Selected Publications

Andrew S. Voyles

October 7, 2022

Sarah Stevenson, Andrew Dong, Yujun Xie, Jon Morrell, **Andrew S. Voyles**, Jeff Bickel, Lee Bernstein, S.A. Maloy, and Peter Hosemann, *The effects of high energy deuteron ion beam irradiation on the tensile behavior of HT-9*. Nuclear Instruments and Methods in Physics Research B, **531** (2022) 65–73.

https://doi.org/10.1016/j.nimb.2022.09.001

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Karolina Kolos, Vladimir Sobes, Ramona Vogt, Catherine E. Romano, Michael S. Smith, Lee A. Bernstein, David A. Brown, Mary T. Burkey, Yaron Danon, Mohamed A. Elsawi, Bethany L. Goldblum, Lawrence H. Heilbronn, Susan L. Hogle, Jesson Hutchinson, Ben Loer, Elizabeth A. McCutchan, Matthew R. Mumpower, Ellen M. O'Brien, Catherine Percher, Patrick N. Peplowski, Jennifer J. Ressler, Nicolas Schunck, Nicholas W. Thompson, Andrew S. Voyles, William Wieselquist, and Michael Zerkle, Current nuclear data needs for applications. Physical Review Research, 4 (2022) 021001.

https://doi.org/10.1103/PhysRevResearch.4.021001

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M. S. Uddin, M. S. Basunia, S. Sudár, B. Scholten, S. Spellerberg, A. S. Voyles, J. T. Morrell, M. B. Fox, I. Spahn, O. Felden, R. Gebel, L. A. Bernstein, B. Neumaier, and S. M. Qaim, Excitation functions of proton-induced nuclear reactions on ⁸⁶Sr, with particular emphasis on the formation of isomeric states in ⁸⁶Y and ⁸⁵Y. Physical Review C, 58 (2022) 67.

https://doi.org/10.1140/epja/s10050-022-00714-w

PDF

Morgan B. Fox, Andrew S. Voyles, Jonathan T. Morrell, Lee A. Bernstein, Jon C. Batchelder, Eva R. Birnbaum, Cathy S. Cutler, Arjan J. Koning, Amanda M. Lewis, Dmitri G. Medvedev, Francois M. Nortier, Ellen M. O'Brien, and Christiaan Vermeulen, *Measurement and modeling of proton-induced reactions on arsenic from 35 to 200 MeV*. Physical Review C, **104** (2021) 064615.

https://doi.org/10.1103/PhysRevC.104.064615

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Stephan Friedrich, Geon-Bo Kim, Dongwon Lee, J. Ad Hall, Robin Cantor, **Andrew Voyles**, Ruslan Hummatov, and Stephen P.T. Boyd, *Ultra-High Resolution Magnetic Microcalorimeter Gamma-Ray Detectors for Non-Destructive Assay of Uranium and Plutonium*. Journal of Nuclear Materials Management, **49** (2021), 114–122.

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D. Gjestvang, S. Siem, F. Zeiser, J. Randrup, R. Vogt, J.N. Wilson, F. Bello-Garrote, L.A. Bernstein, D.L. Bleuel, M. Guttormsen, A. Görgen, A.C. Larsen, K.L. Malatji, E.F. Matthews, A. Oberstedt, S. Oberstedt, T. Tornyi, G.M. Tveten, and A.S. Voyles, Excitation energy dependence of prompt fission γ-ray emission from ²⁴¹Pu*. Physical Review C, 103 (2021) 034609.

https://doi.org/10.1103/PhysRevC.103.034609

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Andrew S. Voyles, Amanda M. Lewis, Jonathan T. Morrell, M. Shamsuzzoha Basunia, Lee A. Bernstein, Jonathan W. Engle, Stephen A. Graves, and Eric F. Matthews, *Proton-induced reactions on Fe, Cu, & Ti from threshold to 55 MeV.* The European Physical Journal A, **57** (2021) 94.

