Curriculum Vitae

Saúl Beceiro Novo, Ph.D.

Ramon y Cajal Researcher Universidade da Coruña

Assistant Professor- Fixed Term – Michigan State University
saul.beceiro@udc.es | ORCID: 0000-0003-2295-473X

Professional Profile

Experimental nuclear physicist specializing in active target detectors and reactions with exotic beams. Author of 79 peer-reviewed publications in high-impact journals, including *Physical Review Letters*, *Physics Letters B*, and *Progress in Particle and Nuclear Physics*.

Research expertise spans experimental nuclear astrophysics, instrumentation, and nuclear structure, complemented by extensive experience in curriculum design, inclusive STEM pedagogy, and academic leadership. Strong track record in international collaboration, student supervision, and research project coordination.

Key Metrics

- Publications: 79 peer-reviewed articles
- Total citations: ~1177 (Scopus, February 2026)
- h-index: 17 (Scopus)
- Mentorship: Over 500 undergraduate students, 200 GTAs, and 300 ULAs supervised
- Funding: Principal Investigator or Co-PI on projects exceeding €2M

Research Areas

Experimental nuclear astrophysics; nuclear structure; nuclear technology and applications; detector instrumentation; physics education research; curriculum design; diversity, equity, and inclusion in STEM.

Education

Ph.D. in Nuclear Physics
University of Santiago de Compostela, Spain (2008–2011)
Dissertation: *Coulomb Dissociation of 27P*
Advisor: Prof. Dolores Cortina Gil

M.Sc. in Nuclear Physics
University of Santiago de Compostela, Spain (2006–2008)
Thesis: Implementation of a GEANT4 simulation for the R3B experiment

B.Sc. in Physics
University of Santiago de Compostela, Spain (2001–2006)
Specialization: Nuclear and Particle Physics
Honors: Extraordinary Award for Academic Excellence

Academic Appointments

- Assistant Professor, Michigan State University (USA), 2015–present
- Adjunct Ramón y Cajal Research Fellow, University of A Coruña (Spain), 2022–present
- Postdoctoral Researcher, National Superconducting Cyclotron Laboratory (MSU, USA), 2012–2015
- Junior Researcher, University of Santiago de Compostela (Spain), 2006–2011

Selected Awards and Honors

- MSU OER Leadership Award (2020)
- Norman L. & Olga K. Fritz Teaching Excellence Award, MSU (2020)
- HUB Catalyst Award, MSU (2020)
- Teaching Accessibility Fellowship, MSU (2019)
- Adams Academy Fellow, MSU (2019)
- HHMI STEM Gateway Fellow (2017)
- Thomas H. Osgood Teaching Excellence Award, MSU (2016)
- Extraordinary Undergraduate Award, Xunta de Galicia (2006)

Teaching and Curriculum Development

Extensive teaching experience in Europe and the United States, including the design and leadership of introductory physics courses. Courses taught include Classical Mechanics, Quantum Physics, Electromagnetism, and interdisciplinary physics for life sciences.

- Designed the *Design, Analysis, Tools, and Apprenticeship (DATA Labs)* (PHY251/252), implementing active learning for over 600 students annually
- Developed the open-access textbook *The Mystery of the Physical World* and a free homework platform
- Integrated accessibility and equity principles into all instructional materials
- Trained and mentored over 500 teaching and research assistants

---

Mentorship and Supervision

Supervisor and co-supervisor of undergraduate and graduate students in nuclear physics and physics education. Recent thesis supervision at UDC and MSU. Member of 2 already defended thesis committees and 2 ongoing.

Research Projects

- **Nuclear physics and technology applications: environmental radiation measurements and neutron imaging**
  (GAIN, Xunta de Galicia, 2024–2027) – *Principal Investigator*
- **Study of exotic nuclei using R3B and SOLARIS experiments at UDC**
  (Spanish State Research Agency, 2023–2027) – *Principal Investigator*
- **Development of an Active Target Time Projection Chamber**
  (National Science Foundation, USA, 2009–2012) – *Co-Principal Investigator*

Professional and University Service

Member of multiple scientific and academic committees, including the R3B Collaboration Council, the Nuclear Physics Division of the Spanish Royal Physics Society, and the College of Natural Science Council at MSU.

