

Catalin Matei, PhD

PUBLICATIONS (ISI JOURNALS)

1. Feasibility of studying astrophysically important charged-particle emission with the variable energy gamma-ray system at the Extreme Light Infrastructure–Nuclear Physics facility, H. Y. Lan, W. Luo, Y. Xu, D. L. Balabanski, G. L. Guardo, M. La Cognata, D. Lattuada, **C. Matei**, R. G. Pizzone, T. Rauscher, J. L. Zhou, **Phys. Rev. C** **105**, 044618 (2022)
2. ELIGANT-GN — ELI Gamma Above Neutron Threshold: The Gamma-Neutron setup, P-A Söderström, E Açıksöz, DL Balabanski, F Camera, L Capponi, Gh Ciocan, M Cuciuc, DM Filipescu, I Gheorghe, T Glodariu, J Kaur, M Krzysiek, **C. Matei**, T Roman, A Rotaru, AB Şerban, A State, H Utsunomiya, V Vasilca, **Nucl. Instr. Meth. A** **1027**, 166171 (2022)
3. The Status and Future of Direct Nuclear Reaction Measurements for Stellar Burning, M. Aliotta, R. Buompane, M. Couder, A. Couture, R.J. deBoer, A. Formicola, L. Gialanella, J. Glorius, G. Imbriani, M. Junker, C. Langer, A. Lennarz, Y. Litvinov, W.-P. Liu, M. Lugaro, **C. Matei****, Z. Meisel, L. Piersanti, R. Reifarth, D. Robertson, A. Simon, O. Straniero, A. Tumino, M. Wiescher, Y. Xu, **J. Phys. G: Nucl. Part. Phys.** **49** (1) 010501 (2021)
4. The $^{27}\text{Al}(\text{p},\alpha)^{24}\text{Mg}$ reaction at astrophysical energies studied by means of the Trojan Horse Method applied to the $^{2H}(^{27}\text{Al},\alpha ^{24}\text{Mg})n$ reaction, S. Palmerini, M. La Cognata, F. Hammache, L. Acosta, R. Alba, V. Burjan, E. Chávez, S. Cherubini, A. Cvetinovic, G. D'Agata, N. de Sérerville, A. Di Pietro, P. Figuera, Z. Fülöp, K. Gaitán De Los Rios, G. L. Guardo, M. Gulino, S. Hayakawa, G. G. Kiss, M. La Commara, L. Lamia, C. Maiolino, G. Manicó, **C. Matei**, M. Mazzocco, J. Mrazek, T. Parascandolo, T. Petruse, D. Pierroutsakou, R. G. Pizzone, G. G. Rapisarda, S. Romano, D. Santonocito, M. L. Sergi, R. Spartà, A. Tumino, H. Yamaguchi, **Eur. Phys. J. Plus** **136** (2021) 898
5. Characterization of a plutonium-beryllium neutron source, P-A Söderström, **C. Matei****, L. Capponi, E. Açıksöz, D.L. Balabanski, I.-O. Mitu, **Applied Radiation and Isotopes** **167**, 109441 (2021)
6. Electromagnetic character of the competitive $\gamma\gamma/\gamma$ -decay from ^{137m}Ba , P-A Söderström, L. Capponi, E. Açıksöz, T. Otsuka, N. Tsoneva, Y. Tsunoda, D.L. Balabanski, N. Pietralla, G.L. Guardo, D. Lattuada, H. Lenske, **C. Matei**, D. Nichita, A. Pappalardo, T. Petruse, **Nature Communications** **11**, 3242 (2020)
7. Measurement of the $^{7}\text{Li}(\gamma,t)^{4}\text{He}$ ground-state cross section between $E\gamma = 4.4$ and 10 MeV, M. Munch, **C. Matei****, S.D. Pain, M.T. Febbraro, K.A. Chipps, H.J. Karwowski, C.Aa. Diget, A. Pappalardo, S. Chesnevskaya, G.L. Guardo, D. Walter, D.L. Balabanski, F.D. Beccetti, C.R. Brune, K.Y. Chae, J. Frost-Schenk, M.J. Kim, M.S. Kwag, M. La Cognata, D. Lattuada, R.G. Pizzone, G.G. Rapisarda, G.V. Turturica, C.A. Ur, and Y. Xu, **Phys. Rev. C** **101**, 055801 (2020)
8. Unfolding of sparse high-energy γ -ray spectra from LaBr₃:Ce detectors, P.-A. Söderström, L. Capponi, V. Iancu, D. Lattuada, A. Pappalardo,^[1]G.V. Turturica, E. Açıksöz, D.L. Balabanski, P. Constantin, G.L. Guardo, M. Ilie, S. Ilie, **C. Matei**, D. Nichita, T. Petruse, and A. Spataru, **J. Instr.** **14**, T11007 (2019)
9. Source commissioning of the ELIGANT-GG setup for γ -ray coincidence measurements at ELI-NP, P.-A. Söderström, L. Capponi, E. Açıksöz, G. L. Guardo, D. Lattuada, **C. Matei**, D. Nichita, A. Pappalardo, T. Petruse, and G. V. Turturica, **Rom. Rep. Phys.** **71**, 206 (2019)
10. Investigation of Compton Scattering for Gamma Beam Intensity Measurements and Perspectives at ELI-NP, G.V. Turturica, **C. Matei****, A. Pappalardo, D.L. Balabanski, S. Chesnevskaya, V. Iancu, C.A. Ur, H.J. Karwowski, K.A. Chipps, M.T. Febbraro, S.D. Pain, D. Walter, C.Aa. Diget, J. Frost-Schenk, M. Munch, G.L. Guardo, M. La Cognata, R.G. Pizzone, G.G. Rapisarda, K.Y. Chae, M.J. Kim, M.S. Kwag, **Nucl. Instr. Meth. A** **921**, 27 (2019)