https://doi.org/10.1140/epja/s10050-021-00401-2

- Morgan B. Fox, Andrew S. Voyles, Jonathan T. Morrell, Lee A. Bernstein, Amanda M. Lewis, Arjan J. Koning, Jon C. Batchelder, Eva R. Birnbaum, Cathy S. Cutler, Dmitri G. Medvedev, Francois M. Nortier, Ellen M. O'Brien, and Christiaan Vermeulen, *Investigating high-energy proton-induced reactions on spherical nuclei: Implications for the preequilibrium exciton model.* Physical Review C, 103 (2021) 034601. https://doi.org/10.1103/PhysRevC.103.034601
- Ryan K. Chapman, **Andrew S. Voyles**, Narek Gharibyan, Lee A. Bernstein, and James E. Bevins, Measurement of the ¹⁶⁰Gd(p,n)¹⁶⁰Tb excitation function from 4–18 MeV using stacked-target activation. Applied Radiation and Isotopes, **171** (2021) 109647. https://doi.org/10.1016/j.apradiso.2021.109647
- D.L. Bleuel, L.A. Bernstein, R.A. Marsh, J.T. Morrell, B. Rusnak, and A.S. Voyles, Precision measurement of relative γ-ray intensities from the decay of ⁶¹Cu. Applied Radiation and Isotopes, 170 (2021) 109625. https://doi.org/10.1016/j.apradiso.2021.109625
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- M. Shuza Uddin, Bernhard Scholten, M. Shamsuzzhoha Basunia, Sandor Sudár, Stefan Spellerberg, **Andrew S. Voyles**, Jonathan T. Morrell, Haleema Zaneb, Jesus A. Rios, Ingo Spahn, Lee A. Bernstein, Bernd Neumaier, and Syed M. Qaim, *Accurate Determination of Production Data of the Non-Standard Positron Emitter* ⁸⁶ Y via the ⁸⁶ Sr(p,n)-Reaction. Radiochimica Acta, **108** (2020) 747-756. https://doi.org/10.1515/ract-2020-0021 PDF
- M.S. Basunia, J.T. Morrell, M.S. Uddin, **A.S. Voyles**, C.D. Nesaraja, L.A. Bernstein, E. Browne, M.J. Martin, and S.M. Qaim, *Resolution of a discrepancy in the γ-ray emission probability from the β decay of* ¹³⁷Ce^g. Physical Review C, **101** (2020) 064619. https://doi.org/10.1103/PhysRevC.101.064619 PDF
- G.B. Kim, S.T.P. Boyd, R.H. Cantor, A.S. Voyles, J.T. Morrell, L.A. Bernstein, and S. Friedrich, A New Measurement of the 60 keV Emission from Am-241 Using Metallic Magnetic Calorimeters. Journal of Low Temperature Physics, (2020) 1-7. https://doi.org/10.1007/s10909-020-02412-7 PDF
- Jonathan T. Morrell, **Andrew S. Voyles**, M. S. Basunia, Jon C. Batchelder, Eric F. Matthews, and Lee A. Bernstein, *Measurement of* ¹³⁹La(p,x) cross sections from 35–60 MeV by stacked-target activation. The European Physical Journal A, **56** (2020) 13. https://doi.org/10.1140/epja/s10050-019-00010-0 PDF
- Lee A. Bernstein, David A. Brown, Arjan J. Koning, Bradley T. Rearden, Catherine E. Romano, Alejandro A. Sonzogni, **Andrew S. Voyles**, and Walid Younes, *Our Future Nuclear Data Needs*. Annual Review of Nuclear and Particle Science, **69.1** (2019) 109–136. https://doi.org/10.1146/annurev-nucl-101918-023708
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- Andrew S. Voyles, Nuclear Excitation Functions for the Production of Novel Medical Radionuclides, University of California, Berkeley, (2018). https://search.proquest.com/docview/2135771326 PDF
- **Andrew S. Voyles**, Lee A. Bernstein, Eva R. Birnbaum, Jonathan W. Engle, Stephen A. Graves, Toshihiko Kawano, Amanda M. Lewis, and Francois M. Nortier, *Excitation functions for (p,x) reactions of*

niobium in the energy range of $E_p=40$ –90 MeV. Nuclear Instruments and Methods in Physics Research B, 429 (2018) 53–74. https://doi.org/10.1016/j.nimb.2018.05.028 PDF

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