- Chair, R3B High Resolution Spectrometer Working Group
- Vice-Chair, R3B Active Targets Working Group
- Founding Director, FiTNAE Research Group (University of A Coruña)

Appendix A: List of publications (79)

1) Title: Valence 1s−0d proton vacancy of the 32Si ground state
Authors: Watwood N., Hoffman C. R., Kay B. P., …, **Beceiro-Novo S.**
Journal: Physical Review C
Year: 2025
Citations: 0
Database: SCOPUS

Available online: https://journals.aps.org/prc/abstract/10.1103/4lzs-mv3l
DOI: 10.1103/4lzs-mv3l

2) Title: Point-cloud based machine learning for classifying rare events in the Active-Target Time Projection Chamber
Authors: Dey P., Beceiro-Novo S. (10/18)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2025
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2024.170002 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2024.170002

3) Title: Correcting beam space charge effects in Active-Target Time Projection Chamber
Authors: Wieske, J.M., Beceiro-Novo S. (8/18)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2025
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2025.170563 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2025.170563

4) Title: Near-Threshold Dipole Strength in Be 10 with Isoscalar Character
Authors: Chen J., Beceiro-Novo S. (10/32)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2025
Citations: 1
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.134.012502 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.134.012502

5) Title: Direct reactions with the AT-TPC
Authors: Ayyad, Y., Beceiro-Novo S. (8/36)
Journal: Frontiers in Physics
Year: 2025
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.3389/fphy.2025.1539148 [consulta: 17/02/2025]
DOI: 10.3389/fphy.2025.1539148

6) Title: Evolution of the nuclear spin-orbit splitting explored via the 32Si(d,p)33Si reaction using SOLARIS
Authors: Chen J., Beceiro-Novo S. (9/33)
Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3)
Year: 2024
Citations: 7
Database: SCOPUS

Available online: https://dx.doi.org/10.1016/j.physletb.2024.138678 [consulta: 17/02/2025] DOI: 10.1016/j.physletb.2024.138678
7) Title: New insight into knockout reactions from the two-proton halo nucleus Ne 17 Authors: Wamers F., Beceiro-Novo S. (9/60) Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2) Year: 2024 Citations: 2 Database: SCOPUS Available online: https://dx.doi.org/10.1103/PhysRevC.109.054602 [consulta: 17/02/2025] DOI: 10.1103/PhysRevC.109.054602
8) Title: Extraction of Gamow-Teller strengths in the β+ direction with the (d, He 2) reaction in inverse kinematics Authors: Rahman Z., Beceiro-Novo S. (6/23) Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2) Year: 2024 Citations: 1 Database: SCOPUS Available online: https://dx.doi.org/10.1103/PhysRevC.110.024313 [consulta: 17/02/2025] DOI: 10.1103/PhysRevC.110.024313
9) Title: β+ Gamow-Teller Strengths from Unstable O 14 via the (d, He 2) Reaction in Inverse Kinematics Authors: Giraud S., Beceiro-Novo S. (7/27) Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1) Year: 2023 Citations: 11 Database: SCOPUS Available online: https://dx.doi.org/10.1103/PhysRevLett.130.232301 [consulta: 17/02/2025] DOI: 10.1103/PhysRevLett.130.232301
10) Title: Diverse mechanisms in proton knockout reactions from the Borromean nucleus 17Ne Authors: Wamers F., Beceiro-Novo S. (9/62) Journal: European Physical Journal A (Q2, D2), (JCR impact factor: 2.6) Year: 2023 Citations: 5 Database: SCOPUS Available online: https://dx.doi.org/10.1140/epja/s10050-023-01063-y [consulta: 17/02/2025] DOI: 10.1140/epja/s10050-023-01063-y
11) Title: Unveiling the two-proton halo character of 17Ne: Exclusive measurement of quasi-free proton-knockout reactions Authors: Lehr C., Beceiro-Novo S. (8/65) Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3) Year: 2022 Citations: 11 Database: SCOPUS

Available online: https://dx.doi.org/10.1016/j.physletb.2022.136957 [consulta: 17/02/2025]
DOI: 10.1016/j.physletb.2022.136957

12) Title: Beam particle identification and tagging of incompletely stripped heavy beams with HEIST
Authors: Anthony A.K., Beceiro-Novo S. (12/29)
Journal: Review of Scientific Instruments
Year: 2022
Citations: 3
Database: SCOPUS
Available online: https://dx.doi.org/10.1063/5.0068180 [consulta: 17/02/2025]
DOI: 10.1063/5.0068180

13) Title: Isotopic cross sections of fragmentation residues produced by light projectiles on carbon near
Authors: Boillos J.M., Beceiro-Novo S. (9/100)
Journal: Physical Review C (Q2, D2), (JCR impact factor: 3.2)
Year: 2022
Citations: 6
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.105.014611 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.105.014611

