**Physics Division Published Journal Articles, July-December 2017**

PHY-14529-HI-2017

Study of the 26Al*m*(*d,p*)27Al Reaction and the Influence of the 26Al 0+ Isomer on the Destruction of 26Al in the Galaxy

S. Almaraz-Calderon, K. E. Rehm, N. Gerken, M. L. Avila, B. P. Kay, R. Talwar,

A. D. Ayangeakaa, S. Bottoni, A. A. Chen, C. M. Deibel, C. Dickerson, K. Hanselman,

C. R. Hoffman, C. L. Jiang, S. A. Kuvin, O. Nusair, R. C. Pardo, D. Santiago-Gonzalez,

J. Sethi, and C. Ugalde

Phys. Rev. Lett. **119**, 072701/1-6 (2017)

PHY-14533-ME-2017

JLab Measurements of the 3He Form Factors at Large Momentum Transfers

A. Camsonne *et al.* (Jefferson Lab Hall A Collaboration)

Phys. Rev. Lett. **119**, 162501/1-6 (2017)

PHY-14504-ME-2017

First Exclusive Measurement of Deeply Virtual Compton Scattering off 4He: Toward the 3D Tomography of Nuclei

M. Hattawy *et al.* (CLAS Collaboration)

Phys. Rev. Lett. **119**, 202004/1-7 (2017)

PHY-14509-HI-2017

Observation of a *γ*-Decaying Millisecond Isomeric State in 127Cd80

A. Jungclaus, H. Grawe, S. Nishimura, P. Doornenbal, G. Lorusso, G. S. Simpson,

P.-A. Soderstrom, T. Sumikama, J. Taprogge, Z. Y. Xu, H. Baba, F. Browne, N. Fukuda,

R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H. S. Jung, D. Kameda, G. D. Kim, Y.-K. Kim,

I. Kojouharov, T. Kubo, N. Kurz, Y. K. Kwon, Z. Li, H. Sakurai, H. Schaffner, Y. Shimizu, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga,

G. Benzoni, S. Bonig, K. Y. Chae, L. Coraggio, J.-M. Daugas, F. Drouet, A. Gadea,

A. Gargano, S. Ilieva, N. Itaco, F. G. Kondev, T. Kroll, G. J. Lane, A. Montaner-Piza,

K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi,

Z. Patel, Zs. Podolyak, and A. Wendt

Phys. Lett. **B772**, 483-488 (2017)

PHY-14460-HI-2017

In-Beam *γ*-Ray Spectroscopy Studies of Medium-Spin States in the Odd-Odd Nucleus 186Re

D. A. Matters, F. G. Kondev, N. Aoi, Y. Ayyad, A. P. Byrne, M. P. Carpenter, J. J. Carroll, C. J. Chiara, P. M. Davidson, G. D. Dracoulis, Y. D. Fang, C. R. Hoffman, R. O. Hughes,

E. Ideguchi, R. V. F. Janssens, S. Kanaya, B. P. Kay, T. Kibedi, G. J. Lane, T. Lauritsen,

J. W. McClory, P. Nieminen, S. Noji, A. Odahara, H. J. Ong, A. E. Stuchbery, D. T. Tran,

H. Watanabe, A. N. Wilson, Y. Yamamoto, and S. Zhu

Phys. Rev. C **96**, 014318/1-7 (2017)

PHY-14472-HI-2017

High-*j* Neutron Excitations Outside 136Xe

R. Talwar, B. P. Kay, A. J. Mitchell, S. Adachi, J. P. Entwisle, Y. Fujita, G. Gey, S. Noji,

H. J. Ong, J. P. Schiffer, and A. Tamii

Phys. Rev. C **96**, 024310/1-9 (2017)

PHY-14474-TH-2017

Variational Calculation of the Ground State of Closed-Shell Nuclei up to *A* = 40

D. Lonardoni, A. Lovato, Steven C. Pieper, and R. B. Wiringa

Phys. Rev. C **96**, 024326/1-22 (2017)

PHY-14191-HI-2015

*γ* Spectroscopy of States in 32Cl Relevant for the 31S(*p*,*γ*)32Cl Reaction Rate

L. Afanasieva, J. C. Blackmon, C. M. Deibel, J. Lai, L. E. Linhardt, B. C. Rasco,

D. Seweryniak, M. Alcorta, M. P. Carpenter, J. A. Clark, C. R. Hoffman, R. V. F. Janssens, and S. Zhu

Phys. Rev. C **96**, 035801/1-5 (2017)

PHY-14572-HI-2017

Shape Coexistence in the Odd-Odd Nucleus 98Y: The Role of the *g*9/2 Neutron Extruder

W. Urban, M. Czerwiński, J. Kurpeta, J. Rzaca-Urban, J. Wiśniewski, T. Materna,

L. W. Iskra, A. G. Smith, I. Ahmad, A. Blanc, H. Faust, U. Köster, M. Jentschel, P. Mutti,

T. Soldner, G. S. Simpson, J. A. Pinston, G. de France, C. A. Ur, V.-V. Elomaa, T. Eronen,

J. Hakala, A. Jokinen, A. Kankainen, I. D. Moore, J. Rissanen, A. Saastamoinen, J. Szerypo, C. Weber, and J. Äystö

Phys. Rev. C **96**, 044333/1-22 (2017)

PHY-14480-HI-2017

Performance of a Gamma-Ray Tracking Array: Characterizing the AGATA Array Using a 60Co Source

A. Korichi, T. Lauritsen, A. N. Wilson, J. Dudouet, E. Clément, N. Lalovic, R. M. Perez-Vidal, S. Pietri, D. Ralet, and O. Stézowski

Nucl. Instrum. Methods **A872**, 80-86 (2017)

PHY-14520-ME-2017

Field Degassing as a New Sampling Method for 14C Analysis in Old Groundwater

Reika Yokochi, Ryan Bernier, Roland Purtschert, Jake C. Zappala, Yoseph Yechieli, Eilon Adar, Wei Jiang, Zheng-Tian Lu, Peter Mueller, Gerard Olack and Roi Ram

Radiocarbon, **First View,** 1-18 (2017)