



# UK Nuclear Activity

May 2022 Issue 107

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

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

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## 1. Nuclear Physics Publications for May\*

If you are publishing a paper that you think would be of media value, please contact [Wendy Ellison](#), STFC Press Officer. She can help with press releases and publicity. If you get in touch with her before publication, she can also get material ready in advance for the day of publication.

\*Also includes missed publications from previous months

Nature Communications 13 2151 (2022) (<https://doi.org/10.1038/s41467-022-29848-7>)

### **Neutron-upscattering enhancement of the triple-alpha process**

J. Bishop *et al.*

Published 20 April 2022

Phys. Rev. C **105**, L051301 (2022) (<https://doi.org/10.1103/PhysRevC.105.L051301>)

### **New narrow resonances observed in the unbound nucleus $^{15}\text{F}$**

V. Girard-Alcindor *et al.*

Published 11 May 2022

Phys. Rev. C **105**, L051001 (2022) (<https://doi.org/10.1103/PhysRevC.105.L051001>)

### **Spectroscopic study of a possible $\text{Ann}$ resonance and a pair of $\Sigma\text{NN}$ states using the $(e,e'K^+)$ reaction with a tritium target**

B. Pandey *et al.* (Hall A Collaboration)

Published 20 May 2022

Phys. Lett. B **829** 137057 (2022) (<https://doi.org/10.1016/j.physletb.2022.137057>)

### **Neutron-proton pairing in the $N=Z$ radioactive $fp$ -shell nuclei $^{56}\text{Ni}$ and $^{52}\text{Fe}$ probed by pair transfer**

B. Le Crom *et al.*

Published 10 June 2022

Phys. Lett. B **829** 137064 (2022) (<https://doi.org/10.1016/j.physletb.2022.137064>)

**Electromagnetic moments of scandium isotopes and  $N = 28$  isotones in the distinctive  $0f_{7/2}$  orbit**

S. W. Bai et al.

Published 10 June 2022

Phys. Lett. B **829** 137129 (2022) (<https://doi.org/10.1016/j.physletb.2022.137129>)

**First observation of a shape isomer and a low-lying strongly-coupled prolate band in neutron-deficient semi-magic  $^{187}\text{Pb}$**

W. Q. Zhang et al.

Published 10 June 2022

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## 2. News to Report

### a. Prof. Marialuisa Aliotta joins FAIR/GSI Joint Scientific Council

Prof. Marialuisa Aliotta from the University of Edinburgh has been invited to serve on the Joint Scientific Council of FAIR/GSI for a 2 year term, starting on the 1<sup>st</sup> of May 2022.

“The Joint Scientific Council is the international advisory board of FAIR and GSI, giving advice to the FAIR Council, the GSI Supervisory Board and the Managing Directors of FAIR and of GSI in scientific and technical matters of fundamental importance. It comprises 8 to 10 external, internationally acknowledged members.”

*Contribution by Prof. Marialuisa Aliotta, University of Edinburgh*

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## 3. Outreach Activity

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## 4. Media Interactions

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