14) Title: Systematic study of Δ (1232) resonance excitations using single isobaric charge-exchange reactions induced by medium-mass projectiles of Sn
Authors: Rodríguez-Sánchez J.L., Beceiro-Novo S. (11/29)
Journal: Physical Review C (Q2, D2), (JCR impact factor: 3.2)
Year: 2022
Citations: 5
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.106.014618 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.106.014618

15) Title: A new Time-of-flight detector for the R 3 B setup
Authors: Heil M., Beceiro-Novo S. (103/328)
Journal: European Physical Journal A (Q2, D2), (JCR impact factor: 2.6)
Year: 2022
Citations: 8
Database: SCOPUS
Available online: https://dx.doi.org/10.1140/epja/s10050-022-00875-8 [consulta: 17/02/2025]
DOI: 10.1140/epja/s10050-022-00875-8

16) Title: Neutron capture cross sections of light neutron-rich nuclei relevant for -process nucleosynthesis
Authors: Bhattacharyya A., Beceiro-Novo S. (6/49)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2021
Citations: 5
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.104.045801 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.104.045801

17) Title: Next-generation experiments with the Active Target Time Projection Chamber (AT-TPC)
Authors: Ayyad Y., Beceiro-Novo S. (6/17)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2020
Citations: 23
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2018.10.019 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2018.10.019

18) Title: Study of Δ excitations in medium-mass nuclei with peripheral heavy ion charge-exchange reactions
Authors: Rodríguez-Sánchez J.L., Beceiro-Novo S. (11/29)
Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3)
Year: 2020
Citations: 12
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.physletb.2020.135565 [consulta: 17/02/2025]
DOI: 10.1016/j.physletb.2020.135565

19) Title: Probing the Z = 6 spin-orbit shell gap with (p,2p) quasi-free scattering reactions
Authors: Syndikus I., Beceiro-Novo S. (9/83)
Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3)
Year: 2020
Citations: 3
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.physletb.2020.135748 [consulta: 17/02/2025]
DOI: 10.1016/j.physletb.2020.135748

20) Title: Low energy nuclear physics with active targets and time projection chambers
Authors: Bazin D., Beceiro-Novo S. (4/7)
Journal: Progress in Particle and Nuclear Physics (Q1, D1), (JCR impact factor: 14.5)
Year: 2020
Citations: 30
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.ppnp.2020.103790 [consulta: 17/02/2025]
DOI: 10.1016/j.ppnp.2020.103790

21) Title: Isobaric charge-exchange reactions: A tool to study the excitation of baryonic resonances in exotic nuclear matter
Authors: Rodríguez-Sánchez J.L., Beceiro-Novo S. (10/31)
Journal: Journal of Physics: Conference Series (Q4), (JCR impact factor: 0.56)
Year: 2020
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1742-6596/1643/1/012104 [consulta: 17/02/2025]
DOI: 10.1088/1742-6596/1643/1/012104

22) Title: Excitation of baryonic resonances in stable medium-mass nuclei of Sn
Authors: Rodríguez-Sánchez J.L., Beceiro-Novo S. (10/31)
Journal: Journal of Physics: Conference Series (Q4), (JCR impact factor: 0.56)
Year: 2020
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1742-6596/1667/1/012036 [consulta: 17/02/2025]
DOI: 10.1088/1742-6596/1667/1/012036

23) Title: Erratum: Direct Observation of Proton Emission in Be 11 (Physical Review Letters (2019) 123 (082501) DOI: 10.1103/PhysRevLett.123.082501)
Authors: Ayyad Y., Beceiro-Novo S. (7/33)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2020
Citations: 6
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.124.129902 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.124.129902

24) Title: First Direct Measurement of Mg 22 (α,p) Al 25 and Implications for X-Ray Burst Model-Observation Comparisons
Authors: Randhawa J.S., Beceiro-Novo S. (10/29)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2020
Citations: 24
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.125.202701 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.125.202701

25) Title: Beam-induced space-charge effects in time projection chambers in low-energy nuclear physics experiments
Authors: Randhawa J.S., Beceiro-Novo S. (7/17)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2019
Citations: 8
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2019.162830 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2019.162830

26) Title: Quasi-free neutron and proton knockout reactions from light nuclei in a wide neutron-to-proton asymmetry range
Authors: Holl M., Beceiro-Novo S. (6/69)
Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3)
Year: 2019
Citations: 28
Database: SCOPUS