11. Photodisintegration reaction rate involving charged particles: systematic uncertainty from nuclear optical model potential and experimental solution based on ELI-NP, H.Y. Lan, Y. Xu, W. Luo, D.L. Balabanski, S. Goriely, **C. Matei**, A. Anzalone, S. Chesnevskaia, G.L. Guardo, M. La Cognata, D. Lattuada, R.G. Pizzone, S. Romano, C. Spitaleri, A. Taffara, A. Tumino, and Z.C. Zhu, **Phys. Rev. C** **98**, 054601 (2018)
12. Extreme Light Infrastructure - Nuclear Physics pillar (ELI-NP): new horizons in physics with high power lasers and brilliant gamma beams, S. Gales, K.A. Tanaka, D.L. Balabanski, F. Negoita, D. Stutman, O. Tesileanu, C.A. Ur, D. Ursescu, S. Ataman, M.O. Cernaiyanu, I. Dancus, B. Diaconescu, N. Djourelov, D. Filipescu, P. Ghenuche, **C. Matei**, K. Seto, L. D'Alessi, M. Zeng, N. V. Zamfir **Reports of Progress in Physics** **81** (9) 094301 (2018)
13. Performance Studies of X3 Silicon Detectors for the Future ELISSA Array at ELI-NP, S. Chesnevskaia, D.L. Balabanski, D. Choudhury, P. Constantin, D.M. Filipescu, D.G. Ghita, G.L. Guardo, D. Lattuada, **C. Matei****, A. Rotaru, A. State, **J. Instr.** **13**, T05006 (2018)
14. First spin-parity constraint of the 306 keV resonance in ^{35}Cl for nova nucleosynthesis, K.A. Chipps, S.D. Pain, R.L. Kozub, D.W. Bardayan, J.A. Cizewski, K.Y. Chae, J.F. Liang, **C. Matei**, B.H. Moazen, C.D. Nesaraja, P.D. O'Malley, W.A. Peters, S.T. Pittman, K.T. Schmitt, and M.S. Smith, **Phys. Rev. C** **95**, 045808 (2017)
15. "Gamma ray beams for Nuclear Astrophysics: first results of tests and simulations of the ELISSA array", M. La Cognata, A. Anzalone, D. Balabanski, S. Chesnevskaia, V. Crucilla, D.M. Filipescu, G.L. Guardo, M. Gulino, D. Lattuada, **C. Matei**, R.G. Pizzone, S. Romano, C. Spitaleri, A. Taffara, O. Tesileanu, A. Tumino, and Yi Xu, **J. Inst.** **12** C03079 (2017)
16. Absolute cross section measurements of neutron-induced fission of ^{242}Pu from 1 to 2.5 MeV, **C. Matei****, F. Belloni, J. Heyse, A.J.M. Plomp, D.J. Thomas, **Phys. Rev. C** **95**, 024606 (2017)
