

List of Publications
Peer-reviewed papers mainly (unless otherwise indicated)

2008

- ✿ **Determination of the $2_1^+ \rightarrow 0_1^+$ transition strengths in ^{58}Ni and ^{60}Ni ,**
J. N. Orce, B. Crider, E. Elhami, S. Mukhopadhyay, E. Peters, M. Scheck, M. T. McEllistrem, and S.W. Yates, [Phys. Rev. C **77**, 064301 \(2008\)](#).
- ✿ **Search for intrinsic collective excitations in ^{152}Sm ,**
W. D. Kulp, J. L. Wood, P. E. Garrett, C. Y. Wu, S. W. Yates, D. Cline, J. M. Allmond, D. Bandyopadhyay, S. N. Choudry, A. B. Hayes, H. Hua, S.R. Leshner, M. Mynk, M.T. McEllistrem C.J. McKay, J. N. Orce, and R. Teng, [Phys. Rev. C **77**, 061301\(R\) \(2008\)](#).
- ✿ **Erratum: $2_1^+ \rightarrow 0_1^+$ transition strengths in Sn nuclei,**
J. N. Orce, S. N. Choudry, B. Crider, E. Elhami, S. Mukhopadhyay, M. Scheck, M. T. McEllistrem, and S. W. Yates, [Phys. Rev. C **77**, 029902\(E\) \(2008\)](#).
- ✿ **Pairing-gap vibrations as a new mechanism of nuclear collectivity,**
J. N. Orce, submitted to Phys. Lett. B. (2008).
- ✿ **Coulomb excitation of radioactive ^{21}Na and its stable mirror ^{21}Ne ,**
M.A. Schumaker, D. Cline, G. Hackman, A.C. Morton, C.J. Pearson, C.E. Svensson, C.Y. Wu, A. Andreyev, R.A.E. Austin, G.C. Ball, D. Bandyopadhyay, J.A. Becker, A.J. Boston, H.C. Boston, R. Churchman, F. Cifarelli, R.J. Cooper, D.S. Cross, D. Dashdorj, G. Demand, M.R. Dimmock, T.E. Drake, P. Finlay, A.T. Gallant, P.E. Garrett, K.L. Green, A.N. Grint, G.F. Grinyer, L.J. Harkness, A.B. Hayes, R. Kanungo, K.G. Leach, G. Lee, R. Maharaj, J-P. Martin, F. Moisan, S. Mythili, L. Nelson, O. Newman, P.J. Nolan, J.N. Orce, E. Padilla-Rodal, A.A. Phillips, M. Porter-Peden, J.J. Ressler, R. Roy, C. Ruiz, F. Sarazin, D.P. Scraggs, J.C. Waddington, J.M. Wan, A. Whitbeck, S.J. Williams, and J. Wong, submitted to Phys. Rev. C. (2008).
- ✿ **Multi-phonon states in ^{136}Ba ,**
S. Mukhopadhyay, M. Scheck, B. Crider, E. Elhami, E. Peters, M. T. McEllistrem, J. N. Orce, and S. W. Yates, submitted to Phys. Rev. C (2008).
- ✿ **Evidence for Pauli blocking in the ($2^+ \otimes$ particle) multiplets of ^{141}Pr ,**
M. Scheck, S. N. Choudry, B. Crider, E. Elhami, M. T. McEllistrem, S. Mukhopadhyay, J. N. Orce, and S. W. Yates, submitted to Phys. Rev. C (2008).
- ✿ **Anomalous multi-phonon excitations in ^{94}Zr ,**
E. Elhami, J. N. Orce, S. Mukhopadhyay, S.N. Choudry, M. Scheck, M. T. McEllistrem, and S. W. Yates, submitted to Phys. Rev. C (2008).
- ✿ **Fermionic-bosonic couplings in a nearly-spherical odd-mass nucleus, ^{93}Nb ,**
J. N. Orce, J.D. Holt, A. Linnemann, C.J. McKay, S.R. Leshner, C. Fransen, N. Warr, V. Werner, T. T. S. Kuo, M. T. McEllistrem, N. Pietralla, and S. W. Yates, submitted to the European Physical Journal A (2008).