Available online: https://dx.doi.org/10.1016/j.physletb.2019.06.069 [consulta: 17/02/2025] DOI: 10.1016/j.physletb.2019.06.069
27) Title: Direct Observation of Proton Emission in Be 11 Authors: Ayyad Y., Beceiro-Novo S. (7/33) Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1) Year: 2019 Citations: 41 Database: SCOPUS Available online: https://dx.doi.org/10.1103/PhysRevLett.123.082501 [consulta: 17/02/2025] DOI: 10.1103/PhysRevLett.123.082501
28) Title: Novel particle tracking algorithm based on the Random Sample Consensus Model for the Active Target Time Projection Chamber (AT-TPC) Authors: Ayyad Y., Beceiro-Novo S. (4/5) Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355) Year: 2018 Citations: 21 Database: SCOPUS Available online: https://dx.doi.org/10.1016/j.nima.2017.10.090 [consulta: 17/02/2025] DOI: 10.1016/j.nima.2017.10.090
29) Title: GET: A generic electronics system for TPCs and nuclear physics instrumentation Authors: Pollacco E.C., Beceiro-Novo S. (12/64) Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355) Year: 2018 Citations: 115 Database: SCOPUS Available online: https://dx.doi.org/10.1016/j.nima.2018.01.020 [consulta: 17/02/2025] DOI: 10.1016/j.nima.2018.01.020
30) Title: Study of spectroscopic factors at N = 29 using isobaric analogue resonances in inverse kinematics Authors: Bradt J. Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3) Year: 2018 Citations: 15 Database: SCOPUS Available online: https://dx.doi.org/10.1016/j.physletb.2018.01.015 [consulta: 17/02/2025] DOI: 10.1016/j.physletb.2018.01.015
31) Title: Enhanced collectivity in 12Be Authors: Morse C. Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3) Year: 2018 Citations: 12 Database: SCOPUS

Available online: https://dx.doi.org/10.1016/j.physletb.2018.03.004 [consulta: 17/02/2025]
DOI: 10.1016/j.physletb.2018.03.004

32) Title: Recent advances with a hybrid micro-pattern gas detector operated in low pressure H2 and He, for AT-TPC applications
Authors: Cortesi M., Beceiro-Novo S. (5/9)
Journal: EPJ Web of Conferences (Q4), (JCR impact factor: 0.3)
Year: 2018
Citations: 3
Database: SCOPUS
Available online: https://dx.doi.org/10.1051/epjconf/201817401007 [consulta: 17/02/2025]
DOI: 10.1051/epjconf/201817401007

33) Title: Quasifree (p,pN) scattering of light neutron-rich nuclei near N=14
Authors: Díaz Fernández P., Beceiro-Novo S. (9/106)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2018
Citations: 19
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.97.024311 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.97.024311

34) Title: Comparison of electromagnetic and nuclear dissociation of Ne 17
Authors: Wamers F., Beceiro-Novo S. (7/60)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2018
Citations: 7
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.97.034612 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.97.034612

35) Title: Structure of Be 13 studied in proton knockout from B 14
Authors: Ribeiro G., Beceiro-Novo S. (10/98)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2018
Citations: 11
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.98.024603 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.98.024603

36) Title: Quasifree (p, 2p) Reactions on Oxygen Isotopes: Observation of Isospin Independence of the Reduced Single-Particle Strength
Authors: Atar L., Beceiro-Novo S. (12/101)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2018
Citations: 81
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.120.052501 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.120.052501

37) Title: Strong Neutron Pairing in core+4n Nuclei
Authors: Revel A., Beceiro-Novo S. (13/101)

Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2018
Citations: 14
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.120.152504 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.120.152504

38) Title: Physics and technology of time projection chambers as active targets
Authors: Ayyad Y., Beceiro-Novo S. (3/5)
Journal: European Physical Journal A (Q2, D2), (JCR impact factor: 2.6)
Year: 2018
Citations: 15
Database: SCOPUS
Available online: https://dx.doi.org/10.1140/epja/i2018-12557-7 [consulta: 17/02/2025]
DOI: 10.1140/epja/i2018-12557-7

39) Title: Commissioning of the Active-Target Time Projection Chamber
Authors: Bradt J.
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2017
Citations: 42
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2017.09.013 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2017.09.013