17. Performance of the Versatile Array of Neutron Detectors at Low Energy (VANDLE), W.A. Peters, S. Ilyushkin, M. Madurga, **C. Matei****, S.V. Paulauskas, R.K. Grzywacz, D.W. Bardayan, C.R. Brune, J. Allen, J.M. Allen, Z. Bergstrom, J. Blackmon, N.T. Brewer, J.A. Cizewski, P. Copp, M.E. Howard, R. Ikeyama, R.L. Kozub, B. Manning, T.N. Massey, M. Matos, E. Merino, P.D. O'Malley, F. Raiola, C. S. Reingold, F. Sarazin, I. Spassova, S. Taylor, D. Walter, **Nucl. Instr. Meth.** **A836**, 122 (2016)
18. Investigation of the $d(g,n)p$ reaction for gamma beam monitoring at ELI-NP, **C. Matei****, J.M. Mueller, M.H. Sikora, G. Suliman, C.A. Ur, H.R. Weller, **J. Instr.** **11**, P05025 (2016)
19. Gamma beam delivery and diagnostics at ELI-NP, H.R. Weller, C.A. Ur, **C. Matei****, J.M. Mueller, M.H. Sikora, G. Suliman, V. Iancu, Z. Yasin, **Rom. Rep. Phys.** **68**, S447 (2016)
20. "Nuclear resonance fluorescence experiments at ELI-NP, C.A. Ur, A. Zilges, N. Pietralla, J. Beller, B. Boisdeffre, M.O. Cernaiyanu, V. Derya, B. Loher, **C. Matei**, G. Pascovici, C. Petcu, C. Romig, D. Savran, G. Suliman, E. Udup, V. Werner, **Rom. Rep. Phys.** **68**, S483 (2016)
21. "Gamma above the neutron threshold experiments at ELI-NP, F. Camera, H. Utsuomiya, V. Varlamov, D. Filipescu, V. Baran, A. Bracco, G. Colo, I. Gheorghe, T. Glodariu, **C. Matei**, O. Wieland, **Rom. Rep. Phys.** **68**, S539 (2016)
22. "Charged particle detection at ELI-NP", O. Tesileanu, M. Gai, A. Anzalone, C. Balan, J.S. Bihalowicz, M. Cwiok, W. Dominik, S. Gales, D.G. Ghita, Z. Janas, D.P. Kendellen, M. La Cognata, **C. Matei**, K. Mikszuta, C. Petcu, M. Pfutzner, T. Matulewicz, C. Mazzocchi, C. Spitalieri, **Rom. Rep. Phys.** **68**, S699 (2016)
23. "Constraint of the astrophysical $^{26}\text{Al}(p,g)^{27}\text{Si}$ destruction rate at stellar temperatures", S.D. Pain, D.W. Bardayan, J.C. Blackmon, S.M. Brown, K.Y. Chae, K.A. Chipps, J.A. Cizewski, K.L. Jones, R.L. Kozub, J. F. Liang, **C. Matei**, M. Matos, B.H. Moazen, C.D. Nesaraja, J. Okolowicz, P.D. O'Malley, W.A. Peters, S.T.