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- ✱ Anomalous behavior of the 2^+ mixed-symmetry state in ^{94}Zr ,
E. Elhami, J.N. Orce, S. Mukhopadhyay, S.N. Choudry, M. Scheck, M.T. McEllistrem and S. W. Yates, [Phys. Rev. C 75, 011301\(R\) \(2007\)](#).
- ✱ Lifetime measurements in ^{93}Nb from photon and inelastic neutron scattering,
J. N. Orce, C. Fransen, A. Linnemann, C. J. McKay, S. R. Leshner, N. Pietralla, V. Werner, G. Friessner, C. Kohstall, D. Mucher, H.H. Pitz, M. Scheck, C. Scholl, F. Stedile, N. Warr, S. Walter, P. von Brentano, U. Kneissl, M. T. McEllistrem and S. W. Yates, [Phys. Rev. C 75, 014303 \(2007\)](#).
- ✱ Study of the low-spin structure of ^{96}Mo with the $(n,n'\gamma)$ reaction,
S. R. Leshner, C.J. McKay, M.G. Mynk, D. Bandyopadhyay, N. Boukharouba, C. Fransen, J. N. Orce, M. T. McEllistrem and S. W. Yates, [Phys. Rev. C 75, 034318 \(2007\)](#).
- ✱ New spin assignments in the odd-odd $N=Z$ nucleus ^{42}Sc and the breaking of the ^{40}Ca core, C. Scholl, P. Petkov, V. Werner, A. Linnemann, T. Adachi, A. Dewald, A. Fitzler, C. Fransen, Y. Fujita, J. Jolie, K. Langanke, A.F. Lisetskiy, G. Martinez-Pinedo, D. Mucher, J. N. Orce, N. Pietralla, N. Warr, K.O. Zell, and P. von Brentano, [Phys. Rev. C 75, 064321 \(2007\)](#).
- ✱ $2_1^+ \rightarrow 0_1^+$ transition strengths in the Sn nuclei,
J. N. Orce, S. N. Choudry, B. Crider, E. Elhami, S. Mukhopadhyay, M. Scheck, M. T. McEllistrem, and S. W. Yates, [Phys. Rev. C 76, 021302 \(R\) \(2007\)](#).
- ✱ Study of 0^+ excitations in ^{158}Gd with the $(n,n'\gamma)$ reaction,
S.R. Leshner, J.N. Orce, N. Warr, N. Boukharouba, C. Fransen, M. Scheck, M.T. McEllistrem, and S.W. Yates, [Phys. Rev. C 76, 034318 \(2007\)](#).
- ✱ The structure of the isomeric states in $^{123-125}\text{Sb}$,
D.S. Judson, A.M. Bruce, T. Kibedi, G.D. Dracoulis, A.P. Byrne, G.J. Lane, K.-H. Maier, P. Nieminen, J. N. Orce, and M.J. Taylor, [Phys. Rev. C 76, 054306 \(2007\)](#).

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- ✱ Symmetry of isoscalar matrix elements and systematics in the *sd* and *fp* shell,
J. N. Orce, P. Petkov, V. Velazquez, C.J. McKay, S.R. Leshner, S.N. Choudry, M. Mynk, A. Linnemann, J. Jolie, P. von Brentano, V. Werner, S.W. Yates, and M.T. McEllistrem, [AIP Conf. Proc. 819, 96 \(2006\) \(not refereed\)](#).
- ✱ Charge-independent trend of isoscalar matrix elements along the $N \sim Z$ line,
J. N. Orce and V. Velazquez, [Nucl. Phys. A 764, 205 \(2006\)](#).

- ✱ [Identification of Mixed-Symmetry States in an Odd-Mass Nearly Spherical Nucleus](#),
J. N. Orce, J. D. Holt, A. Linnemann, C. J. McKay, S. R. Leshner, C. Fransen, J. W. Holt,
A. Kumar, N. Warr, V. Werner, J. Jolie, T. T. S. Kuo, M. T. McEllistrem, N. Pietralla, and
S. W. Yates, [Phys. Rev. Lett. 97 062504 \(2006\)](#).
- ✱ [Shape driving effects in the triaxial nucleus, \$^{128}\text{Xe}\$](#) ,
J. N. Orce, A.M. Bruce, A. Emmanouilidis, C. Wheldon, F.R. Xu, P.M. Walker, M. Caamaño,
Zs. Podolyák, H. El-Masri, A.P. Byrne, G.D. Dracoulis, T. Kibédi, D.M. Cullen,
[Phys. Rev. C 74. 034318 \(2006\)](#).
- ✱ [Symmetry and structure tests in \$^{18}\text{O}\$ and \$^{18}\text{Ne}\$](#) ,
S.N. Choudry, J. N. Orce, V. Varadarajan, S.R. Leshner, D. Bandyopadhyay, S. Mukhopadhyay,
S. W. Yates, and M. T. McEllistrem, [AIP Conf. Proc. 819, 101 \(2006\) \(not refereed\)](#).
- ✱ [Search for Multiphonon and Mixed-Symmetry States in \$^{127}\text{I}\$](#) ,
S. Mukhopadhyay, J. N. Orce, S. N. Choudry, V. Varadarajan, A. Kumar, M. T. McEllistrem,
and S. W. Yates, [AIP Conf. Proc. 819, 583 \(2006\) \(not refereed\)](#).