40) Title: The Active Target Time Projection Chamber at NSCL
Authors: Bazin D., Beceiro-Novo S. (6/12)
Journal: EPJ Web of Conferences (Q4), (JCR impact factor: 0.3)
Year: 2017
Citations: 2
Database: SCOPUS
Available online: https://dx.doi.org/10.1051/epjconf/201716300004 [consulta: 17/02/2025]
DOI: 10.1051/epjconf/201716300004

41) Title: Coulomb breakup of neutron-rich 29,30Na isotopes near the island of inversion
Authors: Rahaman A., Beceiro-Novo S. (4/53)
Journal: Journal of Physics G: Nuclear and Particle Physics (Q1), (JCR impact factor: 3.4)
Year: 2017
Citations: 3
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1361-6471/aa594d [consulta: 17/02/2025]
DOI: 10.1088/1361-6471/aa594d

42) Title: Determination of the neutron-capture rate of C 17 for r -process nucleosynthesis
Authors: Heine M., Beceiro-Novo S. (14/128)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2017
Citations: 11
Database: SCOPUS

Available online: https://dx.doi.org/10.1103/PhysRevC.95.014613 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.95.014613

43) Title: Ground-state configuration of neutron-rich Al 35 via Coulomb breakup
Authors: Chakraborty S., Beceiro-Novo S. (4/48)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2017
Citations: 3
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.96.034301 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.96.034301

44) Title: Knockout and fragmentation reactions using a broad range of tin isotopes
Authors: Rodríguez-Sánchez J.L., Beceiro-Novo S. (9/27)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2017
Citations: 15
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.96.034303 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.96.034303

45) Title: Effective proton-neutron interaction near the drip line from unbound states in F 25,26
Authors: Vandebrouck M., Beceiro-Novo S. (15/110)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2017
Citations: 17
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.96.054305 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.96.054305

46) Title: Fusion studies with low-intensity radioactive ion beams using an active-target time projection chamber
Authors: Kolata J.J., Beceiro-Novo S. (7/14)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2016
Citations: 13
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nima.2016.05.036 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2016.05.036

47) Title: The Prototype Active-Target Time-Projection Chamber used with TwinSol radioactive-ion beams
Authors: Ahn T.
Journal: Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms (Q2, D5), (JCR impact factor: 1.26)
Year: 2016
Citations: 12
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nimb.2015.12.042 [consulta: 17/02/2025]
DOI: 10.1016/j.nimb.2015.12.042

48) Title: Coulomb and nuclear excitations of narrow resonances in 17Ne
Authors: Marganiec J., Beceiro-Novo S. (7/60)
Journal: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics (Q1, D1), (JCR impact factor: 4.3)
Year: 2016
Citations: 12
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.physletb.2016.05.073 [consulta: 17/02/2025]
DOI: 10.1016/j.physletb.2016.05.073

49) Title: Nuclear astrophysics with radioactive ions at FAIR
Authors: Reifarth R., Beceiro-Novo S. (29/320)
Journal: Journal of Physics: Conference Series (Q4), (JCR impact factor: 0.56)
Year: 2016
Citations: 9
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1742-6596/665/1/012044 [consulta: 17/02/2025]
DOI: 10.1088/1742-6596/665/1/012044

50) Title: Experimental study of the 15O(2p, γ)17Ne cross section by Coulomb Dissociation for the rp process
Authors: Marganiec J., Beceiro-Novo S. (7/68)
Journal: Journal of Physics: Conference Series (Q4), (JCR impact factor: 0.56)
Year: 2016
Citations: 1
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1742-6596/665/1/012046 [consulta: 17/02/2025]
DOI: 10.1088/1742-6596/665/1/012046

51) Title: One-dimensionality in atomic nuclei: A candidate for linear-chain α clustering in C 14
Authors: Fritsch A., Beceiro-Novo S. (2/23)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2016
Citations: 59
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.93.014321 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.93.014321

52) Title: Coulomb dissociation of P 27 at 500 MeV/u
Authors: Marganiec J.
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2016
Citations: 8
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.93.045811 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.93.045811

53) Title: Systematic investigation of projectile fragmentation using beams of unstable B and C isotopes

Authors: Thies R., Beceiro-Novo S. (12/122)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2016
Citations: 10
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.93.054601 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.93.054601

54) Title: Coulomb dissociation of N 20,21
Authors: Röder M., Beceiro-Novo S. (12/123)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2016
Citations: 10
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.93.065807 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.93.065807

55) Title: Direct experimental evidence for a multiparticle-hole ground state configuration of deformed Mg 33
Authors: Datta U., Beceiro-Novo S. (4/52)
Journal: Physical Review C (Q1, D2), (JCR impact factor: 3.2)
Year: 2016
Citations: 12
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.94.034304 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.94.034304