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24. "Fission Fragment Yield, Cross Section and Prompt Neutron and Gamma Emission Data from Actinide Isotopes", F.-J. Hambach, S. Oberstedt, A. Al-Adili, T. Brys, R. Billnert, **C. Matei**, A. Oberstedt, P. Salvador-Castineira, A. Tudora and M. Vidali, **Nucl. Data Sheets** **119**:38-41 (2014)
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27. "Neutron single particle structure in ^{131}Sn and direct neutron capture cross sections", R.L. Kozub, G. Arbanas, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, K.Y. Chae, K.A. Chipps, J.A. Cizewski, L. Erikson, R. Hatarik, W.R. Hix, K.L. Jones, W. Krolas, J.F. Liang, Z. Ma, **C. Matei**, B.H. Moazen, C.D. Nesaraja, S.D. Pain, D. Shapira, J.F. Shriner, M.S. Smith, T.P. Swan, **Phys. Rev. Lett.** **109**, 172501 (2012)
28. "Halo nucleus ^{11}Be : A spectroscopic study via neutron transfer", K.T. Schmitt, K.L. Jones, A. Bey, S.H. Ahn, D.W. Bardayan, J.C. Blackmon, S.M. Brown, K.Y. Chae, K.A. Chipps, J.A. Cizewski, K.I. Hahn, J.J. Kolata, R.L. Kozub, J.F. Liang, **C. Matei**, M. Matoš, D. Matyas, B.H. Moazen, C. Nesaraja, F.M. Nunes, P.D. O'Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Roberts, D. Shapira, J.F. Shriner, M.S. Smith, I. Spassova, D.W. Stracener, A.N. Villano, G.L. Wilson, **Phys. Rev. Lett.** **108**, 192701 (2012)
29. " $^{28}\text{Si}(\text{p},\text{3He})$ reaction for spectroscopy of ^{26}Al ", K.A. Chipps, D.W. Bardayan, K.Y. Chae, J.A. Cizewski, R.L. Kozub, **C. Matei**, B.H. Moazen, C. D. Nesaraja, P. D. O'Malley, S.D. Pain, W.A. Peters, S.T. Pittman, K.T. Schmitt, and M.S. Smith, **Phys. Rev. C** **86**, 014329 (2012)
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31. "Direct studies of low-energy resonances in $^{31}\text{P}(\text{p},\text{a})^{28}\text{Si}$ and $^{35}\text{Cl}(\text{p},\text{a})^{36}\text{Ar}$ ", B.H. Moazen, **C. Matei****, D.W. Bardayan, J.C. Blackmon, K.Y. Chae, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, P.D. O'Malley, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, and M.S. Smith, **Eur. Phys. J. A** **47**, 66 (2011)
32. "Neutron detector characterization for SCINTIA array", **C. Matei**, F.-J. Hambach, and S. Oberstedt, **IEEE Transactions on Nuclear Science**, **61**:72863, (2011)
33. "Comment on "Properties of ^{26}Mg and ^{26}Si in the sd shell model and the determination of the $^{25}\text{Al}(\text{p},\text{g})^{26}\text{Si}$ reaction rate", K.A. Chipps, D.W. Bardayan, K.Y. Chae, J.A. Cizewski, R.L. Kozub, J.F. Liang, **C. Matei**, P.D. O'Malley, S.D. Pain, W.A. Peters, S.T. Pittman, M.S. Smith, **Phys. Rev. C** **84**, 059801 (2011)
34. "The $^{28}\text{Si}(\text{p},\text{t})^{26}\text{Si}^*(\text{p})$ reaction and implications for the astrophysical $^{25}\text{Al}(\text{p},\text{g})^{26}\text{Si}$ reaction rate", K.A. Chipps, D.W. Bardayan, K.Y. Chae, J.A. Cizewski, R.L. Kozub, J.F. Liang, **C. Matei**, B.H. Moazen, S.D. Pain, W.A. Peters, S.T. Pittman, K.T. Schmitt, and M.S. Smith, **Phys. Rev. C** **82**, 045803 (2010)
35. "Spin assignments to excited states in ^{22}Na through a $^{24}\text{Mg}(\text{p},\text{3He})^{22}\text{Na}$ reaction measurement", K. Y. Chae, D.W. Bardayan, J.C. Blackmon, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, **C. Matei**, B.H. Moazen, C.D. Nesaraja, P.D. O'Malley, S.D. Pain, S.T. Pittman, and M.S. Smith, **Phys. Rev. C** **82**, 047302 (2010)

