashkar, M.Backes, ...,V.Sahakian et al (The H.E.S.S. collaboration), “A deep spectromorphological study of the γ -ray emission surrounding the young massive stellar cluster Westerlund 1”, *Astronomy and Astrophysics*, 666, A124 (2022).
119. R. Fontana, P. C. R. Marconi, A. Caputo and V. G. Gavalyan, “Novel Chitosan-Based Schiff Base Compound, Chemical Characterization and Antimicrobial Activity”, *Molecules* **2022**, 27, 2740.
120. A. Margaryan et al., “An RF timer of electrons and photons with the potential to reach picosecond precision”, *Nucl. Instrum. Meth. A* 1038 2022, 166926.
121. A. Aprahamian, A. Margaryan, V. Kakoyan et al., “Advanced Radio Frequency Timing AppaRATus (ARARAT) Technique and Applications”, *Universal Journal of Lasers, Optics, Photonics & Sensors (UJLOPS)*, 2 (2022) 3.
122. Ն.Բ. Մարգարյան, Է. Մ. Ալեքսանյան, Է. Պ. կոկանյան, Ածխածնային տարբեր ալոտրոպների նանոթաղանթների մակրոկոսմոսային պոտենցիալի հետազոտումը Կելվինի զոնդի մեթոդով:/ Երևանի Հայբուսակ համալսարանի գիտամեթոդական հանդես, Բժշկակիտություն և բնական գիտություններ, 1 (2022) 88.

123. G. H. Hovhannisyanyan, T. M. Bakhshiyanyan, A. R. Balabekyan, I. A. Kerobyan, “Production of ^{47}Sc in photonuclear reactions on $^{\text{nat}}\text{Ti}$ targets at the bremsstrahlung endpoint energy of 30 and 40 MeV”, Applied Radiation and Isotopes 182 (2022) 110138, 1. The results are included in **Experimental Nuclear Reaction Data (EXFOR) Database**. <https://www-nds.iaea.org/exfor/servlet/X4sSearch5?Accnum=M1035&chkAccnum=1&sort=entry>
124. A.S. Hakobyan, H. H. Marukyan, I. A. Kerobyan, H. R. Gulkanyan, L. A. Poghosyan, V. S. Pogosov, H. T. Torosyan, A. Z. Babayan, L. R. Vahradyan, A. R. Balabekyan, G. H. Hovhannisyanyan, R. K. Dallakyan, and K. Katovsky, “Investigations at the LUE-75 Linear Accelerator Facility of A.I. Alikhanyan National Science Laboratory”, J. Contemp. Phys. (Armenian Academy of Sciences) 57 (2022) 3, 209.
125. A.Y. Aleksanyan et al., “Study of ^7Be formation from oxygen nuclei by bremsstrahlung photons at $E_{\gamma}^{\text{max}} = 40$ и 70 MeV”, Journal of Contemporary Physics (Armenian Academy of Sciences), 57 (2022) 2, 112.
126. A.R. Balabekyan et al., “Investigation of photonuclear reactions on isotopes ^{51}V , ^{115}In and ^{207}Pb at photon energy $E_{\gamma\text{max}} = 20\text{--}70$ MeV”, Radiation Physics and Chemistry, Vol. 204, March 2023, 110651.
127. М.А. Агинян и др. “Газовый потокомер на основе вибрирующих струн” Известия НАН Армении, Физика, 57 (2022) 1, 30.
128. A. S. Hakobyan, H. H. Marukyan, H. H. Hakobyan, A. Z. Babayan, L. R. Vahradyan, V. Baranov, Yu. I. Davydov, A. Krasnoperov, A. Simonenko, V. Tereshchenko, H. T. Torosyan, H. G. Zohrabyan, G. M. Ayvazyan, H. S. Vardanyan, A. K. Papryan, “Test Electron Beams Based on the Linear Accelerator Complex LUE-75 of A.I. Alikhanyan National Scientific Laboratory”, J. Contemp. Phys. (Armenian Academy of Sciences) 57 (2022), 12.
129. A. S. Hakobyan, H. H. Marukyan, G. G. Gulbekyan, H. T. Torosyan, A. Z. Babayan, and L. R. Vahradyan, “On Some Projects of Modernization of the Yerevan Synchrotron ARUS”, J. Contemp. Phys. (Armenian Academy of Sciences) 57 (2022) 4, 317.
130. L. Sargsyan, R. Oganezov et al., (ATLAS Collaboration), « Study of energy response and resolution of the ATLAS Tile Calorimeter to hadrons of energies from 16 to 30 GeV », <https://doi.org/10.1140/epjc/s10052-021-09292-5>.
131. T. Gogami, P. Achenbach, J. K. Ahn et al., “Strangeness physics programs by S-2S at J-PARC”, EPJ Web Conf. 271 (2022), 11002.
132. T. Gogami, P. Achenbach, T. Akiyama et. al, “High accuracy spectroscopy of 3- and 4-body $\Lambda\Lambda$ hypernuclei at Jefferson Lab”, EPJ Web Conf. 271 (2022), 01001.