56) Title: Cluster structure of neutron-rich 10Be and 14C via resonant alpha scattering
Authors: Suzuki D., Beceiro-Novo S. (5/8)
Journal: Nuovo Cimento della Societa Italiana di Fisica C (Q4, D8), (JCR impact factor: 0.252)
Year: 2016
Citations: 2
Database: SCOPUS
Available online: https://dx.doi.org/10.1393/ncc/i2016-16372-0 [consulta: 17/02/2025]
DOI: 10.1393/ncc/i2016-16372-0

57) Title: Exciting baryon resonances in isobar charge-exchange reactions
Authors: Benlliure J., Beceiro-Novo S. (8/24)
Journal: Nuovo Cimento della Societa Italiana di Fisica C (Q4, D8), (JCR impact factor: 0.252)
Year: 2016
Citations: 5
Database: SCOPUS
Available online: https://dx.doi.org/10.1393/ncc/i2016-16401-0 [consulta: 17/02/2025]
DOI: 10.1393/ncc/i2016-16401-0

58) Title: Active Target detectors for studies with exotic beams: Present and next future
Authors: Mittig W., Beceiro-Novo S. (2/17)
Journal: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (Q2, D4), (JCR impact factor: 1.355)
Year: 2015
Citations: 24
Database: SCOPUS

Available online: https://dx.doi.org/10.1016/j.nima.2014.10.048 [consulta: 17/02/2025]
DOI: 10.1016/j.nima.2014.10.048

59) Title: Active targets for the study of nuclei far from stability
Authors: Beceiro-Novo S.
Journal: Progress in Particle and Nuclear Physics (Q1, D1), (JCR impact factor: 14.5)
Year: 2015
Citations: 50
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.ppnp.2015.06.003 [consulta: 17/02/2025]
DOI: 10.1016/j.ppnp.2015.06.003

60) Title: Studies of THGEM-based detector at low-pressure Hydrogen/Deuterium, for AT-TPC applications
Authors: Cortesi M., Beceiro-Novo S. (5/6)
Journal: Journal of Instrumentation (Q2, D3), (JCR impact factor: 1.3)
Year: 2015
Citations: 14
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1748-0221/2015/09/P09020 [consulta: 17/02/2025]
DOI: 10.1088/1748-0221/2015/09/P09020

61) Title: Studies of continuum states in 16 Ne using three-body correlation techniques
Authors: Marganiec J., Beceiro-Novo S. (7/59)
Journal: European Physical Journal A (Q2, D2), (JCR impact factor: 2.6)
Year: 2015
Citations: 10
Database: SCOPUS
Available online: https://dx.doi.org/10.1140/epja/i2015-15009-0 [consulta: 17/02/2025]
DOI: 10.1140/epja/i2015-15009-0

62) Title: Coulomb Dissociation experiment of 27P
Authors: Marganiec J.
Journal: Acta Physica Polonica B (Q4), (JCR impact factor: 0.3)
Year: 2015
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.5506/APhysPolB.46.473 [consulta: 17/02/2025]
DOI: 10.5506/APhysPolB.46.473

63) Title: 13,14B(n, γ) via Coulomb Dissociation for Nucleosynthesis towards the r-Process
Authors: Altstadt S.G., Beceiro-Novo S. (11/126)
Journal: Nuclear Data Sheets (Q2), (JCR impact factor: 2.33)
Year: 2014
Citations: 8
Database: SCOPUS
Available online: https://dx.doi.org/10.1016/j.nds.2014.07.045 [consulta: 17/02/2025]
DOI: 10.1016/j.nds.2014.07.045

64) Title: Ground-state configuration of neutron-rich Aluminum isotopes through Coulomb breakup
Authors: Chakraborty S., Beceiro-Novo S. (4/54)

Journal: EPJ Web of Conferences (Q4), (JCR impact factor: 0.3)
Year: 2014
Citations: 2
Database: SCOPUS
Available online: https://dx.doi.org/10.1051/epjconf/20146602019 [consulta: 17/02/2025]
DOI: 10.1051/epjconf/20146602019

65) Title: Study of ground state wave-function of the Neutron-rich 29,30Na isotopes through coulomb breakup
Authors: Rahaman A., Beceiro-Novo S. (4/54)
Journal: EPJ Web of Conferences (Q4), (JCR impact factor: 0.3)
Year: 2014
Citations: 5
Database: SCOPUS
Available online: https://dx.doi.org/10.1051/epjconf/20146602087 [consulta: 17/02/2025]
DOI: 10.1051/epjconf/20146602087