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36. "Inelastic $^{17}\text{F}(\text{p},\text{p})^{17}\text{F}$ scattering at Ec.m.=3 MeV and the $^{14}\text{O}(\text{a},\text{p})^{17}\text{F}$ reaction rate", D.W. Bardayan, J.C. Blackmon, K.Y. Chae, M.E. Howard, **C. Matei**, W. Martin, M. Matos, B.H. Moazen, C.D. Nesaraja, W.A. Peters, S.T. Pittman, M.S. Smith, and I. Spassova, **Phys. Rev. C 81, 065802 (2010)**
37. "The $^{17}\text{F}(\text{p},\text{g})^{18}\text{Ne}$ resonant cross section", K.A. Chipps, D.W. Bardayan, J.C. Blackmon, K.Y. Chae, U. Greife, R. Hatarik, R.L. Kozub, **C. Matei**, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, and M.S. Smith, **Phys. Rev. C 80, 065810 (2009)**
38. "Direct measurements of (p,g) cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator", D.W. Bardayan, K.A. Chipps, R.P. Fitzgerald, J.C. Blackmon, K.Y. Chae, A.E. Champagne, U. Greife, R. Hatarik, R.L. Kozub, **C. Matei**, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, M.S. Smith, **Eur. Phys. J. A 42, 457 (2009)**
39. "Constrain on the astrophysical $^{18}\text{Ne}(\text{a},\text{p})^{21}\text{Na}$ reaction rate through a $^{24}\text{Mg}(\text{p},\text{t})^{22}\text{Mg}$ measurement", K.Y. Chae, D.W. Bardayan, J.C. Blackmon, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, **C. Matei****, B.H. Moazen, C.D. Nesaraja, S.D. Pain, S.T. Pittman, and M.S. Smith, **Phys. Rev. C 79, 055804 (2009)**
40. "First Direct Measurement of the $^{17}\text{F}(\text{p},\text{g})^{18}\text{Ne}$ Cross Section", K.A. Chipps, D.W. Bardayan, J.C. Blackmon, K.Y. Chae, U. Greife, R. Hatarik, R.L. Kozub, **C. Matei**, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., and M.S. Smith, **Phys. Rev. Lett. 102, 152502 (2009)**
41. "Spectroscopic study of low-lying ^{16}N levels", D.W. Bardayan, P.D. O'Malley, J.C. Blackmon, K.Y. Chae, K.A. Chipps, J.A. Cizewski, R. Hatarik, K.L. Jones, R.L. Kozub, **C. Matei**, B.H. Moazen, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., and M.S. Smith, **Phys. Rev. C 78, 052801(R) (2008)**
42. "Nuclear Astrophysics at TRIUMF", L. Buchmann, P. Amaudruz, J. D'Auria, D. Hutcheon, **C. Matei**, J. Pearson, C. Ruiz, G. Ruprecht, M. Trinczek, C. Vockenhuber, P. Walden, Proceedings of the International Nuclear Physics Conference 2007, **Nucl. Phys. A805, 462c (2008)**
43. "Measurement of Branching Ratios from the 7.12-MeV State in ^{16}O and the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ Reaction Cross Section", **C. Matei****, C.R. Brune, and T.N. Massey, **Phys. Rev. C 78, 065801 (2008)**
44. "Measurement of the cascade transition via the first excited state of ^{16}O in the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction, and its S factor in stellar helium burning", **C. Matei****, L. Buchmann, WR. Hannes, D.A. Hutcheon, C. Ruiz, C. R. Brune, J. Caggiano, A.A. Chen, J. D'Auria, A. Laird, M. Lamey, Z.H. Li, W.P. Liu, A. Olin, D. Ottewell, J. Pearson, G. Ruprecht, M. Trinczek, C. Vockenhuber, and C. Wrede, **Phys. Rev. Lett. 97, 242503 (2006)**
45. "Branching ratio measurements of the 7.12-MeV state in ^{16}O ", **C. Matei**** and C. R. Brune, **Nucl. Phys. A578, 403c (2005)**

