



UK Nuclear Activity

March 2023 Issue 116

In this issue,

1. [Nuclear Physics Publications for March](#)
2. [News to Report](#)
3. [Outreach Activity](#)
4. [Media Interactions](#)

Newsletter archive: <http://npg.dl.ac.uk/OutreachNewsletter/index.html>

Nuclear Physics Public Engagement Website: [NuclearPhysicsForYou](#)

1. Nuclear Physics Publications for March*

Phys. Rev. Lett. **130** 132502 (2023) (<https://doi.org/10.1103/PhysRevLett.130.132502>)

Discovery of New Isotope ^{241}U and Systematic High-Precision Atomic Mass Measurements of Neutron-Rich Pa-Pu Nuclei Produced via Multinucleon Transfer Reactions

T. Niwase *et al.*

Published 31 March 2023

Phys. Rev. Lett. **130** 122502 (2023) (<https://doi.org/10.1103/PhysRevLett.130.122502>)

First Evidence of Axial Shape Asymmetry and Configuration Coexistence in ^{74}Zn : Suggestion for a Northern Extension of the N=40 Island of Inversion

M. Rocchini *et al.*

Published 24 March 2023

Phys. Rev. Lett. **130** 092701 (2023) (<https://doi.org/10.1103/PhysRevLett.130.092701>)

Measurement of the $^{18}\text{O}(\alpha, \gamma)^{22}\text{Ne}$ Reaction Rate at JUNA and Its Impact on Probing the Origin of SiC Grains

L. H. Wang *et al.*

Published 2 March 2023

Phys. Lett. B **838** 137675 (2023) (<https://doi.org/10.1016/j.physletb.2023.137675>)

Quadrupole and octupole collectivity in the semi-magic nucleus ^{206}Hg

L. M. Morrison *et al.*

Published 10 March 2023

Phys. Rev. C **107** 034602 (2023) (<https://doi.org/10.1103/PhysRevC.107.034602>)

Reaction channel contributions to the triton + ^{208}Pb optical potential

N. Keeley and R. S. Mackintosh

Published 3 March 2023

Phys. Rev. C **107** 035803 (2023) (<https://doi.org/10.1103/PhysRevC.107.035803>)

Cross sections of the $^{83}\text{Rb}(p,\gamma)^{84}\text{Sr}$ and $^{84}\text{Kr}(p,\gamma)^{85}\text{Rb}$ reactions at energies characteristic of the astrophysical γ process

M. Williams *et al.*

Published 13 March 2023

Eur. J. Phys. A **59** 44 (2023) (<https://doi.org/10.1140/epja/s10050-023-00950-8>)

In-beam γ -ray spectroscopy of ^{94}Ag

X. Pereira-López *et al.*

Published 15 March 2023

J. Phys. G: Nucl. Part. Phys. **50** 033002 (2023) (<https://doi.org/10.1088/1361-6471/ac9cf8>)

Progress on nuclear reaction rates affecting the stellar production of ^{26}Al

A. M. Laird *et al.*

Published 28 February 2023

NIM A **1050** 168166 (2023) (<https://doi.org/10.1016/j.nima.2023.168166>)

The Advanced Implantation Detector Array (AIDA)

O. Hall *et al.*

Published 23 May 2023, Available online 25 February 2023

2. News to Report

3. Outreach Activity

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4. Media Interactions

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