66) Title: Exclusive measurements of nuclear breakup reactions of 17Ne
Authors: Wamers F., Beceiro-Novo S. (7/68)
Journal: EPJ Web of Conferences (Q4), (JCR impact factor: 0.3)
Year: 2014
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1051/epjconf/20146603094 [consulta: 17/02/2025]
DOI: 10.1051/epjconf/20146603094

67) Title: First observation of the unbound nucleus Ne 15
Authors: Wamers F., Beceiro-Novo S. (7/57)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2014
Citations: 30
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.112.132502 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.112.132502

68) Title: First experimental constraint on the Fe 59 (n,γ) Fe 60 reaction cross section at astrophysical energies via the coulomb dissociation of Fe 60
Authors: Uberseder E., Beceiro-Novo S. (4/50)
Journal: Physical Review Letters (Q1, D1), (JCR impact factor: 8.1)
Year: 2014
Citations: 19
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevLett.112.211101 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevLett.112.211101

69) Title: Study of the 15o(2p, γ)17Ne cross section by coulomb dissociation of 17Ne for the rp process of nucleosynthesis
Authors: Marganiec J., Beceiro-Novo S. (7/68)
Journal: Acta Physica Polonica B (Q4), (JCR impact factor: 0.3)
Year: 2014

Citations: 1
Database: SCOPUS
Available online: https://dx.doi.org/10.5506/APhysPolB.45.229 [consulta: 17/02/2025]
DOI: 10.5506/APhysPolB.45.229

70) Title: Resonant α scattering of 6He: Limits of clustering in 10Be
Authors: Suzuki D.
Journal: Physical Review C - Nuclear Physics (Q2, D2), (JCR impact factor: 3.2)
Year: 2013
Citations: 63
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.87.054301 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.87.054301

71) Title: Beyond the neutron drip line: The unbound oxygen isotopes 25O and 26O
Authors: Caesar C., Beceiro-Novo S. (12/123)
Journal: Physical Review C - Nuclear Physics (Q2, D2), (JCR impact factor: 3.2)
Year: 2013
Citations: 92
Database: SCOPUS
Available online: https://dx.doi.org/10.1103/PhysRevC.88.034313 [consulta: 17/02/2025]
DOI: 10.1103/PhysRevC.88.034313

72) Title: Coulomb Dissociation of 27P
Authors: Novo S.B.
Journal: Journal of Physics: Conference Series (Q4), (JCR impact factor: 0.56)
Year: 2012
Citations: 1
Database: SCOPUS
Available online: https://dx.doi.org/10.1088/1742-6596/381/1/012115 [consulta: 17/02/2025]
DOI: 10.1088/1742-6596/381/1/012115

73) Title: Coulomb breakup of 17Ne from the viewpoint of nuclear astrophysics
Authors: Marganiec J., Beceiro-Novo S. (6/66)
Journal: Proceedings of Science (Q4), (JCR impact factor: 0.122)
Year: 2012
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/nan [consulta: 17/02/2025]
DOI: nan

74) Title: Coulomb dissociation of 27P
Authors: Beceiro S.
Journal: AIP Conference Proceedings
Year: 2010
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1063/1.3428909 [consulta: 17/02/2025]
DOI: 10.1063/1.3428909

75) Title: Coulomb dissociation reactions on proton-rich Ar isotopes
Authors: Langer C., Beceiro-Novo S. (5/42)

Journal: Proceedings of Science (Q4), (JCR impact factor: 0.122)
Year: 2010
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/nan [consulta: 17/02/2025]
DOI: nan

76) Title: Coulomb dissociation of 27P: A reaction of astrophysical interest
Authors: Beceiro Novo S.
Journal: Proceedings of Science (Q4), (JCR impact factor: 0.122)
Year: 2010
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/nan [consulta: 17/02/2025]
DOI: nan

77) Title: Erratum: Measurement of the fluence response of the GSI neutron ball in high-energy neutron fields produced by 500 AMeV and 800 AMeV deuterons (Radiation Protection Dosimetry (2007) vol. 126 (1-4) (497-500))
Authors: Fehrenbacher G., Beceiro-Novo S. (6/13)
Journal: Radiation Protection Dosimetry (Q4), (JCR impact factor: 0.9)
Year: 2008
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/10.1093/rpd/ncn298 [consulta: 17/02/2025]
DOI: 10.1093/rpd/ncn298