**** First author or Corresponding author / Major contribution**

INVITED TALKS / SEMINARS

1. "Nuclear Astrophysics with Gamma Beams at ELI-NP", C2R2 Seminar, South Korea, February 24th, 2022
2. "Mono-energetic γ -ray facilities and nuclear astrophysics", International Research Network for Nuclear Astrophysics (IReNA) Virtual Workshop on stellar burning, June 24th, 2020
3. "The Path to Accurate Measurements with Gamma Beams", Nuclear Physics in Stellar Explosions 2018, Debrecen, Hungary, 13th September 2018

4. "Neutron Detection for Monitoring Gamma Beams at ELI-NP", Neutron Users Club 2017, National Physical Laboratory, Teddington, UK, 24th October 2017
5. "Nuclear Astrophysics with Gamma Beams at ELI-NP", 9th European Summer School on Experimental Nuclear Astrophysics, Santa Tecla, Italy, 20th September 2017
6. "Nuclear Physics Experiments with Gamma Beams at ELI-NP", Turkish Physical Society 33rd International Physics Congress – TPS33, Bodrum, Turkey, 7th September 2017
7. "Gamma Beam Diagnostics and Experiments at ELI-NP", NIF Group Seminar, Nuclear and Chemistry Division, Lawrence Livermore National Laboratory, Livermore, CA, 25th October 2016
8. "ELI-NP Nuclear Physics and Applications with High-Brilliance Monochromatic Gamma Beam", ELI and HILASE Summer School, Prague, Czech Republic, 25th August 2016
9. "From Big Bang to Stellar Helium Burning at ELI-NP", 9th International Balkan School on Nuclear Physics, Constanta, Romania, 15th July 2016
10. "How to Prepare an Experiment using the Gamma Beam System at ELI-NP", Carpathian Summer School of Physics 2016, Sinaia, Romania, 1st July 2016
11. "Nuclear Astrophysics Measurements with ELISSA at ELI-NP", Nuclear Physics Group Seminar, University of York, York, United Kingdom, 8th March 2016
12. "ELI-NP: Gamma Beam System and Experiments", Neutron Physics Group Seminar, Nuclear Physics Institute, Rez, Czech Republic, 28th January 2016
13. "Stellar Helium Burning: Precision Nuclear Astrophysics?", Nuclear Astrophysics Workshop, Sungkyunkwan University, Suwon, South Korea, October 2013
14. "National Physical Laboratory and the Neutron Metrology Group", Korea Research Institute for Science and Standards, Daejeon, South Korea, October 2013
15. "R-matrix analysis of the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction", Nuclear Physics Group Seminar, University of Tennessee, Knoxville, TN, February 2009
16. "VANDLE - Neutron Detector Array for Nuclear Reactions and Decay Studies", Stewardship Science Workshop, Lawrence Livermore National Laboratory, Livermore, CA, October 2008.
17. "Development of a Versatile Array for Neutron Detection", Stewardship Science Workshop, Los Alamos National Laboratory, Los Alamos, NM, October 2007.
18. "New measurements of the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction", Nuclear Physics Group Seminar, Argonne National Laboratory, Argonne, June 2006
19. "New measurements of the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction", Nuclear Physics Group Seminar, KU Leuven, Leuven, June 2006
20. "New measurements of the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction", Nuclear Astrophysics Group Seminar, Oak Ridge National Laboratory, Oak Ridge, May 2006
21. "New measurements of the $^{12}\text{C}(\text{a},\text{g})^{16}\text{O}$ reaction", TUNL Seminar, Duke University, Durham, March 2006

RESEARCH PROPOSALS / FUNDED PROJECTS (PI)

1. "Expanding Big Bang and p-process nucleosynthesis understanding by using gamma-ray beams", PN-III-P4-PCE-2021-1014, 2022 – awarded €235000
2. "Towards accurate cross section measurements by developing new methods for characterisation of the γ -ray beam at ELI-NP", PN III: P5/Subprogram 5.1/ELI-RO, 2020 – awarded €145000
3. " $^{7}\text{Li}(\text{g}, \text{t})^{4}\text{He}$ below 6 MeV", High Intensity Gamma Source, USA, approved by PAC 2019
4. "Measurement of the photo-fission cross section for U-238 between 8 and 16 MeV", Helmholtz-Zentrum Dresden-Rossendorf, approved by PAC 2018
5. " $^{7}\text{Li}(\text{g}, \text{t})^{4}\text{He}$ above 4 MeV", High Intensity Gamma Source, USA, approved by PAC 2016
6. "Neutron detectors testing and characterization for gamma beam monitoring and experiments at ELI-NP", European Commission – Joint Research Centre, Institute for Reference Materials and Measurements, Belgium, approved and funded by PAC 2015
7. "Portable fast-neutron spectrometer", National Measurement Office, UK, 2013 – awarded £211000
8. "Measurement of the 6.92-MeV transition in ^{16}O and the $^{12}\text{C}(\text{a,g})^{16}\text{O}$ Reaction Cross Section", Oak Ridge National Laboratory, TN, USA, approved by PAC 2009

PUBLICATIONS (CONFERENCE PROCEEDINGS)

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