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- ✱ [Heterogeneous vibrations in \$^{112}\text{Sn}\$](#) ,
A. Kumar, J.N. Orce, S.R. Leshner, C.J. McKay, M.T. McEllistrem, and S.W. Yates,
[Phys. Rev. C 72. 034313 \(2005\)](#).
- ✱ [Lifetime measurements and low-lying structure in \$^{112}\text{Sn}\$](#) ,
A. Kumar, J. N. Orce, S. R. Leshner, C. J. McKay, M. T. McEllistrem, and S. W. Yates,
[The European Physical Journal A V25, Supplement 1, p. 443 \(2005\)](#).
- ✱ [Microsecond isomers in \$^{125}\text{Sb}\$](#) ,
D. Judson, A.M. Bruce, M.J. Taylor, G.D. Dracoulis, T. Kibedi, A.P. Byrne, K.-H. Maier,
P. Nieminen, and J. N. Orce, [J. Phys. G: Nucl. Part. Phys. 31 \(2005\) S1899-S1902](#).
- ✱ [Conversion-electron study of \$0^+\$ excitations in \$^{208}\text{Pb}\$](#) ,
J. N. Orce, T. Kibédi, R. Julin, G. D. Dracoulis, and S. W. Yates,
[J. Phys. G: Nucl. Part. Phys. 31 \(2005\) S1705-S1708](#).
- ✱ [Octupole and Hexadecapole Bands in \$^{152}\text{Sm}\$](#) ,
P.E. Garrett, W.D. Kulp, J.L. Wood, D. Bandyopadhyay, S. Christen, S.N. Choudry, A. Dewald,
A. Fitzler, C. Fransen, K. Jessen, J. Jolie, A. Kloezer, P. Kudejova, A. Kumar, S.R. Leshner,
A. Linnemann, A. Lisetskiy, D. Martin, M. Masur, M.T. McEllistrem, O. Moller, M.G. Mynk,
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[J. Phys. G: Nucl. Part. Phys. 31 \(2005\) S1855-S1858](#).
- ✱ [High-K states in the odd-odd nuclide \$^{180}\text{Re}\$](#) ,
H. El-Masri, P. M. Walker, G. D. Dracoulis, T. Kibedi, A. P. Byrne, A. M. Bruce, J. N. Orce,
A. Emmanouilidis, D. M. Cullen, C. Wheldon, and F. R. Xu, [Phys. Rev. C 72. 054306 \(2005\)](#).

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- ✿ Electromagnetic properties of pseudo-Nilsson bands in ^{185}Os ,
C. Wheldon, A.E. Stuchbery, A.N. Wilson, G.D. Dracoulis, A. M. Bruce, R.A. Bark, A.P. Byrne,
F. M. Prados-Estevéz, G.J. Lane, C.-B. Moon, J. N. Orce and R. Wood,
[The European Physical Journal A, V19, No 3 \(2004\) 319.](#)
- ✿ Test of isospin purity in the $A = 42$ isobaric analogs,
J. N. Orce, P. Petkov, C. J. McKay, S. N. Choudry, S. R. Leshner, M. Mynk, D. Bandyopadhyay,
S.W. Yates, and M.T. McEllistrem, [Phys. Rev. C 70 \(2004\) 014314.](#)

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- ✿ Interplay between K-isomerism and gamma-softness in ^{128}Xe ,
J. N. Orce, A. M. Bruce, A. Emmanouilidis, C. Wheldon, F. R. Xu, P. M. Walker, M. Caamaño,
Zs. Podolyák, H. El-Masri, P. D. Stevenson, A.P. Byrne, G.D. Dracoulis, J.C. Hazel, T. Kibédi,
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- ✿ High K states in ^{180}Re ,
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[Acta Physica Polonica B, V. 34, No 4 \(2003\) 2301.](#)

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- ✿ Study of the $K^\pi = 8^-$ isomeric decay in the $N=74$ isotone ^{128}Xe ,
J. N. Orce, A. M. Bruce, A. Emmanouilidis, C. Wheldon, P. M. Walker, M. Caamaño,
Zs. Podolyák, H. El-Masri, A. P. Byrne, G. D. Dracoulis, J.C. Hazel, T. Kibédi, D. M. Cullen,
[Prog. Theor. Phys. Sup. 146 \(2002\) 611.](#)
- ✿ Deviations from axial symmetry in ^{181}Os ,
Z. Podolyák, S. Al-Garni, R. F. Casten, J. R. Cooper, D. M. Cullen, A. Dewald, R. Krucken,
H. Newman, J. N. Orce, C. J. Pearson, C. Ur, R. Venturelli, S. Vincent, C. Wheldon,
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