78) Title: Measurement of the fluence response of the GSI neutron ball in high-energy neutron fields produced by 500 AMeV and 800 AMeV deuterons
Authors: Fehrenbacher G., Beceiro-Novo S. (6/13)
Journal: Radiation Protection Dosimetry (Q4), (JCR impact factor: 0.9)
Year: 2007
Citations: 9
Database: SCOPUS
Available online: https://dx.doi.org/10.1093/rpd/ncm100 [consulta: 17/02/2025]
DOI: 10.1093/rpd/ncm100

79) Title: Fast-neutron production via break-up of deuterons and fast-neutron dosimetry
Authors: Gutermuth F., Beceiro-Novo S. (2/12)
Journal: Proceedings of Science (Q4), (JCR impact factor: 0.122)
Year: 2006
Citations: 0
Database: SCOPUS
Available online: https://dx.doi.org/nan [consulta: 17/02/2025]
DOI: nan

Appendix B: Talks

Exploring Clustering in Exotic Nuclei with Solenoidal Spectrometers (Invited talk)
Fifth International Workshop on "State of the Art in Nuclear Cluster Physics" — Hvar (Croatia), 06/2024

11B proton resonance via 11Be beta decay (Invited talk)
APS Spring Meeting — Minnesota (USA), 03/2023

Using an active target time projection chamber to study reactions of astrophysical interest. (Invited talk)
EuNPC — Santiago de Compostela (Spain), 10/2022

Impact of facilitation in the learning process in STEM. (Invited talk)
PDP 20-Year Reunion Conference — Hawaii (USA), 05/2022

Usage of OER in introductory physics classes (Invited talk)
2021 Spring Conference on Teaching, Learning, and Student Success Faculty Panel — Michigan State University (online), 03/2022

22Mg(α,p)25Al measured with the ATTPC in ReA3.
DNP Conference, APS — Hawaii (USA), 10/2018

Physics behind the NUSTAR project. (Invited talk)
Fairness 2017 — Sitges (Spain), 06/2017

Active Target Time Projection Chamber at NSCL. (Invited talk)
EXON 2016 — Kazan (Russia), 09/2016

A candidate for linear chain alpha cluster in 14C
Direct Reactions with Exotic Beams 2016 — Halifax (Canada), 07/2016

Di-proton decay studies with the Active Target Time Projection Chamber (AT-TPC). Approaching the proton dripline.
5th International Conference on Proton-Emitting Nuclei — Lanzhou (China), 07/2015

Radiation Damage and Annealing in Graphite: Ways to Improve the Lifetime of Targets.
2015 Swift Heavy Ions in Matter — Darmstadt (Germany), 05/2015

An Active Target Time Projection Chamber for Reaccelerated Beams.
DNP Conference, APS — Hawaii (USA), 10/2014

Active Target Time Projection Chamber: experimental campaign
GET Collaboration Meeting — Bordeaux (France), 09/2014

An Active Target Time Projection Chamber for Reaccelerated Beams.
Nuclear Physics Town Meeting — Texas (USA), 08/2014

Study of clustering in 14C
Nuclear Structure 2014 — Vancouver (Canada), 07/2014

Simulation and tracking algorithm of an Active Target Time Projection Chamber
DNP Conference, APS — California (USA), 10/2012

Coulomb dissociation of 27P
First Eurogenesis Workshop — Dubrovnik (Croatia), 11/2010

Disociación Coulombiana del 27P
V Encuentro de Física Nuclear — El Escorial, Madrid (Spain), 09/2010

Coulomb dissociation of 27P: a reaction of astrophysical interest
XVII Euroschool on Exotic Nuclei — Santiago de Compostela (Spain), 09/2010

Coulomb dissociation of 27P: a reaction of astrophysical interest
11th Symposium on Nuclei in the Cosmos (NIC XI) — Heidelberg (Germany), 07/2010

Coulomb dissociation of 27P
International Scientific Meeting on Nuclear Physics — La Rábida (Huelva, Spain), 07/2009

Implementation of a GEANT4 simulation for the R3B setup: application to the Coulomb Dissociation of 27P
XV Euroschool on Exotic Nuclei — Piaski (Poland), 09/2008

Coulomb dissociation of 27P: an alternative way to study the 26Si(p,γ)27P reaction
XIV Euroschool on Exotic Nuclei — Houlgate (France), 08/2007